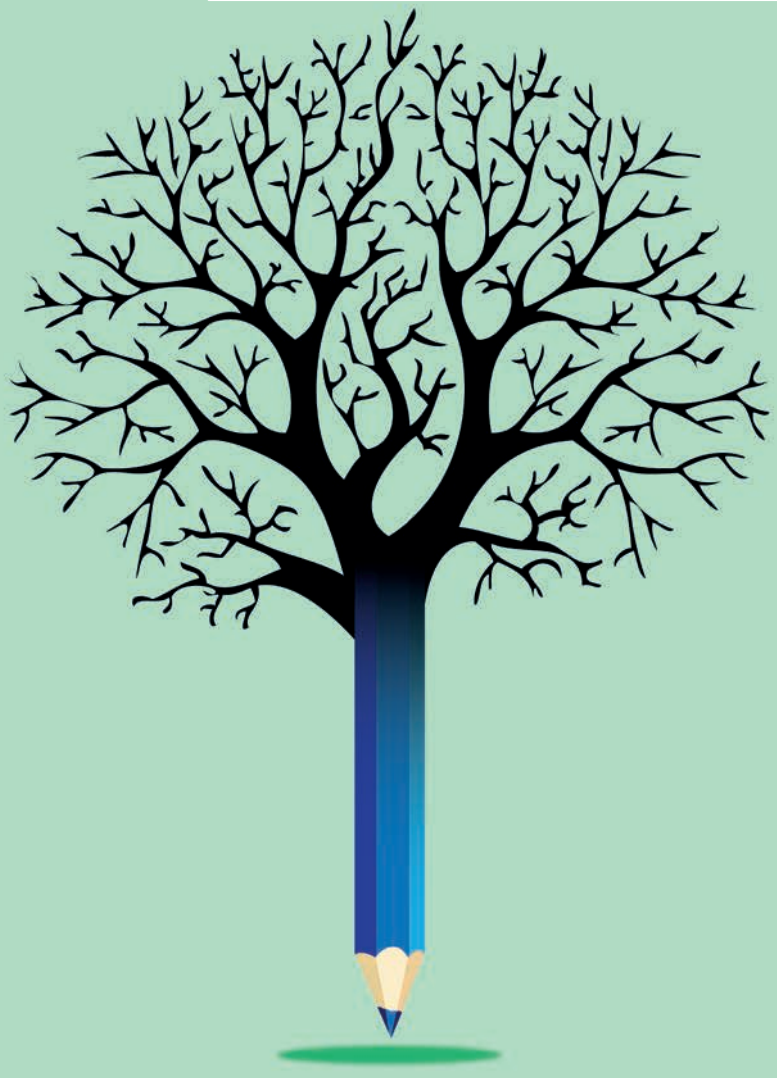
Education Policy Outlook 2019

WORKING TOGETHER TO HELP STUDENTS ACHIEVE THEIR POTENTIAL



OECD

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Foreword

It is so much easier to educate students for our past, than for their future. As parents, we feel anxious when our children learn things we do not understand, or when they no longer study things that were so important for us. Teachers are more comfortable to teach how they were taught, than how they were taught to teach. Furthermore, politicians can lose an election over education issues, but can rarely win one, because it takes so much more than an election cycle to translate good intentions into better results. But improving education is not simply a question of putting more money into it; big budgets do not always translate into quality education.

By analysing the policy efforts of 43 countries over the last decade, the 2019 edition of our Education Policy Outlook gives policy makers some sense of what is being done where and with what success. Indeed, knowledge is only as valuable as our capacity to act on it.

One of the key messages of this report is that policy needs to shift toward inspiring and enabling innovation, and to identifying and sharing best practice, and that shift in policy needs to build on trust: Trust in education, in educational institutions, in schools and teachers, and in students. At a time when command and control systems are weakening, building trust is the most promising way to advance and fuel modern education systems.

Also critical is equity. Perhaps the most impressive outcome of world-class education systems is that they deliver high-quality education across the entire system so that every student benefits from excellent learning. Achieving greater equity in education is not only a social-justice imperative, it is also a way to use resources more efficiently, and to increase the supply of knowledge and skills that fuel economic growth and promote social cohesion. Careful evaluation is needed at each stage of the funding process and systems need to build capacity for foresight to help education systems anticipate the future.

Another message of this report is around policy coherence. On the one hand, people are concerned about a growing gap between what societies expect from schools and actual learning outcomes. On the other hand, teachers complain about a too-rapid pace of education reform that leaves little time or space for thoughtful implementation. Behind the perceptions that reform is happening both too slowly and too fast is a lack of direction and alignment between policies and the components of reform. So there is a great need for consistency and continuity when an education system is trying to improve.

Last but not least, educational leaders need to look not just forward but also outwards. And that is not about copying and pasting solutions from other places; it is about looking seriously and dispassionately at good practice in our own countries and elsewhere to understand what works in which contexts. The ones that progress are those that are open to the world and ready to learn from and with the world's education leaders.

Andreas Schleicher
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Acknowledgements

The *Education Policy Outlook* is a collaborative effort between OECD countries and economies and the OECD Secretariat, invited institutions, as well as all of the actors working within participating education systems to help students achieve their potential.

It was prepared by the Education Policy Outlook team (Diana Toledo Figueroa [Project Leader], Daniel Salinas [on stage during the initial drafting of this report], Christa Rawkins, Marie Ullmann and Jonathan Wright), under the responsibility of Paulo Santiago, Head of the Policy Advice and Implementation Division, and Andreas Schleicher, Special Advisor on Education Policy to the OECD Secretary-General, and Director for Education and Skills. Rex Kaplan, Shiana Crosby and Niklas Olausson contributed analytically as part of the Outlook team during different stages of this report. Cassandra Davis, Rachel Linden, Henri Pearson, Sophie Limoges, Alison Burke, Amar Toor and Eric Magnusson provided communications assistance, and Julie Harris edited the report.

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This report also benefited from invited contributions by the Implementing Education Policies team (Beatriz Pont, Romane Viennet, Pierre Gouëdard and Marco Kools), who prepared Chapter 6 of this report, as well as by the Trade Union Advisory Committee to the OECD (John Bangs and Martin Henry), who prepared Chapter 7 of this report. This report also complements the analysis of the preceding *Education Policy Outlook 2018: Putting Student Learning at the Centre*.

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Table of Contents

Tables

Figures

Boxes

Reader's guide

Structure of the report

The report is divided into three parts:

- **Part I** covers the Education Policy Outlook's comparative analysis in Chapters 1-5 in the areas of school improvement, evaluation and assessment, governance and funding.
- **Part II** of the report includes invited contributions to the Education Policy Outlook by the OECD's Implementing Education Policies programme (Chapter 6) and an OECD external contribution by the Trade Union Advisory Committee to the OECD (Chapter 7). Chapter 7 expresses the opinions of the Trade Union Advisory Committee to the OECD and does not necessarily represent the official views of the OECD nor those of OECD countries.
- **Part III** of the report includes the snapshots of the participating education systems, including an overview of the education systems' context, the evolution of their policy priorities as well as policy trends (Chapter 8). It also include the report's annexes.

The Education Policy Outlook Analytical Framework

The Education Policy Outlook uses an analytical framework to examine education policy ecosystems. Drawing on OECD work with countries on education policy, this framework serves as a lens through which readers can review education systems from the point of view of students, institutions and systems (see Annex A, Table A1.1). This report focuses on institutions and systems. The Education Policy Outlook has been using this analytical framework since 2012 to carry out comparative and country-based analysis of education policies from early childhood education and care to higher education and lifelong learning.

Coverage by primary source of information

This report features data on education from 43 education systems within and beyond the OECD area that participated in activities of the Education Policy Outlook, such as a comprehensive survey on education policy and the OECD's ongoing series of Education Policy Outlook country profiles (see Annex A, Table A1.2).

- The *Education Policy Outlook National Survey for Comparative Policy Analysis 2016-17* (referred to in this report as EPO Survey 2016-17) aimed to collect information to allow for a comparison and update of information on education systems' policies and policy priorities collected by the Education Policy Outlook from 2008 to 2018. A total of 29 education systems responded to the survey between 2016 and 2018. In addition to the 2013 survey questions, the 2016-17

survey gathered information on the evidence underpinning the policies and on their lifecycle (implementation, evaluation, evolution and completion).

- The Education Policy Outlook country profiles published in 2017 (Austria, Belgium [including the Flemish, French and German-speaking Communities], Italy, Latvia and Sweden) and those published in 2018 (Mexico, Spain and Kazakhstan), as well as country profiles that are immediately forthcoming (Denmark, Greece and Ireland) have also been drawn on for this report.
- The OECD Secretariat also conducted additional extensive desk-based research during 2018 and 2019 aiming to complement this information.
- Primary sources also include information provided by governments based on specific follow-up questions asked by the OECD Secretariat, as well as validation processes with government, which took place mainly during the first half of 2019.
- For this report, the OECD also analysed over 150 OECD publications of country-based analysis produced from 2008 until 2018.[1] The publications considered for this analysis consist mainly of country and thematic reviews and economic surveys produced across the OECD. Although these publications have different scopes and are, in some cases, subject to voluntary participation, they are a valuable source for highlighting trends in policy priorities previously identified by the OECD for individual education systems (see Annex A for the list of these publications).

Policies collected in the *2013 Education Policy Outlook Survey* that were reported by education systems again in the EPO Survey 2016-17, yet for which the OECD Secretariat was unable to gather sufficient updated information are not included in the policy analysis of this report (see Annex B for the list of these policies).

Acknowledging the importance of national and sub-national contexts

This report aims to provide an updated comparative perspective of policy continuity and policy change since 2015, as part of education policy ecosystems. It also provides available evidence on the progress and impact of such policies. This overview of policy priorities and trends can serve as a source of inspiration for other education systems that share similar challenges and contextual characteristics. At the same time, this report acknowledges that national and regional contexts, resources, traditions and institutional settings within education systems across OECD countries and partner economies influence the impact of education policy priorities on their populations. These factors play a key role in the way actors may identify policy priorities for education systems over the short, mid or long term. Differences also emerge in the policies and reforms put into place within education systems to address common key issues.

Coverage and timing

This report captures policies implemented mainly between 2008 and 2018, although based on exchanges with participating education systems, some of the policies included in this report are as recent as 2019.

The report presents a range of recent policy responses across different policy contexts. These policies do not represent the totality of ongoing policy activity in participating education systems for the topics analysed. Differences in the number of policies by education system included in this report are a function of the relative capacity to collect

information on education policy in a given education system, rather than a measure of the volume of policy activity in the education system over the period.

In the same way, the timescales and processes required for the implementation of a new reform can vary considerably across education systems and may depend on the scope and intended coverage of the reform. It should be borne in mind that the term "implementation" can be interpreted differently by different systems. In some cases, an overall strategic plan may have different components implemented in stages; in others, it may be necessary to pass legislation before beginning to implement measures. The OECD Secretariat has endeavoured to include the most recent information possible. However, depending on exactly when information was collected, and when final validation of information took place, the information presented may not reflect the most recent developments.

Terminology

Chapters 1 to 5

Policy priorities for each country generally reflect:

- **Key priorities**: Areas where the system is under-performing and have been identified as a point of concern (such as difficulties in ensuring equitable allocation of resources across schools).
- **Key contextual issues**: Particular points of attention that a system needs to keep in mind, given its characteristics (such as demographic change or development of new regional or national industries).
- **Systemic objectives**: Short-term, mid-term and longer-term goals for government administrations.

Depending on when they were identified by education systems (in their responses to the EPO Survey 2016-17, or in eventual updates during revision processes for the report) or the OECD (in previous country-based work conducted with countries), policy priorities are classified according to two periods:

- identified by education systems and/or the OECD in at least the period 2008-14
- or as more recently identified priorities if they were identified by education systems and/or the OECD between 2015 and 2019.

Based on the education policy priorities identified in its work with individual countries over the past, the OECD has formulated recommendations for education systems that contain **principles of action**. Principles of action are the component of a recommendation that draws from the international evidence produced on a specific topic, either by the OECD or externally. As in the previous report *(Education Policy Outlook 2018: Putting Student Learning at the Centre*), the OECD Secretariat has also included relevant principles of action in its analysis for Chapters 2, 3, 4 and 5, intending to support constructive policy dialogue and peer learning among education systems. Keeping in mind the importance of context, these chapters also aim to provide examples of how apparently similar principles of action can apply differently, depending on the contextual specificities and needs of different education systems.

In this report, the OECD Secretariat also analysed **trends** in education policy:

- Policies are classified as **still in place** if they were implemented between 2008 and 2014 and were subsequently reported as having continued since the previous survey.
- Policies are classified as **recent** if they were implemented after 2015 (mainly between 2015 and 2018, with some coverage for 2019).

Chapter 8

The OECD Secretariat has centralised all the policies that are included in the tables of Chapters 2, 3, 4 and 5 of this report, in Chapter 8, either as selected or additional policies.

Some of the **selected policies** also appear in Chapters 2, 3, 4 and 5 as illustrative examples to complement the comparative analysis. These policy examples also provide a summary of available evidence of progress or impact.

Additional selected policies are those which, due to their design, are considered promising or of potential interest to other education systems.

Layout of tables

Chapters 2, 3, 4 and 5 (policy priorities and trends)

The tables in Chapters 2, 3, 4 and 5 include information on education systems from previous OECD country-based work, as well as the challenges reported by education systems in the EPO surveys 2013 and 2016-17, desk-based research by the OECD Secretariat, as well as during follow-up consultations with education systems, mainly in 2019. It covers 43 education systems across OECD countries and partner economies, mainly in the period from 2008 to 2019.

Belgium, Canada, Germany and the United Kingdom are organised into different regions or territories, each with their own government and autonomous education system. The analysis of policy priorities for these education systems is as follows:

- **Belgium**: This report considers policy priorities and policies individually for the Flemish Community, the French Community and the German-speaking Community.
- **Canada** and **Germany**: This report considers policy priorities for Canada and Germany as a unit for each, as the policies are described from a federal perspective in both OECD country-based work and the EPO surveys 2013 and 2016-17. For Canada, policies from the federal level as well as from individual provinces are included (Alberta, New Brunswick, Nova Scotia, Saskatchewan and Ontario).
- **United Kingdom**: OECD country-based work considers policy priorities individually for England, Northern Ireland, Scotland and Wales. This report considers only policies for England as reported in the EPO surveys 2013 and 2016-17.

The tables in these chapters also include information on education policies for which there is available evidence of impact or progress and/or where the policy design is of potential interest to other education systems. The tables list policies according to recent policies (implemented mainly between 2015 and 2019) and policies still in place (implemented between 2008 and 2014).

Chapter 8 (snapshots)

The tables in Chapter 8 include information on the evolution of key policy priorities identified in selected OECD country-based work (and education systems' responses to the EPO surveys 2013 and 2016-17). They also include data from information exchanges with education systems with country profiles published in 2018 (Austria, Belgium [Flemish Community, the French Community and the German-speaking Community), Italy, Kazakhstan, Spain and Sweden). This covers the period 2008 to 2018, and eventually 2019. Validation processes from all education systems were collected during 2019.

Data sources

This report includes mainly OECD and Eurostat data. The main sources of OECD data include *Education at a Glance 2018* (EAG), the Programme for International Student Assessment (PISA) 2015, and the OECD Teaching and Learning International Survey (TALIS) 2018 and the previous TALIS cycle (2013). In some cases, where no OECD or Eurostat data were available, national data were consulted.

Further information

For further information on the work of the Education Policy Outlook, please see http://www.oecd.org/education/policyoutlook.htm.

Notes

1. Selected reports published in the first quarter of 2019 that were deemed particularly relevant to the work of the Education Policy Outlook have also been considered.

Abbreviations and acronyms

AEE	External School Evaluation (*Avaliação Externa de Escolas,* Portugal)
AEQES	Agency for Quality Assurance in Higher Education (*Agence pour l'Évaluation de la Qualité de l'Enseignement Supérieur,* French Community of Belgium)
AIKA	Quality Agency for Higher Education (*Augstākās izglītības kvalitātes aģentūra*, Latvia)
BMBF	Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung*, Germany)
CEUVIZ	Central Register of Participants in Education Institutions (*Centralna evidenca udeležencev vzgoje in izobraževanja,* Slovenia)
CMEC	Council of Ministers of Education (Canada)
CNE	National Education Council (*Conselho Nacional de Educação*, Portugal)
COAG	Council of Australian Governments (Australia)
CSG	Canada Student Grant (Canada)
ČŠI	Czech School Inspectorate (*České školní inspekce*, Czech Republic)
CSLP	Canada Student Loans Program (Canada)
DEIS	Delivering Equality of Opportunity in Schools (Ireland)
DfE	Department for Education (United Kingdom)
DSG	Dedicated Schools Grant (England, United Kingdom)
ECEC	Early Childhood Education and Care
EEA	European Economic Area
ENQA	European Association for Quality Assurance in Higher Education
EQF	European Qualifications Framework
ESF	European Social Fund
eVŠ	Records and Analytical Information System for higher education in the Republic of Slovenia (*Evidenčni in analitski informacijski system visokega šolstva v Sloveniji*, Slovenia)
GDP	Gross domestic product
HEI	Higher education institution
ICT	Information and communications technology
KMK	Standing Conference of Ministers of Education and Cultural Affairs (*Kultusministerkonferenz,* Germany)
MEXT	Ministry of Education, Culture, Sports, Science and Technology (*文部科学省*, Japan)
MEYS	Ministry of Education, Youth and Sports (Ministerstvo školství, mládeže a tělovýchovy České republiky, Czech Republic)
MINEDU	Ministry of Education, Science, Research and Sport (*Ministerstvo školstva, vedy, výskumu a športu SR*, Slovak Republic)
NAPLAN	National Assessment Program - Literacy and Numeracy (Australia)
NCEA	National Certificate of Educational Achievement (New Zealand)
NHEP	National Higher Education Programme (*Resolucija o Nacionalnem programu visokega šolstva*, Slovenia)
NTIP	New Teacher Induction Program (Ontario, Canada)
NVAO	Dutch-Flemish Accreditation Organisation (*Nederlands Vlaamse Accreditatie Organisatie*, Flemish Community of Belgium)
PCAP	Pan-Canadian Assessment Program (Canada)
PIAAC	Programme for the International Assessment of Adult Competencies/Survey of Adult Skills
PISA	Programme for International Student Assessment

PLANEA	National Plan for Learning Assessment (*Plan Nacional para la Evaluación de los Aprendizajes*, Mexico)
PNPSE	Promotion of School Success (*Programa Nacional de Promoção do Sucesso Escolar,* Portugal)
R&D	Research and development
REP	Priority Education Networks (*Réseaux d'éducation prioritaire,* France)
REP+	Enhanced Priority Education Networks (*Réseaux d'éducation prioritaire renforcés,* France)
RIC	Regional Improvement Collaborative (Scotland, United Kingdom)
SAC	National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education (*Sistema Nacional de Aseguramiento de la Calidad de la Educación Parvularia, Básica y Media*, Chile)
SEP	Secretariat of Public Education (*Secretaría de Educación Pública*, Mexico)
SLE	Local Education Services (*Servicios Locales de Educación,* Chile)
SQA	National Quality Assurance System for General Education (*Schulqualität Allgemeinbildung*, Austria)
SRS	Schooling Resource Standard (Australia)
SSC	State Services Commission (New Zealand)
STEM	Science, technology, engineering and mathematics
TALIS	Teaching and Learning International Survey
TEF	Teaching Excellence Framework (New Zealand)
TEMAG	Teacher Education Ministerial Advisory Group (Australia)
TEO	Tertiary Education Organisation (New Zealand)
TEQSA	Tertiary Education Quality and Standards Agency (Australia)
TES	Tertiary Education Strategy (New Zealand)
TFA	Teach For Australia (Australia)
TSV	Turkey's Strategic Vision 2023 (*Türkiye'nin Stratejik Vizyonu 2023 Projesi*, Turkey)
TTÜ	Tallinn University of Technology (*Tallinna Tehnikaülikool*, Estonia)
TUBITAK	Scientific and Technical Research Council of Turkey (*Türkiye Bilimsel ve Teknolojik Araştırma Kurumu*, Turkey)
UAS	Universities of Applied Sciences (*Ammattikorkeakoulut*, Finland)
UNT	Unified National Testing (Единое национальное тестирование, Kazakhstan)
UT	University of Tartu (*Tartu Ülikool*, Estonia)
VET	Vocational Education and Training
WBL	Work-based learning
YÖK	Council of Higher Education (*Yükseköğretim Kurulu,* Turkey)

Executive summary

This report analyses education policies related to school improvement, evaluation and assessment, governance and funding. It analyses 24 education policy priorities and over 460 education policy developments (with evidence of progress or impact for over 200of them) in 43 education systems, from 2008 to 2019. It looks into "what is being done", as well as "why and how it works" to help education systems gain better understanding of how policies can have greater opportunities of success in their specific contexts.

Policy priorities shared across education systems

Of the 24 **education policy priorities** collected for this report, 3 among them appear more prevalent (see Figure 1):

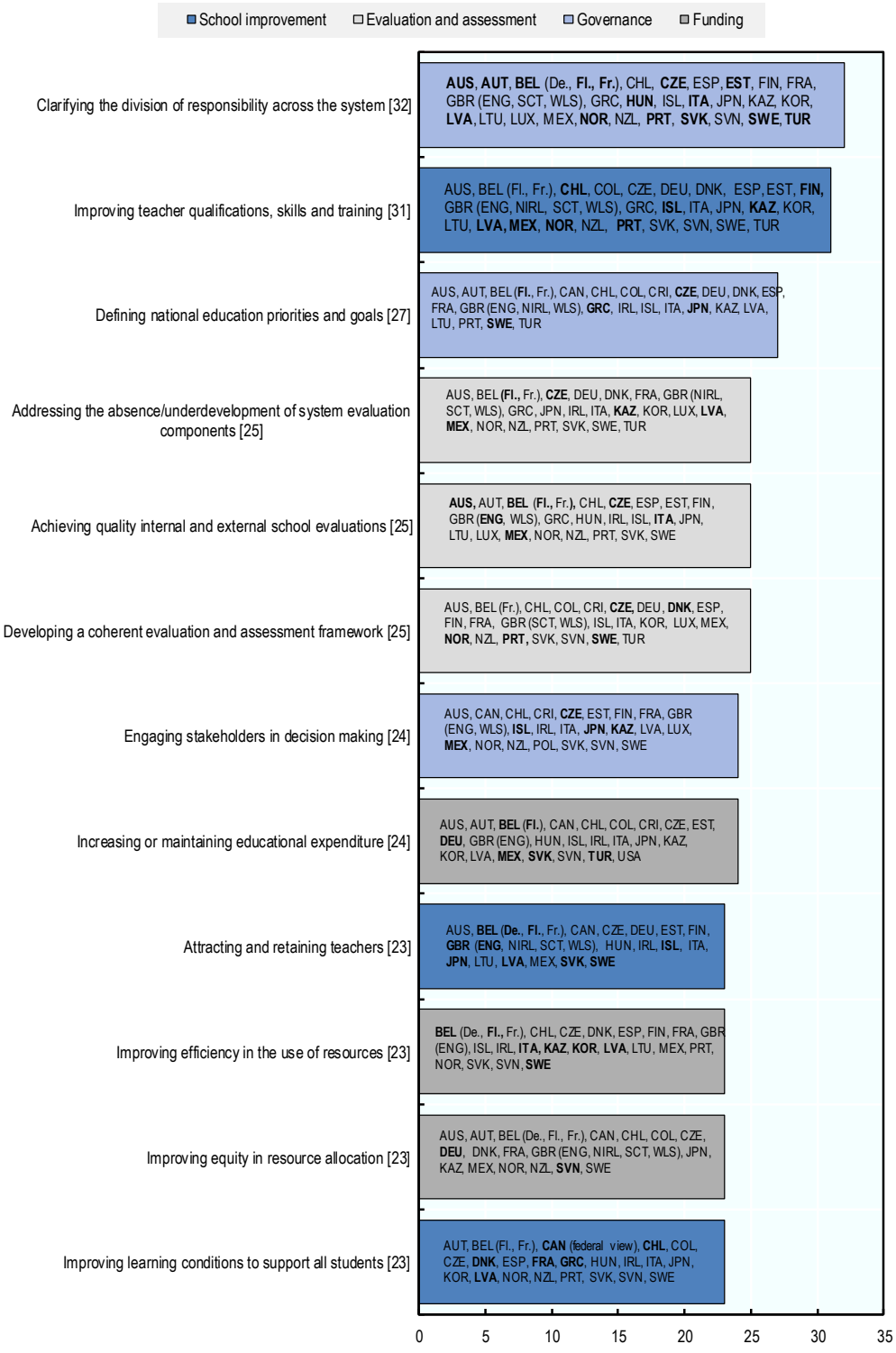
- **tackling unclear or unbalanced division of responsibility** between national and local authorities and schools (32 education systems)
- **improving teacher qualifications, skills and training** (31 education systems)
- **defining national education priorities and goals** (27 education systems).

There is some alignment between education policy priorities and developments. Among **policy developments**, **setting system objectives was by far the most active area** of policy efforts identified for this report, with 87 policies collected (which take the shape of strategies, plans, curricula or qualification frameworks that aim to improve the ability to track progress or discover hidden obstacles) (see Figure 2).

Furthermore, as in 2015, **strengthening the teaching profession remains another crucial area of policy action**, as shown by the 81 policies collected for this report. The most common policy efforts focused on promoting collaborative approaches, developing specific incentives or stimuli to attract and retain teachers and raising professional development standards and quality.

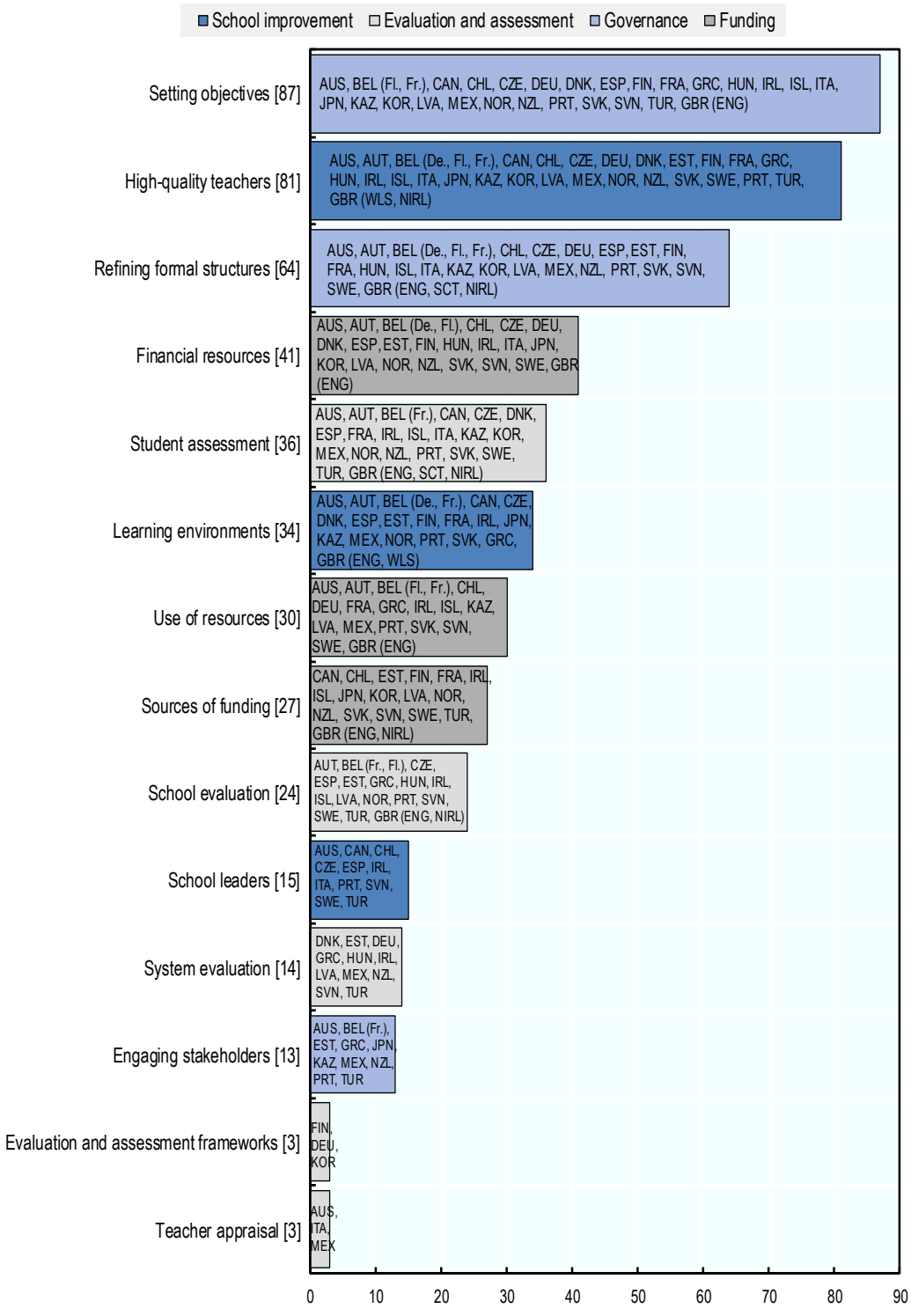
Similarly, the 64 policies collected to refine formal structures target implementing or reforming agencies and mechanisms for quality assurance and decentralising decision making.

Figure 1. Main policy priorities identified in participating education systems by OECD or governments, 2008-19



Sources: See Reader's Guide and Annex A regarding OECD publications consulted and survey processes with participating education systems. Education systems highlighted in bold are those where the policy priority was identified by both the OECD and the education system.

Figure 2. Trends in education policies, 2008-19



Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Lessons learned from progress to date

Evidence of progress or impact collected for almost half of the policies in this report offer some lessons on policy implementation, depending on the topic:

- **School improvement**: Policy developments focused on developing learning environments seem to work best and are better received when they encourage collaboration across administrative levels or between institutions. Initiatives aiming to improve the quality of teachers and school leaders that work well also focus on collaboration, mentoring and dialogue.
- **Evaluation and assessment**: Many education systems have worked to reinforce policies on student assessment or school evaluation by issuing further guidance, support tools, professional development opportunities and handbooks. The main target audience has been teachers and school leaders, but now also include parents and students. Some systems have encountered substantial resistance from stakeholders, particularly when they perceive evaluation and assessment as high stakes or increasing administrative burden. With increased decentralisation and possible greater difficulty in implementing other assessment instruments (such as teacher appraisal or external school evaluation), internal school evaluations are gaining traction. The OECD found that careful communication plans, building common understandings of expectations, methodologies and benefits, placing the focus on improving processes and exploring adapting policy to better match education contexts, were key to improving the sustainability of reforms.
- **Governance**: National priority and target setting, for example, appeared particularly valuable when long-term national goals were broken down into shorter-term actions and sub-actions with concrete outputs. Some of the most successful examples relate to initiatives in policy areas, such as school evaluation or teacher development that were aligned with wider-reaching initiatives such as curricular reforms. Alignment of policies in place at different levels of the system (e.g. institutions, local, or system levels) also was found to facilitate stakeholder buy-in, capacity building and greater clarity in terms of progress. Stakeholder engagement and collaboration do appear to take place in the policy-making and implementation process of a large majority of the policies collected. However, establishing formal mechanisms for ongoing engagement from early on in the process, and with clear procedures to manage the collection of feedback effectively can help make policies more sustainable.
- **Funding**: Large-scale funding reforms have been introduced, and are often informed by expert reviews and inquiries. However, there is less evidence available of careful evaluation made at each stage of the process, suggesting a need for more continuity for evidenced-informed decision making. Governments are introducing reforms in resource use in reaction to contextual changes, such as teacher shortages or addressing demographic changes. Building capacity for foresight could help make systems more anticipatory as opposed to reactive.

Implications for education policy

Four guiding principles of education policy emerged from this analysis:

- **Building or restoring trust is at the core of education systems**. Relevant policy efforts to establish collaborative synergies within an education system aim to: better value professionals working within a system; strengthen evaluation and assessment mechanisms to promote transparency, collaborative support and improved performance; develop a shared vision that can unite actors and actions within different governance arrangements; and promote effective collaboration with different stakeholders in policy processes.
- **Addressing inequality at all levels of the system is necessary to build quality education systems**. To ensure that all students attain high-level skills, equity must be a priority in every aspect of an education system. Policy efforts should aim to foster inclusive learning environments and/or allocate and use different types of resources to promote better education opportunities for all students.
- **Strengthening coherence should gain traction as education systems become increasingly complex**. Coherence can help make education policies more sustainable through greater efficiency and capacity of anticipation for future needs. Relevant policy efforts endeavour to develop shared and more measurable goals for their education systems (e.g. through professional standards and competency frameworks, evaluation and assessment frameworks) or to refine formal structures to streamline decision making.
- **Harnessing digital technologies responsibly matters for both students and education systems**. Technology will inevitably play an important role in any truly successful 21st-century education system. Relevant policy efforts at different levels of an education system aim to: improve the capacity of the teaching profession to use technology in their teaching; monitor improvement across the system; and put in place or reform formal structures that allow monitoring education to improve.

Chapter 1. Overview

Better decisions on education policy can help prepare future generations for the way the world is changing and the challenges facing societies today. This chapter begins by examining some of the global trends affecting education systems, exploring the opportunities and challenges that these trends bring and identifying overarching themes emerging from the analysis of the subsequent chapters of this report.

It then provides an overview of the key policy priorities and trends identified later in this report across OECD countries from 2008-19 within the areas of school improvement, evaluation and assessment, governance and funding. It also introduces readers to the main policy responses to the common challenges seen in those policy areas during the same period. As such, it prepares the ground for the more detailed analysis of policy priorities, responses and impact found in the body of this report.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Highlights

- **Global trends require a reflection** on how today's education systems can help build the foundations for stronger, fairer and more prosperous future societies that are empowered to own their ability to bring positive change.
- **Four overarching themes emerge** as guiding principles for education policy makers: building and restoring trust; addressing inequalities at all levels of the system; strengthening coherence within increasingly complex education systems; and harnessing digital technologies in a responsible manner.
- **The *Education Policy Outlook* provides evidence-informed guidance** to support policy makers in designing and implementing policies that can help establish equitable, coherent and trusted education systems.

Building the foundations for stronger, fairer and more prosperous societies

Today's youngest children in early childhood education and care (ECEC) will leave compulsory schooling in 2035. Education systems are thus challenged to equip these children, and their older peers, with the knowledge and skills required to thrive in a world that policy makers can neither predict, nor fully understand. With this in mind, today's focus should be on embedding a culture of coherence, equity and collaborative innovation at the heart of education systems. These efforts will help build stronger, fairer and more prosperous future societies that are empowered to own their ability to bring positive change.

The *Education Policy Outlook* supports education systems in this endeavour by conducting a comparative analysis of the evolution of policy priorities and policy trends across education systems, and examining the design and impact of policy responses. The *Education Policy Outlook*, an analytical observatory of education policy, thus identifies pathways to improvement that can be adopted by policy makers and adapted to their specific contexts. This work is intended to stimulate the whole-systems thinking required of education ecosystems and to encourage the collaborative synergies essential for building resilience among systems, institutions and students.

Quality education as an antidote to global fragmentation, mistrust and inequality

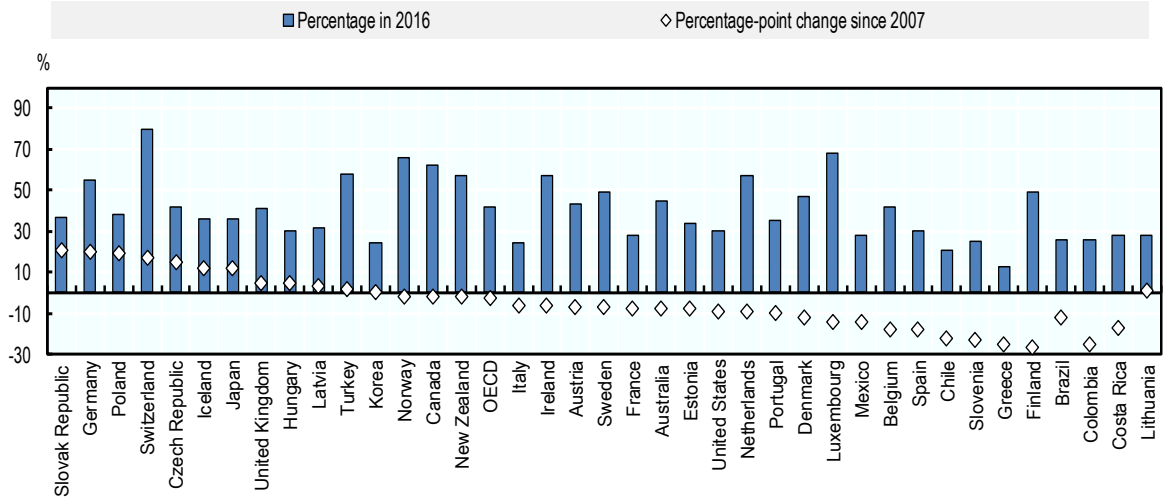
In May 2018, the *OECD Economic Outlook 2018* estimated that the world economy, buoyed by an increase in world trade, global investment and job creation, had finally entered a high-growth phase following the 2007-08 economic crisis (OECD, 2018[1]). But despite this "sunny" outlook, dark clouds appear on the global horizon. Just a few months later, the Economic Outlook's follow-up volume found both protectionism and political and social instability on the rise, and economic growth already stagnating (OECD, 2018[2]).

Today's global society displays increasing signs of fragmentation. The international and transnational relationships formed by globalisation, along with growing autonomy for cities and sub-regions, trends towards decentralised governance and an increased presence of non-state actors in the policy-making environment are creating an unprecedented level of complexity in society. Yet with this complexity comes great opportunity as new voices are heard and new collaborative synergies are forged.

Within education specifically, the growing diversity of voice and the resulting increased demand for accountability can be harnessed to raise standards. The last decade has seen a rise in multi-level governance in education systems where interpretations of reality, expectations and preferred solutions differ (Frankowski et al., 2018[3]). At the same time, increasingly better-educated and more individualistic parents who have greater access to information are also more empowered to hold governments, schools and teachers to account (Burns, Köster and Fuster, 2016[4]). But too often, the links between these various actors and administrative levels are not clearly defined, and parents feel excluded from their children's education. As such, mistrust may inhibit progress.

At the wider level, too, growing multiplicity and stakeholder voice exist against a backdrop of rapidly declining institutional and interpersonal trust. Citizens' trust in government across many OECD countries is at an all-time low. On average, less than half of the citizens in OECD countries (42%) have confidence in their national governments, with some countries experiencing as much as a 20 percentage-point fall since 2007 (see Figure 1.1) (OECD, 2017[5]). Data from the World Values Survey show, too, that roughly half of the OECD countries sampled experienced a decline in interpersonal trust levels from 2005-14 in comparison to the levels from 1981-94 (OECD, 2017[6]). Interpersonal and institutional trust appear to be mutually dependent, and this general decline has important ramifications for social cohesion, political stability and social and economic progress (Murtin et al., 2018[7]).

Figure 1.1. Confidence in national governments in 2016 and percentage-point change since 2007



Notes:
1. Data on the confidence in national governments for Canada, Iceland and the United States in 2016 are based on a sample of around 500 citizens.
2. Data refer to the percentage who answered "yes" to the question, "Do you have confidence in national government?" The data are arranged in descending order according to the percentage-point change between 2007 and 2016.
3. Data for Austria, Finland, Ireland, Norway, Portugal, the Slovak Republic, Slovenia and Switzerland are for 2006 rather than 2007. Data for Iceland and Luxembourg are for 2008 rather than 2007.
Source: OECD (2017[5]), *Government at a Glance 2017*, OECD Publishing, Paris, https://doi.org/10.1787/gov_glance-2017-en.

StatLink http://dx.doi.org/10.1787/888933997056

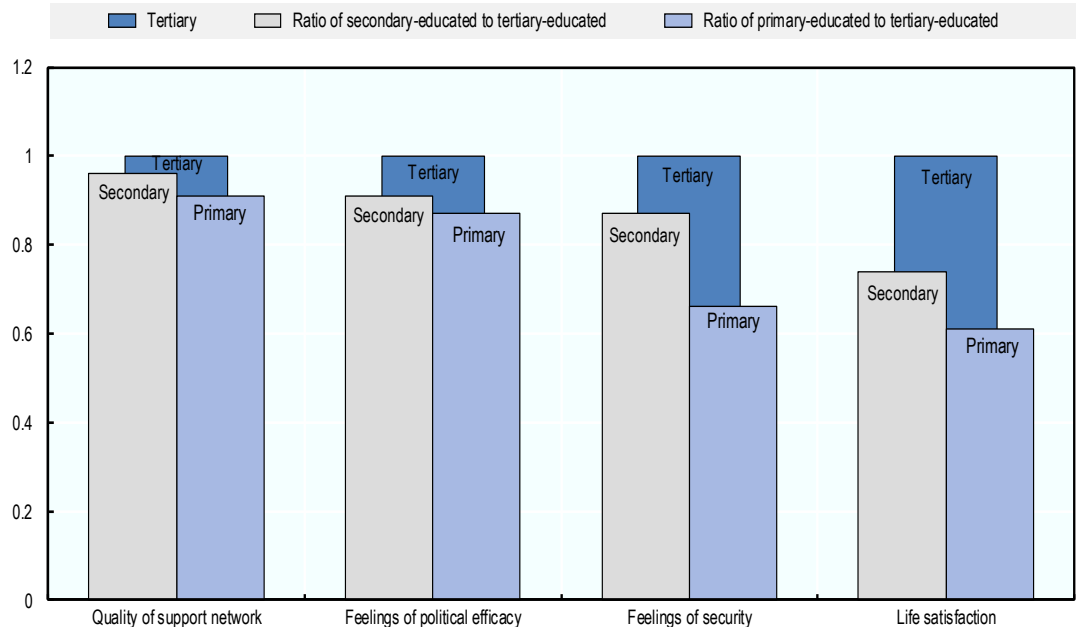
Education can play a crucial role in reversing this trend, and this starts by establishing a culture of trust within the education system itself. Trust and quality education go hand in hand: the higher a country ranks in the Programme for International Student Assessment (PISA), the more likely it is that policy makers work constructively with all stakeholders and treat the system's actors as trusted professional partners (Schleicher, 2018[8]). Equally, a system that is competent in terms of operational capacity and responsiveness, and that has strong and clear guiding principles and values inspires trust among its stakeholders (OECD, 2017[9]). This helps lower transaction costs and mitigate the agency problem, thus encouraging effective policy implementation and curtailing reform fatigue (De Bliek, 2013[10]). Education has an important role to play at the individual level, too. Carefully designed curricula and pedagogy in the hands of effective teachers can help strengthen the cognitive, social and civic skills that students need to build trusting relationships with others.

Compounding both growing fragmentation and declining trust are rising inequalities. Largely a result of the recent financial crisis and subsequent slow recovery, as well as structural changes in labour markets fuelled by globalisation and digitalisation, income inequality has risen significantly in many OECD countries over the last 30 years (OECD, 2017[6]). At the extremes, income divergence between the top 10% and the bottom 10% is increasing year on year as low- and medium-wage growth lag behind high-wage growth (OECD, 2019[11]); (OECD, 2018[2]).

But the problem is not just economic: different kinds of inequalities converge to create an interlocking set of obstacles that make it difficult for upward mobility to occur. Low- and medium-wage workers are at greater risk of job substitutability due to the disproportionately negative impact of technological developments on those with lower skill levels. Yet, since 2006, inequality in students' cognitive skills has increased in the OECD area, in some countries by more than ten percentage points (OECD, 2017[6]). There is also growing evidence of an emerging second-level digital divide where individuals with lower basic and digital skills benefit less from the digital tools they use (Graafland, 2018[12]). These inequalities have far-reaching consequences for society: they inhibit economic growth, fuel instability and intolerance and drive fragmentation by deepening social divides (OECD, 2017[6]).

Quality education is critical to counteracting growing inequality. High-performing education systems ensure that all students can achieve high skill levels, thus easing access to the labour market for all, and increasing both individual and societal resilience to structural change. In addition, by making systems more equitable, education policy makers create the conditions for students of all backgrounds to enter higher levels of education. The premiums enjoyed by tertiary graduates over their peers educated to secondary and primary level are far reaching. Graduates of tertiary education feel more engaged in their community and wider society, are more likely to view themselves as empowered citizens and report higher levels of institutional and interpersonal trust, for example. The education advantage appears particularly impactful in relation to more introspective measures such as life satisfaction and sense of personal security (see Figure 1.2) (OECD, 2017[6]). Raising levels of educational attainment can therefore have a wide positive impact that will endure for future generations: on average across the OECD, respondents with at least one parent who has obtained a tertiary degree report a level of political efficacy that is consistently above those without a tertiary-educated parent (Borgonovi and Pokropek, 2017[13]).

Figure 1.2. Social outcomes relative to level of educational attainment, 2017



Source: OECD (2017), *How's Life? 2017: Measuring Well-being*, OECD Publishing, Paris, https://doi.org/10.1787/how_life-2017-en.

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Education can help prepare people to act critically and responsibly in new digital landscapes

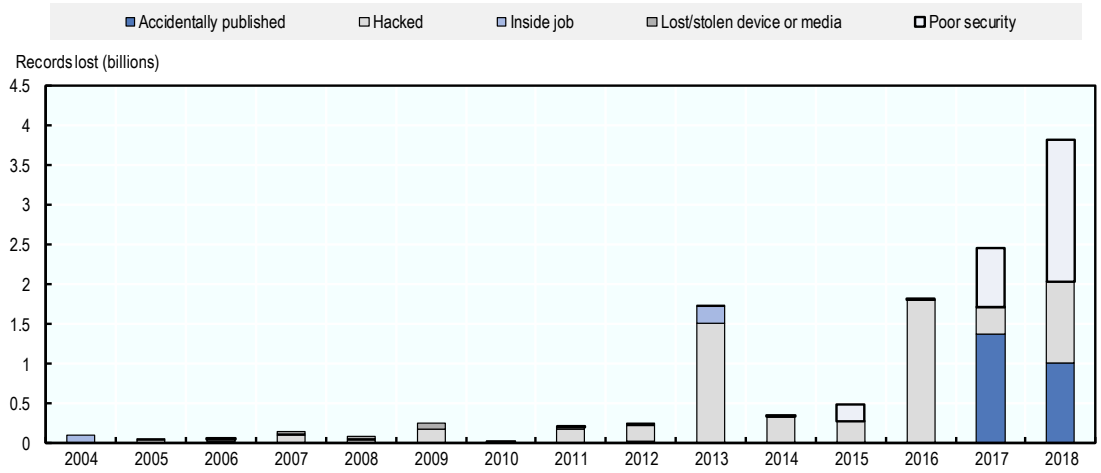
Over the last decade, the number of Internet users across OECD countries reading or downloading online news has increased, on average, by about 40%. By 2017, 65% of Internet users consumed online news (OECD, 2019[11]). Online readers generally access news items via search engines and social media channels, particularly Facebook and its affiliates. There appears to be a strong correlation between the frequency of social media use and false news consumption. Articles bearing falsehoods or highly affective content diffuse more quickly, deeply and broadly, facilitating a polarisation of opinions (Martens et al., 2018[14]). Young people, as both the predominant social media users and the consumers who are most reliant on online news, are doubly vulnerable.

Quality education, therefore, becomes crucial in developing *critical* digital citizens and can help combat the damaging effects of online (fake) news consumption on democratic processes. At a more personal level, quality education can help individuals navigate information in their everyday lives. The shift in media consumption from direct access to content, to algorithm-driven access, has largely erased the editor's role in curation and quality assurance, forcing the reader to take up this task. Education systems can equip students with higher-order cognitive skills and advanced media and digital literacy, valuable tools when distinguishing between fake and real news. Societies rich in these skills are therefore less vulnerable to the spread of fake news (Martens et al., 2018[14]). Furthermore, with a growing number of social interactions occurring digitally, technology is more personal than ever. By working to foster digital citizenship, education can help positively shape the kind of interactions played out in these new digital spaces.

In addition, the accelerated diffusion of digitalised processes across public and private life raises questions about security and privacy. Across the world, digital security is of growing concern as massive breaches of data privacy become increasingly common (see Figure 1.3).

Figure 1.3. World's biggest data breaches by method of leak, 2004-18

Billions of records lost



Notes: Selected losses greater than 30 000 records; data compiled from DataBreaches.net, IdTheftCentre, and press reports. "Inside job" refers to authorised individuals (such as employees) intentionally releasing data in unauthorised ways.
Source: OECD (2019[11]), *Trends Shaping Education 2019*, OECD Publishing, Paris, https://doi.org/10.1787/trends_edu-2019-en.

StatLink http://dx.doi.org/10.1787/888933997094

Education systems must respond proactively to this challenge. Data collection and management are critical elements of effective and efficient school systems and have come to form the backbone of policy reform, impact monitoring and evaluation. The collection, input, analysis and use of data is now a collective endeavour that involves actors at all levels and informs decisions across systems (Subosa and West, 2018[15]). At the same time, growing amounts of data can be collected, especially as students increasingly work via digital media. Education policy makers, therefore, need to be proactive in establishing legal and ethical frameworks that effectively define and regulate the use of educational data and in employing transparency mechanisms that find the right balance between democratising access and protecting privacy. Ongoing capacity building is also required to enable teachers and school leaders to collect and input data in a responsible and secure manner.

Four guiding principles for education policy makers

In view of these global trends and the analysis of education policy priorities and trends among participating education systems conducted for this report, four overarching messages emerge. They build on the work carried out for the *Education Policy Outlook 2018: Putting Student Learning at the Centre*, which looked at how education systems can bring together the different worlds of a student to improve learning outcomes.

The four key messages of this edition of the *Education Policy Outlook* serve as guiding principles for education policy makers:

1. **Building and restoring trust**. To successfully navigate unpredictable and unstable futures, education systems need to establish collaborative synergies across their different levels.
    - Chapter 2 offers insights into how policy decisions can better value the professionals operating within a system, offering quality professional development opportunities and making long-term careers more attractive.
    - Chapter 3 explores approaches to the design and implementation of evaluation and assessment mechanisms that foster accountability systems built to promote transparency, collaborative support and improved performance.
    - Chapter 4 explicitly considers the growing demand placed on education systems to develop a shared vision that can unite actors and actions within decentralising contexts. It also explores approaches to engaging stakeholders in policy processes.
    - Chapter 6 spotlights ongoing collaboration between the OECD and selected education systems (Norway and Wales [United Kingdom]) to implement specific education policies.
    - Chapter 7, prepared by the Trade Union Advisory Committee to the OECD, looks into the evolution of perceptions of unions in the collaboration between teachers and governments.
2. **Addressing inequality at all levels of the system**. To ensure that all students can attain high-level skills, equity must be a priority in every aspect of an education ecosystem.
    - Chapter 2 focuses on improving learning conditions for all students by creating inclusive learning environments, suggesting how equity can be a priority at the school level.
    - Chapter 5 considers the funding of education systems and highlights the importance of improving equity in financial, human, time and material resource allocation.
    - As such, this report follows on from the coverage of equity as a discreet policy lever in *Education Policy Outlook 2018: Putting Students Learning at the Centre*.
3. **Strengthening coherence within increasingly complex education systems**. Education policy makers need to create the conditions required to capitalise on the growing diversity of voice within systems.
    - Chapter 2 explores how overarching professional standards and competence frameworks are helping to harmonise the various drivers of quality teaching.
    - Chapter 3 looks at how evaluation and assessment frameworks can be used to bring together the various evaluation and assessment components at the student, school, and system levels to create an environment of continuous improvement.
    - Chapter 4, which focuses on governance, examines the need to set ambitious and measurable goals at the national level to steer the system in a coherent direction, as well as refining formal structures to streamline decision making.

4. **Harnessing digital technologies in a responsible manner**. Technology will inevitably play an important role in any truly successful 21st-century education system.
    - Chapter 2 looks into improving the capacity of the teaching profession to use technology to enhance students' and their own learning. It also explores ways in which education systems have more recently been expanding access to digital technology at the school level.
    - Chapter 3 considers the digitalisation of student assessment and the use of technology in managing system and school evaluation and assessment components.
    - Chapter 5 analyses policy approaches to the use of material resources, such as through the establishment of formal structures to manage monitoring processes in the education system.

The four key messages of this report come together to promote a view of policy making that emphasises "whole-system" approaches for education ecosystems. Such a view leads to the creation and promotion of horizontal and vertical synergies across and within system levels. Policy makers who adopt such an approach to education policy can help establish a culture of collaboration, shared purpose and efficiency, all crucial to ensuring the future success of education systems.

A broad summary of how education policy priorities and reforms have evolved over the last decade

About this report

As part of the Education Policy Outlook series, this comparative report builds upon a specific analytical framework of six policy levers (see Box 1.1). It is a follow-up to the comparative report *Education Policy Outlook 2018: Putting Student Learning at the Centre*, which looked into the evolution of policy priorities and policy trends to foster equity and quality and to prepare students for the future. That report also presented some key lessons learned from the emerging culture of policy evaluation. In 2015, a first comparative report *Education Policy Outlook 2015: Making Reform Happen*, provided a comparative overview and analysis of education policies and the factors affecting their implementation.

Box 1.1. About the Education Policy Outlook

The Education Policy Outlook is an analytical observatory of education policies spanning from early childhood education and care to higher education mainly across OECD countries' education systems. It monitors the evolution of education policy priorities and key education policies according to changes in their specific contexts, as well as the impact of these policies at a student, institution, and system level according to six policy levers:

- **Students**: How to raise outcomes for all in terms of: 1) equity and quality; and 2) preparing students for the future.
- **Institutions**: How to raise quality through: 3) institutional improvement; and 4) evaluation and assessment.

- **System**: How the system is organised to improve education policy in terms of: 5) governance and 6) funding.

This series consists of three strands of work: comparative analysis (through comparative work and research on policy evaluation), country-based work (through country profiles and a Reforms Finder) and stakeholder engagement (through the Education Policy Reform Dialogues).

For 2017-19, the *Education Policy Outlook* focuses on a comparative analysis of the evolution of education policy priorities across OECD member countries and selected partner economies. It also studies the lifecycles of key policies (comprising the implementation, consolidation, change or completion of a policy, as well as the possible evaluation at any point of its lifecycle).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

This edition of the *Education Policy Outlook* analyses the evolution of education policy priorities and education policy reforms, as well as emerging evidence regarding progress or impact in the areas of school improvement (Chapter 2), evaluation and assessment (Chapter 3), governance (Chapter 4) and funding (Chapter 5). It then presents an analysis of policy implementation across selected education systems (Chapter 6), as well as a perspective from the teaching profession on successful collaboration experiences with governments (Chapter 7). Finally, it presents 29 OECD country snapshots, which centralise the country-based information collected from education systems for this report (Chapter 8).

The OECD Secretariat analysed the evolution of **policy priorities** across the education systems of 43 OECD member countries and non-member economies. In the context of this report, policy priorities refer to the key challenges, issues and objectives identified by the actors involved in an education system based on their own analysis of the system's performance. They are classified here according to the periods when they were identified, 2008-14 and 2015-19. If the priorities are reported by the education systems themselves, they are classified as either *persisting* (2008-19) or *emerging* (2015-19).

Relevant **principles of action** are also included in this analysis. As established in previous publications in this series, analysis conducted by the OECD indicates that certain principles of action recommended in one education system can serve as inspiration for other education systems, even though the specifics of implementation may differ according to context, available resources, existing policy initiatives, as well as the relative and perceived importance of the policy priority (see the Reader's Guide).

In some cases, education systems did not report policy priorities that had been previously identified by the OECD as priorities for their education system. This gap may be due to the existence of ongoing policies targeting those priorities. If this is the case, and only when possible, this report provides relevant examples of the ongoing policies. It may also be due to a lack of available resources within the system, the existence of other needs identified as being more important, or a lack of public relevance, among other things. Monitoring policy priorities can, therefore, help governments by offering a more effective overview of trends and focus, supporting the development of stronger education policy agendas in the future.

This comparative report also provides an overview of key **policy trends** in school improvement, evaluation and assessment, governance and funding as seen in policies collected by the OECD across 34 participating education systems between 2008 and 2019. This includes policies that were first implemented from 2008 to 2014 and are still in place,

albeit with significant modifications in some cases, as well as more recent policies first implemented between 2015 and 2019. Included in this overview is a summary of the available evidence of progress or impact.

School improvement

School improvement policies are essential in establishing the conditions required for a more innovative and flexible education system that supports student achievement according to individual needs and social and technological change. This report defines school improvement policies as those that aim to strengthen learning environments and develop high-quality teachers and school leaders.

Differences in priorities identified by countries and the OECD

The policy priorities for school improvement reported by education systems were generally aligned with those identified by the OECD. Overall, improving teachers' qualifications, skills and training was the most commonly identified priority for the OECD in the work that it undertook with participating education systems. However, participating education systems reported improving learning conditions to support all students slightly more often. Attracting teachers to the profession and retaining them was a frequently identified priority for both the OECD and education systems. Conversely, the OECD identified improving the competencies of school support staff much more often than education systems.

Evolution of trends

In 2015, the *Education Policy Outlook* provided an account of key education policies for school improvement implemented by participating education systems between 2008 and 2014. That report found school improvement reforms within three identifiable categories: promoting positive learning environments; developing effective school leadership; recruiting, developing and retaining high-quality teachers.

Analysis of key policies reported by education systems for this publication shows a high level of continuity in approaches to school improvement. Nevertheless, a few, more specific, policy areas have gained importance, such as harnessing digital technology, to improve learning environments. Although policies related to high-quality teachers remain the most common, there is a shift in focus from initial teacher education to professional development. This suggests a logical development in policy work in this area over time.

Comparing trends in policy priorities and policy developments

There is some notable alignment between policy priorities and trends for school improvement during the period 2008-19. The two most commonly identified or reported priorities were related to teachers, as was the highest number of collected policies. However, education systems' policy efforts often focused on specific aspects of teacher education, such as collaborative approaches and specific incentives or stimuli to attract and retain teachers. Fewer policies addressed general working conditions, particularly in terms of labour market operation, despite attraction and retention being an important priority area.

Regarding learning environments, the most recent policies appear to focus on the digitalisation of schools, including improving information and communication technology (ICT) infrastructure, capacity building and digitalising student plans. This is not a commonly identified policy priority, however. Furthermore, while both the priorities and policies collected from education systems focus on improving learning conditions for all

students, fewer policy examples were identified that specifically target school support staff, despite the interconnectedness of these two areas.

The majority of policies collected for this report for school leadership were first implemented in 2008-14. This suggests relative continuity and stability in this policy area. Nevertheless, the small number of recent policies, and the lower prominence of school leadership as a priority should be noted, particularly in the context of growing school autonomy.

Information about progress and impact, when available, offers some valuable insight to policy makers working on school improvement. Reforms focused on developing learning environments seem particularly impactful and better received when they encourage collaboration across administrative levels or between institutions. Such an approach provides opportunities for learning-focused dialogue. Similarly, the initiatives aiming to improve the quality of teachers and school leaders that show the most positive impact focus on collaboration, mentoring and dialogue. Nevertheless, there is limited evidence as to the impact of these initiatives on student learning, specifically. Impact evidence is also scarce for teacher salary increases and other initiatives related to teacher recruitment and retention, despite the significant financial investments entailed. Education systems should be more deliberate in planning for effective policy evaluation in the area of school improvement reform.

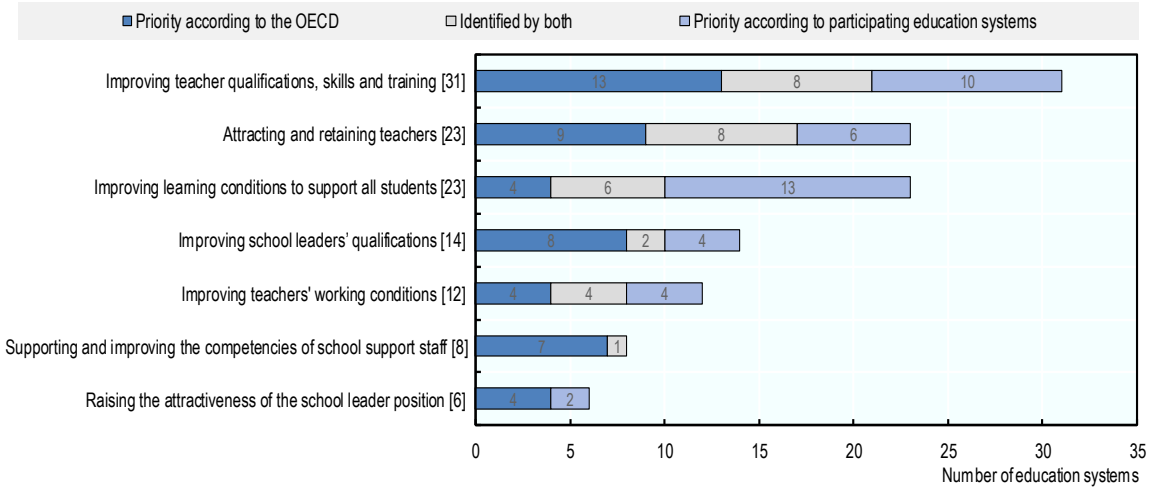
Overview of policy priorities

Policy priorities for the period 2008-19 in the area of school improvement cover seven areas: 1) improving teacher qualifications, skills and training (31 education systems); 2) attracting and retaining teachers (23 education systems); 3) improving learning conditions to support all students (23 education systems); 4) improving school leaders' qualifications, participation in professional development and clearly defining their role (14 education systems); 5) improving teachers' working conditions (12 education systems); 6) supporting and improving the competencies of school support staff (8 education systems); and 7) raising the attractiveness of the school leader position (6 education systems) (see Figure 1.4).

With regard to **improving teacher qualifications, skills and training**:

- The OECD identified this as a policy priority for Belgium **(**Flemish Community), Chile, Colombia, Denmark, Estonia, Finland, Germany, Iceland, Japan, Kazakhstan, Latvia, Lithuania, Mexico, Norway, Portugal, the Slovak Republic, Sweden and the United Kingdom (England, Northern Ireland, Scotland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Australia, Belgium (French Community), Chile, the Czech Republic, Finland, Greece, Iceland, Italy, Kazakhstan, Korea, Latvia, Mexico, New Zealand, Norway, Portugal, Spain, Slovenia and Turkey.
- General principles of action recommended by the OECD for these education systems include: 1) establish clearly defined standards for teacher knowledge across subjects and levels; 2) improve teacher preparation and introduce probationary periods; 3) provide up-to-date professional development that is relevant and embedded within teacher evaluation; and 4) improve pathways for career progression and development.

Figure 1.4. Policy priorities for school improvement, as identified by the OECD and participating education systems, 2008-19



Notes:
1. **Priority according to the OECD**: See Annex A for the year of the country study considered.
2. **Priority according to participating education system**: Based on responses to EPO Surveys 2013 and 2016-17, as well as validation processes from education systems collected during 2019. Responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy and Sweden are based on the EPO Country Profiles published during 2017 and 2018 (see the Reader's Guide).
3. **The total number of education systems** where this priority was identified by the OECD, education systems or both, is included in brackets.

StatLink http://dx.doi.org/10.1787/888933997113

With regard to **attracting and retaining teachers**:

- The OECD identified this as a policy priority for Australia, Belgium (Flemish, French and German-speaking Communities), Finland, Iceland, Italy, Japan, Latvia, Lithuania, Mexico, the Slovak Republic, Sweden and the United Kingdom (England, Northern Ireland, Scotland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Belgium (Flemish and German-speaking Communities), Canada, the Czech Republic, Estonia, Germany, Hungary, Ireland, Iceland, Japan, Latvia, the Slovak Republic, Sweden and the United Kingdom (England).
- General principles of action recommended by the OECD for these education systems include: 1) encourage high-quality candidates to enter the teaching profession; and 2) improve retention.

With regard to **improving learning conditions to support all students**:

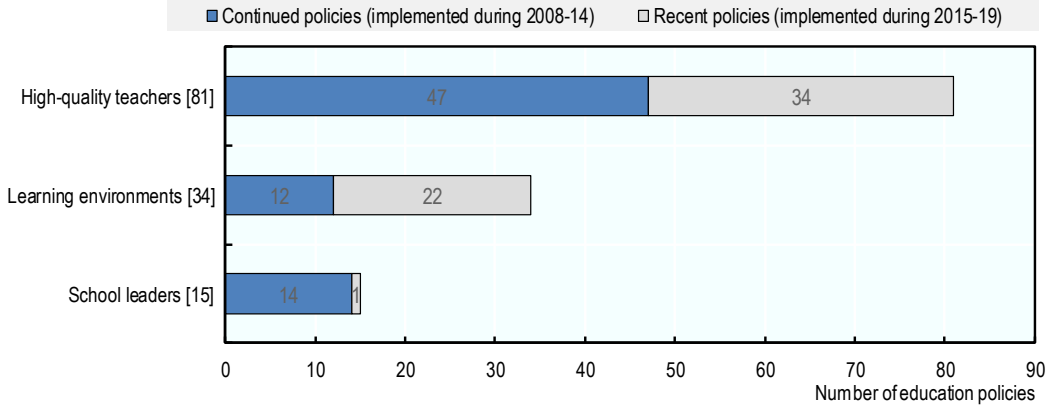
- The OECD identified this as a policy priority for Austria, Belgium (Flemish Community), Canada, Chile, Colombia, Denmark, France, Greece, Latvia and the Slovak Republic.
- Education systems that reported this as a priority between 2008 and 2019 are Belgium (French Community), Canada (federal view), Chile, the Czech Republic, Denmark, France, Greece, Hungary, Ireland, Italy, Japan, Korea, Latvia, New Zealand, Norway, Portugal, Slovenia, Spain and Sweden.

- General principles of action recommended by the OECD for these education systems include: 1) introduce measures to improve learning conditions for all students; 2) enhance human resource strategies to strengthen teaching and learning; 3) invest in physical infrastructure to develop school environments that allow improvement to take place; and 4) provide greater support, including financial incentives, to teachers.

Overview of policy trends

The OECD Secretariat selected and reviewed 130 school-improvement-related policies (see Figure 1.5). Of these, 73 have remained in place since they were first implemented between 2008 and 2014, albeit with substantial modifications in some cases. The remaining 57 are recent policies implemented from 2015-19.

Figure 1.5. Trends in education policies for school improvement, 2008-19



Notes: The total number of policy developments is included in brackets. All policies included in this figure are summarised in Chapter 8 of this report.
Source: EPO Surveys 2013 and EPO Survey 2016-17 and EPO Country Profiles published during 2017 and 2018 for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), as well as desk-based research by the OECD Secretariat and validation processes undertaken in 2019.

StatLink http://dx.doi.org/10.1787/888933997132

For each trend, education systems employed the following common strategies:

- **High-quality teachers***:* Policies collected focus on developing professional frameworks and career pathways, stimulating recruitment and registration, adopting incentives and stimuli to improve teacher retention and strengthening initial teacher education, induction and professional development. These policies were implemented by Australia, Austria, Belgium (Flemish, French and German-speaking Communities), Canada (Ontario), Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Korea, Latvia, Mexico, New Zealand, Norway, Portugal, the Slovak Republic, Spain, Sweden, Turkey and the United Kingdom (Northern Ireland and Wales).
- **Learning environments**: Policies collected consist of general strategies for schools, improving learning conditions and support for all students and promoting digitalisation at the school level. These policies were implemented by Australia, Austria, Belgium (French and German-speaking Communities), Canada

(Saskatchewan), the Czech Republic, Denmark, Estonia, Finland, France, Greece, Ireland, Japan, Kazakhstan, Mexico, Norway, Portugal, the Slovak Republic, Spain and the United Kingdom (England and Wales).

- **School leaders**: Policies collected target establishing professional frameworks and developing professional competencies. These policies were implemented by Australia, Canada (Nova Scotia), Chile, the Czech Republic, Ireland, Italy, Portugal, Slovenia, Spain, Sweden and Turkey.

Evaluation and assessment

Education systems need to design evaluation and assessment components that provide information to support the improvement of student outcomes in a timely and useful manner. According to the Education Policy Outlook Analytical Framework, evaluation and assessment policies include those that aim to strengthen student assessment, school evaluation, teacher appraisal, system evaluation, and evaluation and assessment frameworks.

Differences in priorities identified by countries and the OECD

The policy priorities identified by the OECD and those reported by education systems are somewhat aligned. Both recognise the need to develop a coherent evaluation and assessment framework and strengthen internal and external school evaluations. However, there are also some inconsistencies. While improving the quality and reliability of student assessments was identified as a priority by both the OECD and education systems, and building the assessment competencies of teachers and school leaders was identified by the OECD as a priority in several education systems, this was not reported as a priority by any education system. Similarly, addressing the absence or underdevelopment of system evaluation components was much more frequently identified by the OECD than reported by education systems.

Evolution of trends

In 2015, the OECD collected key reforms on evaluation and assessment implemented in participating countries between 2008 and 2014. The report that followed identified three broad policy trends: 1) using summative and formative student assessment; 2) ensuring quality with internal and external school evaluations; and 3) guiding improvement with system-level evaluation and assessment (OECD, 2015[16]).

Analysis of the key policies reported by education systems for the period 2008-19 shows some continuity: student assessment, school evaluation and system evaluation remain the main areas of focus. More specific policy areas have now developed as well: within student assessment, countries are increasingly looking to broaden and digitise assessments to improve learning and accountability. Similarly, a significant number of policy efforts collected for this report, including many recent ones, focus on building effective information systems for system evaluation.

Comparing trends in policy priorities and policy developments

There are some notable disparities between policy priorities and reported policy reforms for evaluation and assessment during the period 2008-19. Developing a coherent evaluation and assessment framework and addressing the absence or underdevelopment of system evaluation components are two of the most commonly cited policy priorities. However,

there are notably fewer policy efforts in these areas, particularly the latter. Both system evaluation and evaluation and assessment frameworks are highly relevant for education systems' capacity for "systems thinking" and foresight, but, apart from some system-level evaluation planning, little policy work of this nature was seen.

Similarly, hardly any policies were reported for teacher appraisal, whereas it was cited as a priority in some cases by the OECD and education systems. Data show that legal mechanisms for appraisal are in place across a variety of education systems. Nevertheless, these mechanisms must be able to cope with the changing demands placed on teachers and developments in what students need to learn.

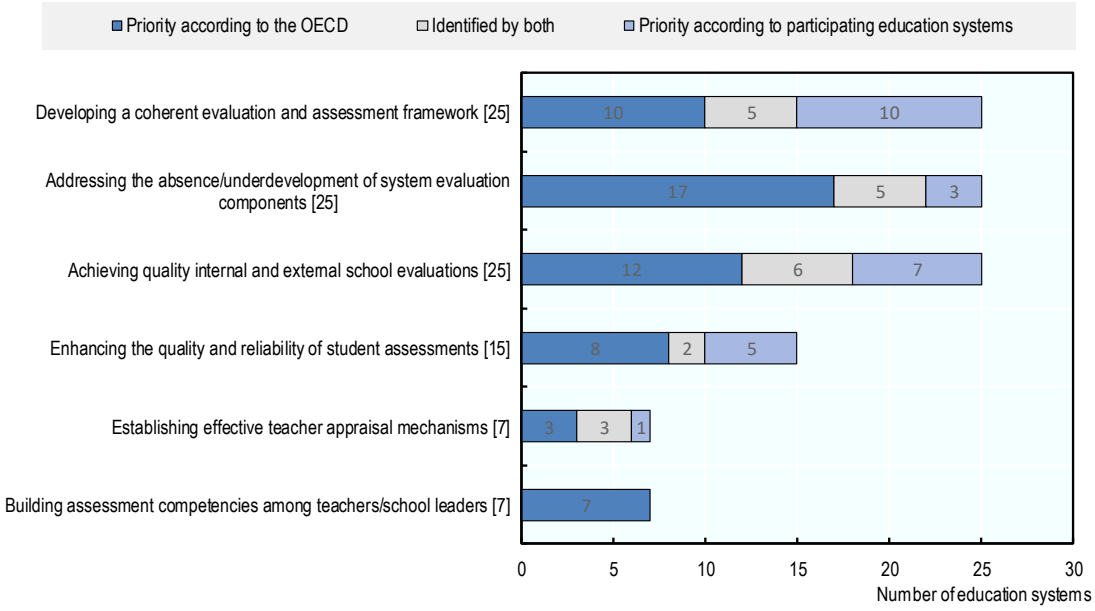
Finally, the highest number of policy efforts were collected for student assessment, although this was a less commonly reported priority. Efforts appear more focused on strengthening the design of student assessments, with fewer examples of how school staff's assessment competencies are being strengthened to use these tools. These two areas need to be addressed concurrently to enable effective policy implementation. However, education systems have expressed interest in strengthening internal or internal/external evaluation components, which could be how they are aiming to respond to building capacity and monitoring needs.

The progress and impact of policy efforts related to evaluation and assessment highlight two common experiences. First, many education systems have had to reinforce reforms related to student assessment or school evaluation by issuing further guidance, support tools, training opportunities and handbooks, primarily for teachers and school leaders, but also for parents and students. This demonstrates the importance of embedding quality capacity building throughout the reform process. In addition, some systems have encountered substantial resistance from stakeholders, particularly when changes are perceived as increasing high-stakes assessment or administrative burden. This indicates a need for careful communication plans and comprehensive, ongoing consultation processes.

Overview of policy priorities

There are six identifiable policy priorities in the area of evaluation and assessment for education systems for 2008-19: 1) developing a coherent evaluation and assessment framework (25 education systems); 2) addressing the absence or underdevelopment of system evaluation components (25 education systems); 3) achieving quality internal and external school evaluations for ongoing improvement (25 education systems); 4) enhancing the quality and reliability of student assessments (15 education systems); 5) establishing effective teacher appraisal mechanisms (7 education systems); and 6) building assessment competencies among teachers and school leaders (based on the policy priorities commonly identified by the OECD) (7 education systems) (see Figure 1.6).

Figure 1.6. Policy priorities for evaluation and assessment, as identified by the OECD and participating education systems, 2008-19



Notes:
1. **Priority according to the OECD:** See Annex A for the year of the country study considered.
2. **Priority according to participating education system**: Based on responses to EPO Surveys 2013 and 2016-17, as well as validation processes from education systems collected during 2019. Responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy and Sweden are based on the EPO Country Profiles published during 2017 and 2018 (see the Reader's Guide).
3. **The total number of education systems** where this priority was identified by the OECD, education systems or both, is included in brackets.

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With regard to **developing a coherent evaluation and assessment framework**:

- The OECD identified this as a policy priority for Australia, Colombia, Costa Rica, the Czech Republic, Denmark, Germany, Luxembourg, Mexico, New Zealand, Norway, Portugal, the Slovak Republic, Sweden and the United Kingdom (Scotland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Belgium (French Community), Chile, the Czech Republic, Denmark, Finland, France, Iceland, Italy, Korea, Norway, Portugal, Slovenia, Spain, Sweden and Turkey.
- General principles of action recommended by the OECD for these education systems include: 1) design well-developed components that relate in a coherent manner to one another and to the context, and are accompanied by a strategic implementation plan; 2) construct a clear, rational and compelling narrative; 3) engage stakeholders throughout the process; and 4) build capacity across the system.

With regard to **addressing the absence or underdevelopment of system evaluation components**:

- The OECD identified this as a policy priority for Australia, Belgium (Flemish Community), the Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Kazakhstan, Korea, Latvia, Luxembourg, Mexico, New Zealand, Norway, Portugal, the Slovak Republic, Sweden and the United Kingdom (Northern Ireland, Scotland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Belgium (Flemish and French Communities), the Czech Republic, Japan, Kazakhstan, Latvia, Mexico and Turkey.
- General principles of action recommended by the OECD for these education systems include: 1) broaden the concept of system evaluation to cover the wide range of system-level, ongoing monitoring that permits a good understanding of how well student learning objectives are being achieved; 2) develop capacity across the system; and 3) use data to inform improvement.

With regard to **achieving quality internal and external school evaluations**:

- The OECD identified this as a policy priority for Australia, Austria, Belgium (Flemish Community), Chile, the Czech Republic, Estonia, Finland, Greece, Italy, Lithuania, Luxembourg, Mexico, New Zealand, Norway, the Slovak Republic, Sweden and the United Kingdom (England and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Australia, Belgium (Flemish and French Communities), the Czech Republic, Hungary, Iceland, Ireland, Italy, Japan, Mexico, Portugal, Spain and the United Kingdom (England).
- General principles of action recommended by the OECD for these countries include: 1) strengthen and balance systematic internal and external school evaluations that go beyond basic compliance; 2) establish a shared vision; and 3) build capacity across the system.

Overview of policy trends

The OECD Secretariat also selected and reviewed a total of 80 policies on evaluation and assessment (see Figure 1.7). Of these, 43 were initially implemented between 2008 and 2014 and have remained in place since then, albeit with substantial modifications in some cases. The remaining 37 policies were implemented between 2015 and 2019.

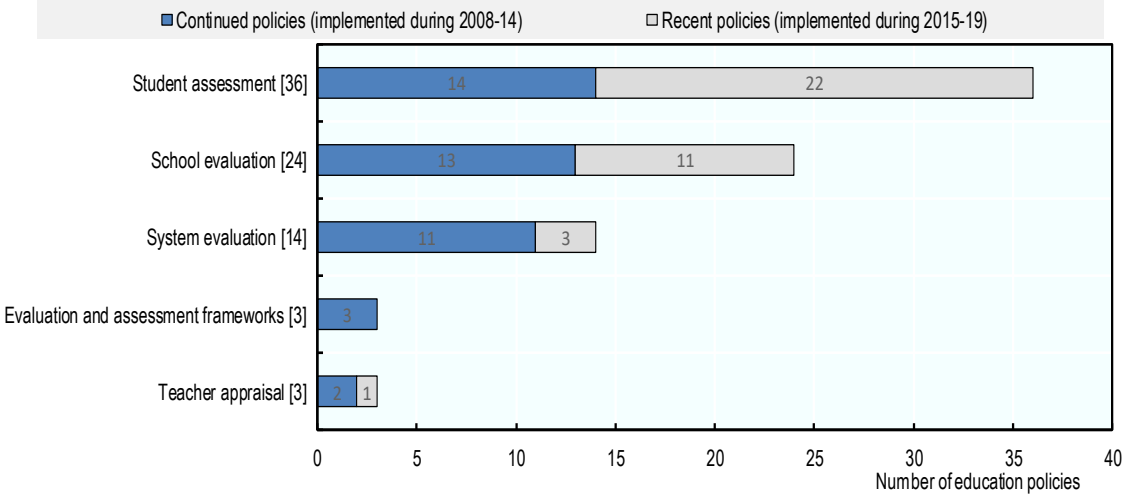
For each trend, education systems employed the following approaches:

- **Student assessment***:* Policies collected consist of introducing structural changes, expanding the scope of student assessments and digitalising assessment processes. Policies were implemented by Australia, Austria, Belgium (French Community), Canada (Federal and Alberta), the Czech Republic, Denmark, France, Iceland, Ireland, Italy, Kazakhstan, Korea, Mexico, New Zealand, Norway, Portugal, the Slovak Republic, Spain, Sweden, Turkey and the United Kingdom (England, Northern Ireland and Scotland).
- **School evaluation***:* Policies collected focus on strengthening external school evaluations or internal school evaluations and developing internal and external

school evaluation mechanisms in parallel. Policies were implemented by Austria, Belgium (Flemish and French Communities), the Czech Republic, Estonia, Greece, Hungary, Iceland, Ireland, Latvia, Norway, Portugal, Slovenia, Spain, Sweden, Turkey and the United Kingdom (England and Northern Ireland).

- **System evaluation***:* Policies collected target developing information systems. Policies were implemented by Denmark, Estonia, Germany, Greece, Hungary, Ireland, Latvia, Mexico, New Zealand, Slovenia and Turkey.
- **Evaluation and assessment frameworks**: Policies collected focus on achieving greater clarity and interconnections within existing frameworks. Policies were implemented by Finland, Germany and Korea.
- **Teacher appraisal**: Policies collected consist of developing more comprehensive appraisal mechanisms to support teacher improvement. Policies were implemented by Australia, Italy and Mexico.

Figure 1.7. Policy trends in education policies for evaluation and assessment, 2008-19



Notes: The total number of policy developments is included in brackets. All policies included in this figure are summarised in Chapter 8 of this report.
Source: EPO Surveys 2013 and 2016-17 and EPO Country Profiles published during 2017-18 for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), as well as desk-based research by the OECD Secretariat and validation processes undertaken in 2019.

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Governance

In today's increasingly complex systems, education systems are making considerable efforts to ensure that governance structures facilitate effective planning, implementation and delivery of education policies. As defined in this report, governance-related policies include those that aim to set system objectives and priorities, refine formal structures and engage stakeholders.

Differences in priorities identified by countries and the OECD

The policy priorities for governance reported by education systems were somewhat aligned with those identified by the OECD, most notably regarding the clarification of divisions of responsibility between national and local authorities and schools, which is the most commonly cited priority by both the OECD and education systems. However, there are also some important disparities. The OECD identified the introduction of quality assurance mechanisms and engaging stakeholders in decision making as policy priorities considerably more frequently than the participating education systems.

Evolution of trends

In 2015, the OECD canvassed key education policies for governance implemented by education systems between 2008 and 2014. The report that followed presented governance-related reforms within three broad focus areas: general strategies, education priorities and re-organisation of decision making.

Analysis of the key policies collected for this publication show continuity in the focus of policy efforts, but a new distribution of efforts across those areas. Whereas policies related to developing education strategies was the least active area of policy reported in 2015, setting system objectives was by far the most active area identified for this report. However, this is at least partly explained by the new inclusion of curricula policies within this policy area; in the 2015 report, these policies were considered as part of school improvement, although less had been collected at that time.

Comparing trends in policy priorities and policy developments

There is some alignment between policy priorities and reported policy reforms for governance for the period 2008-19. Clarifying the division of responsibility across the system was the most cited policy priority, and many policy efforts were reported in this area. A considerable number of these focused on creating or modifying bodies in charge of quality assurance processes, particularly through the amalgamation of agencies and bodies to create greater coherence. Decentralising decision making through transferring responsibilities for administrative and pedagogical matters from central government to local authorities or education institutions was another common way in which this priority area was addressed.

Establishing national strategies and plans is by far the most frequent policy tool used among countries participating in this report. This shows alignment with the commonly cited priority of defining national education priorities and goals, although activity was much more extensive than priority reporting suggested. In addition, this corroborates the idea that governance of evermore complex education systems increases the need for foresight and systemic vision. In line with this, many education systems also reported updating learning expectations and frameworks to meet the requirements of today's changing social and economic environment.

A rather limited number of policies have been found that aim to effectively enhance participation in the education system, however; this is consistent with the fact that very few education systems reported this as a policy priority. Stakeholder engagement is crucial for effective and efficient education governance and student learning. This is clearly illustrated by the evidence of progress and impact collected for this report across all policy areas; implementation is facilitated by purposeful and ongoing efforts to engage students, and is

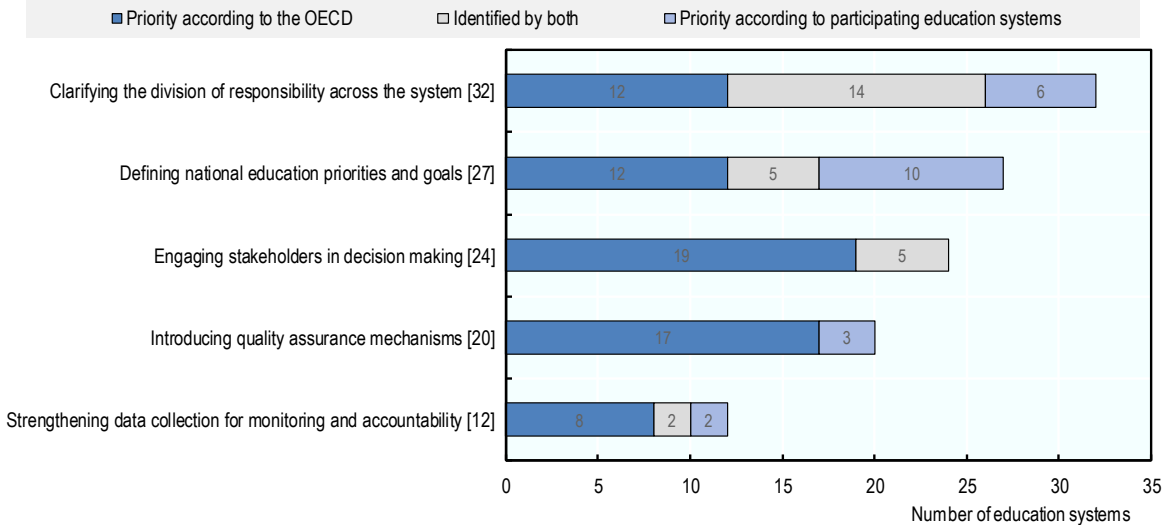
inhibited by a lack of engagement or buy-in. The OECD, therefore, encourages education systems to reflect on mechanisms to strengthen stakeholder engagement in the future.

Regarding governance-related policies, evidence collected for progress and impact offers some interesting insights. National priority and target setting, for example, proves to be a particularly valuable approach when long-term national goals are broken down into shorter-term actions and sub-actions with concrete outputs. This then helps inform policy decision making across the rest of the system and encourages ongoing monitoring. When it comes to curriculum reform, allowing sufficient time for gradual development and implementation seem key, as this enables stakeholders to be fully engaged across the process and to implement new processes according to local contexts. Some of the most interesting and successful examples occur when systems thinking allows initiatives in policy areas such as school evaluation and teacher development to be carefully aligned with wider-reaching initiatives such as curricular reforms. This encourages stakeholder buy-in, capacity building and engagement, which in turn enables actors to implement change.

Overview of policy priorities

There are five identifiable policy priorities in the area of governance for education systems for 2008-19: 1) clarifying the division of responsibility across the system (32 education systems); 2) defining national education priorities and goals (27 education systems); 3) engaging stakeholders in decision making (24 education systems); 4) introducing quality assurance mechanisms (20 education systems); and 5) strengthening data collection for monitoring and accountability (12 education systems) (see Figure 1.8).

Figure 1.8. Policy priorities in education system governance, 2008-19



Notes:
1. **Priority according to the OECD**: See Annex A for the year of the country study considered.
2. **Priority according to participating education system**: Based on responses to EPO Surveys 2013 and 2016-17, as well as validation processes from education systems collected during 2019. Responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy and Sweden are based on the EPO Country Profiles published during 2017 and 2018 (see the Reader's Guide).
3. **The total number of education systems** where this priority was identified by the OECD, education systems or both, is included in brackets.

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With regard to **clarifying the division of responsibility across the system**:

- The OECD identified this as a policy priority for Australia, Austria, Belgium (Flemish, French and German-speaking Communities), the Czech Republic, Estonia, France, Greece, Hungary, Iceland, Italy, Japan, Kazakhstan, Korea, Latvia, Lithuania, Luxembourg, Norway, Portugal, the Slovak Republic, Slovenia, Sweden, Turkey and the United Kingdom (Scotland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Australia, Austria, Belgium (Flemish and French Communities), Chile, the Czech Republic, Estonia, Finland, Hungary, Italy, Latvia, Mexico, New Zealand, Norway, Portugal, the Slovak Republic, Spain, Sweden, Turkey and the United Kingdom (England).
- General principles of action recommended by the OECD for these education systems include: 1) clarify decision-making responsibilities and support capacity building at national or local levels of administration; and 2) grant more autonomy to schools and higher education institutions.

With regard to **defining national education priorities and goals**:

- The OECD identified this as a policy priority for Australia, Belgium (Flemish Communities), Chile, Colombia, Costa Rica, the Czech Republic, Greece, Iceland, Japan, Kazakhstan, Latvia, Lithuania, Sweden, Turkey and the United Kingdom (England, Northern Ireland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Austria, Belgium (Flemish and French Communities), Canada, the Czech Republic, Denmark, France, Germany, Greece, Ireland, Italy, Japan, Portugal, Spain and Sweden.
- General principles of action recommended by the OECD for these education systems include: 1) create national education strategies, plans and frameworks; and 2) reform curricula to modernise learning expectations.

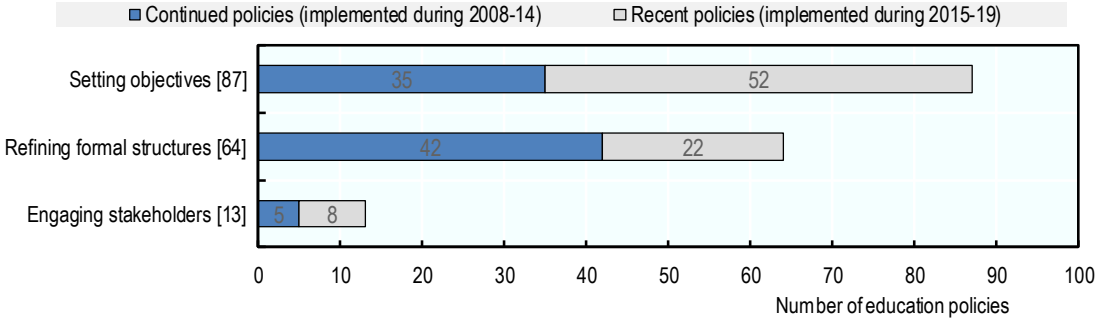
With regard to **engaging stakeholders in decision making**:

- The OECD identified this as a policy priority for Australia, Canada, Chile, Costa Rica, the Czech Republic, Estonia, Finland, France, Iceland, Ireland, Italy, Japan, Kazakhstan, Latvia, Luxembourg, Mexico, New Zealand, Norway, Poland, the Slovak Republic, Slovenia, Sweden and the United Kingdom (England and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are the Czech Republic, Iceland, Japan, Kazakhstan and Mexico.
- General principles of action recommended by the OECD for these education systems include: 1) engage parents, students and the school community; 2) promote school networking and peer learning; 3) engage employers and the private sector; and 4) foster internationalisation.

Overview of policy trends

The OECD Secretariat also selected and reviewed a total of 164 policies related to governance for this analysis (see Figure 1.9). From these policies, 82 were initially implemented between 2008 and 2014 and have remained in place until at least 2019, albeit with substantial modifications in some cases. The remaining 82 policies were implemented between 2015 and 2019.

Figure 1.9. Policy trends in education policies for system governance, 2008-19



Notes: The total number of policy developments is included in brackets. All policies included in this figure are summarised in Chapter 8 of this report.
Source: EPO Surveys 2013 and 2016-17 and EPO Country Profiles published in 2017 and 2018 for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan and Sweden (see the Reader's Guide), as well as desk-based research by the OECD Secretariat and validation processes undertaken in 2019.

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Education systems employed the following common strategies for each trend:

- **Setting objectives***:* Policies collected focus on developing national strategies or plans and modernising curricula and qualifications frameworks. Policies were implemented by Australia, Belgium (Flemish and French Communities), Canada, Chile, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Kazakhstan, Korea, Latvia, Mexico, New Zealand, Norway, Portugal, the Slovak Republic, Slovenia, Spain, Turkey and the United Kingdom (England).
- **Refining formal structures***:* Policies collected target implementing or reforming agencies and mechanisms for quality assurance and decentralising decision making. Policies were implemented by Australia, Austria, Belgium (Flemish, French and German-speaking Communities), Chile, the Czech Republic, Estonia, Finland, France, Germany, Hungary, Iceland, Italy, Kazakhstan, Korea, Latvia, Mexico, New Zealand, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom (England, Northern Ireland and Scotland).
- **Engaging stakeholders**: Policies collected consist of creating participatory boards or councils or better engaging the private sector and local employers. Policies were implemented by Australia, Belgium (French Community), Estonia, Greece, Japan, Kazakhstan, Mexico, New Zealand, Portugal and Turkey.

Funding

Ensuring that the resources invested in education systems are directed to the areas where improvements in teaching and learning outcomes can be best achieved is critical work for policy makers. As defined in this report, funding policies include those that address the economic resources within the education system and the use of resources at the school level.

Differences in priorities identified by countries and the OECD

There is some alignment in the policy priorities identified by the OECD and those reported by education systems. Improving efficiency in the use of resources is a popular priority for both. However, tackling shortages in high-quality teachers and school leaders and revising the sources of funding for educational institutions were much more commonly identified by the OECD than reported by education systems.

Evolution of trends

In 2015, the OECD reported on the key funding-related policies implemented by participating education systems between 2008 and 2014. That report collated reforms within three policy areas: public and private funding at the system level, institution-level funding and student-centred approaches to funding (OECD, 2015[16]).

The key policies reported by education systems for this report exhibit some continuity in policy efforts for funding with trends identified at the system, institutional and student levels. However, the trend areas have been significantly refined for this report and new cross-cutting areas of focus, such as efficiency and equity, have become more prevalent.

Comparing trends in policy priorities and policy developments

There is some notable alignment between policy priorities and trends for funding during the period 2008-19. Investing sufficient financial resources in education and improving efficiency in their use were the most frequently identified policy priorities. Similarly, the highest number of policy efforts were reported for the area of financial resources. In particular, these focused on improving access to, and quality of, early childhood education and care (ECEC) through increasing funding or introducing performance-based funding mechanisms for higher education. These types of policy reforms appear to be growing in significance; many were implemented during 2015-19.

The commonly cited policy priorities of improving efficiency and equity in educational expenditure are also reflected in the high number of reforms relating to the use of funding. Several education systems have introduced targeted support to certain population sub-groups, predominantly the socio-economically disadvantaged, often through improving the quantity and quality of human resources available to support these groups. In contrast, despite being a less frequently reported policy priority, many reforms tackling shortages of human and material shortages were collected, particularly regarding teacher salary increases and school infrastructure.

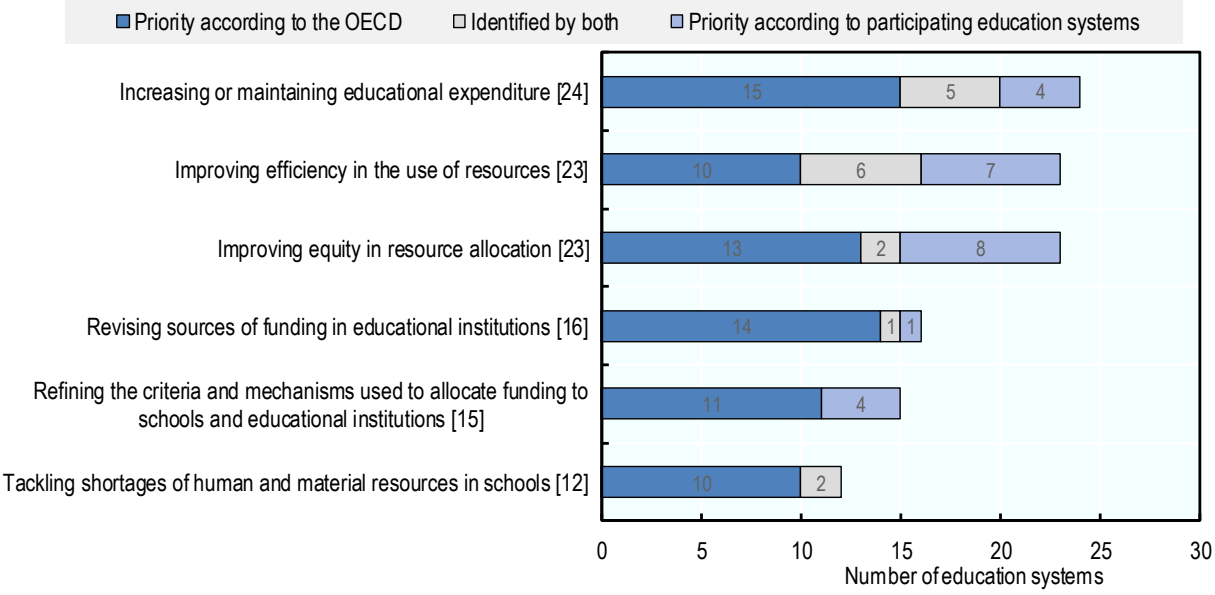
Reforming sources of education funding is a less frequently identified policy priority and consequently appears to have received less attention from policy makers. There are very few collected policy efforts in the area of private financing of education, although several education systems have invested public funding in transfers to households, particularly to cover higher education tuition fees.

According to the progress and impact of policy efforts collected for this report, where large-scale funding reforms have been introduced, they are often informed by expert reviews and inquiries. However, many other funding reforms appear to be implemented in a piecemeal approach, expanding year on year: in such cases, there is little evidence of careful evaluation at each stage, suggesting a need for more evidence-informed decision making. Furthermore, a common challenge lies in ensuring that public funds meet demand, both to achieve full coverage of eligible students and to ensure continuity in the longer term. Finally, education systems appear to introduce reforms in resource use in reaction to contextual changes, such as teacher shortages or student numbers; building capacity for foresight could, therefore, help make systems more anticipatory as opposed to reactive.

Overview of policy priorities

There are six identifiable policy priorities in the area of funding for education systems for 2008-19: 1) increasing or maintaining educational expenditure (24 education systems); 2) improving efficiency in the use of resources (23 education systems); 3) improving equity in resource allocation (23 education systems); 4) revising sources of funding in educational institutions (16 education systems); 5) refining the criteria and mechanisms used to allocate funding to schools and educational institutions (15 education systems); and 6) tackling shortages of human and material resources in schools (12 education systems) (see Figure 1.10).

Figure 1.10. Policy priorities for funding, as identified by the OECD and participating education systems, 2008-19



Notes:
1. **Priority according to the OECD**: See Annex A for the year of the country study considered.
2. **Priority according to participating education system**: Based on responses to EPO Surveys 2013 and 2016-17, as well as validation processes from education systems collected during 2019. Responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy and Sweden are based on the EPO Country Profiles published during 2017 and 2018 (see the Reader's Guide).
3. **The total number of education systems** where this priority was identified by the OECD, education systems or both, is included in brackets.

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With regard to **increasing or maintaining educational expenditure**:

- The OECD identified this as a policy priority for Australia, Belgium (Flemish Community), Canada, Chile, Colombia, Costa Rica, Estonia, Germany, Hungary, Italy, Japan, Kazakhstan, Korea, Latvia, Mexico, the Slovak Republic, Slovenia, Turkey, the United Kingdom (England) and the United States.
- Education systems that reported this as a priority between 2008 and 2019 are Austria, Belgium (Flemish Community), the Czech Republic, Germany, Iceland, Ireland, Mexico, the Slovak Republic and Turkey.
- General principles of action recommended by the OECD for these education systems include: 1) invest in early educational levels (ECEC and primary); 2) shift funds from higher education to primary and secondary levels; and 3) invest in higher education and vocational education and training (VET).

With regard to **improving efficiency in the use of resources**:

- The OECD identified this as a policy priority for Belgium (Flemish Community), Chile, Denmark, France, Iceland, Ireland, Italy, Kazakhstan, Korea, Latvia, Lithuania, Norway, the Slovak Republic, Slovenia, Sweden and the United Kingdom (England).
- Education systems that reported this as a priority between 2008 and 2019 are Belgium (Flemish, French and German-speaking Communities), the Czech Republic, Finland, Italy, Kazakhstan, Korea, Latvia, Mexico, Portugal, Spain and Sweden.
- General principles of action recommended by the OECD for these education systems include: 1) consolidate small schools to achieve economies of scale; 2) reduce spending while preserving service provision; and 3) improve the use of budget plans.

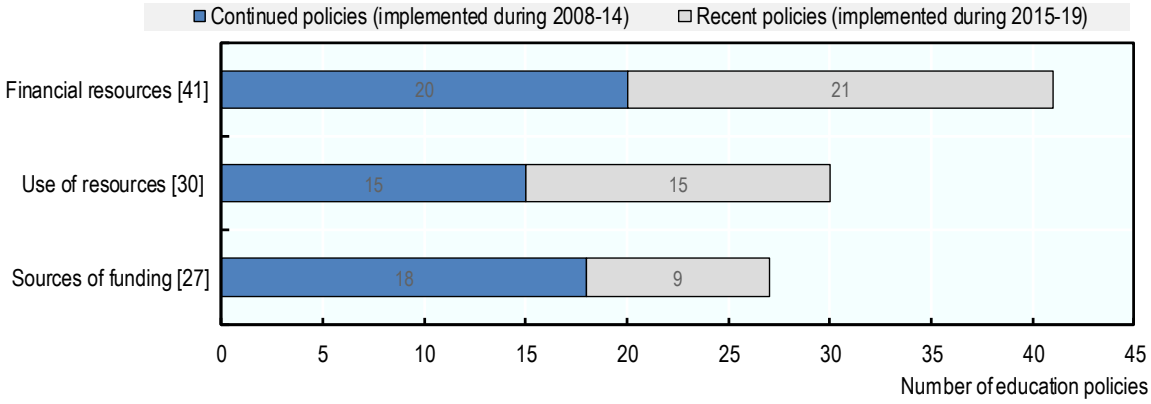
With regard to **improving equity in resource allocation**:

- The OECD identified this as a policy priority for Australia, Belgium (Flemish Community), Canada, Chile, Colombia, Germany, Japan, Kazakhstan, Norway, Slovenia, Sweden and the United Kingdom (England, Northern Ireland, Scotland and Wales).
- Education systems that reported this as a priority between 2008 and 2019 are Austria, Belgium (French and German-speaking Communities), the Czech Republic, Denmark, France, Germany, Mexico, New Zealand and Slovenia.
- A general principle of action recommended by the OECD for these education systems is to provide targeted support to disadvantaged population sub-groups.

Overview of policy trends

The OECD Secretariat also selected and reviewed a total of 98 funding-related policies for this analysis (see Figure 1.11). Of these, 53 were initially implemented between 2008 and 2014 and have remained in place, albeit with substantial modifications in some cases. The remaining 45 policies were implemented between 2015 and 2019.

Figure 1.11. Policy trends in education policies for funding, 2008-19



Notes: The total number of policy developments is included in brackets. All policies included in this figure are summarised in Chapter 8 of this report.
Source: EPO Surveys 2013 and 2016-17 and EPO Country Profiles published during 2017 and 2018 for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), as well as desk-based research by the OECD Secretariat and validation processes undertaken in 2019.

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For each policy trend, education systems employed the following common strategies:

- **Financial resources***:* Policies collected target investing in ECEC, primary and secondary education, and introducing performance-based and needs-based funding in higher education. Policies were implemented by Australia, Austria, Belgium (National and Flemish and German-speaking Communities), Chile, the Czech Republic, Denmark, Estonia, Finland, Germany, Hungary, Ireland, Italy, Japan, Korea, Latvia, New Zealand, Norway, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom (England).
- **Use of resources***:* Policies collected focus on improving or introducing targeted support to population sub-groups and increasing efficiency in time, human and material resources. Policies were implemented by Australia, Austria, Belgium (Flemish and French Communities), Chile, Germany, Greece, France, Iceland, Ireland, Kazakhstan, Latvia, Mexico, Portugal, the Slovak Republic, Slovenia, Sweden and the United Kingdom (England).
- **Sources of funding**: Policies collected consist of increasing the amount of public financial aid available to students across education levels, encouraging private sector involvement and increasing tuition fees. Policies were implemented by Canada, Chile, Estonia, Finland, France, Iceland, Ireland, Japan, Korea, Latvia, New Zealand, Norway, the Slovak Republic, Slovenia, Sweden, Turkey and the United Kingdom (England and Northern Ireland).

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Chapter 2. School improvement: Policy priorities and trends, 2008-19

This chapter identifies developments in policy priorities related to school improvement between 2008 and 2019, both from the perspective of education systems across participating education systems in OECD member countries and non-member economies, and previous OECD country-based work. Such policy priorities include improving learning conditions to support all students; supporting and improving the competencies of school support staff; attracting and retaining teachers; improving teacher qualifications, skills and training; as well as improving teachers' working conditions, among others.

Taking a comparative approach, this chapter also analyses policy trends identified for school improvement between 2008 and 2019, providing evidence of progress or impact for a selection of policies

Highlights

- This chapter **analyses policy priorities and trends on school improvement** across participating education systems in terms of **learning environments, high-quality teachers** and **school leaders**.
- The **most frequently observed policy priorities** related to school improvement from 2008 to 2019 were: **improving teacher qualifications, skills and training** (identified in 31 education systems); **attracting and retaining teachers** (identified in 23 education systems); and **improving learning conditions to support all students** (identified in 23 education systems). Other priorities identified related to: improving school leaders' qualifications (identified in 14 education systems); improving teachers' working conditions (identified in 12 education systems); supporting and improving the competencies of school support staff (identified in 8 education systems); and raising the attractiveness of the school leader position (identified in 6 education systems).
- The **most frequently observed trends in policy developments** related to school improvement from 2008 to 2019 were on: **improving education systems' learning environments** (through general strategies for schools, policies aimed at improving learning conditions to support all students, and policies on digitalisation of schools); **developing high-quality teachers** (through measures such as professional frameworks and career pathways, recruitment and registration, incentives and stimuli, initial teacher education, induction processes and professional development); and **supporting school leaders** (mainly through professional frameworks and competence development).

Setting the scene

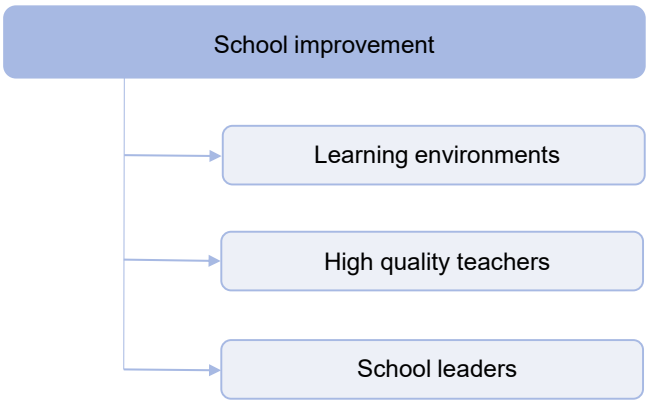
How can education systems build a more flexible 21st-century learning environment and help schools innovate? Education systems are increasingly confronted with these questions (Schleicher, 2018[1]).

It turns out that school improvement policies are essential in establishing the conditions required for a more innovative and flexible education system that supports student achievement according to individual needs and social and technological change.

In line with this, the Education Policy Outlook Analytical Framework defines school improvement policies as those that aim to strengthen learning environments and develop high-quality teachers and school leaders (see Figure 2.1) (OECD, 2015[2]).

Effective 21st-century learning environments create communities and build capacities within them, strengthening collaboration and communication, creating conducive conditions and climates for teaching and learning, and seeking coherence in these efforts (Schleicher, 2015[3]). These learning conditions can support students to learn how to better navigate worlds that are increasingly volatile, unstable, complex and ambiguous (Bennis and Nanus, 1985[4]). Moreover, in contexts of increasing student diversity, inclusive learning environments play a crucial role in nurturing stronger schools and societies.

Figure 2.1. School improvement according to the Education Policy Outlook Framework



Source: OECD (2015[2]), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, https://doi.org/10.1787/9789264225442-en.

As part of the process of strengthening learning environments, education systems also need to develop high-quality teachers. A high-quality teaching body is not just a "given" among high-performing education systems, however; it is the result of deliberate policy choices carefully implemented over time. With this in mind, education systems can learn from different education models to find alternatives that can be relevant to their specific contexts (OECD, 2018[5]). This learning opportunity can be of great value to education systems, as teachers and education systems need to support students, now more than ever, to learn how to better navigate change and develop a mindset conducive to lifelong learning.

Besides teachers, school leaders play an increasingly important role in establishing and ensuring well-functioning 21st-century learning environments. School leaders often act as the bridge between teachers, students, parents or guardians, the education system as a whole and the wider community (OECD, 2016[6]). OECD evidence emphasises that effective school leaders are those who can make evidence-informed decisions, provide the instructional leadership that teachers need to help all their students to succeed in school, and create a collaborative school environment in which teachers take part in school decision making (Schleicher, 2015[3]). Moreover, school leaders are often the first implementers of an education system, as they are tasked with translating education policies into reality within their schools so they become part of everyday practice.

With this framework as a basis, this chapter provides a comparative overview of the evolution of policy priorities related to school improvement, as identified by the OECD in previous country-based work, and as reported by participating education systems at different points between 2008 and 2019.

General principles of action, as identified by the OECD to support countries in tackling these priorities, are then explored.

The chapter also analyses policy trends in over 130 education policy developments undertaken mainly between 2008 and 2019. Over half of the policies collected have been in place since at least 2014, offering evidence of progress or impact in most cases. Throughout this chapter, evidence of progress or impact is included, in order to assist the reader in analysing factors relevant to the implementation of these policies (also see Chapter 1 and the Reader's Guide).

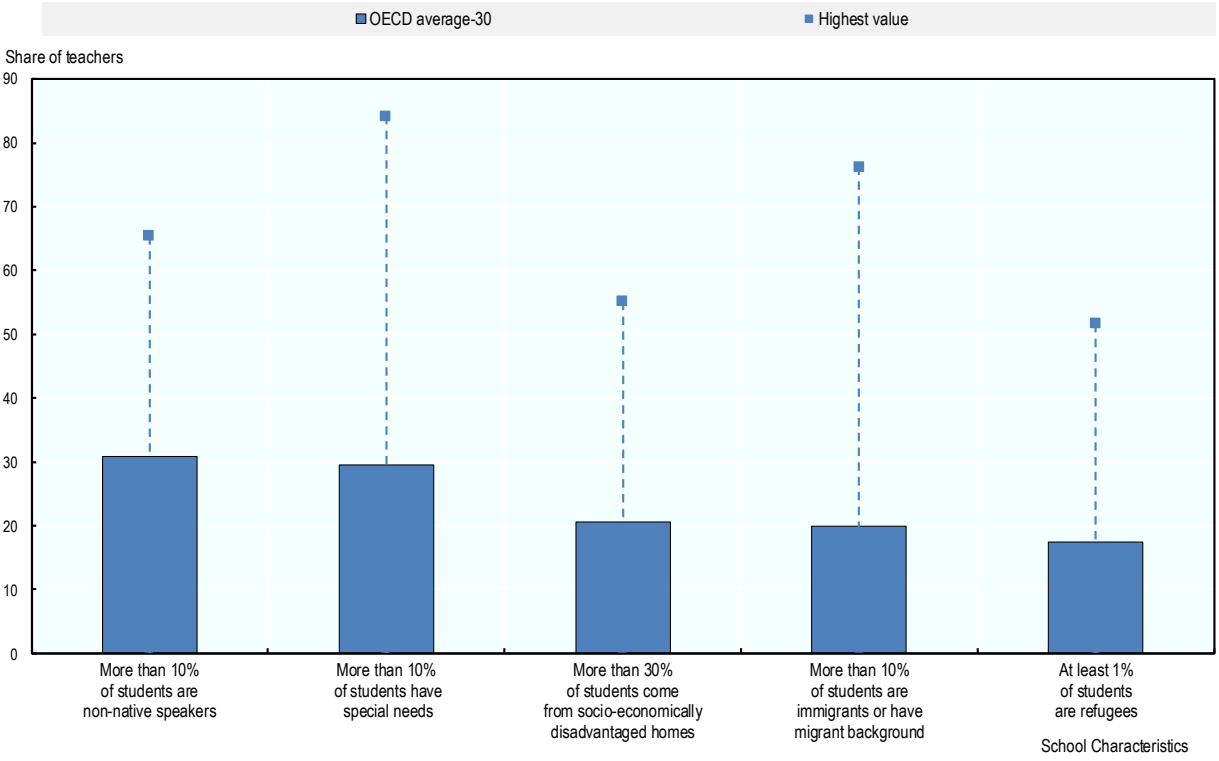
All the policy reforms relating to **school improvement** and collected by the Education Policy Outlook are listed in the policy trends tables included in this chapter; more detailed descriptions of each of these policies and, where possible, their progress or impact, can be found in Chapter 8.

Learning environments

Learning environments play an increasingly important role in ensuring students' success at school by influencing how students and teachers interact. The OECD defines learning environments as covering four key components: learners (the centrepiece), educators, content and resources. More specifically, this includes structural school-level conditions such as class size, learning and instruction time, the curriculum and share of instruction within the curriculum by subject, all of which are tangible policy areas used across countries to improve the learning process (OECD, 2015[2]) (for curriculum-focused policies, see Chapter 4 of this report). As of 2018, lower secondary teachers across the OECD spent an average of 78% of lesson time on actual teaching and learning, 13% on keeping order in the classroom and 8% on administrative tasks. However, there appears to be a negative trend across the OECD: over the period 2008-19, for the majority of those countries with statistically significant data (12 out of 17 countries), there has been a decline in the percentage of class time dedicated to teaching and learning (OECD, 2019[7]).

As student bodies become increasingly heterogeneous across education systems, schools have to improve education outcomes for *all* students by creating inclusive learning environments. There are many ways in which a student population can be diverse; the OECD identifies five main themes: migration; ethnic groups and visible minorities; disabilities, learning impairments and mental health; gender; and giftedness (OECD, 2019[8]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, on average across the OECD, classrooms host a complex mix of learners: nearly one in three teachers teach in schools where more than 10% of students have special needs, just over one in five teach in schools where more than 10% of students are non-native speakers and one in five in schools where more than 30% of students come from socio-economically disadvantaged homes (see Figure 2.2) (OECD, 2019[7]). Ensuring all students have high outcomes is therefore an ongoing challenge for teachers across the OECD: in terms of average science performance, boys outperform girls by 4 points, native students outperform their immigrant peers by 43 points and advantaged students outperform disadvantaged students by 88 points (OECD, 2018[9]).

Figure 2.2. School composition, according to principals of lower secondary schools, 2018



Notes:
1. Principals' responses were merged to teacher data and weighted using teacher final weights.
2. Students who are "non-native speakers" refer to "students whose first language is different from the language(s) of instruction or from a dialect of this/these languages."
3. "Students with special needs" are those for whom a special learning need has been formally identified because they are mentally, physically, or emotionally disadvantaged.
4. "Socio-economically disadvantaged homes" refers to homes lacking the basic necessities or advantages of life, such as adequate housing, nutrition or medical care.
5. "Immigrant students" refers to "students who are immigrants or with a migrant background", as reported by the school principal. An "immigrant student" is one who was born outside the country. A "student with a migrant background" has parents who were both born outside the country.
6. "Refugee" students are those who, regardless of legal status, fled to another country seeking refuge from war, political oppression, religious persecution or a natural disaster.
Source: OECD (2019[10]), *TALIS 2018 Database*, Table 1.3.25, https://www.oecd.org/education/talis/talis-2018-data.htm.

StatLink http://dx.doi.org/10.1787/888933997265

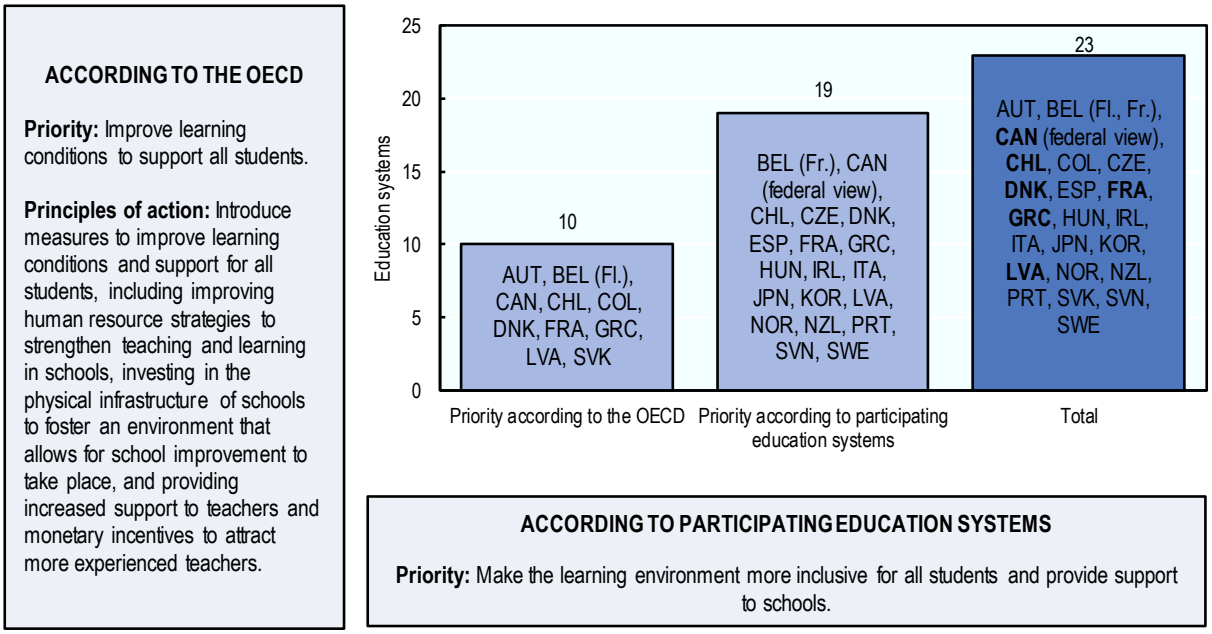
Policy priorities

Improving learning conditions to support all students

Through specific country-based work, the OECD has identified improving learning conditions to support all students as a policy priority in several education systems. This includes addressing the needs of specific student groups, as well as providing support to schools to develop well-functioning learning environments. Between 2008 and 2019, this policy priority was identified in at least a total of 23 education systems, either by the OECD

in previous country-based work (10 education systems), by participating education systems (19 education systems), or both (6 education systems) (Figure 2.3).

Figure 2.3. Improving learning conditions to support all students



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this as a policy priority in at least nine education systems from 2015-19 (Austria, the Flemish Community of Belgium, Canada, Chile, Colombia, Denmark, France, Greece and Latvia). It was also identified as a priority in the Slovak Republic in 2008-14.

Common principles of action mentioned by the OECD in recommendations to these education systems include introducing measures to improve learning conditions to support all students. More specifically, these recommended measures include improving human resource strategies to strengthen teaching and learning in schools. These can be as broad as developing teacher standards or professional development opportunities that have a strong link to the school context. Other recommended measures include providing increased support to teachers for classroom management and offering monetary incentives to attract more experienced teachers to schools with a high share of students from a disadvantaged background. Further measures link to investing in the physical infrastructure of schools, such as through the development of a more integrated system for infrastructure

development and better use of data at all system levels, to foster an environment that allows for school improvement to take place.

For example, in 2017, the OECD recommended that France offer attractive salaries and career prospects to excellent teachers in schools with many students from disadvantaged backgrounds (OECD, 2017[11]). Previously, in 2015, the OECD had recommended that the Flemish Community of Belgium develop a more integrated system-wide planning procedure for school infrastructure, and improve the quantity and quality of school facilities (Nusche et al., 2015[12]).

Of the 19 education systems reporting this to the OECD as a policy priority, several, including the French Community of Belgium, Chile, Greece, Latvia and New Zealand, did so between 2015 and 2019. Others, including the Czech Republic, Slovenia and Spain reported it as a persisting priority across the period 2008-19. Education systems have undertaken several policy efforts to address this priority, such as the current work of the German-speaking Community of Belgium on a common policy for homework practice (2015), or France's measures to tackle bullying and violence (2013).

Supporting and improving the competencies of school support staff

For some countries, the OECD's specific country-based work has identified a need to support and improve the competencies of school support staff. This includes improving the recruitment, organisation and competencies of school support staff and ensuring that different staff profiles are coherent and complementary. Between 2008 and 2019, this policy priority was identified in a total of 8 education systems, either by the OECD in previous country-based work (8 education systems) by participating education systems (1 education system), or both (1 education system) (Figure 2.4).

Supporting and improving the competencies of school support staff was identified by the OECD as a priority in at least five education systems (the Czech Republic, Finland, Japan, the Slovak Republic and Wales [United Kingdom]) across the period 2008-14, and as a priority in three more education systems (Estonia, Kazakhstan and Latvia) from 2015-19.

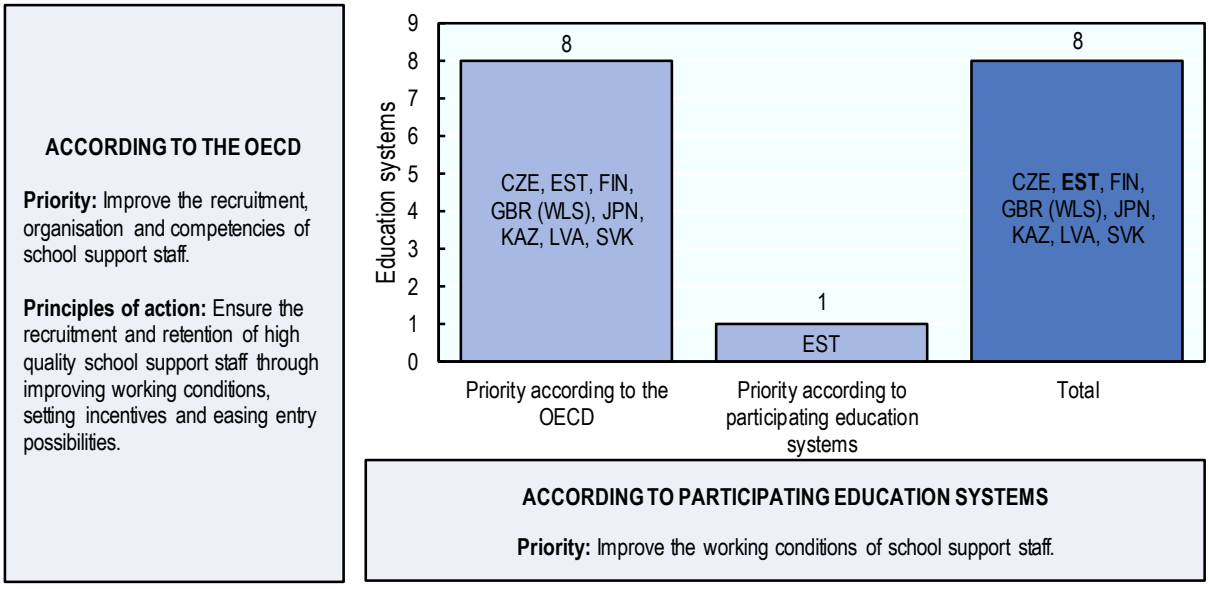
Relevant principles of action offered by the OECD in recommendations to these education systems include ensuring the recruitment and retention of high-quality school support staff through improved working conditions, setting incentives and easing entry possibilities. More specifically, this support can refer to offering better organisational guidance, such as setting out clear standards and qualifications or establishing a clear career structure.

In 2012, for example, the OECD recommended that Japan raise awareness of the importance of continuous training among early childhood education and care (ECEC) staff and employers (Taguma, Litjens and Makowiecki, 2012[13]). More recently, in 2017, the OECD recommended that Kazakhstan provide local academic and professional development opportunities for all core academic staff and academic leaders of higher education institutions (OECD, 2017[14]).

Estonia was the only education system to report this priority to the OECD, identifying it as a persisting priority for the period 2008-19.

Despite this, the OECD collected information on relevant policy efforts in several other education systems. Latvia's Education Development Guidelines (2014-20) include activities for competence development relating to the organisation of the learning process and development of information and communication technology (ICT) skills among administrative, pedagogical and academic staff in vocational and higher education.

Figure 2.4. Supporting and improving the competencies of school support staff



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. Priority according to participating education system: Based on responses to EPO Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. Comparing previous OECD analysis and country responses: Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

Policy trends

The policy trends observed include a focus on general strategies for schools and learning conditions to support all students (Table 2.1). The general strategies have shown some stability over time. These policies were originally designed or have evolved to strengthen capacity at school levels, including for school staff and community engagement. A more recent topic identified is the digitalisation of schools, for which the majority of the policies collected were implemented from 2015.

Evidence of progress or impact for these policies was also collected for this report, when possible. The analysis on the cases analysed found that the effectiveness and efficiency of implementation depends greatly on factors such as: stakeholder involvement (including governments to schools and students); collaboration across the different levels (for example through peer learning); guidance and monitoring; adaptation to local needs; and increased financial support to schools.

Table 2.1. Policies to improve education systems' learning environments, 2008-19

Learning environments		
General strategies for schools	**Learning conditions to support all students**	**Digitalisation of schools**
Recent (Implemented between 2015 and 2019)		
Austria: School Entry and Primary School package (2016) (introduced new elements to the School Organisation Act, the School Education Act and the Compulsory Schooling Act)	**Belgium (De.)**: Common policy for homework practice (2015)	**Austria**: New Master Plan for Digitalisation in Education (2018); Introduction of an innovation package (2017), as part of the digital education strategy "School 4.0 – Let's get digital"
Belgium (Fr.): Pact for Excellence in Teaching (2015-30) **[*]**	**Czech Republic**: Decree No.27/2016 Coll., on the education of children, pupils and students with special educational needs	**Canada (Saskatchewan)**: Digital Citizenship Education in Saskatchewan Schools (2015) **[*]**
Denmark: New reform (2017), introduces a minimum grade requirement for entry to general upper secondary education	**Greece:** "Uniform" all-day model for primary schools (2016); expanded to include special education primary schools (2017)	**France**: Digital School Plan (2015); Digital Resource Bank for School (BRNE, 2016)
Finland: New Comprehensive School Programme (2015-19)	**Mexico**: Public and private schools can choose among two calendars (2016)	**Spain**: National Plan for Digital Education (2018)
Ireland: DEIS Plan (2017)	**Mexico**: National Certificates of Education Infrastructure for Schools (2015)	
Kazakhstan: Updated State Compulsory Standard (2017); efforts to reform the pedagogical approach to be competency-based (2016)	**Slovak Republic**: Introduction of career counsellor with new measures (2019), based on Pedagogical and Specialised Employees Act reforms (2009, 2018)	
Mexico: School at the Centre strategy (2016)	**Slovak Republic**: Special working group for the reduction of unnecessary administrative workload (2015)	
Mexico: Technical Support Service to Schools (2017)	**United Kingdom (England):** Policy efforts to reduce teachers and school leaders' workload (2016, 2018, 2019)	
Portugal: National Programme for the Promotion of School Success (PNPSE, 2016-19)		
United Kingdom (Wales): Pioneer Schools Network (2015)		
Still in place (Implemented between 2008 and 2014)		
Australia: Australian Education Act (2013), Quality Schools package (2017), enabling legislation Australian Education Amendment Bill (2017), New National School Reform Agreement (2019) **[*]**	**Denmark**: Reduce the influence of social background in relation to students' academic achievements, as part of the *Folkeskole* reform (2014-20)	**Denmark**: Changes to Individual Mandatory Student Plans (2006) for children in kindergarten up to Grade 8 (2014-20) **[*]**
Denmark: *Folkeskole* reform by modifying aspects of compulsory education (2014-20)	**Denmark**: Measurement and improvement of students' well-being initiative (2014), as part of the *Folkeskole* reform (2014-20)	**Greece:** Digital School Strategy (2013); updated (2016)
Estonia: Basic School and Upper Secondary School Act (2013); re-organisation of the school network (2004)	**France**: Revised school timetables for primary education (2013; revised 2014; revised 2017) **[*]**	
Japan: OECD Tohoku School Project (2011); Innovative Schools Network 2030 Phase 1 (ISN 1.0) (2015)	**France**: Improving the overall school climate; tackling bullying and violence in school (2013)	
Kazakhstan: National pilot to introduce resource centres to support small-class schools (2012)		
Norway: Advisory Team Programme (2009), incorporated into the Follow-Up Scheme in 2017		

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.

Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

General strategies for schools

Many education systems have implemented **general strategies for schools** to foster better learning environments. The goal is to strengthen capacity and improvement at school level and among school staff, as well as increase community engagement. This type of policy was collected for Australia, Austria, the French Community of Belgium, Denmark, Estonia, Finland, Ireland, Mexico, Japan, Kazakhstan, Mexico, Norway, and the United Kingdom (Wales).

In Australia, school funding has been linked to education reform to improve education quality. As another example, the French Community of Belgium's Pact for Excellence in Teaching (2015-30) is a far-reaching strategy that contains elements that relate to quality knowledge and skills, school principals and teacher development, student well-being and educational achievement. In the same way, Mexico's School at the Centre strategy works to bring together different initiatives to improve the overall functioning of schools by strengthening autonomy and shared decision making.

Policy focus

- In **Australia**, under the Australian Education Act 2013, school **funding is linked to educational reform**. States and territories have to enter into agreements with the government to receive funding.

> **Progress or impact:** Following up on the 2013 Students First and Quality Schools, Quality Outcomes, the Australian Government announced its Quality Schools package (2017) and introduced the enabling legislation, the Australian Education Amendment Bill 2017. The bill was successfully passed by the Commonwealth Parliament mid-2017, amending the Australian Education Act (2013) to enable the government to deliver record levels of school recurrent funding from 2018 to 2027 (National information reported to the OECD). All Australian governments developed a new National School Reform Agreement that came into effect in 2019. It is a joint commitment between the Commonwealth, states and territories to provide high-quality and equitable education for all students. It also includes a requirement for an annual public report from the Education Council to the Council of Australian Governments (COAG) outlining progress towards implementation, with the first progress report due in late 2019. The National School Reform Agreement was informed by the findings and recommendations of the Review to Achieve Educational Excellence in Australian Schools (Government of Australia, 2018[15]), the Independent Review of Regional, Rural and Remote Education (Government of Australia, 2019[16]) and the STEM Partnerships Forum (National information reported to the OECD).

- In **Belgium's French Community**, the **Pact for Excellence in Teaching** (Pacte pour un enseignement d'excellence, 2015-30) built on a **participatory consultative process** (2015 to mid-2016), including key stakeholders (teachers, educators, parents and students). It was also **developed in consultation with the economic, social and cultural sectors**. The five main goals are: 1) teach the knowledge and skills required for 21st-century society; 2) mobilise education

stakeholders within a framework of school autonomy and accountability; 3) make the vocational pathway a stream of excellence; 4) promote inclusive education, and strengthen the fight against school failure, dropout and repetition; and 5) ensure the well-being of each child in a quality school, favouring a democratic school (OECD, 2017[17]).

Progress or impact: In 2018, the government approved two decrees to support the implementation of the Pact for Excellence in Teaching (Ministère de la communauté française, 2018[18]; Ministère de la communauté française, 2018[19]). The Steering of Schools Decree aims to improve the system's governance from the school level, and a second decree regulates that each school enters into a contract with the Central Authority to assess the development of the implementation of the Steering Decree (*délégués au contrat d'objectifs*) (see Governance in Snapshot). Support was provided as well for the implementation of the pact through the allocation of 1 100 staff reinforcements in pre-primary education during 2017-19, granting of administrative or educational assistance for the school leaders of pre-primary and primary education, or additional support for specialised education. (See Chapter 8 for additional information)

Improving learning conditions in schools to support all students

In the same way, some policies reported for this publication aim to **improve learning conditions in schools to support all students**, which can be in terms of learning time, administrative work or physical infrastructure.

For example, the German-speaking Community of Belgium implemented a policy on homework to improve student well-being and provide greater equity of learning opportunities for students. France and Mexico have undertaken policies to modify learning time in schools. In France, the reallocation of time also aims to promote students' participation in extracurricular activities. Furthermore, Mexico has been working to improve the quality of school infrastructure, while the Slovak Republic has undertaken important efforts to reduce red tape in schools. Also, the United Kingdom (England) has taken policy efforts to reduce teachers' and school leaders' workload.

Policy focus

- **France revised the school timetables in primary education** (La réforme des rythmes à l'école primaire, 2013) at the start of the 2013/14 school year. The government extended the weekly schedule from 4 to 4.5 days with 24 hours of teaching per school week over 9 half-days. France aims to cater for extracurricular education activities and provide more personalised support for students. As a result, the number of days of schooling in primary education has risen from 144 to 180 days per year, according to national data reported to the OECD. One in four primary schools implemented the new schedule during 2013/14. The reform took effect across all schools in 2014/15.

Progress or impact: The municipal support fund for extracurricular school activities was set up in 2014, and followed up in 2015 and 2017 with a total allocation of EUR 373 million. In 2014, a complementary decree passed,

which authorises school principals a certain authority to adopt the reform to local needs in an experimental period (National information provided to the OECD).

A 2015 inspection of the reform found that school time organisation varied considerably among the different municipalities (DEPP, 2013[20]). A 2017 evaluation assessing the students', practitioners' and families' point of view on the different types of organisation found no significant difference between the different school time organisations put in place (DEPP, 2013[20]). As of 2017/18, public nursery and primary schools can also introduce a 4-day week school schedule instead of the 4.5 days (Blanquer, 2017[21]). This aims to allow a certain degree of flexibility for local actors to adopt the school schedules to their local contexts and better meet student needs (Blanquer, 2017[21]).

A new teacher replacement plan (2017) was put in place to better manage teacher absence and better inform students and their families, and thereby ensure learning continuity. Furthermore, a decree will be implemented to define the legal framework of the first degree with an emphasis on de-compartmentalising and improving the replacement system (National information reported to the OECD).

Digitalisation of schools

Policy efforts related to **digitalisation** refer to **access, processes and capacities**. Some education systems reported having implemented recent and continued policies to provide Internet access to schools (this was the case for Austria, Greece and Spain) or the digitalisation of student plans (Denmark, also discussed in Chapter 3). Education systems have also been working to help build digital capacity, according to evidence collected for Canada (Saskatchewan), France and Spain. France, Greece and Spain have focused on improving technical resources and skills, such as by providing tablets, updating education plans with courses on programming, setting up online platforms, or providing professional development opportunities to teachers. But technological capacity can also relate to the strengthening of emotional skills to improve the responsible use of digital devices. Canada (Saskatchewan) has established programmes to help students better navigate the digital world (2015).

Policy focus

- In the province of **Saskatchewan (Canada)**, the Digital Citizenship Education in Saskatchewan Schools (2015) is a policy guide. It is designed for school division officials to work with school administrators and teachers to help students build an understanding of safe and appropriate online behaviour. The guide was developed in response to one of the recommendations in the Saskatchewan Action Plan to Address Bullying and Cyberbullying (2013) (Government of Saskatchewan, 2019[22]).
- **Denmark** has made changes to the Individual Mandatory Student Plans (Elevplaner i folkeskolen, 2006) for children in pre-school up to Grade 8 (Ministry of Education, 2018[23]). These changes are meant to respond to the requirements in the Folkeskole Act (2014) of making student plans accessible to students and

parents through a digital format. A platform of the student plan helps collect information on progress, goals and student assessments, among others. First, this platform should contain the specific goals for the individual student's learning, with the starting point being common objectives. Second, a status section should show student progress in relation to the goals. Third, a monitoring section should describe how and when to follow up on the goals. Both the student and the teacher must monitor progress on the goals, and the parents can be involved in this process. The plans are mandatory in all subjects in all years (Ministry of Education, 2018[23]).

High-quality teachers

High-quality teachers are an essential part of well-functioning education systems and are critical to the success of students in school and later in life. A high-quality teacher workforce is thus a necessity to ensure that students obtain the skills they need in the 21st-century. Education policies need to emphasise improving the way systems attract, develop and retain high-quality teachers at schools (OECD, 2015[2]). To do so, specific policy measures can target recruitment, selection and induction processes; salary and working conditions; initial teacher education and professional development opportunities; career paths available to teachers; feedback and assessment; or collaborative working (OECD, 2018[24]).

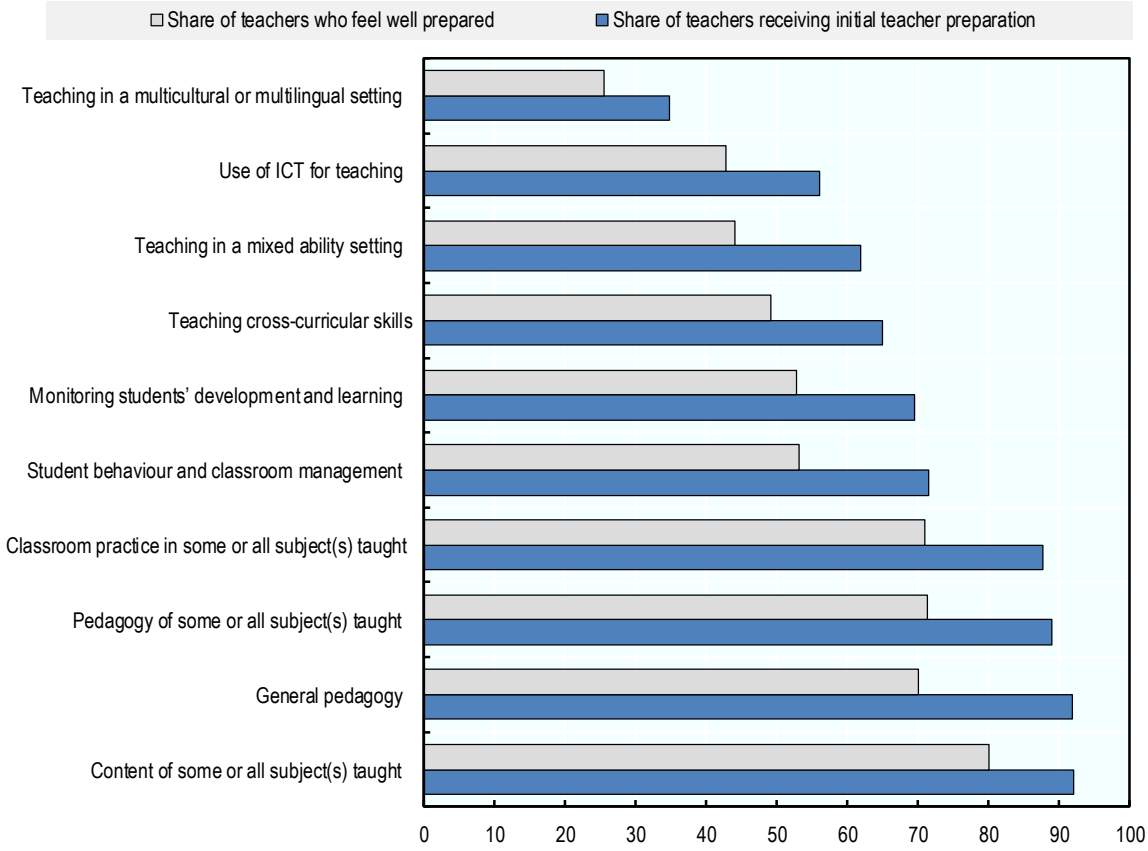
Initial teacher education is the first step in ensuring that teachers obtain the skills needed to support student learning. A coherent and comprehensive initial teacher education curriculum covers both content and pedagogical knowledge which is most relevant to 21st century classrooms, and develops practical skills linked to theoretical knowledge (OECD, 2019[25]). According to teachers' reports in TALIS 2018, across OECD countries, teachers' initial teacher education most commonly covers subject content, general or subject pedagogy and classroom practice: on average, around 90% of teachers reported having received instruction for each of these components. Conversely, only around one-third of trainee teachers across OECD countries received formal preparation for teaching in a multicultural or multilingual setting, and just over half for using ICT to enhance teaching.

However, TALIS 2018 results also show that, for each component of initial teacher education programmes included in the survey, systematically a larger share of teachers reported receiving the training than those that felt "well prepared" or "very well prepared" in relation to them. While the average discrepancy was 16 percentage points, the largest were in the areas of general pedagogy (22 percentage points) and student behaviour and classroom management (19 percentage points) (Figure 2.5) (OECD, 2019[7]).

Following initial teacher education, teachers ideally undergo an induction process once they enter the profession that helps them transition from theoretical to practical teaching in the classroom. Through providing a variety of dedicated support, effective induction programmes are key to helping teachers navigate challenges once in the profession, and can bring long-lasting benefits. Empirical evidence shows that induction has a positive impact on teacher quality and student learning, supports teacher commitment and retention and can stimulate virtuous cycles for innovation and continuous professional development (OECD, 2019[7]) (OECD, 2019[26]). However, in TALIS 2018, over two-thirds of lower secondary teachers reported having had no access to either formal or informal induction activities during their first employment (Figure 2.6). Furthermore, evidence suggests that teachers are increasingly less likely to have access to any form of induction in their first teaching role: on average, fewer recently qualified teachers reported having received

induction than their more experienced counterparts, by a difference of 5 percentage points (OECD, 2019[7]).

Figure 2.5. The content of initial teacher preparation and teachers' feelings of preparedness, 2018



Note: According to the reports of lower secondary education teachers.
Source: OECD (2019[10]), *TALIS 2018 Database*, Tables 1.4.13 and 1.4.20, https://www.oecd.org/education/talis/talis-2018-data.htm.

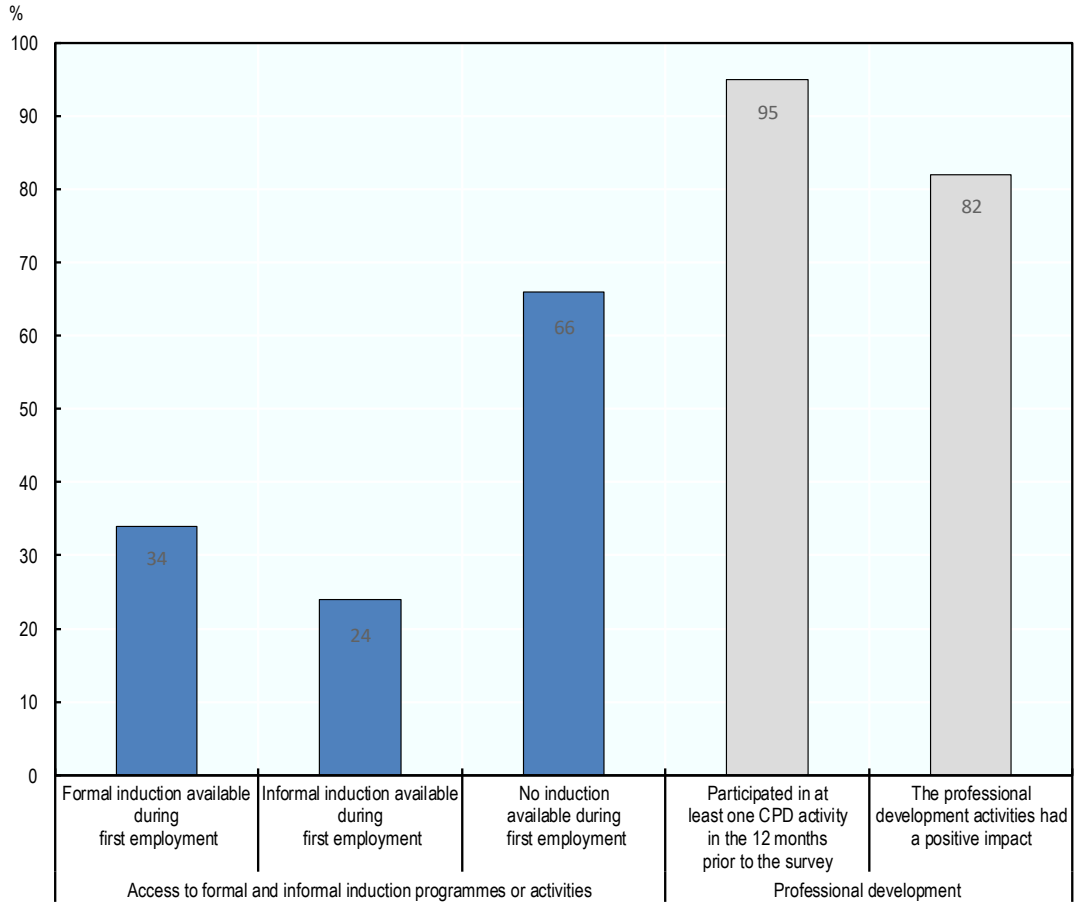
StatLink http://dx.doi.org/10.1787/888933997284

Once in the profession, teachers need to update their skills throughout their careers. The importance of continuous professional development (CPD) grows as education changes and, increasingly, students have to be prepared for an ever-changing world. Effective CPD programmes can have an impact on teachers' skills, attitudes and beliefs, as well as their classroom practices. Furthermore, CPD helps to foster professional collaboration and prevent burnout. CPD offers that are well-matched to teacher and student need can also have a positive effect on student learning outcomes (OECD, 2019[7]). TALIS 2018 results show that 94% of teachers undertook at least one professional development activity in the 12 months prior to the survey, an increase of 6 percentage points on 2013 (Figure 2.6). The most frequently cited barriers to participation in CPD were conflicts with teacher's work schedule (54%), lack of incentives for participating in professional development (47%) and cost (45%) (OECD, 2019[7]).

There is growing support within the academic literature for professional development that adopts school-embedded approaches or promotes participation in professional networking.

These types of CPD may both be more effective in supporting teachers to incorporate learning into classroom practice and more efficient by capitalising on in-house expertise (OECD, 2019[7]). However, among teachers across the OECD, the most frequent types of CPD activities reported in TALIS 2018 followed more traditional formats, such as attending courses/seminars (76%), reading professional literature (72%) and attending education conferences (49%). Nevertheless, teachers regard their CPD experiences positively: on average, 82% of teachers report a positive impact on their teaching practices (OECD, 2019[7]). In the previous cycle of TALIS, results suggested that teacher participation in high-quality professional development was systematically associated with a more intense use of some of the classroom practices that are key to student learning such as feedback and small group work

Figure 2.6. Formal and informal induction programmes or activities, and teachers' participation in professional development, 2018



Note: Percentage of lower secondary education teachers whose school principal reports the existence of formal and informal inductions; participation rates and reported personal financial cost of professional development activities undertaken by lower secondary education teachers in the 12 months prior to the survey.
Source: OECD (2019[10]), *TALIS 2018 Database*, Tables 1.4.38, 1.5.1 and 1.5.15, https://www.oecd.org/education/talis/talis-2018-data.htm.

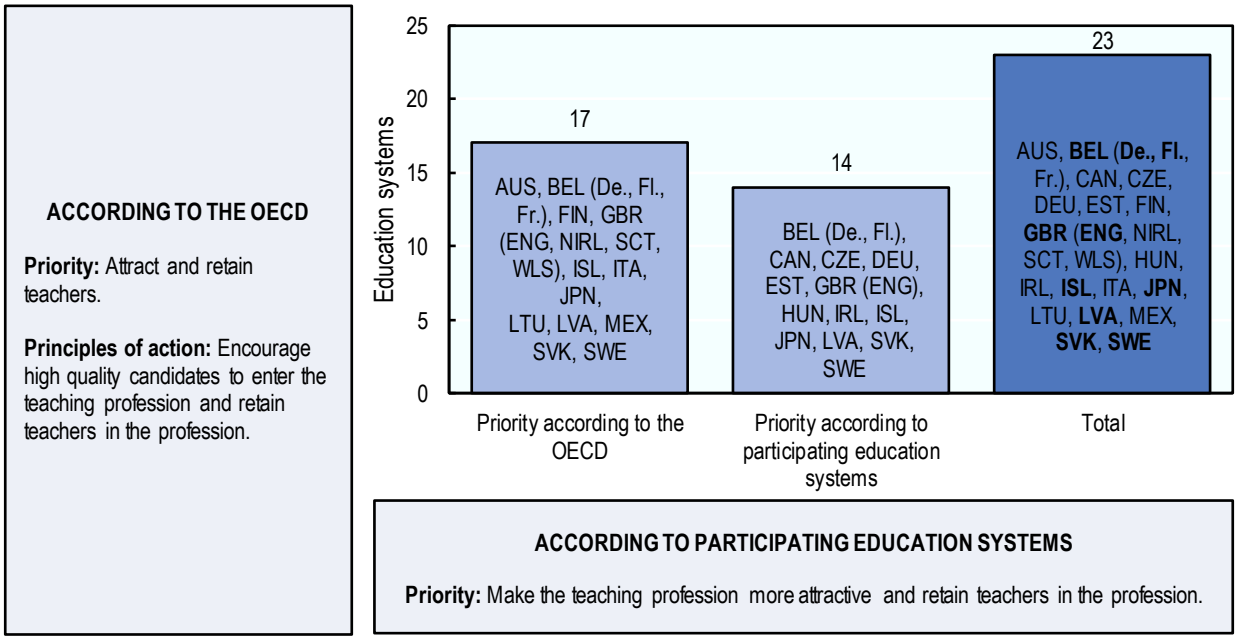
StatLink http://dx.doi.org/10.1787/888933997303

Policy priorities

Attracting and retaining teachers

According to both the OECD and education systems, attracting and retaining teachers is a policy priority shared by many systems. This reflects a need to recruit an adequate supply of talented teachers but also to create the conditions that ensure teachers feel satisfied and engaged across the full career. For some education systems, this applies to the teaching force as a whole; for others, including Finland and Japan, it may concern specific education levels or sectors, such as early childhood education and care (ECEC) and vocational education and training (VET). Between 2008 and 2019, this policy priority was identified in at least 23 education systems, either by the OECD in previous country-based work (17 education systems), by participating education systems (14 education systems), or both (8 education systems) (Figure 2.7).

Figure 2.7. Attracting and retaining teachers



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. Priority according to participating education system: Based on responses to EPO Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide**)**.
4. Comparing previous OECD analysis and country responses: Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

This policy priority was identified by the OECD for at least 11 education systems during 2015-19 (the Flemish, French and German-speaking Communities of Belgium, Italy, Latvia, Lithuania, Sweden and the United Kingdom [England, Northern Ireland, Scotland,

Wales]) and 6 more education systems in 2008-14 (Austria, Finland, Iceland, Japan, Mexico and the Slovak Republic).

Some of the principles of action included in OECD recommendations to these education systems refer to encouraging high-quality candidates to enter the teaching profession and retaining teachers in the profession through various measures. These include improving remuneration, selection, preparation and professional development, as well as providing career development opportunities. Another key aspect of facilitating the process is to collect data for longer-term planning.

In 2017, for example, the OECD recommended that the United Kingdom raise training and other incentives to recruit and retain teachers in disadvantaged areas and/or regions with high teacher shortages (OECD, 2017[27]). Previously, in 2015, the OECD recommended that Sweden make the teaching profession more attractive by increasing monetary incentives, offering clearer career paths, and improving teacher education (OECD, 2015[28]).

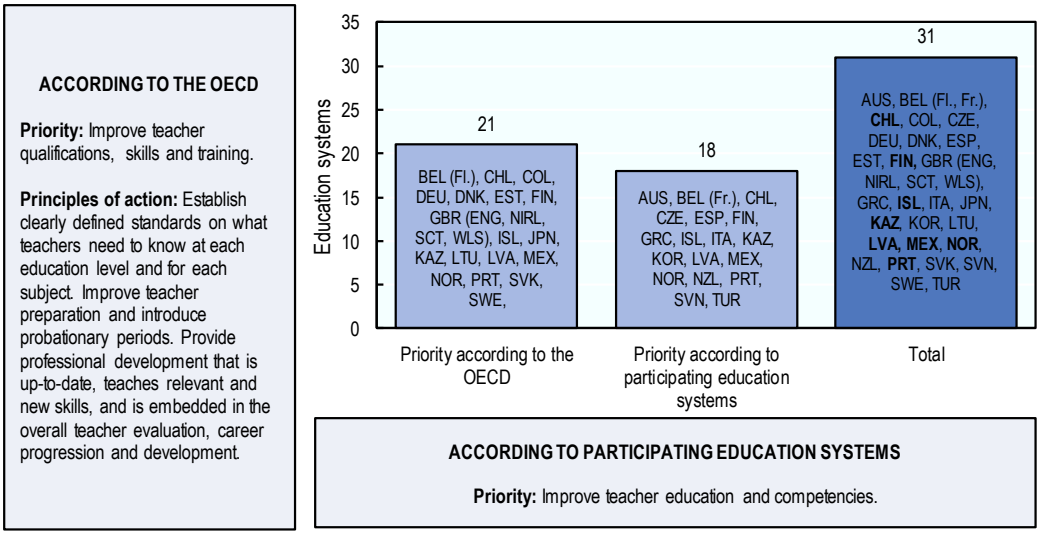
A slightly smaller number of education systems (14) reported this as a policy priority. Some countries such as Iceland and Ireland reported it as an emerging priority during 2015-19, while a greater number, including Canada, the Czech Republic, Germany and the United Kingdom (England) reported this priority as having persisted since 2008.

Education systems have taken a wide variety of policy measures to increase the attractiveness of the teaching profession. For example, as of 2016, Sweden allocated extra funding under the Teacher Salary Boost initiative (Lärarlönelyftet) to increase teacher salaries.

Improving teacher qualifications, skills and training

The most common policy priority related to school improvement identified for this report was the need to improve teacher qualifications, skills and training. This highlights the dynamic nature of this area of education policy, as the various components of a teacher's training and development require ongoing reflection in response to changing contexts. Between 2008 and 2019, this policy priority was identified in a total of 31 education systems, either by the OECD in previous country-based work (21 education systems), by participating education systems (18 education systems), or both (8 education systems) (Figure 2.8).

Figure 2.8. Improving teacher qualifications, skills and training



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. Priority according to participating education system: Based on responses to EPO Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. Comparing previous OECD analysis and country responses: Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

This policy priority was identified by the OECD through specific-country based work for at least eight education systems during 2015-19 (Flemish Community of Belgium, Colombia, Estonia, Germany, Kazakhstan, Latvia, Lithuania and the United Kingdom [Scotland]), and seven more education systems during 2008-14 (Finland, Iceland, Japan, Mexico, and the United Kingdom [England, Northern Ireland and Wales]). The OECD identified this as a priority for Chile, Denmark, Norway, Portugal, the Slovak Republic and Sweden, both before and after 2014.

In general terms, three principles of action can be drawn from the relevant OECD recommendations made to education systems, although these may apply to different extents, depending on the education systems (and not all of them may have been necessarily identified concurrently across them):

- **Establishing clearly defined standards** on what teachers need to know at each education level and for each specific subject. More specifically, this implies ensuring that standards are aligned, reviewed continuously, remain relevant and are embedded in teachers' everyday work.
- **Improving initial teacher preparation** through revisions and better provision of education programmes and institutions, as well as introducing probationary periods.

- **Providing up-to-date and relevant professional development** that allows teachers to learn new skills, and is embedded in overall teacher evaluation, career progression and development structures. It also implies ensuring that teachers have time to participate in relevant activities. Another key aspect is developing specific skills, such as assessment capacities, digital and leadership skills and peer learning.

In 2018, for example, the OECD recommended that Chile introduce a formal probationary process for new teachers as part of the new career structure (Santiago et al., 2017[29]). In the same year, in terms of teachers' professional development, the OECD recommended that Germany improve teachers' digital teaching skills, while acknowledging policy efforts already underway in Germany (such as comprehensive measures to digitally train teachers in vocational schools as well as further education instructors) (OECD, 2018[30]).

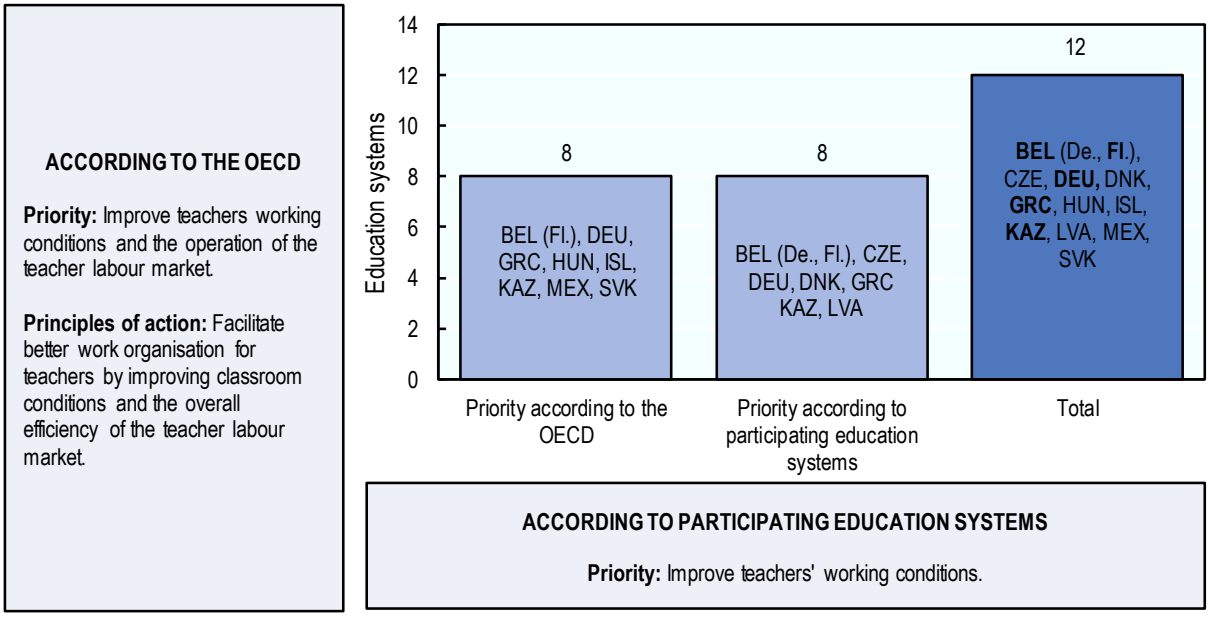
The improvement of teacher qualifications, skills and training was the policy priority reported by the largest number of participating education systems. Overall, this has been a significant ongoing area for improvement, both from the perspective of the OECD and participating education systems. Improving teacher qualifications skills and training was reported as a policy persisting across the period 2008-19 by several education systems including Australia, the French Community of Belgium, Greece and Spain. At the same time, many other education systems, such as Chile and Norway, reported it as an emerging priority during 2015-19.

Education systems have implemented various approaches to improve teacher education and competencies. Spain has been working on improving teachers' digital skills through the Common Digital Competence Framework for Teachers (2014). In 2016, Finland implemented the Teacher Education Development Programme (TEDP, 2016) to strengthen teacher education and professional development. In 2017, Kazakhstan's government revised teacher professional standards, which aim to help the government better support and improve teachers' working conditions and qualification processes (see also Chapter 7).

Improving teachers' working conditions

Another common policy priority in the area of school improvement relates to improving teachers' working conditions. Working conditions in schools may include, but are not limited to, working hours, health and safety in the workplace, working relationships and the operation of the labour market. As explained in Chapter 7 of this report, it is one of the areas where external actors (i.e. trade unions) have identified enhanced collaboration with governments. Between 2008 and 2019, this policy priority was identified in a total of 12 education systems, either by the OECD in previous country-based work (8 education systems), by participating education systems (8 education systems), or both (4 education systems) (Figure 2.9).

Figure 2.9. Improving teachers' working conditions



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. Priority according to participating education system: Based on responses to EPO Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. Comparing previous OECD analysis and country responses: Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this policy priority in work with at least five education systems during 2008-14 (Germany, Hungary, Iceland, Mexico and the Slovak Republic), and three more education systems during 2015-19 (the Flemish Community of Belgium, Greece and Kazakhstan).

OECD recommendations provided to these education systems identified various common principles of action. One of them is to review teachers' workload, teaching hours or the provision of support in the implementation of policy reforms regarding areas such as curriculum and assessment. Another principle of action that has received attention is improving the overall efficiency of the teachers' labour market.

Measures may include allowing for more choice among teacher candidates and schools by, for example, reviewing initial appointment processes. Other approaches include allowing for better portability of statutory rights across school networks, more flexibility of recruitment regulations and more systematic dissemination of vacancies for teaching positions.

In 2012, for example, the OECD recommended that Hungary increase the ratio of actual teaching hours to total statutory working time, and then use the resulting gains in efficiency to reduce the number of teachers or increase the relatively low salaries of teachers, or a

combination of both (OECD, 2012[31]). Previously, in 2010, the OECD had recommended that Mexico open up all teacher posts for competition in order to achieve a better match between schools and teachers (OECD, 2010[32]). Following recommendations by the OECD, Kazakhstan has been raising teacher's salaries while reforming payment structures for teachers.

According to reports to the OECD, this policy priority has persisted since 2008 for six education systems: the Flemish and German-speaking Communities of Belgium, the Czech Republic, Denmark, Greece and Latvia. Two education systems, Germany and Kazakhstan, reported this priority more recently between 2015 and 19. Policy efforts related to this priority include, for example, a new teacher remuneration scheme introduced in 2016 in Latvia as part of a new funding model that aims to recognise the additional workload of teachers outside of instruction hours (also discussed in Chapter 5).

Policy trends

The policies collected refer to professional frameworks and career pathways, recruitment and registration, incentives and stimuli, initial teacher education, induction processes and professional development (Table 2.2 and Chapter 8). The largest number of continued policies was collected in the area of professional development, and the second largest number was on quality assurance for initial teacher education programmes, including guidelines and criteria. The policy area of teacher appraisal, previously discussed under teachers, is discussed in Chapter 3 of this report.

The majority of the more recent policies (implemented as early as 2015) focus on continuous professional development of teachers throughout their career, showing that education systems put increasing emphasis on this policy area. At the same time, education systems reported continued and recent policies on standards or professional frameworks, as well as criteria and legal acts on the requirements, obligations and rights of teachers to improve the quality of the profession.

In addition, education systems have continued putting in place policies to attract and recruit students to the teaching profession, as well as providing incentives and stimuli. This may include teacher well-being matters that go beyond monetary compensation to make the profession more attractive. At the same time, education systems reported a lower number of recent and continued policies on teacher induction. The majority of the policies collected address teachers in general primary to secondary education, with only a few policies reported specifically for ECEC and VET teachers, or teachers in higher education.

To track policy development, this report also collected information on progress or impact of policies when possible. The analysis underscores the importance of involving teachers in the implementation of policies. Positive developments could be identified for policies that included general support, mentorship and training that improved teaching practices. This was the case, for example, for Ireland's Droichead policy (2013) where evidence collected among the different stakeholders identified a high level of satisfaction with the effectiveness of the programme's structured approach to mentoring, professional support and performance assessment, as well as the programme's impact on creating a collaborative culture in schools and among staff (ESRI, 2016[33]).

Table 2.2. Policies to develop high-quality teachers, 2008-19

High-quality teachers		
Professional frameworks and career pathways	**Recruitment and registration**	**Incentives and stimuli**
Recent (Implemented between 2015 and 2019)		
Belgium (Fr.): Reform of titles and functions for teaching (2016)	**Belgium (Fl.)**: Reform on alternative pathways to the teaching profession (2018)	**Belgium (Fl.)**: Simplified transition process from temporary to permanent appointment and improved salary conditions (2018)
France: Law "For a school of trust" (2019)	**Belgium (Fl.)**: Test to evaluate the competencies of prospective teaching students (2015)	**Slovak Republic**: Increase tariff salaries of teachers (2018)
Ireland: DEIS Plan (2017)	**Iceland:** Reform of teacher education and professional certification (2019)	**Sweden**: Teacher Salary Boost initiative (2016)
Ireland: Professional development framework for teachers (2016-20)	**Ireland**: Teacher Supply Action Plan (2018)	
Kazakhstan: Professional standards for teachers developed by Atemeken (2017)	**Slovak Republic**: Scholarship programme for student teachers in certain subjects (2017)	
New Zealand: Code of Professional Responsibility and Standards for the Teaching Profession (2017) (replaced the Code of Ethics (2004))	**Slovak Republic**: Introduction of a measure to prevent teachers' dismissal during summer (2015)	
Still in place (Implemented between 2008 and 2014)		
Australia: Australian Professional Standards for Teachers (2013)	**Australia**: Teach for Australia (2009) **[*]**	**Estonia**: Increasing teachers' salaries, as part of the Lifelong Learning Strategy 2014-20 **[*]**
Australia: Australian Teacher Performance and Development Framework (2013)	**Belgium (De.)**: Baremen reform for the increase in teachers' starting salaries (2009)	**Mexico**: Incentives Programme for Teacher Quality (2008-09)
Australia: New Legislation on the Employment of Teachers (2013)	**Chile**: Teacher Vocation Programme (2012)	**Slovak Republic**: Increasing teachers' salaries (2011; 2013)
Austria: Australian Institute for Teaching and School Leadership (2010)	**Hungary**: Klebelsberg Institution Maintenance Centre (KLIK, 2013); renamed Klebelsberg Centre (KK, 2016): Klebelsberg Scholarship Programme (2013)	**Sweden**: Career development reform (2013)
Belgium (Fr.): Removal of early teacher retirement (2011)	**France**: Masterisation reform (2010); Reform of Teacher Training (2013)	

Belgium (De.): Harmonising various forms of teaching ability (2010)	**Germany**: Rules and proceedings for more mobility and quality for teachers (2013) **[*]**	
Chile: Good Teaching Framework (2003, revision in 2016) **[*]**	**Germany**: Efforts to meet the demand for teachers (from 2009)	
Estonia: Career structure for general education and vocational education teachers (2014)	**Iceland**: Act on the recruitment of teachers and head teachers in pre-school, compulsory school and upper secondary school (2008)	
Hungary: System of teacher career management and salary scale (2013)		
Mexico: Teacher Professional Service (2013); replaced by National System for the Career of Female and Male Teachers in 2019		
New Zealand: Communities of Learning (Kāhui Ako, 2014)		
Initial education	**Induction processes**	**Professional development**
Recent (Implemented between 2015 and 2019)		
Austria: New Teacher Education Scheme (2015/16)	**Austria**: Compulsory one-year induction for new teachers (2019/20)	**Denmark**: Training for upper secondary teachers (2017)
Belgium (Fl.): Measures on initial teacher education (since 2015) **[*]**	**Belgium (Fl.)**: Compulsory induction period (2018)	**Finland**: Teacher tutors programme (2016)
Norway: Changes to Initial Teacher Education (2017) through the reform of National Guidelines for Differentiated Primary and Lower Secondary Teacher Education Programme for Yrs 1-7 and 5-10 (2010; 2013)	**Belgium (Fr.)**: Compulsory welcome and support programme (2016)	**Greece:** National Centre for Teacher Training (EKEPE, 2019)
Sweden: Teaching practice in specialised training schools (2014)		**Greece**: In-Service Education and Training of Teachers (2016)
United Kingdom (Wales): New Initial Teacher Education accreditation criteria (2018)		**Japan**: National Institute for School Teachers and Staff Development (2018), previously National Centre for Teachers' Development (2015)
		Korea: Leave of Absence for Self-training System (2016)
		Korea: Teacher Education Emotion centres
		Mexico: National Strategy for Continuous Training of Teachers of basic and upper secondary education (2016)
		Sweden: Boost for Reading (2015)
		United Kingdom (N. Ireland): Learning Leaders (2016)

Still in place (Implemented between 2008 and 2014)		
Australia: Review of the Accreditation of Initial Teacher Education Programmes (2014)	**Canada (Ontario)**: New Teacher Induction Program (NTIP, 2006, with new requirements since 2009) **[*]**	**Australia:** Australian Charter for the Professional Learning of Teachers and School Leaders (2013)
France: Reform of teacher education (2013)	**Germany**: Common requirements of the *Länder* for preparatory service and concluding state examination in teacher training (2012)	**Czech Republic**: Project Metodika (2006-12)
Hungary: Decree on the Teacher Education System (2012)	**Iceland:** Introduction of fifth-year induction programme (2008)	**Finland**: Teacher Education Development Programme (2016)
Ireland: Reconfiguration of initial teacher education programmes (2012)	**Ireland**: Procedures for Induction and Procedures and Criteria for Probation (2013-14)	**Iceland**: Council of Continuous Professional Development of Teachers (2013); renewed (2016)
Ireland: Initial Teacher Education Criteria and Guidelines for Programme Providers (2011) from Teaching Council; revised requirements in 2017	**Korea**: Master Teacher Initiative (2011)	**Kazakhstan**: Professional development courses for teachers at the Orleu National Centre for Professional Development (2011)
Italy: Initial education by Italian Ministry of Education (2013), with changes to initial teacher education through Good School Reform (2015)		**Latvia**: Improving Teachers' Professional Competence as part of the Education Development Guidelines (2014-20) **[*]**
Portugal: Reinforcing the scientific curricula in Teachers' Education Programmes (2014)		**Portugal**: Teachers' lifelong training framework (2014); Decrees on the role of School Association Training Centres (2014-15)
Sweden: Teacher education programmes as four main degrees (2011)		**Spain**: Digital Competence Framework for Teachers (2014)
United Kingdom (Wales): Entry requirements for Initial Teacher Education (2014)		**Sweden**: Matematiklyftet programme (2012) **[*]**
		Sweden: Boost for Teachers programme (2007-11; 2012-18)
		Turkey: Teaching, Entrepreneurship and Leadership Training Co-operation Protocol for Managers and Teachers in VET (2012)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Professional frameworks and career pathways

Several education systems reported having **ongoing standards or professional frameworks** in place. Examples of this type of policy were collected for Australia, the French and the German-speaking Communities of Belgium, Chile, Ireland, Kazakhstan and New Zealand. At the same time, Australia and Chile have standards in place that define what constitutes quality teaching, as well as required teacher capabilities. New Zealand reported a new code that defines standards of ethical behaviour and expectations of teaching practice.

Furthermore, the teaching profession requires clarity in terms of career evolution. In order to tackle this need, some education systems have put in place **criteria and legal acts** on the requirements, obligations and rights of teachers to improve the quality of the profession. Educations systems that reported such policies include Australia, Austria, Estonia, France and Hungary. Australia has a framework in place that aims to improve teaching through continuous assessment, feedback and performance appraisal, as well as by providing professional development opportunities to all teachers.

Policy focus

- In **Chile**, the **Good Teaching Framework** (Marco para la Buena Enseñanza, MBE, 2003) **outlines what teachers are expected to know and be able to do**. It identifies four domains: 1) preparation for teaching; 2) creation of an environment favouring the learning process; 3) teaching that allows learning for all students; and 4) professional responsibilities. Within each domain, the MBE describes criteria and performance levels (outstanding, competent, basic or unsatisfactory). The framework also outlines four elements of teacher appraisal: portfolio, self-assessment guidelines, interview by a peer evaluator and a third-party reference report (OECD, 2017[34]).

Progress or impact: The OECD has praised the Good Teaching Framework (MBE), reporting that it gives a clear and concise profile of what teachers are expected to know and be able to do, providing a sound frame of reference for teachers in Chile (OECD, 2017[34]; Santiago et al., 2017[29]). In 2016, a revision of the MBE with updates to criteria and performance levels reflecting the latest research on good teaching practice was released for public consultation. The process of approval for the revised MBE remains ongoing. The OECD commended efforts taken to review and refresh the MBE (OECD, 2017[34]; Santiago et al., 2017[29]).

In addition, the System for Teacher Professional Development (Sistema de Desarrollo Profesional Docente, Ley 20903, 2016), aims to bring together and build on the various initiatives developed and implemented over the previous ten years to present a more organised vision of improvement for the teaching profession. It also provides an overarching framework for development in this area up to 2026. It introduces mechanisms such as multi-stage career structure, an increase in the proportion of non-teaching hours and mandatory accreditation, among others (Santiago et al., 2017[29]). Immediately following the launch of the new system, the OECD praised the increased clarity and goal setting it offered. However, the OECD also suggested that Chile consider introducing a coherent set of professional

standards to better delineate teachers' roles and career progression as well as more rigorous and formative teacher evaluation procedures and relevant professional development. The OECD also highlighted the importance of actively involving stakeholders throughout the implementation process in order to build trust and a sense of ownership, particularly among teachers (OECD, 2017[34]).

Recruitment and registration

Several education systems have also put measures in place to **attract and recruit students into the teaching profession**. Chile has established ongoing financial support mechanisms, such as grant programmes, to attract high-performing students. The German-speaking Community of Belgium also implemented a measure to increase teachers' starting salaries.

To respond to current or potential teacher shortages, some education systems have continued scholarship programmes for student teachers, as was the case in Hungary and the Slovak Republic, or set up guidelines, as in Germany. Similarly, Australia has a programme in place that fast-tracks high-performing graduates into disadvantaged secondary schools to address teacher shortages and develop effective school teachers. Ireland developed an action plan to increase the number of teacher graduates entering the profession. Recently, Sweden established an alternative fast track pathway into the teaching profession targeted at newly-arrived migrants, in order to facilitate entrance into the profession of people with previous teaching experience in other countries.

In order to select potential candidates to enter the profession, recent policies undertaken by Belgium (Flemish Community) include tests to evaluate potential students for initial teacher education. France introduced the obligation for teachers to obtain a master's degree, to improve teacher preparation. Other education systems have put tests in place to assess students' suitability to become teachers, such as in Germany, and have established minimum requirements, as in Iceland.

Policy focus

- In **Australia**, the **Teach for Australia** (TFA, 2009) programme works to **improve teacher quality and student outcomes in disadvantaged schools, address teacher shortages** and **develop effective school teachers**. TFA recruits high-performing graduates (called associates) and fast tracks them into disadvantaged secondary schools. On completion of the programme, associates receive a Master of Teaching qualification. During the programme, associates receive support from teaching advisors and mentors who are expected to provide frequent classroom observation and feedback.

Progress or impact: Between 2009 and 2018, the Teach for Australia programme expanded from one jurisdiction (Victoria) to five jurisdictions (the Australian Capital Territory, the Northern Territory, Victoria, Western Australia and Tasmania) at its peak. The programme has also steadily increased the number of associates placed in schools (125 in 2018). In 2016, the government committed an additional AUD 20.5 million to finance the placement of up to 315 associates, as part of cohorts nine and ten, in secondary schools from 2018 to 2021 (Government of Australia, 2016[35]).

Two independent evaluations of the TFA programme indicate that it produces high-quality teachers and has a positive impact on participating schools (Government of Australia, 2016[35]). The most recent 2017 report found that the programme attracts top talent and associates provide skills that schools need, especially in the science, technology, engineering and mathematics (STEM) fields. Overall, improvements should be made to further align the programme to the government's objectives. An example on how this has so far been addressed is, in 2018, the government announced that for 2020 and 2021 employment-based pathways into teaching would be funded through an open and competitive tender process known as the High Achieving Teachers Program.

- In 2012, **Germany**'s **Standing Conference of Ministers of Education and Cultural Affairs adopted common requirements** of the *Länder* **for the preparatory service** (the practical placement at schools, Referendariat) and the **concluding state examination** in teacher training *(Ländergemeinsame Anforderungen für die Ausgestaltung des Vorbereitungsdienstes und die abschließende Staatsprüfung*). The resolution took into account recent developments in the school sector and further enhanced comparability and mobility in the education system. Furthermore, in 2013, the regulations and procedures to increase the mobility and quality of teachers (*Regelungen und Verfahren zur Erhöhung der Mobilität und Qualität von Lehrkräften*) passed.

Progress or impact: The 2017 report of the Standing Conference of Ministers of Education and Cultural Affairs found that all *Länder* guaranteed mobility according to the 2013 implemented regulations and procedures (KMK, 2018[36]). The 2018 report put forward that, nevertheless, the school and training structures differ between the *Länder*. Hence, several alleged mobility barriers can be explained by state-specific organisational frameworks, such as a combination of school subjects and subject-specific offers. In such cases, restrictions of mobility in access to preparatory service are no violation of the regulations and procedures. The same accounts for access to school service after completion of demand-oriented special measures. The KMK recommended to the *Länder* and universities, among others, to support the mobility of students during their teaching-oriented studies with the consistent implementation of the Lisbon Convention (KMK, 2018[36]). In addition, the *Länder* have passed common decisions on preparing teachers for increasingly diverse classrooms, including courses to teach German as a second language, and support high-achieving students during the initial preparation as well as providing professional development opportunities (KMK, 2019[37]; KMK, 2019[38]).

Incentives and stimuli

Improving **monetary compensation** is one mechanism employed to increase the attractiveness of the teaching profession and retain teachers.

Belgium (Flemish Community), Estonia, Mexico, the Slovak Republic and Sweden have put in place policies to improve monetary compensation for teachers. Estonia has taken

measures to ensure that teachers' salary levels correspond to their qualifications. In addition, the Slovak Republic reported recent and continued policy measures on increasing teachers' salaries and preventing the termination of teaching contracts over the summer break. Sweden introduced a recent policy, which allows principals and employers to decide on the distribution of additional funding to specific teachers while undertaking broad efforts to design more adequate salary progression schemes.

Policy focus

- In **Estonia**, one of the goals of the **Lifelong Learning Strategy 2014-20** is to **increase teachers' salaries** to 120% of the average national salary by 2020 (from 95% in 2011 and 107% in 2015) (European Commission, 2017[39]). Another goal is to raise the percentage of teachers under the age of 30 to 12.5% by 2020. A further goal is to assess teachers and school principals and to ensure that their salaries are consistent with the qualifications required for the job and work-related performance.

Progress or impact: As of 2017, the *minimum* school teacher monthly salary was set to be raised to EUR 1 050 and the *average* teacher monthly salary to EUR 1 300. The average salary was at EUR 1 201, however, in 2017 (Statistics Estonia, 2018[40]).

In 2019, the *minimum* monthly salary is set to be raised to EUR 1 250. The state provided additional funding to increase pre-primary school teacher salaries to at least 80% of the minimum salary in general education by September 2017 as well as an additional increase of 85% in 2018 and 90% in 2019 (European Commission, 2017[39]) .

Initial teacher education

Several education systems have established policies over the past decade that aim to provide **overall guidelines and criteria for initial teacher education programmes**, in order to ensure their quality.

Examples of these policies were collected for Australia, Austria, the Flemish Community of Belgium, France, Hungary, Ireland, Italy, Norway, Portugal, Sweden and the United Kingdom (Wales). For example, the Flemish Community of Belgium has implemented several measures, from broadening the path to becoming a teacher to improving the quality of initial teacher training. France has undertaken a number of efforts in initial teacher education further to its relatively recent requirement (2010) for teachers to have a master's degree qualification as well as its strengthening initial education through the new law "For a school of trust".

Policy focus

- In **Belgium**, the government of the Flemish Community has introduced several changes to initial teacher education (ITE) in recent years. In 2018, the Flemish Parliament adopted a **decree broadening the path to becoming a teacher, reinforcing the profile of prospective teachers, streamlining training and increasing the quality of ITE** (National information reported to the OECD). ITE programmes are now exclusively offered by universities, as well as some university

colleges, and feature improved content on didactics, classroom management, multilingualism and diversity. From the 2019/20 academic year, prospective teachers can enter one of six ITE programmes: a short-cycle course for teaching in secondary education, three Bachelor's courses for pre-primary, primary and secondary education and two Master's courses in art subjects and secondary education. As such, prospective teachers can now enrol in an ITE programme at any stage of tertiary education, including, for the first time, directly after upper secondary completion. The reform has also eased students' transfer to ITE from other tertiary courses, as well as facilitated mature student pathways into ITE and the transition into teaching for those with three or more years' experience in an alternative profession (Flemish Parliament, 2018[41]). In the 2018/19 academic year, the government introduced a compulsory non-binding, institution-neutral admission test for ITE. This assesses a prospective teacher's preparedness for studies and identifies any possible need for remedial support. Ultimately, this aims to increase completion rates and improve the quality of ITE graduates (National information reported to the OECD).

Progress or impact: A 2013 evaluation of initial teacher education in Flanders first inspired these reforms. Following the evaluation, the Flemish government adopted a concept note, in 2016, containing a set of proposed measures to enhance teacher education and improve the profile of new entrants to the profession. While awaiting legislative approval, the government piloted some measures and established several working groups. For example, it first piloted the test to evaluate the competencies of prospective student teachers in 2015/16, and then expanded the pilot in 2016/17 (OECD, 2017[17]). However, with a recent decline in ITE graduates and an older demographic profile of teachers, the Flemish Community faces growing recruitment needs in pre-primary and particularly secondary education. The Department of Education and Training predicts that, in general, teacher recruitment needs for the academic year 2023/24 will be 10% higher than 2014/15 (Department of Education and Training (Flanders), 2015[42])

Induction processes

Fewer policies were collected on supporting the career entry of newly trained teachers. Canada (Ontario), Germany and Ireland have continued to put teacher induction programmes and guidelines in place. Austria, the Flemish and French Communities of Belgium and Iceland have undertaken this type of effort more recently. For example, Canada (Ontario) reported a continued policy on improving learning environments through mentorship for educational staff. Other support mechanisms include mentoring by school staff for new teachers, as in Korea.

Policy focus

- In **Canada**'s province of Ontario, the **New Teacher Induction Program** (NTIP, 2006) aims to **support the growth and professional learning of new teachers**. It builds upon the first step of initial teacher education and is the second step of on-the-job learning along a continuum of learning and growth for new teachers. The NTIP consists of the following induction elements: 1) orientation for all new

teachers with information about the Ontario curriculum and context, and their specific school; 2) professional development and training in areas such as literacy and numeracy strategies and classroom strategies; and 3) mentoring for new teachers by experienced teachers (Government of Ontario, 2018[43]; Queen's Printer for Ontario, 2010[44]). In addition to the NTIP induction process, new permanent teachers are evaluated twice within their first 12 months of employment through the Teacher Performance Appraisal process. Upon completion of two satisfactory evaluations, a notation reflecting completion of NTIP is placed on the teacher's certificate of qualification and registration that appears on Ontario College of Teachers' public register.

Progress or impact: Since 2009, the New Teacher Induction Program provides support for first-year, long-term occasional (LTO) teachers with assignments of 97 days or longer. In 2018, the scope of NTIP was expanded to enable school boards to support any teacher in their first 5 years of practice. The inclusion of these teachers in any of the NTIP induction elements is designed to provide boards with flexibility to respond to local hiring realities and potentially to support new teachers for a greater length of time. Boards may decide to include an entire category of NTIP eligible teachers or base the supports they offer on a case by case basis. Overall, each year, approximately 8 000 new hired teachers access NTIP supports. Including second-year teachers and mentors, the total number of teachers participating in NTIP exceeds 18 000 annually (National data provided to the OECD). The results of longitudinal research from 2012 to 2015 show that new teachers have made meaningful and sustained improvements in all four of the core goal areas of NTIP (confidence, efficacy, instructional practice and commitment to ongoing learning) (Christine Frank and Associates, 2018[45]).

Professional development

Several education systems have established policies over the past decade targeting **teachers' professional development**. Within teacher policies, this was the topic with the highest number of education policies collected by the OECD. Indeed, with continually changing education needs across the globe, teacher education also needs to occur throughout teachers' careers. Teachers must be the first lifelong learners. Australia, Czech Republic, Denmark, Finland, Greece, Iceland, Japan, Kazakhstan, Korea, Latvia, Mexico, Portugal, Spain, Sweden, Turkey and the United Kingdom (Northern Ireland) have all undertaken related policies.

Several education systems, such as Portugal and Sweden, linked career progression to professional development. Portugal, for example, is aiming to do this while also raising the bar for prospective teachers entering the profession, reinforcing the scientific knowledge of teachers through curricular changes in initial teacher education and establishing a lifelong training framework for teachers.

Collaborative learning is also a prominent area being encouraged by some education systems, such as Japan, the Czech Republic, Finland, and Sweden. For example, Japan's National Institute for School Teachers and Staff Development (previously known as National Centre for Teachers' Development) aims to strengthen teachers' and school leaders' capacities, including in collaborative learning, while it conducts studies and

surveys. In Latvia, the Education Development Guidelines include planned actions to enhance teachers' professional competencies to raise the quality of learning processes. Furthermore, Sweden's Boost programmes for teachers have largely focused on collaborative learning to promote improvements in mathematics, reading or science, for example.

Policy focus

- In **Latvia**, the **Education Development Guidelines** (2014-20), which define the goals and sub-goals for Latvia's education system, include planned **actions to enhance teachers' professional competencies in order to raise the quality of learning** processes. Specific measures include: 1) developing teachers' professional competence, particularly in teaching the new competency-based general education content and inclusive education; 2) improving the professional skills of vocational education teachers and apprenticeship leaders with a particular emphasis on co-operation with employers; 3) developing competence among administrative, pedagogical and academic staff in vocational and higher education to improve the organisation of learning processes and use of information and communication technology (ICT) as well as other areas; and 4) promoting international co-operation between teachers (MoES, 2013[46]).

  Progress or impact: The government began by developing a competency-based curriculum for initial teacher education (ITE) programmes and approving the conceptual framework for a new model of competency-based teacher education (European Commission, 2018[47]). It also plans to rationalise ITE provision to make it less fragmented. As part of a project supported by the European Social Fund (ESF), Latvia is developing new ITE programmes in six higher education institutions, and certain elements of some older ITE programmes will be discontinued. The project plans to have a total of 23 new ITE programmes in place by 2023 (European Commission, 2018[47]).

  Also with the support of the ESF, the National Centre for Education has launched several professional development programmes to prepare teachers for the implementation of the new competency-based curriculum. The programmes target different audiences based on their roles in relation to the curriculum. Some 1 650 school leaders, teachers, general education and vocational education and training (VET) leadership teams had participated in the programmes by the end of 2018.

  Latvia has also allocated extra funding to allow an additional 2 450 teachers to be trained, including 50 teachers who will be trained as future trainers. Free e-learning materials are also available; by the end of 2018, 444 pre-school educators had accessed them. Also, the Ministry of Education and Science (IZM) has allocated additional funding to train regional consultants and professional development experts to support the implementation of competency frameworks (National information reported to the OECD).

- **Sweden** has introduced **pedagogical training initiatives** structured as **collaborative research-based learning**. The "**Boost**" programmes, for teachers of mathematics, reading and science, were launched with a budget of EUR 28 million.

The Matematiklyftet programme (2012), for example, is available to all mathematics teachers, tutors and school principals. Materials are produced in collaboration with over 20 Swedish universities and colleges and are published on line. Materials are organised according to year groups and school type, and all follow a four-part structure, supporting teachers to: 1) prepare independently, using the materials provided to them; 2) meet colleagues to discuss what they have read and collaboratively plan a lesson; 3) teach the lessons in their classrooms; and 4) reconvene to evaluate and discuss their experiences. Weekly discussion meetings focus on didactic questions and are moderated by mathematics tutors trained by national authorities. During the programme, teachers exchange learning materials, ideas and experiences and enter into professional dialogue. The programme fosters collaborative teaching and enhances teamwork. School principals are also involved (OECD, 2017[48]).

Progress or impact: A final evaluation report (2016) from the Swedish National Agency for Education found that this collegial training model (Matematiklyftet) has had a positive impact. Over 35 000 teachers were found to have participated in the mathematics training, which corresponds to 75% of all mathematics teachers in compulsory and upper secondary education. The training is also available to tutors (1 668 had participated by 2016) and school principals (2 961 had also participated by 2015). Participants reported feeling more confident and secure in their classrooms, and their teaching was more varied and student-centred. In 2017, the total cost of the programme was estimated at EUR 56 million (European Commission, 2017[49]).

The evaluation did not take into account the impact of the programme on students' learning outcomes, however (Skolverket, 2018[50]; European Commission, 2017[49]).

As of 2018, new mathematics modules are available on the Learning Portal, which aim to provide teachers, specialist teachers or specialist support teachers with tools to develop teaching for students with additional needs (Skolverket, 2018[50]). During 2018/19, supervisors can take part in a web-based supervisor training to acquire the skills to supervise participant teacher groups.

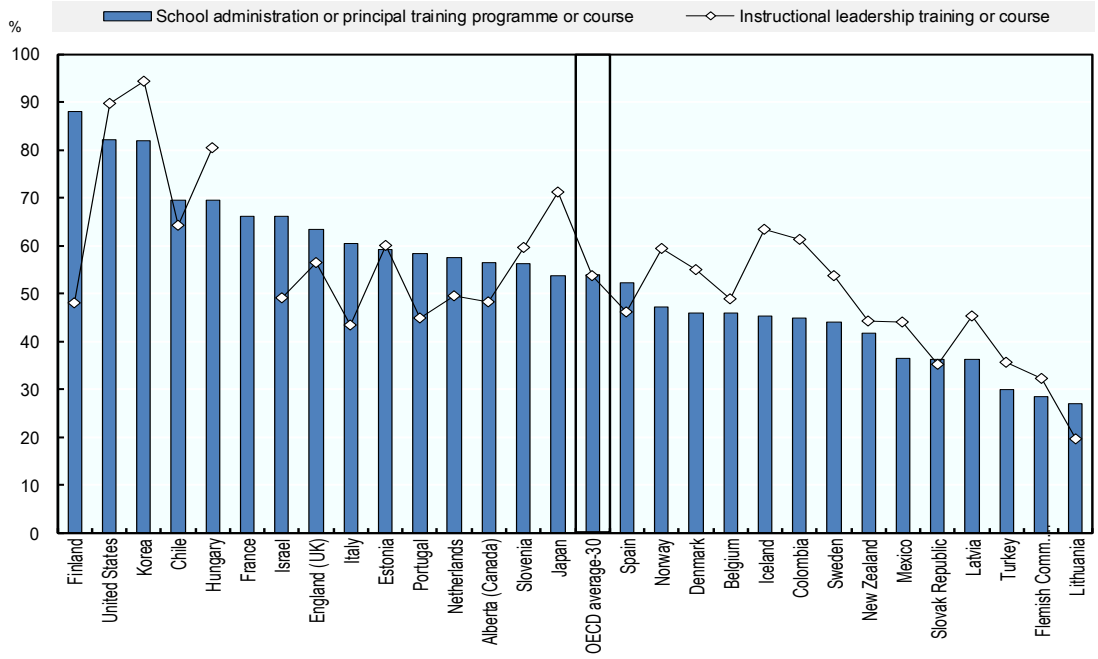
School leaders

School leaders increasingly gain importance as education systems allocate more and more autonomy in decision making to individual schools. As this occurs, general challenges identified by the OECD for school leaders include the demanding and far-ranging activities of the profession itself, as well as the pressure to meet the needs of different stakeholders within the system, such as parents, the local community and the education system (OECD, 2014[51]). In order for school leaders to nurture overall school improvement, it is important, therefore, to take supportive measures, such as clarifying the role of effective school leaders, distributing this role, and ensuring school leadership development throughout a leader's career (OECD, 2015[2]). In particular, effective leaders need to have the space to support teaching staff through instructional leadership in order to help all their students succeed in school, and to create a collaborative school environment in which teachers take part in school decisions (Schleicher, 2015[3]).

However, in many OECD countries, instructional leadership seems to play a less significant part in school leadership than administrative management. In TALIS 2018, school leaders were asked how they spend their time. Among the seven activities listed, one is closely related to supporting teaching in their school: "curriculum and teaching-related tasks and meetings" and has been identified as a key component of instructional leadership of school principals (OECD, 2016[52]). On average across the OECD, however, principals reported spending 16% of their working time on this type of activity. This makes it only the third most time-consuming task of principals, after administrative tasks and meetings (30% of principals' working time) and leadership tasks and meetings (21%). Furthermore, nearly one-third of lower secondary principals reported that a shortage of time for instructional leadership hinders their school's capacity to provide quality instruction. This was among the three largest hindrances according to school principals (OECD, 2019[7]).

Although on average across the OECD, similar shares of school leaders receive training related to instructional leadership and training related to school administration, prior to taking up their role, in most countries there are notable discrepancies between the two. For example, in Finland, Italy and Portugal, a larger share of school principals undertook formal training on administrative aspects, compared to school principals who undertook training related to instructional leadership. Conversely, in Colombia, Iceland and Japan a greater share undertook training on instructional leadership training compared to school principals who participated in training on administrative aspects. Furthermore, in the majority of countries, one-third of school principals or more appear to have received no training of either type before taking up the position (Figure 2.10).

Figure 2.10. Lower secondary principals' formal training before taking up their role as principal, 2018



Note: Data refer to the sum of the percentages of school leaders trained "before taking up a position" and "before and after taking up a position" as principal.
Source: OECD (2019[10]), *TALIS 2018 Database*, Table I.4.28, https://www.oecd.org/education/talis/talis-2018-data.htm.

StatLink http://dx.doi.org/10.1787/888933997322

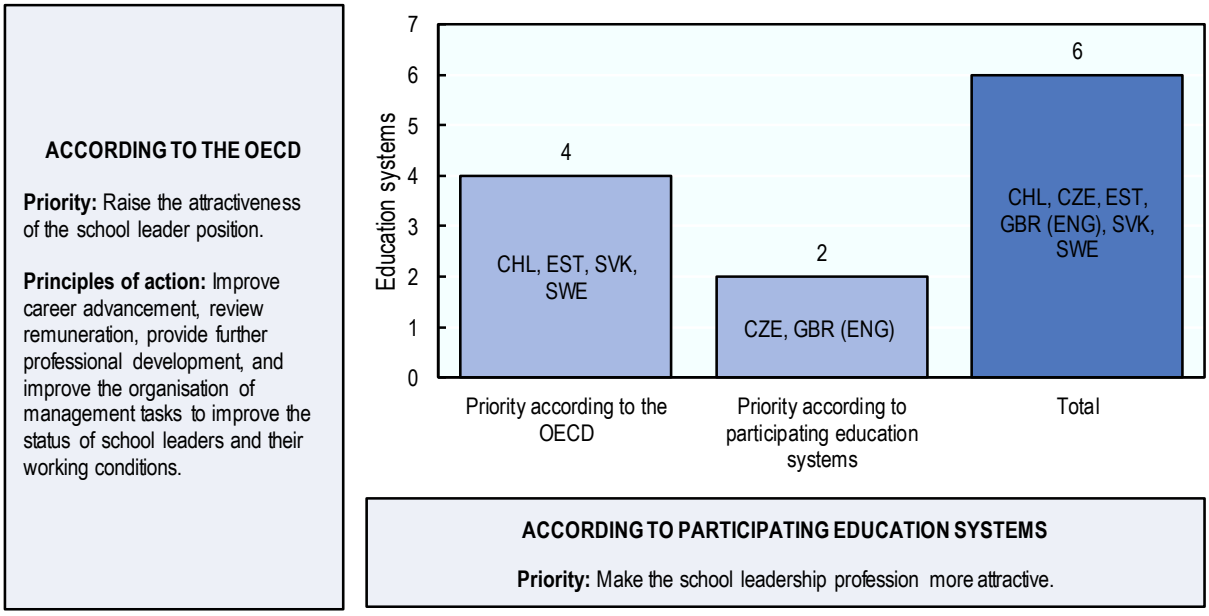
Nevertheless, TALIS 2018 evidence shows that professional development for principals is commonplace: nearly all (99%) school leaders had participated in some sort of professional development in the 12 months prior to the survey and, on average, they had participated in 5.8 different activities during that time. Among lower secondary school principals, the highest reported needs for professional development related to developing collaboration among teachers, using data to improve the quality of the school and financial management, all of which were reported by around one-quarter of respondents.

Policy priorities

Raising the attractiveness of the school leader position

An important area of concern for policy makers related to school leaders relates to raising the attractiveness of the school leader position. This includes improving the status and working conditions of school leaders to attract high-quality talent. Between 2008 and 2019, this policy priority was identified in a total of 6 education systems, either by the OECD in previous country-based work (4 education systems) or by participating education systems (2 education systems) (Figure 2.11).

Figure 2.11. Raising the attractiveness of the school leader position



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to EPO Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide**)**.
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this policy priority in at least four education systems during 2015-19 (Chile, Estonia, the Slovak Republic and Sweden); it was not identified by the OECD as a policy priority for any specific education system in the period 2008-14.

Relevant principles of action that the OECD identified in its recommendations to these education systems include improving career advancement for school leaders, reviewing remuneration, providing further professional development and addressing the distribution of management tasks. This includes, for example, developing a career structure for school leaders that is distinct from the one for teachers, by linking career progression to specific leadership responsibilities outlined in professional standards, for example. Also important is the introduction of an independent salary scale and feeding appraisal results into career advancement. High-quality professional development should be provided as well, tailored to the school leader's needs. In addition, an important area of policy action is to ensure that school management tasks are well distributed, bearing in mind school leaders' often very demanding time schedules.

In 2016, the OECD recommended that Estonia take measures to introduce a distinct career structure for school leaders (Santiago et al., 2016[53]). Likewise, in 2015, the OECD recommended that the Slovak Republic raise the attractiveness of the profession through measures such as introducing a distinct career structure for school leadership, an independent salary scale for school leadership, greater flexibility in teaching hour requirements and leveraging appraisal processes to inform career advancement (Santiago et al., 2016[54]).

Both the Czech Republic and the United Kingdom (England) reported raising the attractiveness of the school leader position as a policy priority persisting across the period 2008-19. The Czech Republic has taken policy measures to improve the job security of school leaders (2012). It has also been working to improve the working conditions for school leaders through the Amendment to Education Action Appointment, which modified the appointment and dismissal of school leaders and introduced a six-year appointment period (2012).

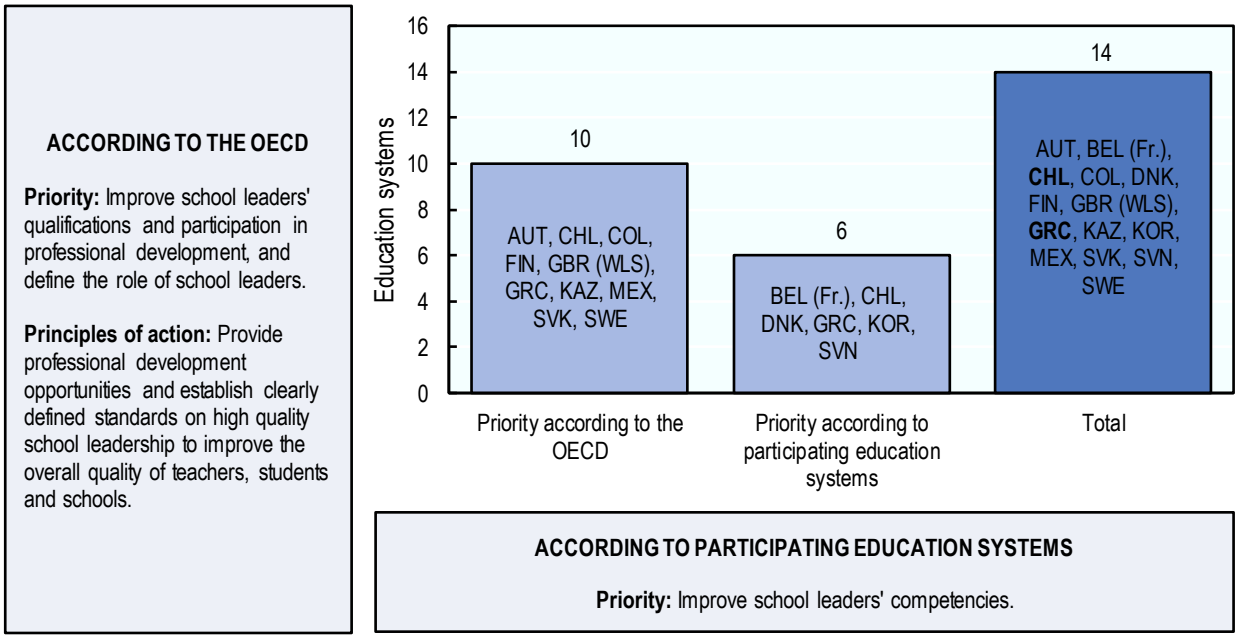
Improving school leaders' qualifications

The most common policy priority related to school leaders concerns improving school leaders' qualifications. This includes both appropriately defining the role of the school leader and support leaders to improve their qualifications and participate in professional development. Between 2008 and 2019, this policy priority was identified in a total of 14 education systems, either by the OECD in previous country-based work (10 education systems), by participating education systems (6 education systems), or both (2 education systems) (Figure 2.12).

The OECD identified this policy priority for at least four education systems during 2015-19 (Austria, Colombia, Greece and Kazakhstan), and three more education systems during 2008-14 (Finland, Mexico and United Kingdom [Wales]). In Chile, the Slovak Republic and Sweden, the OECD identified this priority both before and after 2014.

Relevant principles of action provided by the OECD to these education systems refer to the provision of professional development opportunities, especially to foster pedagogical leadership, evaluation and appraisal competencies. An additional principle of action is to establish clearly defined standards on high-quality school leadership to improve teaching and school quality and thereby improve student achievement.

Figure 2.12. Improving school leaders' qualifications



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to EPO Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide**)**.
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

For example, in 2016, the OECD recommended that Colombia introduce professional standards to shift school leaders' focus from administration to improving teaching and learning processes in schools, including the set-up of distinct career structures and school leadership roles, reforming recruitment and appraisal processes (OECD, 2016[55]). Previously, in 2014, the OECD recommended that the Slovak Republic foster internal appraisal mechanisms to support professional development through, for example, disseminating resources and training for the direct evaluation of pedagogical practice, or stimulating peer learning among school leadership in different schools and supporting regional leadership programmes (Shewbridge et al., 2014[56]).

Improving school leaders' qualifications was reported as a priority persisting across the period 2008-19 by five education systems: the French Community of Belgium, Chile, Denmark, Korea and Slovenia. Greece reported it as a priority more recently, between 2015 and 2019. In response to this policy priority, Chile has introduced an induction process for school leaders as part of the Principal Training Plan through the Quality and Equality of Education Law (2011). In addition, the Czech Republic worked on a policy to modernise the initial training of teachers and headmasters.

Policy trends

Besides increasing decentralisation and the transfer of autonomous decision making to schools, policies related to school leaders appear to remain less of a priority compared to other areas on school improvement, according to the results reported to the OECD. This was also the case for the 2015 OECD report, *Education Policy Outlook: Making Reforms Happen.* At the same time, there is some policy continuity with the majority of the policies introduced during 2008-14 still in place in participating education systems in 2019 (Table 2.3). The collected policies for this report continue to address policy areas covering professional frameworks and competency development.

Table 2.3. Policies to support education systems' school leaders, 2008-19

School leaders	
Professional frameworks	**Competence development**
Recent (Implemented between 2015 and 2019)	
Australia: Leading for Impact: Australian guidelines for school leadership development (2018)	
Still in place (Implemented between 2008 and 2014)	
Australia: Australian Professional Standard for Principals (2011)	**Australia**: Australian Charter for the Professional Learning of Teachers and School Leaders (2013)
Chile: Various reforms and initiatives to improve the quality of school leadership (since 2010) **[*]**	**Canada (Nova Scotia)**: Instructional Leadership Academy Program (2010)
Czech Republic: Amendment to Education Action Appointment to modify the appointment and dismissal of school leaders and introduce a six-year appointment period (2012)	**Ireland**: Centre for School Leadership (2015)
Portugal: Reform of School Leadership (2008) **[*]**	**Italy**: Initial training provided by the Italian Ministry of Education (2013)
Spain: Under LOMCE, more decision-making capacities for school leaders (2013)	**Portugal**: Specialised mandatory training for school leaders (2012) **[*]**
	Slovenia: Managing and Leading Innovative Learning Environments (2016-19); Headship Certificate Programme (2012, temporarily suspended); Headship Licence Programme (1996)
	Slovenia: Middle-Leadership Programme (2014)
	Sweden: Programme for Professional Development for School Leaders (2011-18)
	Turkey: Teaching, Entrepreneurship and Leadership Training Co-operation Protocol for Managers and Teachers in Vocational and Technical Schools and Institutions (2012)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

More specifically, these policies were designed, or have evolved, to implement and define professional frameworks, as well as clarify criteria for appointment and dismissal. Education systems also reported continued policies to support career-entry training for school leaders that takes place once the school leader has taken up the position. At the same

time, one education system reported a recent policy (2018) on guidelines for school leadership development.

Overall, the evidence collected on the progress or impact of policies on the development of school leaders is limited. Education systems that have undertaken policies in this area include Portugal's Reform of School Leadership (2008) and Chile's various reforms and initiatives to improve the quality of school leadership (since 2010). Aspects highlighted as important for greater success of these policy efforts include providing incentives for school leaders to participate in specialised training (as is the case in Portugal), but also continuing to work to ensure sufficient career differentiation between teachers and school leaders.

Professional frameworks

Australia, Portugal and Spain reported the priority of **implementing professional frameworks** that aim to clarify the roles of school leaders and define their responsibilities. The Czech Republic has worked to clarify the criteria for appointment and dismissal, while Chile has implemented a broader professional framework that encompasses school leader selection, salaries and professional development.

Policy focus

- In **Chile**, various **reforms and initiatives** have been introduced to **improve the quality of school leadership**. In 2011, the Law for Quality and Equity in Education (Ley 20501: Calidad y Equidad de la Educación, 2011) introduced competitive and open selection processes for school directors in public establishments. It also introduced new responsibilities and powers for school leaders, including greater flexibility to remove teachers, higher salaries and more support for professional development in schools with a high concentration of priority students (MINEDUC, 2011[57]). The same year, MINEDUC launched the Principals' Training Plan (*Plan de Formación de Directores,* 2010). This consisted of two phases: 1) strengthening training offers for school leaders through increasing flexibility in programme structures and improving quality assurance; and 2) offering scholarships to incentivise professionals to enrol in training programmes.

  In 2014, Chile's commitment to improving school leadership was further established through the launch of the School Leadership Strengthening Policy (*Política de la Fortalecimiento del Liderazgo Directivo Escolar*, 2014). This aimed to strengthen leadership skills within the system in order to enhance the role of school leaders as agents of change. The policy had five lines of action: 1) definition of the role of the school leader; 2) improved selection processes; 3) capacity development; 4) establishment of school leadership centres; and 5) building an evidence base to support policy making (MINEDUC, 2018[58]).

  Progress or impact: From 2011-14, 2 969 acting and new school leaders received scholarships through the Principals' Training Plan (MINEDUC, 2017[59]). However, an OECD review found that the plan had not been effectively applied to inform the teacher career structure, professional development plans, evaluation processes or salary scales (OECD, 2017[34]). Furthermore, the lack of a school leadership career path also meant that no related salary structure was in place, apart from the salary allowances introduced as part of the Law for Quality and Equity in Education for those

working in schools with high socio-economic disadvantage, high numbers of students with disabilities and schools in rural areas.

The School Leadership Strengthening Policy hoped to address some of these issues. For example, MINEDUC launched the Good School Leadership and Management Framework (Marco de Buena Dirección y el Liderazgo Escolar, 2015) to better focus the work of school leaders and their professional development. Two national school leadership centres (*Centro de Desarrollo de Líderes Educativos and Centro de Liderazgo para la Mejora Escolar,* 2015) opened to improve the quality of training and support offered to school leaders. The centres have led several research and innovation projects in the area of school leadership and have built up an international profile (MINEDUC, 2018[58]). Chile's Centre for Improvement, Experimentation and Pedagogical Research (Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas, CPEIP) launched an induction programme for school leaders in 2017.

The OECD recognised Chile's work in the area of school leadership as a promising step in the development of the profession, but signalled a persistent challenge in the lack of sufficient career differentiation between teachers and school leaders, which most likely contributes to the continued low status of the profession (Santiago et al., 2017[29]).

Competency development

In comparison to the teaching profession, the majority of reported polices on school leadership aim to provide **career-entry training** once the school leaders have taken up their positions. For example, in Sweden, school leaders begin training once they start the job and another Swedish policy, aimed at developing specific competencies, targets school leaders who have been in the profession for at least a year. Other education systems provide initial education and professional development programmes throughout the career, targeting, for example, leadership skills (e.g. Italy, Portugal and Slovenia) or underscore the importance of professional development through a charter (e.g. Australia).

Policy focus

- In **Portugal**, before 2008, pedagogical leadership within Portuguese schools was uncommon. The **School Leadership Reform** (Decree-Law 75/2008, 2008) **created the position of school director (leader)** (Santiago et al., 2012[60]). This reform modified selection processes and responsibilities for principals, from a *primus inter pares* system where teachers were elected to the positions by their peers and functioned mainly as administrators. Leaders thus became responsible for the pedagogical, cultural, administrative and financial management of the school or school cluster. School management now consists of four main bodies: the school leader; the General Council (with representatives of school staff, teachers, parents and local authorities), which is in charge of operational and strategic planning; the Pedagogical Council, which supervises and co-ordinates pedagogical activities; and the Administrative Council, which is responsible for administrative and financial matters. Specialised mandatory training for school leaders was reinforced through an amendment to the law (2012). Leaders are now appointed on a four-year basis by the school or school cluster's General Council, composed of

teachers, non-teaching staff, parents, secondary students and representatives from the municipality. Their performance is evaluated internally by the General Council, based on the successful accomplishment of the goals outlined in their proposed educational project (70%), as well as a qualitative assessment of their leadership, strategy and external communication skills (30%).

Progress or impact: A 2012 OECD review found that the exercise of pedagogical leadership remained under-developed (Santiago et al., 2012[60]). More recently, the OECD found that while Portugal has made progress and there are formal structures in place that aim to strengthen leadership in schools, adequate and sufficient levels of instructional leadership practices still need to be strengthened at the school level (Liebowitz et al., 2018[61]).

New postgraduate programmes and qualifications for school leaders, intended as pre-service training, have been introduced by several universities across Portugal. In any school-principal appointment process where one or more candidates has such a qualification, all candidates who have not participated in the training must step down. This, according to national information, has acted as a strong incentive for incumbent and prospective principals to enrol in the postgraduate programme (National information reported to the OECD). However, the OECD found that the school leader role needs a professional pathway separate from that of teachers, and by remaining an elected office, leaders are still potentially ultimately responsible to fellow teachers rather than student interests (Liebowitz et al., 2018[61]).

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Chapter 3. Evaluation and assessment: Policy priorities and trends, 2008-19

This chapter identifies developments in policy priorities related to education evaluation and assessment between 2008 and 2019, both from the perspective of participating education systems in OECD member countries and non-member economies, and previous OECD country-based work. Such policy priorities, often shared by different education systems, include enhancing the quality and reliability of student assessments; developing a coherent evaluation and assessment framework; and addressing underbalanced or underdevelopment of system evaluation components, among others.

Taking a comparative approach, this chapter also analyses policy trends identified for evaluation and assessment between 2008 and 2019, providing evidence of progress or impact for a selection of policies.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Highlights

- This chapter **analyses policy priorities and trends on education evaluation and assessment** across participating education systems in terms of **student assessment**, **teacher appraisal**, **school evaluation**, as well as how these different components come together into a **coherent evaluation and assessment framework**.
- The **most frequently observed policy priorities** related to evaluation and assessment between 2008 and 2019 were: **achieving quality internal and external school evaluations; developing a coherent evaluation and assessment framework;** and **addressing absence or underdevelopment of system evaluation components**. These three priorities were each identified in 25 education systems. Other priorities identified to a lesser extent included achieving quality and reliability of student assessment (identified in 15 education systems), as well as building assessment competencies among both teachers and school leaders (identified in 7 education systems), and establishing effective teacher appraisal mechanisms (also identified in 7 education systems).
- The **most frequently observed trends in policy developments** related to evaluation and assessment between 2008 and 2019 were **student assessment** (structural changes, expansion of scope and digitalisation); **teacher appraisal** (reviewing encompassing mechanisms of teacher appraisal); **school evaluation** (developing internal, external or internal/external school evaluations); **system evaluation** (developing information systems for system evaluation); and **evaluation frameworks** (policies aiming for greater clarity and interconnections between evaluation and assessment frameworks).

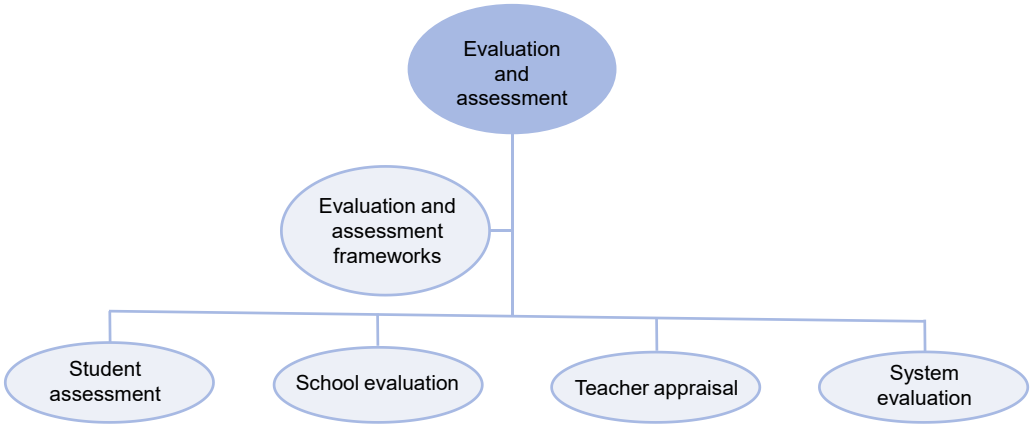
Setting the scene

Education evaluation and assessment refers to the co-ordinated arrangements that seek to provide information in a given system to support the improvement of student outcomes. These arrangements are like a global positioning system (GPS). They help the actors in an education system know if they are heading in the right direction, if the speed of progress is adequate, and alerts actors to possible pathways that could be taken to reach a desired destination.

As such, education systems need to design their evaluation and assessment components by reflecting carefully on their clarity, timeliness and usefulness. Clarity gives users indications of expectations, progress and alternatives. Timeliness facilitates change for improvement as evidence emerges. Usefulness helps to avoid information overload and overlapping and to identify those areas where improvement is most needed for the short, mid or longer term.

Building on previous OECD work, particularly the *Review on Evaluation and Assessment Frameworks for Improving School Outcomes*, the Education Policy Outlook Analytical Framework focuses on five main evaluation and assessment components. These components are: student assessment; school evaluation; teacher appraisal; system evaluation; and evaluation and assessment frameworks (see Figure 3.1) (OECD, 2015[1]).

Figure 3.1. Evaluation and assessment according to the Education Policy Outlook Framework



Source: OECD (2015[1]), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, https://doi.org/10.1787/9789264225442-en.

The use of evaluation and assessment has been increasing across education systems. Among the main factors behind this is an increased demand for effectiveness, equity and quality in education. But there is also greater school autonomy, progress in information technology, and a greater aim to rely on evaluation results to make evidence-based decisions. These factors translate into specific challenges for policy making, such as the following (OECD, 2013[2]):

- **Greater sophistication of evaluation and assessment**: With greater importance given to evaluation and assessment among OECD education systems, the number of instruments, coverage and their use has also been increasing. Although student assessment had been a common starting point, its focus became broader and more sophisticated to allow new types of measurements of quality at the school, sub-system, system or international levels, for example.
- **A more complex understanding of student learning**: Students need to acquire other skills beyond knowledge in order to navigate a changing world. Education systems must rethink strategies and means to measure this broader range of skills (such as critical thinking, self-motivation, well-being or socialisation), and provide adequate and timely support according to students' specific learning needs.
- **Expectations for greater efficiency**: From the point of view of structures, challenges include taking a holistic approach to ensure synergies between the different evaluation and assessment instruments, and that these are implemented in a way that can effectively help the education system to approach its goals.
- **Need for stakeholder engagement and capacity building**: As for other education efforts, stakeholders need to be engaged in the process in order to ensure the relevance of instruments, as well as clarity in terms of what is being implemented. The capacity of stakeholders to understand and use this information for effective improvement is essential. Students also need to have a voice in education improvement processes, as well as the capacity to assess their own learning.

With this framework as a basis, this chapter provides a comparative overview of the evolution of policy priorities related to evaluation and assessment as identified by the

OECD in previous country-based work and as reported by participating education systems at different points between 2008 and 2019.

General principles of action, as identified by the OECD to support countries in tackling these priorities are then explored.

The chapter also analyses policy trends in over 80 education policy developments undertaken mainly between 2008 and 2019. Over half of the policies collected have been in place since at least 2014, offering evidence of progress or impact in most cases. Throughout this chapter, evidence of progress or impact is included, in order to assist the reader in analysing factors relevant to the implementation of these policies (also see Chapter 1 and the Reader's Guide).

All of the policy reforms relating to evaluation and assessment and collected by the OECD are listed in the policy trends tables included in this chapter; more detailed descriptions of each of these policies and, where possible, their progress or impact, can be found in Chapter 8.

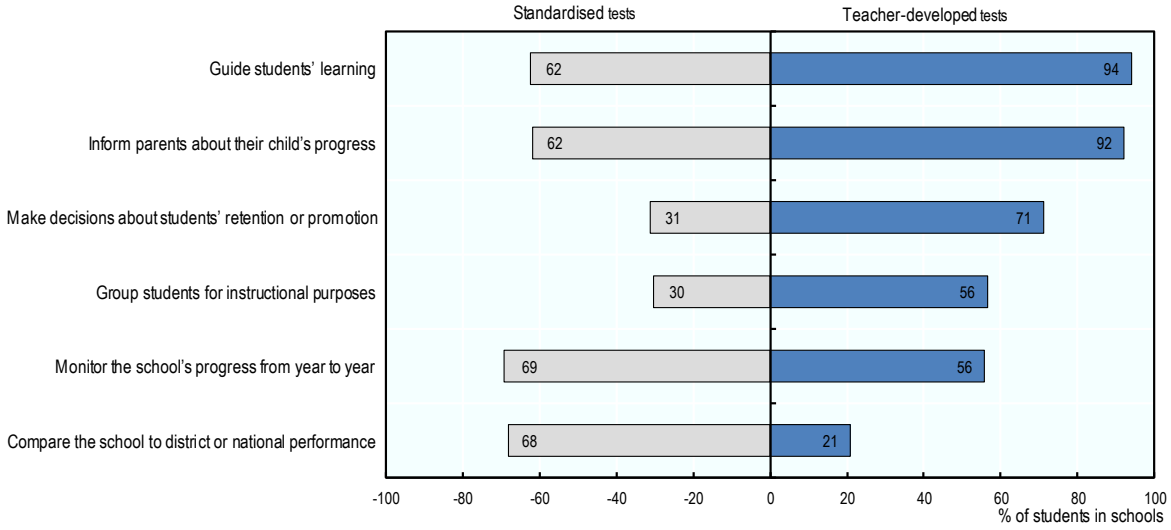
Student assessment

Student assessments collect evidence of learning in planned and systematic ways, and in doing so, they establish levels of student learning. Student assessments can be implemented in the form of internal assessments (taking place within the school), external assessments (through standardised assessments), or a combination of both. They can also be summative, formative or diagnostic. Summative assessments, also known as assessment *of* learning, aim to summarise learning that has taken place, with possible formal consequences for the student (examinations). Formative assessments, also known as assessment *for* learning, identify aspects of learning as it happens in order to improve learning processes. Diagnostic assessments are a type of formative assessment used to define the adequate starting point of learning for students (OECD, 2013[2]).

Students and education systems can benefit significantly from these different types of evaluations. However, governments need to be careful when designing and implementing them, considering both their purpose and how they interact with other instruments within the education system. For example, international evidence shows that students in education systems with external assessments tend to score higher in international surveys. At the same time, the high stakes generally attached to external evaluations may cause distortions in the education process (e.g. curriculum narrowing, teaching to the test, rote learning) (OECD, 2013[2]).

Evidence from the Programme for International Student Assessment (PISA) 2015 shows some trends in terms of types of assessments and their purpose. Teacher-developed tests are more commonly used to guide student learning and inform parents about student performance, as well as to make decisions about student retention and promotion, or group students for instructional purposes. Student standardised tests are more commonly used to monitor school progress from year to year or to compare performance with district or national performance. They are also widely used to guide student learning and inform parents. On average, high-stakes decisions and decisions on how to better teach students are based more frequently on teacher-developed tests, whereas standardised tests are more frequently used to compare school achievement against local, regional, national or international standards (OECD, 2016[3]) (see Figure 3.2).

Figure 3.2. Purposes of assessments, PISA 2015



Source: Based on data from OECD (2016[3]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264267510-en.

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At classroom level, recognition of the critical role of quality student assessment in the classroom appears to be growing. The OECD Teaching and Learning International Survey (TALIS) 2018 found that, overall, a larger share of teachers in 2018 reported frequently using student assessment practices than in 2013. Furthermore, teachers in 2018 were much more likely to report having engaged in professional development related to student assessment practices in the 12 months prior to the survey than those asked in 2013: of 31 countries with a statistically significant observed change, 29 saw increased reports of participation.

However, trends in current practices reported by teachers suggest that increased attention for student assessment has not necessarily focused on the use of formative approaches. Although the most frequently employed assessment practice among teachers is to observe students working and provide immediate feedback, a practice considered more formative than summative, this was less common in 2018 than in 2013 in a significant number of TALIS participating countries. In contrast, TALIS results from 2013 and 2018 show a general trend towards increased use of written feedback and teachers administering their own tests, both of which are more summative forms of assessment. Students' self-evaluation, a critical component of effective formative assessment was the least commonly used assessment practice among teachers in 2018 (OECD, 2019[4]).

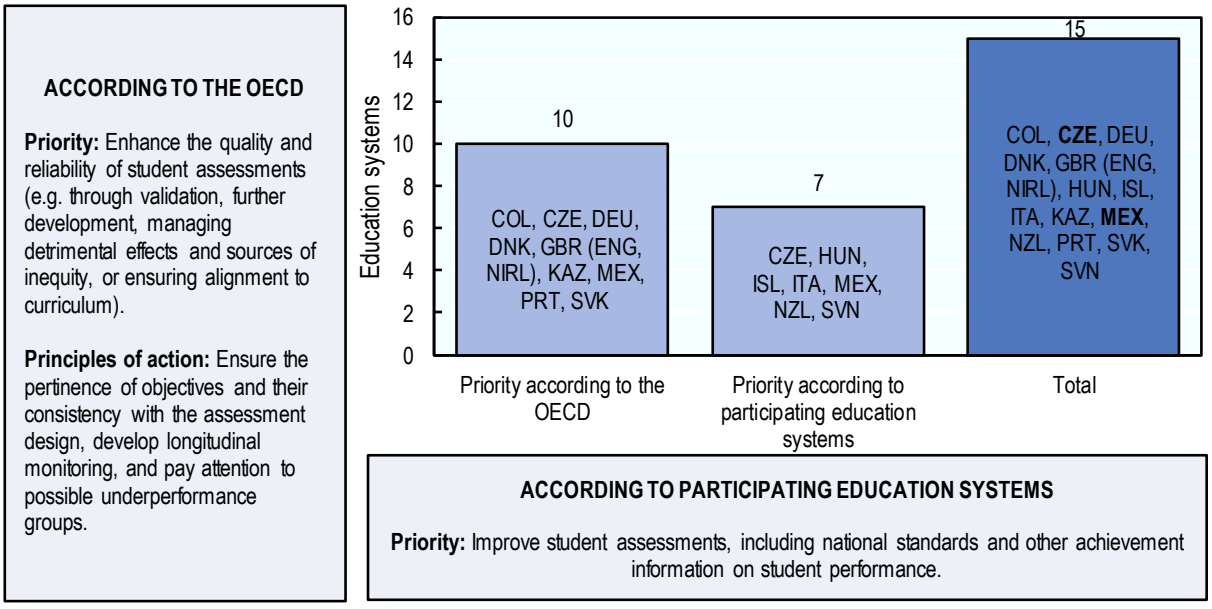
Policy priorities

Enhancing the quality and reliability of student assessments

A common policy priority identified both by the OECD and education systems refers to enhancing the quality and reliability of student assessments. Important aspects related to this priority include their validation, being able to assess more complex skills or ensuring alignment with curriculum and learning standards. The OECD has pointed out that

governments also need to manage detrimental effects that can emerge or potential sources of inequity (e.g. curriculum narrowing, teaching to the test or not taking students' or schools' backgrounds into consideration as part of the assessment). Between 2008 and 2019, this policy priority was identified in at least 15 education systems, either by the OECD in previous country-based work (10 education systems), by participating education systems (7 education systems), or both (2 education systems) (Figure 3.3).

Figure 3.3. Enhancing the quality and reliability of student assessments



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the Education Policy Outlook (EPO) Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this policy priority for at least five education systems during the period 2008 to 2014: the Czech Republic, Mexico, Portugal, the Slovak Republic and the United Kingdom (Northern Ireland). More recently, during 2015-19, it identified the same policy priority for another five education systems: Colombia, Denmark, Germany, Kazakhstan and the United Kingdom (England).

Common principles of action mentioned by the OECD in recommendations to these education systems include ensuring that objectives are pertinent to the needs of the system, and that there is consistency in the design of assessments.

For example, the OECD recommended in 2014 that the Slovak Republic collaboratively develop assessment criteria that demonstrate progression and could be integrated into the standards within the national education programmes. The OECD also recommended that

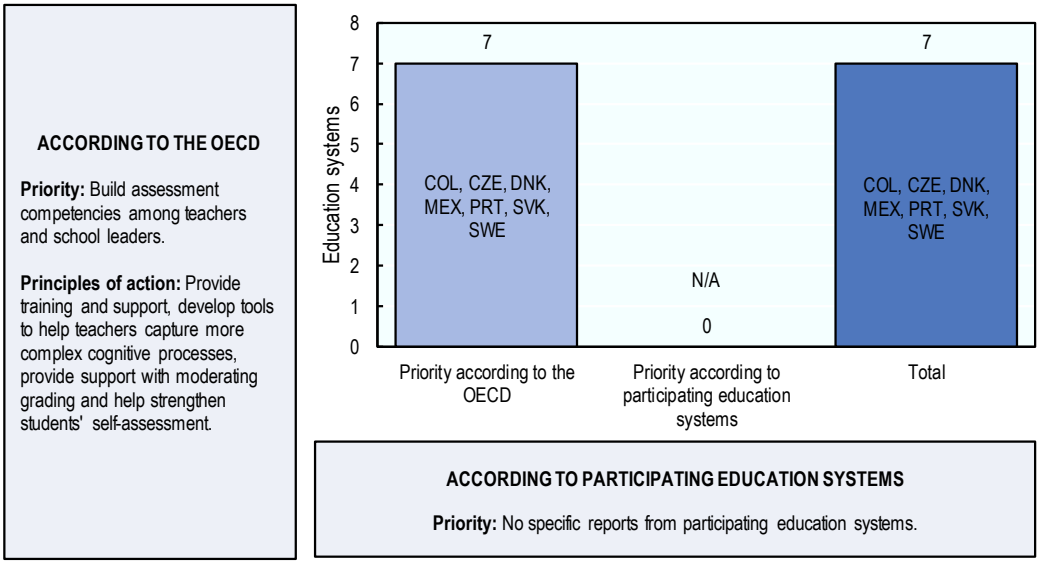
besides matching the curriculum, assessment criteria in the Slovak Republic should be compatible with existing national education programmes, and should provide sufficient detail to be clear and unambiguous, as well as easily accessible for teachers to integrate into their practice (Shewbridge et al., 2014[5]).

The capacity to develop longitudinal monitoring and provide attention to groups at risk of under-performing have also been identified as important principles of action, particularly to avoid sources of inequity. In 2016, the OECD recommended that Denmark remain particularly attentive to potential groups at risk of underperformance (Nusche et al., 2016[6]). The Czech Republic, Hungary, Iceland, Italy, Mexico, New Zealand and Slovenia all reported enhancing the quality and reliability of student assessment to the OECD as a policy priority that emerged during 2015-19. In response, in Italy, regulations introduced in 2017 regarding student assessment aimed to introduce important changes in the final examinations administered in lower and upper secondary education.

Building assessment competencies among teachers and school leaders

Another policy priority related to student assessment relates to building assessment competencies among teachers and school leaders. This complex area includes strengthening formative assessment and classroom-based assessment in general, or minimising inequities in grading. Between 2008 and 2019, this policy priority was identified in at least 7 education systems, all through the OECD's previous country-based work. No participating education systems reported this as a priority (Figure 3.4).

Figure 3.4. Building assessment competencies among teachers and school leaders



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this policy priority for at least seven participating education systems. Between 2008 and 2014 it was identified as a priority for the Czech Republic, Denmark, Mexico, Portugal and the Slovak Republic. Between 2015 and 2019, the OECD identified it in work with Colombia. The OECD identified this as a priority in Sweden both before and after 2014.

To support education systems to address this policy priority, the OECD has proposed principles of action focused on providing training and support, including developing tools that can help teachers capture more complex cognitive processes, and to provide support in moderating grading. A strong component of this area of capacity building also relates to how teaching staff in schools can help students improve their capacity for self-assessment so they can become the motors of their own learning.

The OECD has proposed different pathways to help strengthen teachers' classroom-based assessments, for example, in Denmark, Sweden and the Czech Republic. In 2011, the OECD recommended that Denmark actively involve teachers in developing data-driven professional learning communities focused on the use of assessment data in non-threatening ways, so that teachers could develop assessment competencies (Shewbridge et al., 2011[7]). Likewise, the OECD advised the Swedish government to help build teachers' assessment capacities in order to achieve greater consistency, comparability and equity among teacher-based assessments. The OECD then proposed that this could be achieved through the combined supports of external moderation (such as through a second teacher grading, employing professionals, or introducing a checking procedure by a competent authority or examination board), among other possible tools (Nusche et al., 2011[8]). Moderation, both within and across schools, was also proposed to the Czech Republic, to improve the reliability of teacher-based assessment. The OECD recommended it alongside the development of national guidelines for assessing students against learning objectives (Santiago et al., 2012[9]).

In the same way, the OECD has also focused on strengthening assessment competencies as a shared effort that should actively involve students, parents and communities. The OECD recommended that Portugal and the Slovak Republic fully engage students in the learning process and encourage them to take full responsibility for their learning. Proposed ways of doing this include clearly communicating the goals set for their learning, discussing assessment responses to help develop their knowledge and understanding of how to improve and inviting them to contribute to the planning and organisation of lessons (Santiago et al., 2012[10]; Shewbridge et al., 2014[5]). No participating education systems reported specific priorities relating to building assessment competencies among teachers and school leaders. This is interesting given the critical role of teachers and school leaders in using evidence garnered from student assessment to enhance learning outcomes.

Policy trends

Policy reforms undertaken between 2008 and 2019 and collected for this report have focused on structural changes of student assessments, expanding the scope of assessments to capture more complex learning processes and aspects related to the digitalisation of student assessments. Analysis of these reforms suggests some continuity concerning the policy trends identified in 2015. Digitalising assessment processes is a new trend for this report, however, indicating education systems' efforts to harness technology to improve educational outcomes (Table 3.1).

Table 3.1. Policies on student assessment, 2008-19

Student assessment		
Structural changes	**Broader scope**	**Digitalisation**
Recent (Implemented between 2015 and 2019)		
Austria: New standardised and competency-oriented Matura examinations (2014/15; 2015/16)	**Austria:** Education Compass (2015)	**Iceland:** Digitisation of students' standardised tests (2016)
Belgium (Fr.): Declaration on Community Policy to strengthen assessment and guidance in higher education (2014-19)	**Iceland:** Extension of students' standardised tests (2017)	**Sweden**: Digitised National Test for Years 3, 6 and 9 (2018)
Czech Republic: New unified entrance examination for upper secondary schools (2016)	**Norway:** New regulation added to the Education Act (2015) to clarify the relationship between formative and final assessments **[*]**	
France: National assessments in mathematics and French in Grades 1, 2 and 6 (2018)		
Ireland: Junior Cycle Profile of Achievement (JCPA) replaced the Junior Certificate (2015)		
Italy: Revised regulations concerning student assessment for final examinations at lower and upper secondary education levels (Law 107/2017) (2017)		
Kazakhstan: Modifications to the Unified National Testing (UNT) (2017)		
Mexico: National Plan for Learning Assessment (PLANEA, 2015)- replaced previous school and student assessments		
Mexico: New performance appraisal (2015-16) – part of Education Reform (2013)		
Portugal: Comprehensive Model for External Student Assessment - Basic Education (2015) **[*]**		
Slovak Republic: National Standardised Assessment (2015)		
Spain: Royal Decree 5/2016 to establish diagnostic nature of student assessments and introduce sampling (2016)		
Sweden: National system for assessing knowledge (2016) **[*]**		
Turkey: Monitoring and Evaluation of Academic Skills (ABIDE, 2016)		
United Kingdom (England): Primary and secondary school accountability measures (2015; 2016)		
United Kingdom (Scotland): Achievement of Curriculum for Excellence Levels reporting (2016)		
United Kingdom (Scotland): National Standardised Assessments (2018)		

Student assessment		
Structural changes	**Broader scope**	**Digitalisation**
Still in place (Implemented between 2008 and 2014)		
Belgium (Fr.): Certification of knowledge, professional competencies and skills by units (CPU, 2013)	**Belgium (Fr.):** Legally mandated formative assessment in schools (2016)	**Australia:** National Assessment Program – Literacy and Numeracy (2008)
Belgium: (Fr.): Draft decree on external evaluations of student learning (2016)	**Korea:** Test-free semesters (2013) **[*]**	**Canada (Alberta):** Student Learning Assessments (SLAs) replaced the existing Grade 3 Provincial Achievement Tests (2013) **[*]**
Czech Republic: Full-cohort national standardised tests at Grades 5 and 9 (2011) in the curricular areas of the Czech language, foreign languages and mathematics	**Spain:** PISA for Schools (2014)	**Canada:** Pan-Canadian Assessment Program (2007); digitalisation (2019)
New Zealand: National Monitoring Study of Student Achievement (2012)		**Denmark:** Individual mandatory student plans (2006)
United Kingdom (N. Ireland): New assessment arrangements in 2012/13		**Slovak Republic:** Increasing quality of primary and secondary education with the use of electronic testing (20013-15)
		Slovak Republic: National standardised assessments (2005-15); National project for the digitisation of assessments (2013-15)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Furthermore, it appears that policy makers are putting increased attention on student assessment, as more activity was reported for this area between 2015 and 2019 than had been reported for 2008-14. However, the more recently implemented policy developments collected for student assessments focus on structural changes. In general, policy efforts collected by the OECD from education systems appear much more focused on the design of student assessments, than on building capacity among school staff to use these instruments effectively, which corresponds to findings presented earlier on priorities.

Analysing the progress or impact of the policies related to student assessment collected for this report, it is clear that a growing number of education systems are steadily moving towards improvement-focused approaches. However, many of these policies have undergone multiple changes since their introduction. For example, in both Northern Ireland and Ireland, the governments have introduced multiple modifications to new assessment arrangements in response to reactions from key stakeholders. Other modifications include adding new assessment years or subjects and introducing new guidelines and procedures for teachers.

Furthermore, as Table 3.1 shows, while there is a significant amount of recent policy work in this area, the number of older policies that are still in place is relatively small. Overall, this suggests a lack of stability in this area of education policy, which risks placing undue pressure on the teachers and school leaders who are implementing the changes to student assessment. This is exacerbated by the fact that capacity building is rarely an explicit

feature of implementation, as borne out by the evidence collected for the policies covered in this report.

Structural change

Some participating education systems made important changes to their **external student assessment systems**. These changes can refer, for example, to the creation of new systems, modifications to existing instruments in terms of the years assessed or even new considerations on how external student assessments should take place and how families and schools should be informed of student outcomes.

Newly designed assessment systems have been introduced in Austria, Mexico and Sweden. At the school level, the new Matura examinations introduced in Austria from 2014 are competency-oriented and include standardised and non-standardised components that can be applied depending on the specific focus of the school. In the academic year 2015/16, Mexico replaced its former external student assessment instruments with the National Plan for Learning Assessment (PLANEA), which aims to provide information on student learning at the student, school and system levels. Furthermore, in 2016, Sweden made significant revisions and adjustments to the national system for assessing knowledge to establish a three-part system comprised of tests, assessment support materials and knowledge evaluation.

Other systems have made changes to existing systems and instruments, for example, in terms of years assessed, accountability measures or other aspects related to design. From 2015, Portugal discontinued national tests administered in Grades 4 and 6 in order to align more closely with practices in the majority of European countries. Kazakhstan split its Unified National Assessment Test into two in 2017 in order to administer it at the end of school, and for admission into university and state grant distribution. In the United Kingdom, England introduced new accountability measures for primary and secondary education that aim to measure both performance and progress in student learning.

A few education systems have implemented reforms to improve how different actors use student assessment results to promote improvement across the system, or how student assessments and examinations take place. For example, the French Community of Belgium adopted a draft decree in 2016 amending the external evaluation of student learning, which specifies the general framework and conditions for external evaluation, from design to administration. Likewise, Portugal's Comprehensive Model for External Student Assessments includes a premise highlighting the importance of ensuring that the information returned to schools, families and other stakeholders is of high quality and pertinent. This is more conducive to creating opportunities for concerted action and building trust in the system.

Policy focus

- **Portugal**'s **Comprehensive Model for External Student Assessments - Basic Education** (*Modelo Integrado de Avaliação Externa das Aprendizagens no Ensino Básico,* 2015-16), introduced national assessments in Grades 2, 5 and 8, and a **national examination** in Grade 9, at the end of basic education (primary and lower secondary). The model is based on a clear set of premises: 1) the aim is to improve student learning and academic success; 2) continuous assessment should be the main instrument of internal school evaluation with external evaluation used to enhance approaches to assessment applied within the school; 3) external

assessment focused on only a few disciplines leads to an impression of curricular narrowing among teachers and families; and 4) there should be a strong commitment to the quality and pertinence of the information returned to schools, families and other stakeholders in order to create opportunity for more concerted action and build trust in the system (National information reported to the OECD).

Progress or impact: The introduction of the Comprehensive Model for External Student Assessments signalled a move away from high-stakes testing in basic education in Portugal. Previously, Portugal had national examinations for Grades 4 and 6 of basic education (2011/12). These provided the basis for assessing and monitoring learning progress and replaced the National Monitoring Educational Progress Test (2001). The tests for Grades 4 and 6 were discontinued as this type of early examination was found to be dissonant with practice in the majority of European countries.

The first implementation round of the Comprehensive Model took place in a number of schools in 2016 (EC, 2016[11]). Results of the assessments have no impact on final grades; instead, schools and families use them to improve understanding of the students' learning processes and to target teaching and support to reduce school failure. Oral communication skills are also assessed (EC, 2016[11]).

- In **Sweden**, in 2016, the **Inquiry on National Tests** published a report (*Likvärdigt, rättssäkert och effektivt – ett nytt nationellt system för kunskapsbedömning*, 2016) **proposing significant revisions and modifications to the national system for assessing knowledge** in Sweden, consisting of three components: tests, assessment support materials and knowledge evaluation. According to the proposal, the National Agency for Education will be given an overall remit to develop the three components. This includes disseminating information about the new system and its various components and providing relevant training (National information reported to the OECD).

Progress or impact: National tests have been administered at the end of compulsory education and at upper secondary level for many years. In 2012, national tests at primary level were moved from Grade 5 to Grade 6. National tests were introduced for Grade 3 in 2009, covering mathematics, Swedish and Swedish as a second language, in order to identify those students requiring special support (European Commission, 2016[12]). As of 2016, it is compulsory to use the National Assessment support material made available for the teaching of Swedish, Swedish as a second language and mathematics in Grade 1.

In 2017, the government put forward a Proposal to the Swedish Parliament under the title National Test – Fair, Equal, Digital (*Nationella prov – rättvisa, likvärdiga, digitala*) (Regeringen, 2017[13]). This states that in accordance with assessment results certain regulatory changes are necessary to increase the equitability and legal certainty of the national support for knowledge assessment and grading. Proposed changes included: clarifying the purpose of national examinations and national assessment supports;

assigning special significance to national test results in grading, when applicable; anonymising student responses; and ensuring responses are marked by someone other than the students' teacher.

The parliament endorsed the government's proposal, and the new legislation came into force in mid-2018. The Read-Write-Count guarantee for early intervention (*Läsa, skriva, räkna – en garanti för tidiga stödinsatser, 2019)* introduces mandatory evaluations of student' reading, writing and mathematics skills at pre-school level, which are to be followed up with targeted intervention where needed.

Presently, mandatory national tests in mathematics and Swedish (including Swedish as a second language) are administered in Grades 3, 6 and 9 as well as tests for English in Grades 6 and 9 and both a science subject (biology, physics or chemistry) and a humanities subject (geography, history, religion or social sciences) in Grade 9. These tests support grading, except in Year 3, where the results support the assessment of achieved knowledge requirements. In upper secondary school, national tests are administered in different courses in mathematics, Swedish (including Swedish as a second language) and English, of which some are mandatory depending on which national programme the student is studying. The same tests are administered in adult education at the upper secondary level.

Broader scope

The OECD has also collected policies more directly aimed at strengthening the role of formative assessment in schools. For example, in the French Community of Belgium, formative student assessment is legally mandated as an effort to signal its importance within the education system. Norway has also introduced regulations that aim to clarify the importance of formative assessment; these also aim to take into consideration learning that occurs outside the classroom. Meanwhile, Korea's test-free semesters, where student progress is measured exclusively through formative assessment, have extended their coverage since their introduction.

Governments have also made efforts to introduce assessment tools that capture a broader range of student learning outcomes and more clearly facilitate improved teaching and learning. At the level of early childhood education and care (ECEC), Austria introduced the Education Compass for children aged 3.5 years old, to record talent and development needs. Also, Spain is one of the 11 education systems to have participated in the OECD's PISA for Schools programme. This project aims to measure students' knowledge, skills and competencies, going beyond just mathematics, reading and science to capture a wider range of 21st-century skills, and also allows for comparisons of student performance with those of other schools and nations. This is intended to strengthen school-level improvements in student learning.

Policy focus

- **Korea** selected 42 schools for the **introduction of the test-free semester programme** in 2013 (National information reported to the OECD). The aim was to reduce students' stress from tests and help them engage in various activities, including career search and acquiring life values. In 2014/15, the programme opened up to any school that wanted to adopt the policy. Middle schools only have

three national test subjects (Korean/Literature, English, Mathematics), and elementary schools no longer apply achievement tests. In addition, local education offices aim to create simpler academic evaluations. Student assessments are based on preparation, choice of courses, organisation of curriculum, their participation and predictions of the outcomes of their courses.

Progress or impact: The programme covers an increasing number of middle schools from 25% in 2014 to 79% in 2015 (MoE and KEDI, 2017[14]). A 2014 survey found that student, parent and teacher satisfaction had increased. As of 2016, all middle schools had to adopt the programme with 100% coverage. The government also introduced the programme for lower secondary students in 2016 (MoE, 2018[15]). As of 2017, the programme extended to a test-free year for 7th graders. Also, pilot programmes started for 8th and 9th grade.

- **Norway** has made efforts to strengthen assessment since the launch of its **Knowledge Promotion Reform** (*Kunnskapsløftet*, 2006), which is a curriculum complementing the National Quality Assessment System (NKVS, 2004). It aims to support **effective evaluation and assessment practices in schools**. Also, the **Assessment for Learning** (2010-14) intended **to improve formative assessments** and support systematic reflection about schools, development of their assessment practices, networking of schools and professional development. This programme is built on a similar initiative that ran from 2007 to 2009.

Progress or impact: The Knowledge Promotion Reform is currently under review (UDIR, 2018[16]). Until 2020, the following curricula development plan is set out. The core elements that students need to learn in each subject were developed in 2017/18. As of 2018/19, the new curriculum is under development. For example, in 2018, teacher groups worked to develop curricula for individual subjects and requested input on the first draft during an open consultation process. In 2019/20, schools will prepare for the new curriculum to be applied from 2020 onwards. The new curricula will be rolled out step-by-step from 2020 to 2023.

Regarding the Assessment for Learning programme, just over 40% of the municipalities (184 out of 428) have participated in the programme to date. A preliminary study for an OECD review found that success in implementation was often due to clearly set objectives, good communication, and trust among those actors involved, as well as capacity building for smaller municipalities. Further recommendations have been developed (UDIR, 2018[16]).

Digitalisation of student assessments

Digitalisation can help provide information on student learning to teachers and schools within a shorter timeframe. Education systems such as Canada and the Slovak Republic have been undertaking efforts to digitise student assessments. In Canada, the Pan-Canadian Assessment Program (PCAP) will be an online assessment from 2019. Also, in Canada, Alberta has been introducing a digitally based Student Learning Assessment for Grade 3

students. Australia, through its National Assessment Program – Literacy and Numeracy (NAPLAN), has aimed to ensure that all students involved in this assessment are tested on line by 2019, to make this information more useful for student learning processes. The Slovak Republic has also been transitioning to e-testing, with the support of a contribution from the European Social Fund.

From a diagnostic approach, Denmark has also made important efforts to digitalise individual mandatory student learning plans for children from kindergarten to the age of 8. These student plans are based on individual student goals for each student, and collect information on the students' progress relative to these goals, along with a description of how and when the goals will be followed.

Policy focus

- In **Canada,** the province of **Alberta**'s digitally based **Student Learning Assessments** (SLAs, 2013) replaced the Grade 3 Provincial Achievement Tests. SLAs take place at the start of the school year and **assess literacy and numeracy in language arts and mathematics in Grade 2** (Alberta Education, 2018[17]). Based on the results, the report aims to deliver to students, teachers, and parents' information on the student's strengths and areas for improvement relative to provincial standards at the beginning of the school year. In 2014/15, a pilot of the SLAs in Grade 3 took place (Alberta Education, 2018[18]).

Progress or impact: Some 20 randomly selected school authorities took part in the Student Learning Assessments Grade 3 pilot during 2016/17 (Alberta Education, 2016[19]). In 2018, SLAs had extended to Grade 3 in all schools (Alberta Education, 2018[20]). The teachers' preview of the SLA digital questions and performance tasks aim to tailor the SLAs to the grade level. The SLAs can be used at the teacher's discretion. Grade 3 SLAs cover four elements in English and French: digital literacy questions, literacy performance tasks, digital numeracy questions and numeracy performance tasks. It is expected that the SLA will continue to reference the current Grade 2 provincial programmes of study until the new programmes of study are implemented (Alberta Education, 2018[17]).

Teacher appraisal

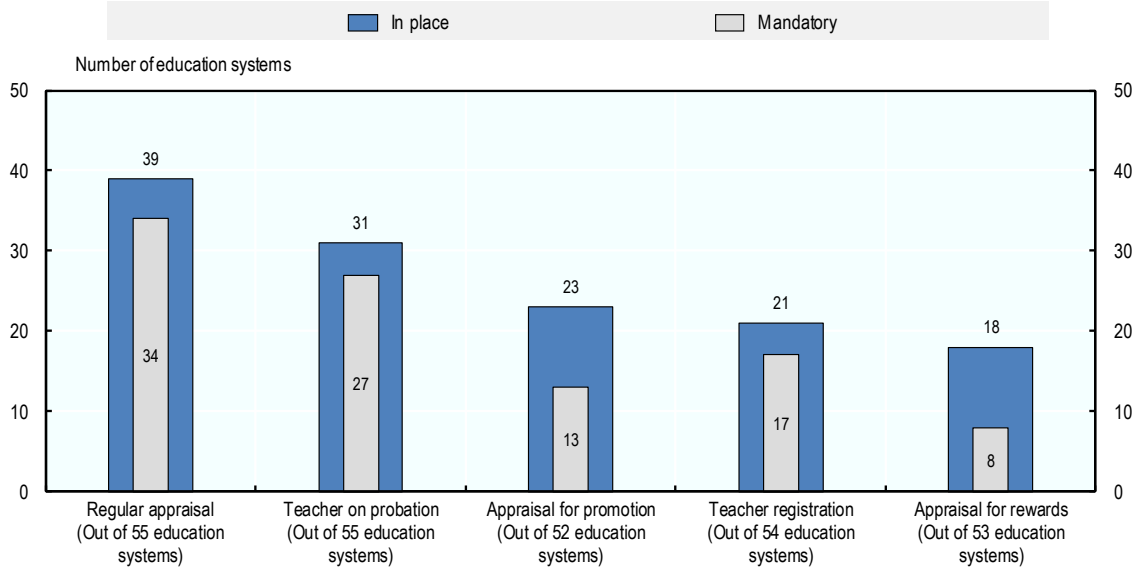
Teacher appraisal is the process whereby individual teachers are evaluated to establish their levels of competencies and performance and/or provide feedback to help them improve their practice (OECD, 2013[2]).

Teachers, schools and the education system in general can benefit greatly from teacher appraisal. It is a way for teachers to receive recognition for high-quality teaching and to advance in their careers. At schools, teacher appraisal can help to raise awareness of the individual profile of teaching staff and hence help tailor better opportunities for professional improvement and progression. Schools, where effective appraisal and feedback mechanisms exist, are also more likely to benefit from greater internal collaboration to improve practice and innovate. As such, effective teacher appraisal can also help education systems to develop stronger teaching and leadership across schools and make the profession more attractive (OECD, 2013[2]) (OECD, 2014[21]).

The formal arrangements of teacher appraisal can vary significantly across countries. Some of the most common formal arrangements of teacher appraisal include: 1) appraisal for the completion of a probationary period; 2) appraisal as part of performance management (e.g. registration, regular appraisal and promotion); and 3) appraisal for reward schemes (OECD, 2013[2]) (Figure 3.5). Approaches to the completion of probationary periods and for reward schemes are discussed in more detail in Chapter 2.

Figure 3.5. Formal arrangements of teacher appraisal in place, PISA 2015

Teacher appraisal arrangements as reported by countries and economies (OECD average)



Source: Based on data from OECD (2016[3]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264267510-en.

StatLink http://dx.doi.org/10.1787/888933997360

As shown in Figure 3.5, a large number of education systems in OECD member countries and non-member economies that participated in PISA 2015 reported having at least one of these types of formal appraisal in place, sometimes on a mandatory basis. Regular appraisal was the most common type of teacher appraisal reported, followed by probation processes. While almost half of education systems also reported employing appraisal for promotion, only 13 education systems reported it as mandatory (OECD, 2016[3]). Other forms of feedback can exist in education systems, which may, or may not, be part of a formal appraisal system. These include classroom observations, student or parental surveys and collegial feedback (OECD, 2014[21]).

According to previous evidence collected by the OECD, two appraisal-related challenges emerge for education systems. The first is the need to design comprehensive systems of teacher appraisal that help teachers (and school leaders) to better understand what is expected from them as professionals at the different stages of their careers, their performance in relation to these expectations and how they can improve to meet or surpass them (OECD, 2013[2]). While providing a coherent view of teacher quality, they also need to align with professional development and incentives and avoid tensions between formative and summative appraisal processes.

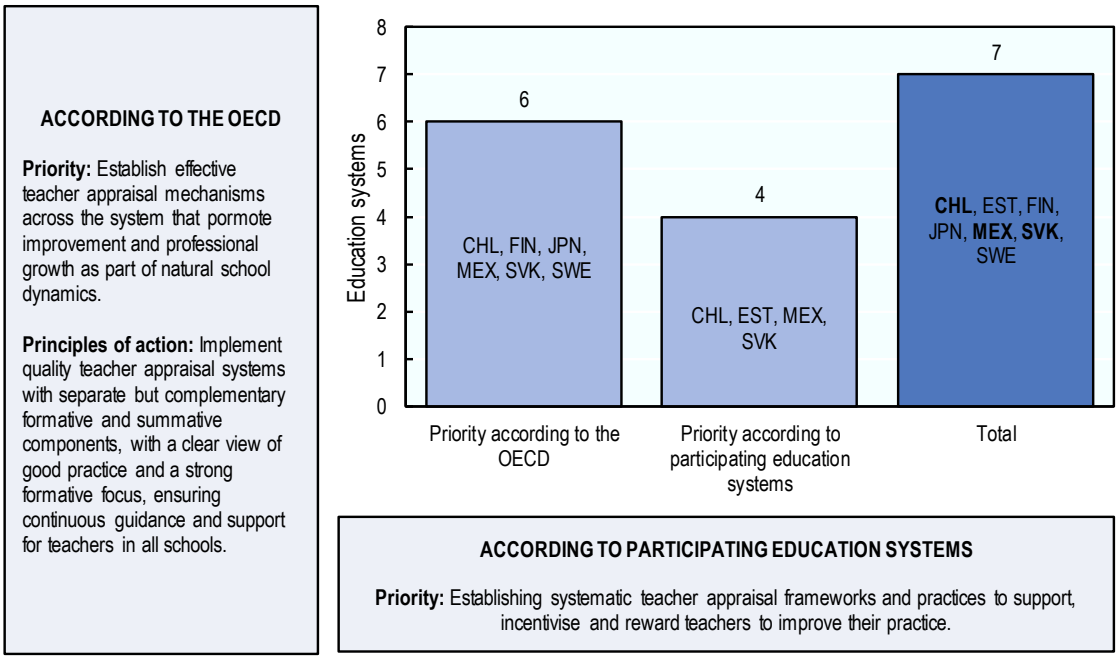
The second challenge is ensuring that these systems can effectively provide clear, timely and useful feedback for the teachers and staff in practice. On average, over two-thirds of teachers who responded to the OECD Teaching and Learning International Survey (TALIS) 2013 had received appraisal and feedback and found it helpful in developing their work as teachers in the school (78.6%). However, at the same time, nearly half of the teachers reported then that teacher appraisal and other feedback processes in place in their schools largely occurred to fulfil administrative requirements. Furthermore, less than half (40%) considered that the best teachers receive recognition in their schools, and almost one-third (31%) considered that consistently under-performing teachers would be dismissed in their schools (OECD, 2014[21]). These data point to a need to further monitor the design and implementation processes of appraisal. For appraisal mechanisms to be effective, they need to be validated, understood and owned by actors who must see them as inherent to the system rather than artificial additions that compete with everyday responsibilities.

Policy priorities

Establishing effective teacher appraisal mechanisms

Establishing effective teacher appraisal mechanisms is a policy priority for several education systems and includes constructing appraisal procedures focused on improvement to support teachers' professional growth as part of natural school dynamics. Between 2008 and 2019, this policy priority was identified in at least 7 education systems, either by the OECD in previous country-based work (6 education systems), by participating education systems (4 education systems), or both (3 education systems) (Figure 3.6).

Figure 3.6. Establishing effective teacher appraisal mechanisms



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified establishing effective teacher appraisal mechanisms as a policy priority for at least six education systems, all between 2008 and 2014. These were Chile, Finland, Japan, Mexico, the Slovak Republic and Sweden.

Principles of action proposed by the OECD to education systems in this area focus on designing and implementing quality systems of teacher appraisal. This includes developing separate, but complementary, formative and summative components, which should provide clarity to teachers and school leaders regarding the areas they need to improve on an ongoing basis while setting career evolution mechanisms that align with teaching skills. As part of this process, the OECD also recommends ensuring continuously that there is a clear understanding of what constitutes good practice and that a strong formative focus is necessary, as is ensuring continuous guidance and support for teachers in all schools (and eventually ECEC centres).

The OECD has made recommendations to support several education systems, including Chile and Mexico, to strengthen teacher appraisal. For Chile, the OECD made recommendations in 2013 and 2017 suggesting that the Good Teaching Framework, and eventually the School Leadership framework, could capture evolving aspirations for the

profession, alongside the more recent components in the system that aim to strengthen the profession. Other aspects also previously identified relate, for example, to improvements in the marking of portfolios, or the integration, to some degree, of the private sector in teacher evaluation frameworks (Santiago et al., 2013[22]; OECD, 2017[23]; Santiago et al., 2017[24]).

For Mexico, the OECD pointed out the need for a standards-based teacher evaluation system in 2012. The OECD proposed that this system could be initially formative, and eventually integrate formative and summative consequences once its implementation progressed, with more socialised rules. The OECD also proposed strengthening the role and capacities of school leaders in teacher-appraisal processes, through the support and co-ordination of Mexican federal authorities (Santiago et al., 2012[25]).

Among participating education systems, four specifically reported strengthening teacher appraisal mechanisms as a policy priority. Chile reported this as an emerging priority for 2015-19, while Estonia, Mexico and the Slovak Republic first identified it as a priority earlier, between 2008 and 2014.

Policy trends

As in 2015, the OECD found relatively few policies related to **teacher appraisal** for this report. In 2015, the OECD collected examples for Australia, Greece, Mexico and Portugal. At the time of writing this report, these instruments were still in place in Australia, and appeared in revision in Mexico, or had been discontinued (Greece and Portugal) (Table 3.2). More recently, in 2015, Italy introduced annual teacher appraisals.

The limited policy activity reported in this area among participating education systems suggests that teacher appraisal can be a more challenging topic for policy makers, where comprehensive stakeholder engagement or buy-in may be more difficult to attain. This can certainly pose problems for their implementation and sustainability.

Table 3.2. Policies on teacher appraisal, 2008-19

Teacher appraisal
Encompassing efforts
Recent (Implemented between 2015 and 2019)
Italy: Annual teacher appraisal, as part of the Good School reform (2015); National appraisal guidelines (2018)
Still in place (Implemented between 2008 and 2014)
Australia: National framework for teacher registration (2011) with a 2017 National Review of Teacher Registration **[*]**
Mexico: Appraisal system for teachers, school leaders and supervisors, as part of the Education Reform (2013)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Encompassing efforts under revision

In this round of policy collection for the Education Policy Outlook, the OECD Secretariat found that encompassing efforts were under revision for policies implemented during

2008-19 for Australia, Italy and Mexico. In both Italy and Mexico, policies were part of very comprehensive reforms undertaken by governments to improve education quality in schools (the Good School Reform in Italy, and the 2013 Education Reform in Mexico).

Policy focus

- In **Australia**, the national framework for teacher registration (2011) shapes the current approach to registration in Australia. The framework is underpinned by the Australian Professional Standards for Teachers (Teacher Standards), a public statement of what constitutes teacher quality and what teachers should know, and be able to do, at different stages across their careers (Graduate, Proficient, Highly Accomplished and Lead) (AITSL, 2018[26]). The framework includes a set of eight elements common to the registration processes and requirements of each state and territory. These elements include an initial and fixed period of registration, alternative authorisation to teach, discipline and de-registration, suitability, qualifications, English-language proficiency and mutual recognition across states and territories. All eight elements of the framework were reviewed as part of the National Review of Teacher Registration (AITSL, 2018[26]). In 2017, all education ministers agreed to a **National Review of Teacher Registration** to **identify ways to build on, and further strengthen, teacher registration** in Australia. The review considered how the current national registration framework is operating, including all elements of the framework as they relate to consistency and best practice, as well as challenges and barriers to successful implementation. An additional consideration was the extent to which the Teacher Standards are used within regulatory arrangements and appraisal procedures to drive teacher quality and how to further strengthen them. The review also covered the registration of early childhood teachers and vocational education and training teachers in schools.

Progress or impact: The National Review of Teacher Registration report, *One Teaching Profession: Teacher Registration in Australia*, was published in 2018 (AITSL, 2018[27]). All education ministers agreed that the Australian Institute for Teaching and School Leadership would, in consultation with key stakeholders, develop an implementation plan for the report's 17 recommendations, according to national information reported to the OECD; see also (AITSL, 2018[28]; Education Council, 2018[29]) for the specific recommendations to strengthen teacher registration.

At the time of writing this report, the finalisation of the plan is set for late 2019. In the interim, the focus was put on implementing the review's priority child safety recommendations 9, 10 and 11 that link to the work of the Royal Commission on Institutional Responses to Child Sexual Abuse (National information reported to the OECD).

School evaluation

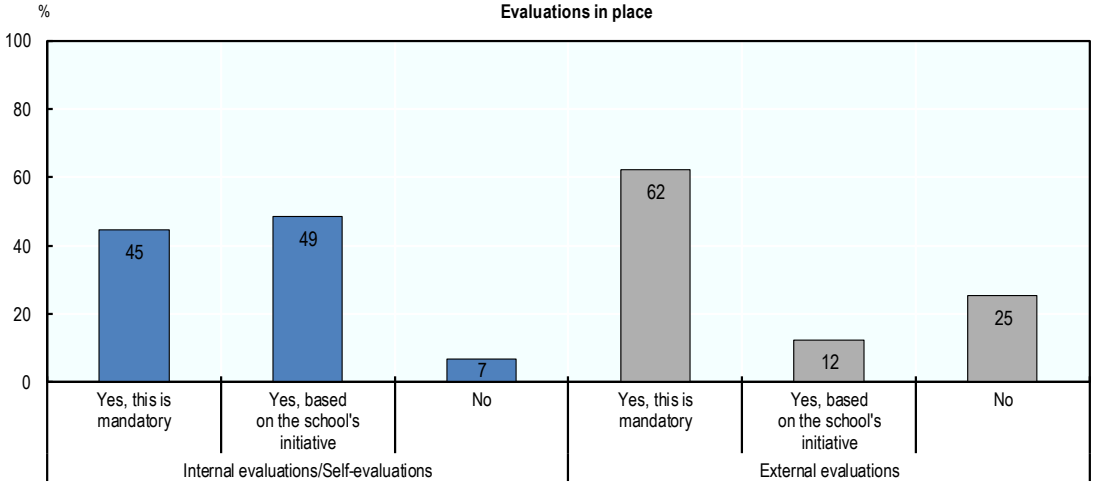
School evaluation aims to develop an understanding of improvement processes for teaching and learning, school administration, educational administration, school environments and the management of school resources. As such, school evaluation looks into aspects related to the effectiveness of structures and processes in place within a school, the implementation of national education policies and regulations within a school, the quality of student

learning outcomes at a school and the capacity of schools to improve. This report looks specifically at schools' self-evaluations, external school evaluations and comparisons between schools on different performance measures (OECD, 2013[2]).

With increasing school autonomy, school evaluations are becoming key tools of governance to monitor and promote improvement within the system. For at least 62% of students in countries participating in PISA 2015, school principals reported that mandatory *external* school evaluations are in place. At the same time, governments' growing interest in reducing the administrative burden of external evaluations has resulted in more attention given to the quality of internal evaluation processes in schools. At least 45% of students in PISA 2015 were also in schools where school principals report that mandatory *internal* school evaluations are in place in schools (Figure 3.7) (OECD, 2013[2]; OECD, 2016[3]).

Figure 3.7. Internal and external school evaluations in place, PISA 2015

Results based on school principals' reports (OECD average)



Source: Based on data from OECD (2016[3]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264267510-en. Table II.4.33.

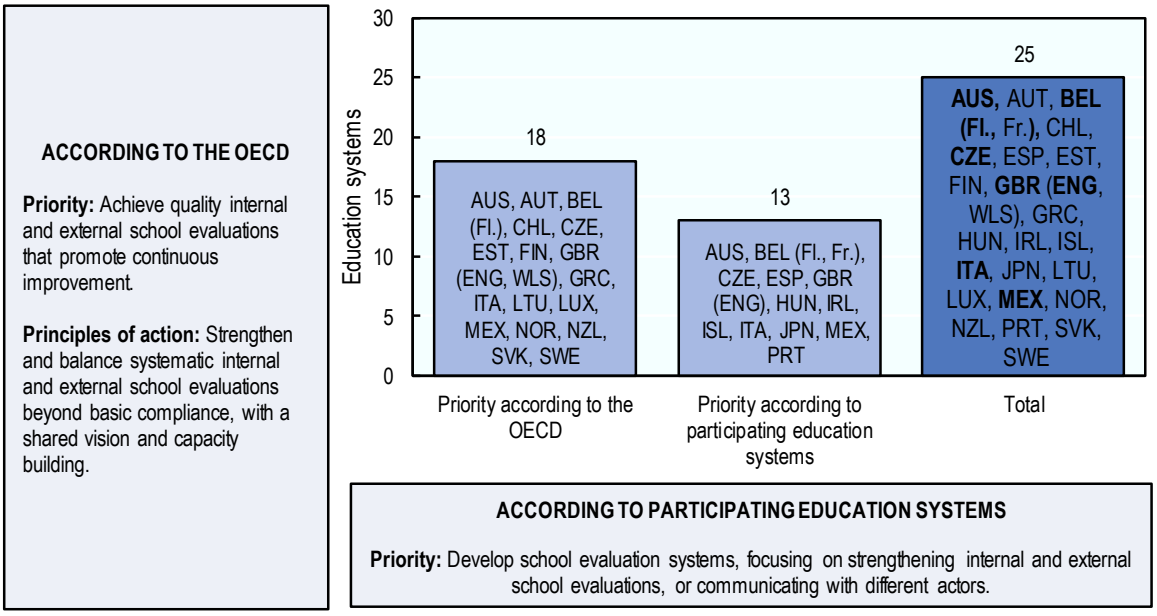
StatLink http://dx.doi.org/10.1787/888933997379

Policy priorities

Achieving quality school evaluations for ongoing improvement

A common policy priority shared by many education systems is the need to achieve quality internal and external school evaluation processes that promote continuous improvement. Between 2008 and 2019, this policy priority was identified in at least 25 education systems, either by the OECD in previous country-based work (18 education systems), by participating education systems (13 education systems), or both (6 education systems) (Figure 3.8).

Figure 3.8. Achieving quality internal and external school evaluations



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this policy priority for at least 18 education systems from 2008-19. For 14 education systems, including New Zealand, the Slovak Republic and Sweden, achieving quality internal and external school evaluation was identified as a priority during 2008-14. For other countries such as Chile and Estonia, the OECD identified this priority more recently (2015-19).

Related principles of action identified by the OECD to education systems in this area refer to strengthening and balancing internal and external school evaluations. These need to take place systematically in order to allow progress to be monitored. A commonly identified challenge relates to moving beyond a vision of basic compliance with requirements, to one oriented on effective student learning and school improvement. For this, the OECD has pointed out the need to cultivate a shared vision of expectations among actors for effective schools or ECEC centres. In order to successfully translate this vision into the reality of the school context, capacity building at both school and local levels is also key. This will facilitate the effective extraction and use of information.

In the Flemish Community of Belgium, the OECD recommended improving the inter-reliability of inspection reports via training during both induction and later on, during inspectors' careers, for example. At the same time, the OECD recommended possible ways in which the public use of external inspection results could be improved (e.g. simplifying

the language used in reports, including summaries for parents and developing small, high-quality charts to convey information visually) (Shewbridge et al., 2011[30]). A possible approach to strengthening external school evaluations that the OECD recommended for Estonia was to extend existing thematic external school evaluations into whole school evaluations (Santiago et al., 2016[31]).

Some 13 education systems reported policy priorities that specifically targeted improving the quality of school evaluations. During 2015-19, this priority was reported as emerging by a small group of education systems including Spain and the French Community of Belgium, while several other countries reported it as persisting from 2008-14. This includes Australia, Flemish Community of Belgium, Iceland, Ireland, Japan and Mexico. For example, as part of the Pact of Excellence in the French Community of Belgium, heads of all schools are required to prepare steering plans, which includes self-assessing their progress.

Policy trends

Building on the findings from 2015, for this report, the OECD Secretariat was able to collect a larger number of policies on school evaluation policies that relate to three identifiable policy trends: policies on internal evaluations, policies on external evaluations, and policies addressing internal and external evaluations in parallel. There is some continuity in terms of policies that had been reported earlier (for example, Ireland's School Self Evaluation Guidelines for Primary and for Post-Primary Schools), although additional policies were also collected that had been in place during 2008-14 (Table 3.3).

Table 3.3. Policies on school evaluation, 2008-19

School evaluation policies		
External	**Internal**	**Internal/external**
Recent (Implemented between 2015 and 2019)		
Hungary: Reforms to the external evaluation of schools (2015)	**Belgium (Fr.):** Decree on Steering Plans (2018)	**Belgium (Fl.):** Inspectorate 2.0 (2018)
Latvia: List of indicators for school performance (2017)	**Greece**: Procedures for the planning and evaluation of schools' educational work (Law 4547/2018)	**United Kingdom (N. Ireland):** Inspection and Self-Evaluation Framework (ISEF) (2017)
Latvia: Improvement of the accreditation process in general and vocational schools and examination centres (2016)		
Portugal: Working Group for the revision of the school's external evaluation model (IGEC, 2016) **[*]**		
United Kingdom (England): New Common Inspection Framework for school inspection (2015)		
United Kingdom (England): Attainment 8 and Progress 8 reporting (2016)		
United Kingdom (England): Revised GCSE criteria (2017)		
Still in place (Implemented between 2008 and 2014)		
Czech Republic: Strategy of the Czech School Inspection on external school evaluation (2014-20)	**Ireland:** Guidelines for primary schools (2012) and school self-evaluation guidelines for post-primary schools (2012); School Self-Evaluation Guidelines 2016-20 (2016) **[*]**	**Austria:** New national quality assurance system for general education schools (SQA, 2013); Further developing a uniform system for all types of schools (Education Reform Act 2017) **[*]**

Iceland: Co-operation agreement on financing and execution of external evaluations (2011); renewed (2017)	**Norway:** Assessment for Learning (2010)	**Estonia:** Concept of external evaluation (2014)
Portugal: Evaluation and monitoring guidelines for pre-school education (2011)		**United Kingdom (N. Ireland):** Every School a Good School (2009)
Slovenia: Compulsory national assessment at the end of Grade 6 (2012), amendment to Basic Schools Act		
Spain: PISA For Schools (2014)		
Sweden: Strengthened role of the Swedish Schools Inspectorate (2011)		
Turkey: Standards for Pre-school and Primary Education Institutions (2014)		
United Kingdom (England): English Baccalaureate (EBacc, 2010)		

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Related evidence on progress or impact shows that many education systems have favoured a cyclical approach to school evaluation, updating frameworks, guidelines and procedures intermittently. This is the case in Portugal, for example, where the latest cycle launching in 2019 has been strengthened to deliver better information and support to stakeholders, and to ensure alignment with the ongoing curriculum reform. Ireland's updates to the new cycle for 2016 were also informed by consultation and feedback with a range of stakeholders.

Furthermore, evidence collected in Norway and Turkey has pointed to the importance of good communication and capacity building when introducing changes to school evaluation. In Norway's Assessment for Learning, for example, these very factors influenced the policy's good reception.

External school evaluations

The largest share of policies collected on school evaluations for this report relates to **external evaluations**. These policies can relate to school evaluation instruments based on student standardised assessments, measures taken to enhance the clarity of processes and roles of different actors during external evaluations, and the strengthening of the role of inspectorate bodies (OECD, 2013[2]).

Some student assessment instruments aim to support school evaluation processes, as is the case for instruments developed in Slovenia and the United Kingdom (England). The approach varies though, depending on the policy. In England, the tests aim to evaluate school performance and provide parents, or other actors, with information about student outcomes, including comparative information across schools. However, in Slovenia, the new mandatory national assessment at the end of Grade 6 compulsory school is intended for self-improvement and school self-evaluation. Students receive their individual results, while principals and teachers can only access anonymised aggregated results that they can compare to national averages.

Achieving greater clarity in terms of processes and actors has been the object of policies undertaken by a number of countries such as Hungary, Latvia, Iceland, Portugal and the United Kingdom (England). Hungary and England have developed frameworks or guidelines to clarify school inspection processes, and Portugal established a working group to revise the process of external evaluations in schools. Iceland, on the other hand, has established agreements that define the broader processes of the financing and execution of external evaluations among government and municipalities. At the same time, Latvia has established a list of indicators to measure school performance (such as further education pathways or the employment status of graduates) and has worked to enhance accreditation processes in general and vocational schools as well as examination centres.

Other education systems have implemented targeted inspectorate bodies specifically. Over past years, Sweden has attributed greater powers to its Schools' Inspectorate. Likewise, the Czech Republic has been working to develop methods, procedures and tools of external evaluation to better measure student learning as well as contextualise it according to the students' and schools' socio-economic and territorial backgrounds.

Policy focus

- In 2016, **Portugal** created a **working group** of external experts, staff from the Inspectorate-General of Education and Science (IGEC), representatives of other educational administration services, and government advisors to continue to improve the External School Evaluation (Avaliação Externa de Escolas, AEE) programme. In 2016/17, following two evaluation cycles with the current framework, the group focused on **revising the evaluation model and enhancing its formative character** (IGEC, 2018[32]). The first evaluation cycle started in 2006 when 24 school clusters across the country were evaluated under the guidance of a newly-established group of academic experts and inspection representatives. The evaluation system was then extended to all public schools (except those in the overseas autonomous regions of the Azores and Madeira), with external evaluations to be carried out on a five-year basis. The first cycle (2006-11) used a five-dimension analysis (school outcomes, processes, organisation, leadership and self-development), then reduced to three dimensions (school outcomes, education service, leadership and management) for the second cycle (2011-17) (Ministry of Education, 2010[33]; IGEC, 2016[34]). Implementation is under the responsibility of the IGEC, which prepares an annual report with the main results, and provides targeted feedback to schools and evaluators (IGEC, 2018[32]) The National Education Council (CNE) has been following this process and holding commission meetings, working groups and seminars to enhance the analysis, discussion and use of evaluation data (CNE, 2015[35]).

Progress or impact: Evidence available to the Ministry of Education suggests some improvement in school development, teaching and learning and student outcomes. School self-evaluation has also helped promote professionalism in schools and enhance public knowledge of schools' work. Furthermore, having a qualitative and comprehensive evaluation process was considered beneficial in supporting schools to improve their internal organisation and self-evaluation. Portugal reported greater trust in schools, their institutional mechanisms and their leaders.

One implementation challenge lies in establishing a system that is objective and produces substantive results, while at the same time recognising and promoting the specificities of schools and their autonomy and empowering them. Another is to avoid an excessively administrative focus, putting more emphasis on the work in the classroom. Across evaluation cycles, ensuring the involvement of a wide range of participants (teachers, parents, students, experts and institutions) was also a challenge (National information reported to the OECD).

Given the diverse backgrounds of its members, the working group is a positive example of increased alignment among system-level administration services. In 2018, following their review, the working group of external experts presented a proposal to improve the AEE programme and the third evaluation cycle launched in 2019 with a revised model widening the programme's goals and the scope of its action, as well as extending the process to private schools (IGEC, 2019[36]). This is intended to deepen the information garnered from evaluations and provide greater support to schools, enhancing their capacity to ensure quality learning for all students and across all the competencies defined within the new Profile of Students at the End of Compulsory Schooling.

Internal school evaluations

Education systems have also aimed to **strengthen internal evaluation processes**: this has been the case for schools in the French Community of Belgium, Greece, Ireland, Norway and Turkey. Norway introduced the Assessment for Learning programme (2010-14) to improve formative assessments and support systematic reflection about schools and their assessment practices, among other areas. Ireland has also revised its School Self Evaluation Guidelines produced for both Primary and Post-Primary Schools.

Policy focus

- **Ireland**'s **School Self Evaluation Guidelines for Primary Schools** (2012) and the **School Self Evaluation Guidelines for Post-Primary Schools** (2012) **introduced obligatory school self-evaluation** to improve the quality of learning. The process calls for a collaborative, reflective process that focuses on teaching and learning. Based on school and education partners' feedback, the updated School Self-Evaluation Guidelines 2016-20 advise schools to continue to: 1) focus on teaching and learning; 2) use the process to implement national initiatives; and 3) identify and work on aspects of their teaching and learning practices that require development and improvement (The Inspectorate, 2016[37]).

Progress or impact: The first cycle of school self-evaluation was intended to explicitly support the implementation of the National Literacy and Numeracy Strategy. The second cycle and its revised guidelines offer schools a more systematic approach to understanding how they can improve outcomes for learners. The School Inspectorate anticipates that most primary and post-primary schools will employ the process between 2016-20 in a manner that continues to focus on quality teaching and learning for literacy and numeracy and helps schools to introduce and embed curriculum reform initiatives (The Inspectorate, 2016[37]). The Department for Education and Skills is currently processing survey feedback from school leaders, teachers, parents and boards of management on the role of self-evaluation in school improvement.

Internal/external school evaluations

Education systems have undertaken efforts as well to develop policies that strengthen **internal and external assessment in parallel**, which involve important aspects of capacity building in schools, as the examples of Austria, Estonia and the Flemish Community of Belgium show. Austria's National Quality Assurance System establishes development plans in schools to be revised every year by schools, through a process that includes self-evaluation. In the Flemish Community of Belgium, the Inspectorate 2.0 initiative promotes more frequent visits to schools from the Inspectorate. These visits aim to achieve greater emphasis on internal quality assurance processes in schools, which previously took place every ten years. In Estonia, the concept of external evaluation was also put in place to strengthen internal evaluation. This also aims to help schools learn how to capitalise on the support and information available at the national level for their improvement processes (see Chapter 8).

Policy focus

- In 2013, **Austria** developed a **new national quality assurance system for general education schools** (Schulqualität Allgemeinbildung, SQA). The system requires school leaders, in consultation with teachers, to put development plans in place that cover three years each time; they are also required to update them annually. The plan must include self-evaluation, which can be either an internal or external consultation with specially trained school development advisors. Each school and province has assigned SQA co-ordinators who implement and co-ordinate the SQA system.

Progress or impact: For the formative evaluation of the national quality assurance system (SQA), two assessment rounds took place in 2015 and 2018. All school principals, the entire school supervisory authority for general education, the national SQA co-ordinators and the school co-ordinators were surveyed.

Based on the consultation with school principals, the 2015 report found that in 2014/15, school inspectors and SQA co-ordinators perceived the implementation process as positive (Skliris, 2016[38]). The structure and leading questions of the development plans were found to be useful. The

development plans at the individual schools served as a tool to promote the development of school and class quality. The goal to establish evaluation talks on the different levels had been only partially reached, however. School principals found the support by actors, such as the SQA co-ordinators, as positive. At the same time, the support had not been used on a comprehensive scale (Skliris, 2016[38]).

The 2018 evaluation results confirmed that support structures anchored within the framework of SQA were generally accepted and assessed positively (Skliris et al., 2018[39]). It underlined that counselling services offered by University Colleges of Teacher Education and support for school management by SQA co-ordinators appeared necessary for successful quality measures at the school level. It was also reconfirmed that feedback and evaluation were not yet common practice, while overall improvements had taken place. Teaching development had played a central role in many schools, and school principals had promoted teacher co-operation. Measures to develop teaching in schools have also increased since the introduction of SQA. In sum, personnel development and further education were considered of great importance at all system levels. Both school principals and school supervisors have reported an increase in these measures in their area of responsibility since the introduction of SQA (Skliris et al., 2018[39]).

This means that in the new quality measures, too, special attention must be paid to evaluation and evidence-based issues. The results form the basis for implementing the legal mandate to further develop a uniform system for all types of schools (Education Reform Act 2017). More specifically, these elements include the development plans, balance sheet and targeted agreement discussions between management levels, school management and school supervision. The aim is also to ensure the link between the new system and the SQA, according to national information shared with the OECD. The anticipated starting date for the new common quality measures system is the beginning of the school year 2020/21.

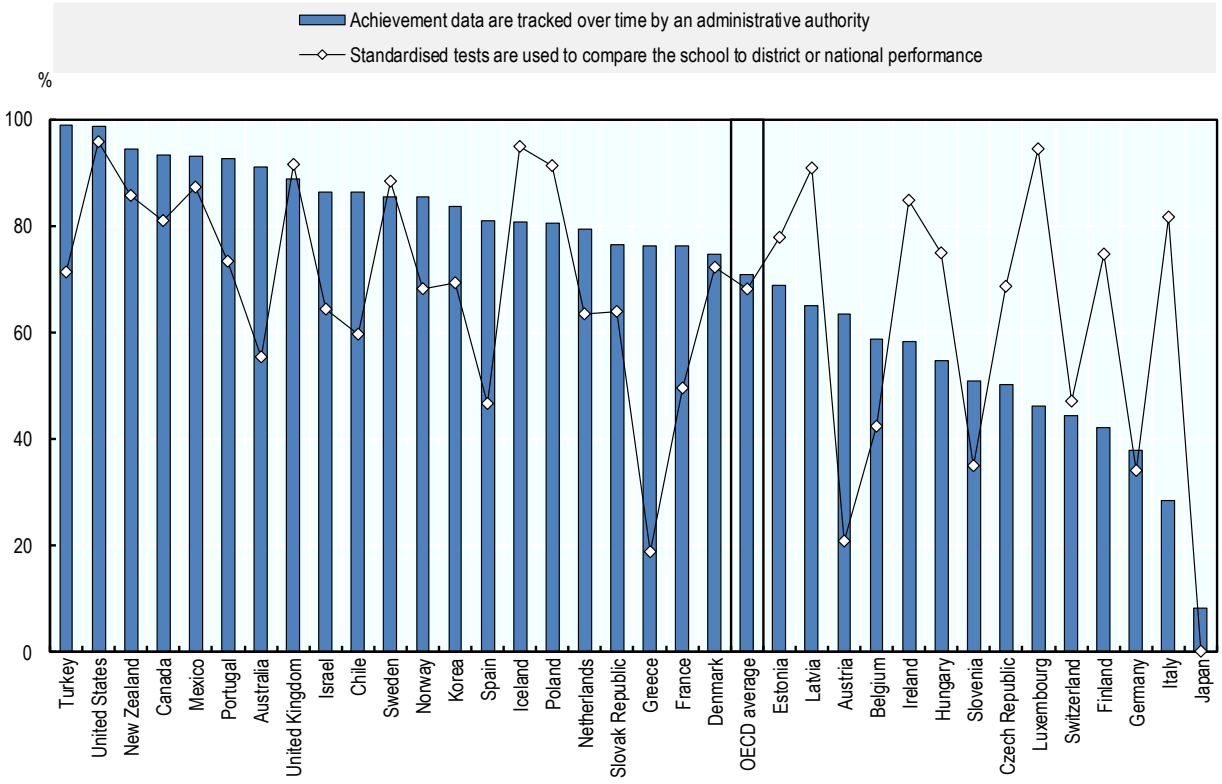
System evaluation and evaluation and assessment frameworks

This section brings together two types of policies, those aimed at system evaluation and those aimed at evaluation and assessment frameworks. They are key to help monitor the system as a whole (system evaluation), and that each of its components can act in synergy with the others towards education improvement (evaluation and assessment frameworks). They are therefore also highly relevant for the governance of an education system discussed in Chapter 4. They help the system monitor progress towards established goals (or the need to revise them), facilitating a systems-based approach, and the development of foresight capacities (see Chapter 4).

System evaluation aims to provide information that can be useful to the public for accountability purposes, or planning and improving policies to improve processes and outcomes of education at the national or sub-national levels. System evaluation benefits from a variety of tools, which include: indicator frameworks to monitor key information on school systems; tools to monitor student outcomes (in particular, some specific national assessments, longitudinal research and surveys and international assessments); qualitative reviews focusing on particular areas; and policy and programme evaluation (OECD,

2013[2]). For example, in PISA 2015, 71% of students were in schools where an administrative authority tracks achievement data over time, and 68% of students were in schools where standardised tests were used to compare the school to district or national performance, according to principals' reports (Figure 3.9).

Figure 3.9. School monitoring by administrative authorities, PISA 2015



Source: Based on data from OECD (2016[3]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264267510-en. Tables II.4.27 and II.4.24.

StatLink http://dx.doi.org/10.1787/888933997398

Evaluation and assessment frameworks are, on the other hand, the components within an education system that contribute separately and as a coherent compound to enhancing the quality of teaching and learning in schools. They consist of judgements aimed at measuring the quality of an education system in terms of assessments (progress and achievement of goals of individual students), appraisals (performance of school-level professionals) and evaluations (effectiveness of schools, school systems, policies and programmes) (OECD, 2013[2]).

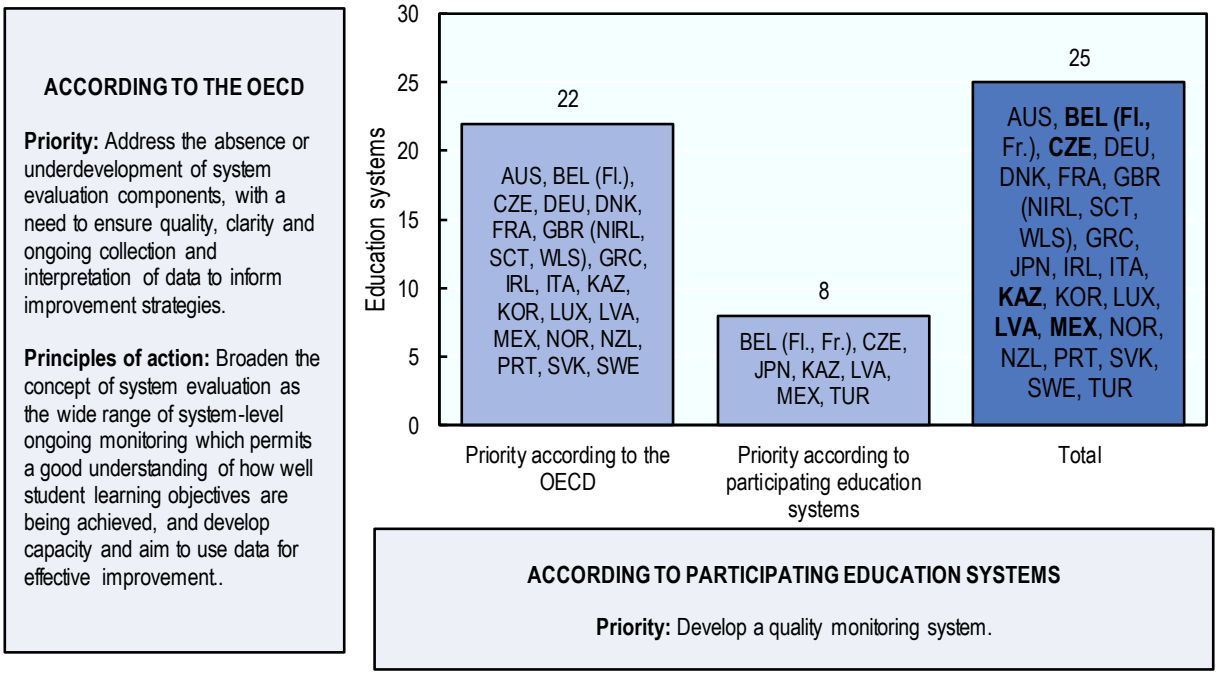
Policy priorities

Addressing the absence or underdevelopment of system evaluation

Previous OECD work on evaluation and assessment in different education systems has identified addressing a possible absence or underdevelopment of system evaluation

components as a priority for many education systems. This includes ensuring quality and clarity of evaluation processes at system level and the ongoing collection and interpretation of data to inform improvement. Between 2008 and 2019, this policy priority was identified in at least 25 education systems, either by the OECD in previous country-based work (22 education systems), by participating education systems (8 education systems), or both (5 education systems) (Figure 3.10).

Figure 3.10. Addressing the absence or underdevelopment of system evaluation components



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this as a policy priority for at least 22 education systems between 2008 and 2019. For some countries, such as Latvia and United Kingdom (Scotland), the OECD identified this as a priority in 2015-19, while for others, including the Czech Republic and the Slovak Republic, it was identified earlier from 2008-14. For a small number of countries including Mexico sand Sweden, the OECD identified this as a priority both before and after 2014.

Principles of action recommended by the OECD to education systems in this area include broadening the concept of system evaluation through a wide range of ongoing, system-level monitoring. The aim is to improve understanding across the system of how well it can achieve students' learning objectives. This can refer to developing broad measures of student outcomes, as well as demographic, administrative and contextual data. At the same

time, these data also need to be mapped and managed through effective information systems. Better clarity will support better use of data through research and analysis to inform different stages of policy, including planning, intervention and development of policies and strategies. Another key aspect for implementation is the need to develop capacity among actors to use these data regularly for effective improvement.

In 2011, for example, the OECD recommended that Norway clarify learning goals and quality criteria to guide assessment and evaluation (Nusche et al., 2011[40]). Likewise, in 2012, the OECD recommended that Luxembourg strengthen reporting against competency-based learning objectives and analysis of results while ensuring statistical, analytical and research competencies among the staff so as to fully exploit existing information (Shewbridge et al., 2012[41]).

A smaller share of education systems reported aspects related to system evaluation as a priority to the OECD. Belgium (Flemish Community), the Czech Republic, Kazakhstan and Turkey reported this as an emerging priority during 2015-19, while this policy priority was first reported in 2008-14 for education systems like Japan, Latvia and Mexico. Latvia has been working to establish national-level education studies, or expand participation in international surveys. Mexico's efforts to improve system evaluation include a re-design of its student assessment mechanisms, and their complementarity, to provide better information on system performance, as explained later in this chapter and in Chapter 8.

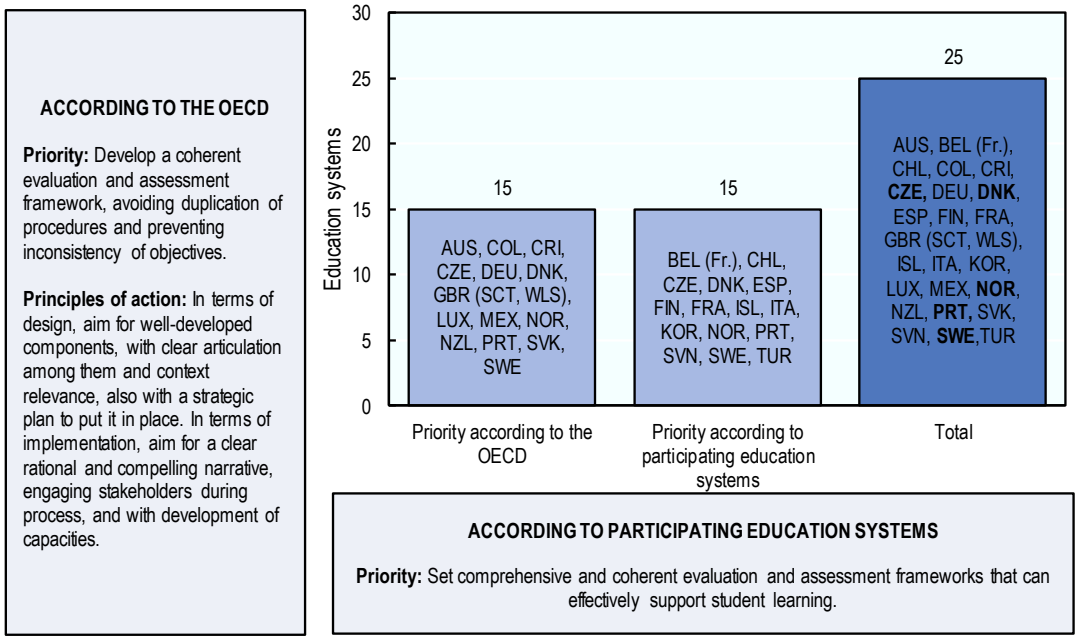
Developing a coherent evaluation and assessment framework

Another common policy priority related to evaluation and assessment refers to an education system's need to develop a coherent evaluation and assessment framework. As defined by the OECD, this largely means ensuring that the evaluation and assessment system's components are conceived holistically; in other words, that the system integrates mechanisms of student assessment, teacher and school leader appraisal, school evaluation and system evaluation. Each of the components should be developed sufficiently in order to address the system's needs, but they also should complement each other coherently, and without duplication or inconsistency in objectives (OECD, 2013[2]). Between 2008 and 2019, this policy priority was identified in a total of 25 education systems, either by the OECD in previous country-based work (15 education systems), by participating education systems (15 education systems), or both (5 education systems) (Figure 3.11).

The OECD identified this policy priority for at least 12 education systems during 2008-14, including Australia, the Czech Republic, Luxembourg, New Zealand, Portugal, the Slovak Republic and Sweden. More recently, during 2015-19, it identified it for Colombia, Costa Rica and the United Kingdom (Scotland).

Some key principles of action suggested by the OECD to these education systems relate to aspects of design and implementation. In terms of design, recommendations target an adequate development of components, with clear articulation among them, contextual relevance, and a strategic plan for implementation. Other aspects related to implementation that could be highlighted include the need to provide a clear rationale and compelling narrative to the evaluation and assessment framework. Engaging stakeholders during the process has, therefore, become a necessary step in ensuring the contextual relevance of the framework, and its ability to encompass different realities. Developing capacities of stakeholders across the system is also part of this process, as is ensuring that the evaluation and assessment framework can effectively lead to improved student outcomes.

Figure 3.11. Developing a coherent evaluation and assessment framework



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide**)**.
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

In its work with different education systems, the OECD referred to the need to develop strategies to ensure that the components of their evaluation and assessment frameworks are aligned and coherent. For example, in 2011, the OECD recommended that Australia develop a national strategy to ensure linkages between classroom practice and overall evaluation and assessment frameworks, or improve integration of the non-governmental sector (through protocol agreements). The OECD advised the Czech Republic to pay due attention to achieving proper articulation between the different evaluation components (e.g. teacher appraisal, school evaluation and school development) (Santiago et al., 2012[9]).

In order to achieve a better balance of components, in 2016, the OECD recommended that Colombia consider reducing the number of standardised assessments and re-design at least one to provide student-level performance data (OECD, 2016[42]). The OECD also recommended that Norway develop a strategic framework in order to clearly map all existing elements of evaluation and assessment in 2011. This mapping would also include elements not formally perceived as part of the National Quality Assessment System, and would help more clearly visualise the elements that needed to be considered in order to

complete the evaluation and assessment framework and make it more coherent (Nusche et al., 2011[40]).

The OECD sees capacity building as necessary to make evaluation and assessment frameworks function. This is addressed in analysis for Australia, Denmark and Mexico. In Australia, the OECD recommended developing the capacity of teachers to assess against evaluation and assessment standards, improving data handling by parents, and working with parents and other stakeholders to enhance the clarity of the information provided (Santiago et al., 2011[43]). In Denmark, in 2011, the OECD advised building capacity among those who evaluate and those who use evaluation results at different levels of the system, and more clearly communicating the objectives of the processes so that they can be more easily integrated into action plans (Shewbridge et al., 2011[7]). In Mexico, the OECD mentioned in 2012 the need to build capacity within state educational authorities and supervision structures (supervisors, heads of teaching and heads of sector). The OECD also highlighted building the capacities of school leaders in Mexico to help them operate effective feedback, coaching and appraisal arrangements for their staff (Santiago et al., 2012[25]).

Improving evaluation and assessment frameworks was widely reported by education systems as a priority. A total of 15 education systems have reported this priority and for at least 13 of them, this was an ongoing priority that was first reported in 2008-14. Relevant policy efforts were identified for Finland, Germany and Korea, as discussed later in this chapter.

Policy trends

The policies collected for 2008-19 by the OECD Secretariat have focused on collecting data and increasing the accessibility of information for schools, governments or the broader community, both for accountability and improvement purposes. In addition, the OECD Secretariat has now also collected policies aimed at improving the overall evaluation and assessment frameworks (Table 3.4).

Analysis of the progress or impact of the policies relating to system evaluation collected for this report suggests that many education systems are particularly aware of the need to ensure comparability and continuity of data across time, while also extending and strengthening the type of information collected. This is the case for Germany and Latvia, for example, while Slovenia has been working to interlink the new systems with the existing education records and data collection of the Ministry of Education, Science and Sport.

Finally, although the majority of the policies collected for this report are longer-standing policies from the period 2008-14, several country's efforts to act on system-level information remain in their early stages. For example, the OECD recently commended Mexico's 2015 National Plan for Learning and Assessment as a major step towards reinforcing the role of assessment to improve student learning but found that more progress is needed to ensure teachers use all the derived information for formative purposes (OECD, 2019[44]). This shows that while evaluation and assessment frameworks can be an important step in making systems more improvement focused, the required change of practice among actors at all levels is much slower to take hold.

Table 3.4. System evaluation: Evaluation and assessment frameworks, 2008-19

Policies on evaluation and assessment frameworks and system evaluation	
System evaluation **Information systems**	**Evaluation and assessment frameworks** **Aiming for greater clarity and interconnections**
Recent (Implemented between 2015 and 2019)	
Latvia: National level education studies (2017); Implementation due to take place from 2018-22	
New Zealand: Publication of employment status and earnings of tertiary education graduates (2017)	
Turkey: Quality Assurance Directive of the Vocational and Technical Education Institutions (2019)	
Still in place (Implemented between 2008 and 2014)	
Denmark: Data warehouse (2014)	**Finland:** Quality Criteria for Basic Education (2009); National Plan for Education Evaluation 2016-19 (2016)
Estonia: Estonian Education Data System (EHIS, 2005)	**Germany:** Comprehensive strategy for education monitoring (2006, revised edition in 2015); As part of it, Educational standards for the Allgemeine Hochschulreife in German, mathematics and English/French (2012) **[*]**
Germany: Local Learning (2009-14); Transfer initiative for municipal education management (2013)	**Korea:** Broadening of the evaluation and assessment framework for the whole education system (2010)
Greece: MySchool - Diofantos (2013)	
Hungary: Personal assessment identifier for all students (2008)	
Ireland: The Survey on Life skills in Primary and Post-Primary schools (2009-12) **[*]**	
Latvia: Supporting education studies (2011-15)	
Mexico: National System for Educational Information and Management (2013), replacing the National Registry of Students, Teachers and Schools (2011)	
New Zealand: Tertiary Education Performance Indicators (2010)	
Slovenia: Central Register of Participants in Education Institutions (CEUVIZ, 2011); Records and Analytical Information System for higher education in the Republic of Slovenia (2012) **[*]**	
Turkey: Expansion of MEBBIS to include data for students and infrastructure for pre-primary, primary and secondary education	

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

System evaluation: Information systems

A key element of system evaluation is the development of reliable **information systems** that provide a picture of the system's performance and progress towards its goals. The OECD collected several policy developments for providing better information relating to the outcomes of the system, its functioning (in terms of both infrastructure and school-level practices) and the monitoring of progress.

In terms of information systems related to student outcomes, for example, New Zealand's Public Achievement Information (PAI) provides information on student performance at the school level, and other information. Furthermore, New Zealand publishes the employment status and earnings of tertiary education graduates in order to give students clearer perspectives of study education pathways. Slovenia's Central Register of Participants in Education Institutions (CEUVIS) also aims to provide better information on the performance of the system. This database, which is linked to other databases, has been found useful for making better decisions for the allocation of resources within the system in Slovenia. Latvia has also made efforts to collect more information regarding student performance through national-level education studies and participation in international assessments.

Other information systems aim to bring together different elements related to the quality of the management of the system and practices. Related policies were collected for Estonia, Denmark, Hungary, Ireland, Kazakhstan, Mexico and Turkey. Ireland's Survey of Life Skills, for example, focuses on collecting information on learning practices available at schools and students' experiences. Furthermore, Mexico's National System for Educational Information and Management has been a major undertaking, bringing together information on learning outcomes, general school data and infrastructure.

Policy focus

- **Ireland**'s **Survey on Life Skills in Primary and Post-Primary Schools** (2009) gathers **information on school policies and practices relating to nutrition, exercise, health, growing up, bullying and other aspects** of the social, personal and health education programme. The survey is administered every three years, with subsequent rounds that took place in 2012, 2015 and 2018.

Progress or impact: As in previous cycles, findings from the 2015 Life Skills Survey suggest schools work positively to equip students with a range of essential life skills, by integrating physical activity and healthy eating, social, personal and health education (SPHE), relationships and sexuality education (RSE), and addressing anti-bullying and substance use (Department of Education and Skills, 2017[45]). The survey design was recently reviewed, and a more streamlined survey was issued to schools at the end of 2018. In addition, the title has changed to the *Well-being and Life Skills Survey 2018*, given the increased emphasis on student well-being. The Department is also exploring ways in which the survey findings may support the implementation of the Well-being Policy for Schools (2018) (Department of Education and Skills, 2018[46]).

- In **Slovenia**, the **Central Register of Participants in Education Institutions** (CEUVIZ, 2011) stores individual, school and education outcome data on students in pre-primary, primary and secondary education, and short-cycle higher vocational education. It is connected to other databases, including the Ministry's Register of Institutions and Programmes, the Central Population Register, the Register of Social Rights and the Register of Spatial Units. CEUVIZ is used to **follow up on key education goals and objectives, make decisions regarding the allocation of public funding, and provide evidence for scientific research and statistical work**. The **Records and Analytical Information System for Higher Education**

in the Republic of Slovenia (Evidenčni in analitski informacijski system visokega šolstva v Sloveniji, eVŠ, 2012) is an analytical tool linked to the CEUVIZ. It includes **data on higher education institutions, publicly verified study programmes, students and graduates**. The eVŠ facilitates regular monitoring of the system's operations and the development and streamlining of higher education policies. In addition, the eVŠ helps verify students' rights to public subsidies and different forms of financial aid instruments by serving as a main data source on student status (OECD, 2016[47]). It also includes an online application system for enrolment in study programmes and subsidised student accommodation (European Commission, 2015[48]) .

Progress or impact: In 2014, the Records and Analytical Information System for Higher Education (eVŠ) registered almost 1.5 million views of the student data (OECD, 2016[47]). In 2014, 48 595 online applications were completed, as part of the online application system for enrolment into study programmes and subsidised student accommodation places (European Commission, 2015[48]). It was found that the data collection helped reduce fictitious enrolments in tertiary education, in some cases, by deterring ineligible students from enrolling (European Commission, 2018[49]).

In addition, as of 2016, the Modernising the Organisation of Management and Governance of Data in Innovative Learning Environments project (2016-20), co-financed by the European Social Fund (ESF), aims to support the process of upgrading and interlinking the Ministry of Education, Science and Sport's existing education records and data collection (from ECEC to upper secondary). The focus is mainly on the Central Register of Participants in Education Institutions (CEUVIZ) and KPIS (a data collection system on school staff and salaries).

According to national information reported to the OECD, at the beginning of 2019, the eVŠ was updated with new administrative data to help monitor tertiary graduates' employability in Slovenia. This will contribute to evidence-based policy development at the national (ministerial) level and provide higher education institutions with quality data on graduates' labour market status. This should then support the design and update of study programme curricula, improve the acquisition of relevant skills and strengthen career guidance for students and graduates.

Aiming for greater clarity and interconnections

Some policy developments on policy evaluation frameworks were also collected by the OECD. These policies aim for greater clarity and interconnections within the education system, such as in Finland, Germany and Korea.

Finland, as also discussed in Chapter 4, has also been refining its quality processes across all levels of the system in recent years, for example, by developing quality evaluation plans, which also include criteria for third-party evaluations. Germany and Korea have aimed to develop comprehensive policies that establish quality criteria for the education systems at different levels. In Germany, the four interconnected areas of the framework aim to evaluate quality within and across the *Länder* (regions). In Korea, the broader evaluation and assessment framework aims to provide a clearer vision of quality at the student, teacher,

school or local levels. The policy developments collected in these two education systems also aim to make the resulting information from these frameworks more actionable for policy change at the school level.

Policy focus

- In Germany, the **Standing Conference of the Ministers of Education and Cultural Affairs** adopted a comprehensive **strategy for education monitoring** in 2006. The strategy, which was revised in 2015, covers four interconnected areas: 1) international comparative studies of student achievement; 2) central assessment of the achievement of educational standards (the basis for comparison between the *Länder*); 3) comparative studies to review the efficiency of individual schools within the *Länder*; and 4) joint education reporting of the Federation and the *Länder*. As part of this strategy, in 2012, Germany implemented educational standards for the general higher education entrance qualification (Allgemeine Hochschulreife) in German, mathematics and in English and French. For its modifications in 2015, the KMK aimed, among other things, to not only describe developments in the education sector but to improve the quality of conclusions drawn from empirical data and implement changes accordingly (KMK, 2015[50]).

Progress or impact: Thanks to the strategy for education monitoring, the different education monitoring instruments were arranged more systematically, allowing for comparisons and conclusions drawn from a wider and more complex range of data. In addition, the national assessment of the achievement of educational standards entered its second phase, which means that trends and developments can now be described. To further measure student performance, Germany participates in international comparative studies of student achievement (e.g. the Trends in International Mathematics and Science Study [TIMSS], the Progress in International Reading Literacy Study [PIRLS] and PISA) (National information provided to the OECD).

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Chapter 4. Education governance: Policy priorities and trends, 2008-19

This chapter identifies developments in policy priorities related to education governance between 2008 and 2019, both from the perspective of participating education systems in OECD member countries and non-member economies, and previous OECD country-based work. Such policy priorities, often shared by different education systems, include tackling unclear or unbalanced division of responsibility between national and local authorities and school; defining national education priorities and goals; putting in place quality assurance mechanisms; and engaging stakeholders in decision-making processes, among others.

Taking a comparative approach, this chapter also analyses policy trends identified for education governance between 2008 and 2019, providing evidence of progress or impact for a selection of policies.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Highlights

- This chapter **analyses policy priorities and trends on education governance** across participating education systems in terms of the **need to refine formal structures of education systems to streamline decision making**, **setting ambitious and measurable goals to steer the system** in a coherent direction, and **engaging a greater variety of stakeholders**.
- Compared to the other topics analysed in this report, governance-related priorities were observed in more education systems. The **most frequently observed governance-related policy priorities** from 2008 to 2019 were: **achieving a clear and balanced division of responsibility between national and local authorities and schools** (identified in 32 education systems); **defining national education priorities and goals** (identified in 27 education systems); **engaging stakeholders in decision making** (identified in 24 education systems); and **putting in place quality assurance mechanisms** (identified in 20 education systems). Strengthening data collection for monitoring and accountability was observed less often (identified in 12 education systems).
- The **most frequently observed trends in governance policy developments** between 2008 and 2019 were on policies to **refine education system's formal structures** (by creating agencies and mechanisms for quality assurance and decentralising decision making) and policies to **review education system's objectives** (through the use of national strategies and plans, and the modernisation of curricula and qualifications frameworks). Some policies on stakeholder engagement were collected as well, although to a lesser extent.

Setting the scene

Governance refers to how decision making happens in education systems. It refers to the institutions and dynamics through which education systems allocate roles and responsibilities, determine priorities and designs, and carry out education policies and programmes. In today's increasingly complex social environments, many countries are working to ensure effective planning, implementation and delivery of education policies.

Governing education systems has become more challenging in recent years due to their increasing complexity (Burns and Köster, 2016[1]). Complexity has increased because parents and society, in general, are more diverse and educated, and also more demanding that schools cater to students' individual needs. Complexity in education also increases because more information about student achievement and schools is publicly available, forcing education policy and practice to be based on evidence and not merely on traditional practices. Many large-scale social and economic changes such as the replacement of low-skills jobs resulting from technological change, higher expectations due to the expansion of access to higher education, the decline in the student population due to demographic changes, or the increased interconnectedness and international migration are also creating new challenges that call for new governance models and mechanisms.

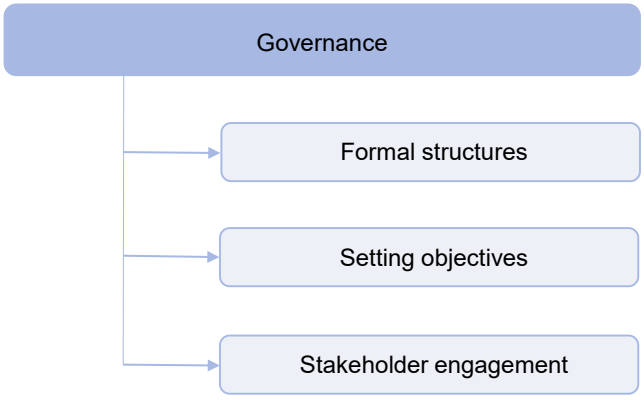
Countries govern these changes in different ways. For example, in many countries, the relationship between the central and local levels has become less hierarchical and more fluid and open to negotiation (Burns and Köster, 2016[1]). Ministries are no longer the only actor involved in governing education systems; instead, multiple actors, operating at

different levels, including schools and parents and local communities, are engaged with and shape education policies, processes and outcomes.

Effective governance can be viewed in two ways. The first is related to which institutions and actors are involved in a decision-making process and how these are expected to interact. The second refers to how governments carry out policies in practice, and how they set priorities, plan and implement new policies through a mix of leverage and consultation (OECD, 2011[2]; Fazekas and Burns, 2012[3]).

According to the Education Policy Outlook Analytical Framework, education governance can be analysed by looking at the formal structures and processes in place to deliver education policy and the stakeholder engagement process for policy making. Effective systems have a clear distribution of roles and responsibilities and find the right balance between central and local direction, set concrete objectives and policy priorities for their education system, and engage stakeholders in the process (see Figure 4.1).

Figure 4.1. Education governance as defined by the Education Policy Outlook Analytical Framework



Source: OECD (2015[4]), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, https://doi.org/10.1787/9789264225442-en.

With this framework as a basis, this chapter provides a comparative overview of the evolution of policy priorities related to education governance as identified by the OECD in previous country-based work and as reported by participating education systems at different points between 2008 and 2019.

General principles of action, as identified by the OECD to support countries in tackling these priorities, are then explored.

The chapter also analyses policy trends in over 160 education policy developments undertaken mainly during 2008-19. Half of the policies collected have been in place since at least 2014, offering evidence of progress or impact in most cases. Throughout this chapter, evidence of progress or impact is included, in order to assist the reader in analysing factors relevant to the implementation of these policies (also see Chapter 1 and the Reader's Guide).

All of the policy reforms relating to education governance and collected by the OECD are listed in the policy trends tables included in this chapter; more detailed descriptions of each of these policies and, where possible, their progress or impact, can be found in Chapter 8.

Refining formal structures

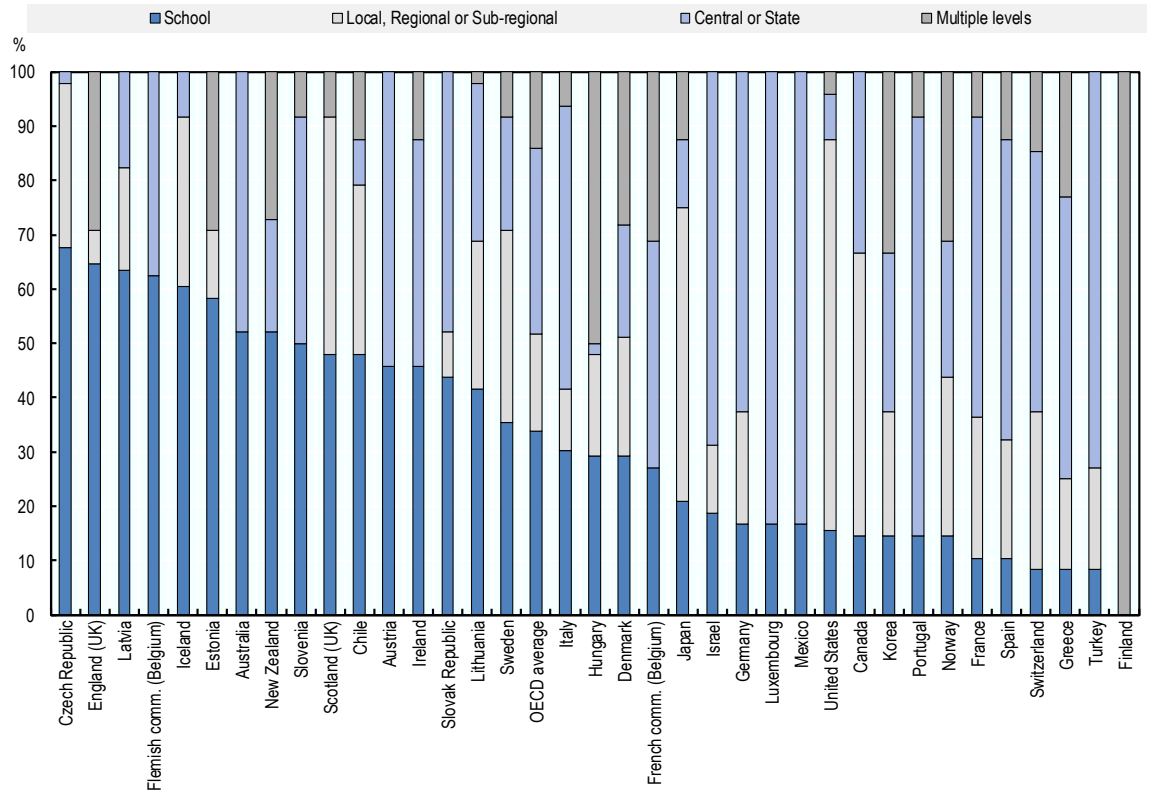
The formal structures of an education system are the institutional arrangements that organise positions of authority and guide interaction and communication between education policy makers, school owners and administrators, teachers, students, parents and other stakeholders (Arum, Beattie and Ford, 2010[5]).

Policy issues analysed in this chapter as relevant for an education system's formal structures are, for example: the type of government (federal or unitary); the organisation of the education system policy-making process (institutions/actors that intervene in policy design and delivery); and how education is delivered (public, private with public support, or private). The public agencies and institutional mechanisms of quality assurance, and the degree of centralisation (versus local and school autonomy) of governance, are also key features of the structure of an education system.

Whereas in some countries most educationally relevant decisions are taken centrally, in others some responsibilities are assigned to regional or local levels of administration, and still in others, schools are largely autonomous to make decisions such as teacher hiring, defining their budget or choosing their academic assessments of student performance (OECD, 2015[4]).

On average across OECD countries in 2017, some 34% of decisions about diverse aspects of public lower secondary education were taken at the central or state level, and a similar share was taken at the school level (Figure 4.2). More than 70% of decisions were taken by the central or state level in Luxemburg, Mexico, Portugal and Turkey. By contrast, 60% or more of decisions were taken at the school level in the Czech Republic, the United Kingdom (England), Latvia, Belgium (Flemish Community) and Iceland.

Figure 4.2. Percentage of decisions taken about education at each level of government, 2017



Notes:
1. Countries are ranked in descending order of the percentage of decisions taken at the school level.
2. A set of 23 decisions are included in the figure that refers to the organisation of instruction (e.g. instructional time), personnel management (e.g. hiring and dismissal of principals and teachers), design of programmes of study and course content, and resource management (e.g. allocation and use of resources in schools).
3. Lithuania was not an OECD member country at the time of preparation of *Education at a Glance 2018*. Accordingly, Lithuania does not appear in the list of OECD member countries and is not included in the zone aggregates.
Source: OECD (2018[6]), *Education at a Glance 2018: OECD Indicators,* OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2018-en.

StatLink http://dx.doi.org/10.1787/888933997417

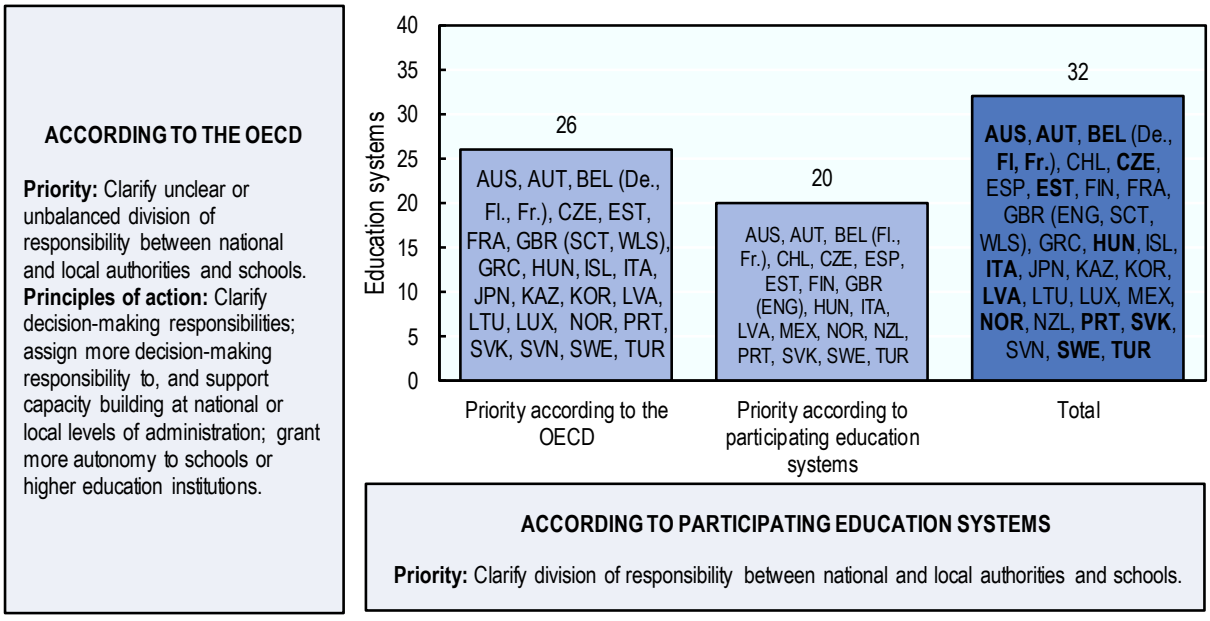
The degree of centralisation or decentralisation in a system is not necessarily good or bad. It depends on contextual needs and has its own specific challenges. For example, with more decentralised education systems, a stronger challenge that emerges is developing adequate capacity and accountability instruments to accompany the process at local levels, so the actors can effectively manage their increased autonomy. In terms of recentralisation, or clustering at intermediate levels, besides capacity building or the development of relevant monitoring mechanisms, another key challenge is ensuring reactiveness to local contextual needs (Burns and Köster, 2016[1]).

Policy priorities

Clarifying the division of responsibility between national and local authorities and schools

For many education systems, a pertinent policy priority refers to clarifying divisions of responsibility between national and local authorities and schools. These responsibilities include decision-making related to hiring teachers, salary increases, school budgets and curricular content (OECD, 2016[7]). Governing today's complex and multi-level education systems requires finding a balance between responsiveness to local diversity and the ability to ensure national objectives (Burns and Köster, 2016[1]). Between 2008 and 2019, this policy priority was identified in at least 32 education systems, either by the OECD in previous country-based work (26 education systems), by participating education systems (20 education systems), or both (14 education systems) (Figure 4.3).

Figure 4.3. Clarifying the division of responsibility between national and local authorities and schools



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the Education Policy Outlook (EPO) Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

This priority was identified by the OECD for at least 17 education systems between 2015 and 2019, including Estonia, France and Kazakhstan. Between 2008 and 2014, this priority had been identified in 12 education systems, such as Australia, the Czech Republic and the

United Kingdom (Wales). In Japan, Norway and Turkey, the OECD identified this priority both before (2008-14) and after 2014 (2015-19).

In country-based studies in which the OECD identified an *unclear* division of roles and responsibilities among the actors (e.g. when there is overlap, fragmentation or inertia in financial and educational decisions), the principle of action put forward by the OECD was to clarify decision-making responsibilities. This generally referred to redefining who is responsible for what and, in some cases, creating new institutional arrangements, such as specific agencies or governmental divisions to deliver certain services.

There were also country-based studies in which the OECD identified an *unbalanced* division of responsibility across education system levels. For example, a school system may be found to be too centralised to perform adequately. A relevant principle of action is to assign more decision-making responsibility to local levels of administration and to schools and higher education institutions, as well as build capacity to help them perform their new tasks. Inversely, in cases with a need to address a lack of local capacity, especially in smaller and underfunded areas, some centralisation of responsibility through intermediate (e.g. regional or supra-municipal) agencies has been identified as a priority.

Austria and Italy are examples of education systems in which the OECD identified the need to clarify responsibilities in the education sector. In Austria, the OECD recommended ending the dual structure of provincial school boards and school departments in the provincial governments and replace it with a unitary structure (Nusche et al., 2016[8]). In Italy, the OECD underscored the need for reforms to the education system to ensure the consistency and co-ordination of the various levels of governance (OECD, 2009[9]).

In Lithuania the OECD determined that the central government needed to play a stronger role. While municipalities are responsible for decisions on school planning in Lithuania, the OECD review highlighted the need for the Ministry of Education and Science and its national agencies to monitor progress and, where appropriate, exercise a challenge function to ensure that students and teachers were not disadvantaged by any lack of willingness or capacity at the municipality level to embrace reform and provide access to a wide and rich curriculum experience (Shewbridge et al., 2016[10]).

In Iceland, the OECD recommended strengthening the capacity of municipalities to manage and oversee primary education collectively or shift these responsibilities back to the central government's education ministry (OECD, 2013[11]).

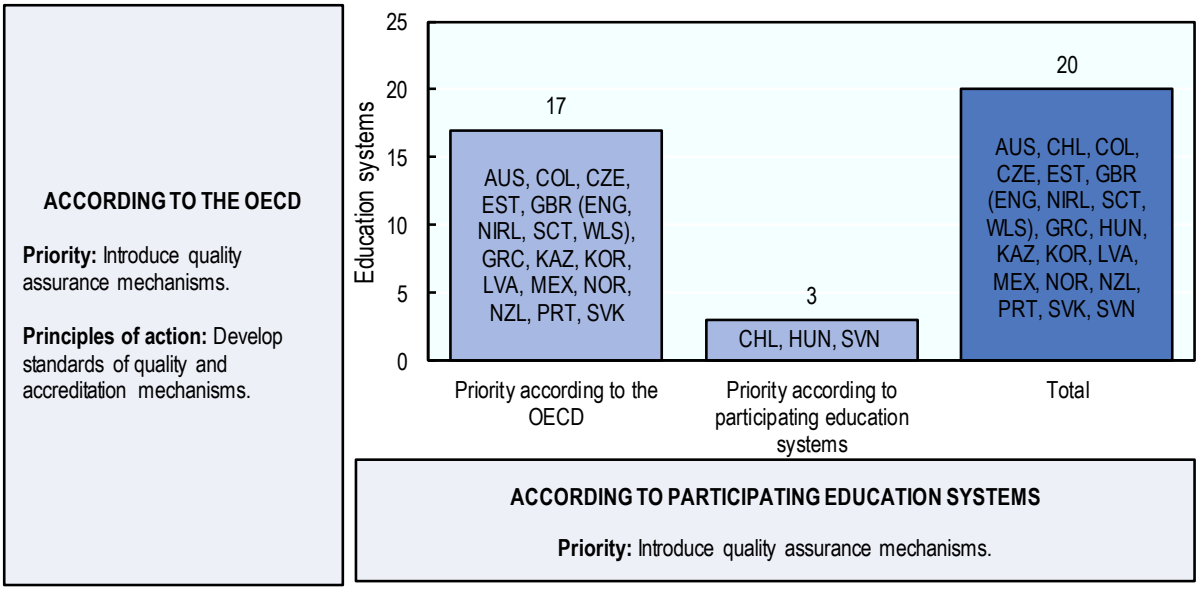
From the point of view of education systems, 20 education systems reported clarifying the division of responsibilities within the system as a policy priority to the OECD. For 18 of these education systems, including Finland and Norway, this was first reported as a priority in 2008-14. For other education systems, such as Belgium (Flemish Community) and Mexico, this priority was reported as persisting across the period 2008-19. The Czech Republic and Hungary reported this as an emerging priority in 2015-19.

The OECD collect several reforms targeting this policy priority, which are presented later in this chapter. Korea implemented a range of measures promoting school autonomy in 2008, including the transferring of decision-making authority over administrative and budget decisions from the Ministry of Education to newly established regional Offices of Education. In Portugal, among the various efforts undertaken by the government to improve the balance of responsibilities, the Project for Autonomy and Curriculum Flexibility (2017) aims at fostering autonomy and flexibility in curriculum development and management.

Introducing quality assurance mechanisms

The introduction of quality assurance mechanisms is a priority for several education systems. This may relate to a need to define basic standards for student learning or professional standards for teachers, school leaders and school providers, or to establish a dedicated agency to monitor and ensure that quality standards are met (OECD, 2013[12]). Between 2008 and 2019, this policy priority was identified in a total of 20 education systems, either by the OECD in previous country-based work (17 education systems) or by participating education systems (3 education systems). There are no examples where this priority was identified by both (Figure 4.4).

Figure 4.4. Introducing quality assurance mechanisms



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD identified this policy priority for at least six education systems during 2015-19, including Australia, Kazakhstan and Norway, and for seven education systems during 2008-14, including Korea, New Zealand and Portugal. For Colombia, the Czech Republic, the Slovak Republic and the United Kingdom (England), the OECD identified this priority both before and after 2014.

General principles of action identified by the OECD include developing standards of quality and accreditation mechanisms. Educational standards are descriptions of what students should know (content standards) and be able to do (performance standards) at

different stages of the learning process. By creating a set of standards, countries aim to assess student performance against these desired measurable outcomes (OECD, 2013[12]). Similarly, governments across the world are introducing external quality assurance systems for higher education and higher education institutions (OECD, 2018[13]).

For example, in Colombia, the OECD identified the need to improve accreditation mechanisms in higher education institutions and recommended raising the minimum quality requirements for higher education centres to register and operate (OECD, 2013[14]). In Latvia, the OECD recommended establishing an external quality assurance system that meets international standards (OECD, 2016[15]).

A smaller number of education systems reported introducing quality assurance mechanisms as a policy priority. Chile, Hungary and Slovenia first reported it as a priority during 2008-14 whereas no education systems reported this priority during 2015-19.

In Australia, the Tertiary Education Quality and Standards Agency was created in 2011 as an independent national quality regulator that aims to ensure that higher education providers meet minimum standards, promote best practice and improve the quality of the Australian higher education sector. In Chile, a new agency, the division for preschool education within the Education Superintendence (Intendencia de educación parvularia), was created in 2015 to ensure that centres providing education and care for children aged 0-6 years, which are officially authorised and recognised by the Ministry of Education, comply with educational regulations.

Strengthening data collection for monitoring and accountability

Another education governance-related policy priority for education systems relates to strengthening data collection for monitoring and accountability. Education data has become increasingly available in the last decades (e.g. data on student achievement, school and teacher evaluations, etc.), and its effective use in informing education policy is a major challenge (Schildkamp, Karbautzki and Vanhoof, 2014[16]). Between 2008 and 2019, this policy priority was identified in at least 12 education systems, either by the OECD in previous country-based work (10 education systems), by participating education systems (4 education systems), or both (2 education systems) (Figure 4.5).

The OECD identified this policy priority in only one education system, Hungary, between 2008 and 2014 and in at least a further nine education systems, including Denmark, Lithuania and Sweden, during 2015-19.

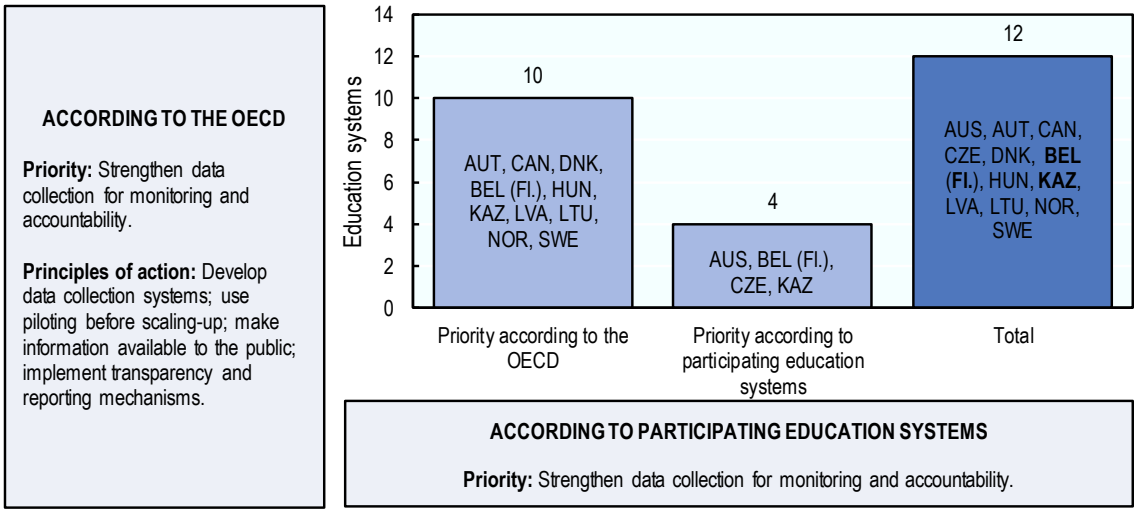
General principles of action identified include developing data collection systems; using pilot data before scaling-up; making information available to the public; and implementing transparency and reporting mechanisms.

For example, in a recent review, the OECD recommended that Denmark develop indicators and measures of system performance that permit a better understanding of how well the system is achieving its objectives (Nusche et al., 2016[17]). An OECD review of Latvia identified the need to improve public accountability (OECD, 2016[15]). In the Flemish Community of Belgium, the OECD identified the need for more transparency in financial decision making and recommended enhancing school-level reporting on resources and gathering data on locally raised funds and the services that these provide (Nusche et al., 2015[18]).

In comparison, a much smaller number of education systems reported strengthening data collection for monitoring and accountability as a priority. Australia, the Czech Republic

and Kazakhstan reported this as a priority emerging in 2015-19, while Belgium (Flemish Community) first reported this priority in 2008-14.

Figure 4.5. Strengthening data collection for monitoring and accountability



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

Nevertheless, relevant policy efforts were identified in several education systems. For example, in Germany the programme 'Local Learning' (Lernen vor Ort, 2009-14) brought together education experts from districts and independent cities, as well as more than 180 foundations, to develop local-level, integrated, data-based education management. In the Slovak Republic, the Educational Policy Institute was established in 2013 within the Ministry of Education, Science, Research and Sport to support the drive towards more evidence-based policy making.

Policy trends

As shown in Table 4.1, policies aimed at refining the formal structures of the system collected by the EPO Survey 2016-17 can be classified into two types: agencies and mechanisms for quality assurance, and decentralisation of decision making. The first group focuses on ongoing and recent efforts to establish (or support) agencies and mechanisms regarding quality assurance with key differences found in how education systems outline goals and strategies to achieve them. The second group focuses on policies and reforms that aim to balance various roles in governance by noting key trends in education system alignment between various levels. Policies aimed at collecting data are addressed in Chapter 3.

Table 4.1. Policies to refine education systems' formal structures, 2008-19

Refining formal structures	
Agencies and mechanisms of quality assurance	**Decentralisation of decision making**
Recent (Implemented between 2015 and 2019)	
Chile: Higher Education Superintendence created as part of Higher Education Reform (2018)	**Austria**: Autonomy of Schools Package (2017)
Chile: Education Superintendence for Preschool and new Secretariat for Childhood Education (2015)	**Belgium (Fr.):** Steering decree 13th September 2018 (part of the Pact for Excellence in Teaching, 2015)
Czech Republic: Complex System of Evaluation project (2017-22)	**Chile**: New Public Education System (2018)**;** Local Education Services (2015)
Czech Republic: New National Accreditation Bureau for Higher Education (2016)	**France**: University Communities (ComUE, 2017)
Finland: National Plan for Education Evaluation (2016-19)	**Hungary**: Government Decree on measures relating to the maintenance of vocational education and training (VET) public institutions (2015)
Iceland: Directorate of Education (2015)	**Kazakhstan**: Law on increasing higher education institutions' academic and organisational autonomy (2018)
Latvia: Transfer of the function of accreditation and licensing to the Quality Agency for Higher Education (2015)	**Mexico:** Education Regions (2015)
Portugal: InfoESCOLAS Portal (2015)	**Portugal**: Project for Autonomy and Curriculum Flexibility (2017)
Slovak Republic: Amendment to Quality Assurance (2018) with Act on Higher Education (2017)	**Portugal**: Introduction of student profiles (2017/18)
Sweden: Swedish School Commission (2015)	**United Kingdom (Scotland):** Regional Improvement Collaboratives (2016)
Sweden: Quality Assurance System in Higher Education (2017)	**United Kingdom (Scotland):** Joint Agreement on Education Reform (2018)
Still in place (Implemented between 2008 and 2014)	
Australia: Tertiary Education Quality and Standards Agency (2011) **[*]**	**Australia**: Intergovernmental Agreement on Federal Financial Relations (2009)
Australia: Australian Skills Quality Authority (2011)	**Belgium (Fl.)**: Introduction of higher education institutional reviews (2012, reform in 2015, new Quality Assurance System, 2018)
Australia: Australia's Children's Education and Care Quality Authority (2010)	**Finland**: Universities Act (2009); Universities of Applied Sciences reform (2014) **[*]**
Austria: Quality assurance system for general education schools (2013)	**Germany**: Local Learning (2009-14)
Austria: Agency for Quality Assurance and Accreditation Austria (2012)	**Hungary**: Klebelsberg Institution Maintenance Centre (KLIK, 2013); renamed Klebelsberg Centre (KK, 2016)
Belgium (De.): Decree on Educational and Administrative Innovations in Public Education (2010)	**Hungary**: Reforms to the management model of public education institutions via the National Public Education Act (2011); amended (2016)
Belgium (Fl.): Accreditation Organisation of the Netherlands and Flanders in Higher Education (NVAO, 2005)	**Korea:** Measures promoting school autonomy (2008)
Belgium (Fr.): Agency for Quality Assurance in Higher Education (AEQES, 2002)	**Latvia:** Reform of general education institutions network (2009)
Chile: National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education (SAC, 2011) with implementation co-ordinated through the School Quality Assurance Plan (2016-19) **[*]**	**Portugal:** Plan for Reduction and Improvement of Central Administration (2011)
Czech Republic: National Institute for Education, Education Counselling Centre and Centre for Continuing Education of Teachers (NÚV, 2011)	**Portugal**: Autonomy contracts (2008) **[*]**
Estonia: Estonian Quality Agency for Higher and Vocational Education (EKKA, 2008)	**Portugal**: Legal Regime of Higher Education Institutions (RJIES, 2007)
Finland: Finnish Education Evaluation Centre (FINEEC, 2014)	**Portugal**: School Leadership Reform (2008)
France: National Council for the Evaluation of the School System (CNESCO, 2013), replaced by School Evaluation Council (2019)	**Slovak Republic**: Effective, Reliable and Open state administration (ESO, 2013)
Iceland: Quality Council for Higher Education (2012)	**United Kingdom (England)**: The Academies Act (2010)
Iceland: Quality Board for Icelandic Higher Education (2010); Quality Enhancement Framework for Higher Education (QEF, 2011)	

Italy: National Agency for the Evaluation of the University and Research System (ANVUR, 2011)	
Italy: National Evaluation System (SNV, 2014)	
Kazakhstan: The Committee for Control in Education and Science (2011)	
Mexico: Autonomy to National Institute for Educational Assessment and Evaluation (2012); replaced by the National System of Continuous Education Improvement (2019)	
New Zealand: Student Achievement Function (2010)	
New Zealand: Public Achievement Information (2012)	
Portugal: Educational Evaluation Institute (IAVE, 2013)	
Slovak Republic: Educational Policy Institute (2013)	
Slovenia: Slovenian Qualification Framework (2016)	
Slovenia: Slovenian Quality Assurance Agency for Higher Education (2010)	
Spain: National Agency for Quality Assessment and Accreditation (2012)	
Sweden: National Agency for Higher Vocational Education (NAHVE, 2009)	
United Kingdom (N. Ireland): Establishment of the Education Authority to replace Northern Ireland's five Education and Library Boards (2014)	

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Analysing the progress or impact of the policies relating to agencies and mechanisms of quality assurance as collected for this report, a common ongoing challenge appears to be the establishment of collaborative relationships with the institutions they work with.

Evidence collected for both Australia and Chile recognised this as an area requiring further work. Similarly, in the Flemish Community of Belgium, the Accreditation Organisation of the Netherlands and Flanders (NVAO) was advised to conduct consultations with relevant stakeholders regarding their expectations about quality assurance in higher education. Furthermore, the Finnish Education Evaluation Centre has been encouraged to extend the scope of stakeholder work to include actors beyond institutions, including other key co-ordinators at national level within both the administration and the world of work. Nevertheless, the fact that so many of these measures introduced in 2008-14 are still in place suggests that they have been making positive contributions to governance processes.

Regarding the decentralisation of decision making, the evidence collected for several education systems reported shows the complexity of these processes, which may need to be led more gradually (for example, in Latvia, daily tools for decision makers were developed, and consultations with municipalities and other actors were also launched).

Agencies and mechanisms for quality assurance

Several education systems reported taking efforts to **create or modify bodies in charge of quality assurance processes**. A total of 39 education policies related to quality assurance agencies and measurements implemented during 2008-19 were selected for this report.

Among these, 28 policies were first implemented between 2008 and 2014, and 11 policies were first implemented between 2015 and 2019.

Some of these efforts consist of bringing together different bodies into one main body of quality assurance, as has been the case for Chile and Finland. Chile has established quality assurance bodies at early childhood education and care (ECEC), school and higher education (HE) levels through their development of new superintendences in ECEC and HE (2015, 2018). The Ministry of Education of Chile heads each of these bodies in collaboration with other government institutions. In Finland, a comparable arrangement exists for the Finnish Education Evaluation Centre (FINECC, 2014).

The Czech Republic, France, Japan, Mexico, Portugal and Spain have established or reformed institutions in charge of monitoring the overall quality of their education systems, collecting data on performance, undertaking research, and providing input for the planning and evaluation of the overall education system. For example, France's National Council for the Evaluation of the School System (CNESCO, 2013) has focused its most recent work on school inequalities of territorial origin, among other related topics. CNESCO has since been replaced by the School Evaluation Council (CEE, 2019), which will develop a methodological framework and tools to monitor schools.

The OECD also collected some examples of institutions created or reformed specifically for the higher education level. Following significant changes to the quality assurance system in 2015, the Flemish Community of Belgium's independent bi-national Dutch-Flemish Accreditation Organisation (NVAO, 2005) implemented a pilot programme (2016-17) that informed a new decree (2019) on reform to quality assurance in tertiary education. Also in Belgium, the French Community's Agency for Quality Assurance in Higher Education (AEQES, 2002) has implemented changes to better meet the Standards and Guidance for Quality Assurance in the European Higher Education Area (2011, 2012). Iceland has also been working on improving its higher education quality assurance system, through the creation of the Quality Board for Icelandic Higher Education (2010) and, more recently, engaging in discussions regarding its potential application to the European Association for Quality Assurance in Education (ENQA, 2016). Membership of the ENQA has also been an objective for Latvia's recently created Quality Agency for Higher Education (AIKA) and was achieved in 2018. Other examples include Australia's Tertiary Education Quality and Standards Agency (2011) and Chile's School Quality Assurance Plan (2016-19), which aims to co-ordinate and support the National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education (SAC, 2011).

Policy focus

- **Australia**'s **Tertiary Education Quality and Standards Agency** (TEQSA, 2011) is an independent national quality assurance and regulatory agency. Its role is to **ensure that higher education providers meet minimum standards, promote best practice and improve the quality for all students** (TEQSA, 2017[19]). By complying with three regulatory principles (regulatory necessity, reflecting risk and proportionate regulation) the agency aims to support the alignment of the system with the population's social and economic needs (TEQSA, 2017[20]). The Higher Education Standards Framework is the basis for TEQSA's regulation of higher education providers and courses (Department of Education and Training, 2018[21]).

Progress or impact: The Tertiary Education Quality and Standards Agency obtained an additional AUD 24.3 million over four years in the 2018–19 government budget to strengthen TEQSA's regulatory oversight, meet the significant increase in applications for registration from prospective providers, and maintain the country's reputation for high-quality higher education. This measure also provides TEQSA with additional resources of AUD 1.1 million in 2018-19 and AUD 660 000 annually (ongoing) to crack down on contract cheating. TEQSA had 172 registered higher education providers, as of March 2019 (TEQSA, 2019[22]). According to the third TEQSA Stakeholder Survey (2017-18), 71% of provider principal contacts rated its performance as "good" or "excellent". This is a decrease from 80% in 2017 and 82% in 2016, although it remains high. Providers indicated that TEQSA was performing well on matters relating to "conference, quality and relevance of guidance materials and regulatory information". Respondents that "streamlining, speed of response, consultation and case management for all and CRICOS (Commonwealth Register of Institutions and Courses for Overseas Students) applications" be improved, and signalled the need to develop relationships through "engagement and visits". The survey was sent to 235 higher education provider contacts and 42 relevant peak, professional and student bodies (PPSBs) with a response rate of 156 principal contacts (66%) and 24 PPSBs (57%) (TEQSA, 2019[23]).

- **Chile**'s **National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education** (*Sistema Nacional de Aseguramiento de la Calidad de la Educación Parvularia, Básica y Media*, SAC, 2011) is an **accountability system** that brings together the Ministry of Education, the National Education Council (*Consejo Nacional de Educación*, CNED), the Quality of Education Agency (*Agencia de Calidad de la Educación*, ACE, 2012) and the Education Superintendence (*Superintendencia de Educación Escolar*). The **School Quality Assurance Plan 2016-19** (launched in 2016), aims to articulate and co-ordinate the SAC (OECD, 2017[24]). Its main objectives include: 1) developing and implementing strategies by schools based on their education improvement plans (Plan de Mejoramiento Educativo, PME) and other tools available to them; 2) providing schools with continuous access to the Support and Capacity Strengthening System for Education Improvement (*Sistema de Apoyo y Fortalecimineto de Capacidades para el Mejoramiento Educativo*); and 3) providing education actors in the system with useful, pertinent and contextualised information as well as tools and resources to help them improve their schools (OECD, 2017[24]).

Progress or impact: An OECD review identified the National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education (SAC) as a chance for Chile to ensure that key institutions within the education system can actually reach schools and positively affect educational practice. However, SAC needs to ensure that its constituent institutions can achieve an effective model of collaboration. Co-ordination across these institutions will help educational authorities identify how to better support students as they progress through the education system. It will

also help the government identify gaps or problems as well as successes and areas of potential collaboration (OECD, 2017[24]).

Decentralisation of decision making

A different policy strategy used in many education systems is **increasing the degree of decentralisation** in education decision making by transferring responsibilities for administrative and pedagogical matters from the central government to local authorities, or to schools and higher education institutions. A total of 25 education policies related to decentralisation reforms implemented during 2008-19 were selected for this report. Among these, 14 policies were first implemented between 2008 and 2014, and 11 policies were first implemented between 2015 and 2019. This is, for example, the case with Austria's Autonomy of Schools Package (2017), the French Community of Belgium's new Steering Decree (2018), Portugal's Project for Autonomy and Curriculum Flexibility (2017), France's University Communities (2017) and Finland's Universities Act (2009).

The trend towards decentralisation is not universal, however. Some decentralised systems are establishing new agencies at intermediate levels (e.g. supra-state or supra-municipal) to consolidate professional capacities and financial resources. This is the case, for example, in Chile's Local Education Services (2015), Mexico's new Education Regions (2015), and the United Kingdom's (Scotland) introduction of the Regional Improvement Collaboratives (RICs, 2017). In Hungary, the central government took over the maintenance of schools and pedagogical institutions from local governments in 2016.

Policy focus

- **Finland**'s **Universities Act** (2009) grants **further administrative and financial autonomy to Finnish universities**. Performance agreements between universities and the Ministry of Education and Culture (OKM) define operational and qualitative targets for the whole higher education sector, for each university, and for Universities of Applied Sciences (UAS). Degree targets in the agreements are also one of the bases for how universities make decisions regarding student enrolment. The UAS reform was implemented in 2014-15 with many similar aims, such as granting further administrative and financial autonomy to Finnish UAS. Since 2015, UAS institutions have been operating as independent legal entities, joining universities, which have been operating as independent legal entities since 2010, following the 2009 Act (National information reported to the OECD, 2019). Allocations of core funding for higher education institutions depends primarily on a performance-based funding model. This funding model also includes a strategic funding component (European Commission, 2015[25]).

Progress or impact: The Education Committee within the Finnish Parliament reviewed the Universities Act in 2016. This review focused on the evolution of the university management structure, universities' decision-making processes, and the relationship between the ministry and universities. According to the evaluation, the Universities Act has increased universities' financial and administrative autonomy. However, despite increased funding autonomy, the OKM culture maintains a strong steering influence on universities' activities (OKM, 2016[26]). In 2018, the OKM published an impact evaluation of higher education (HE) reforms.

According to the evaluation, the HE reforms have considerably changed the leadership and operating culture within HEIs. These reforms have afforded HEIs the authority to make decisions on finances while also showing evidence of strengthening their administration. However, there is evidence that some HE staff and communities feel less included in decision-making processes (OKM, 2018[27]). Despite external funding for HEIs, the majority of funds come from the government, which can still impose limitations on institutional-level autonomy. External sources primarily come from research funding organisations (such as The Academy of Finland or Business Finland), foundations, international sources like the European Union, and from business organisations. Since 2017, tuition-fee funding from students outside the EU/EEA-area has accounted for only a small proportion of HEI funding in Finland (National information reported to the OECD).

- **Portugal** issued a law in 2015 **giving municipalities** (Concelhos) **more autonomy** over education policies, school administration, curriculum management and development, administrative and pedagogical organisation, resource management and relationships between schools and the local community (Republic Diary, 2015[28]). This follows an extended period of increasing decision making at the sub-national level, in Portugal, as part of broader efforts to improve the efficiency of public services. In 2008, the government decided to expand municipalities' funding responsibilities to include lower secondary schools (municipalities have managed funding for pre-primary and primary schools since 1999). Responsibilities of school governing bodies were also reinforced, especially with regard to the selection and evaluation of the school principal. Additionally, a growing number of voluntary autonomy contracts have afforded some schools and school clusters greater autonomy for pedagogical and curriculum organisation, human resources, school social support and financial management. Conditions for granting an autonomy contract include approval of school self-evaluation reports and positive external school evaluations (OECD, 2014[29]).

Progress or impact: Following the 2015 law, 14 municipalities have been taking part in a four-year pilot programme assessing their capacity to manage the funds provided. Monitoring commissions have been appointed for each contract, and a final evaluation at the end of the pilot will determine the potential to scale up this system of localised control (Liebowitz et al., 2018[30]). However, given the ongoing decentralisation processes within the school system, conditions of the contracts with municipalities may change to the point of becoming redundant.

In terms of school autonomy, a first group of 24 autonomy contracts were granted in 2006 among school clusters, and schools already evaluated through the external evaluation system. This increased to almost 30 schools in 2010 (National information reported to the OECD).

In 2012, legislation was published to define procedures to follow and evaluate these autonomy contracts, and legislation in 2014 allowed school clusters with autonomy contracts to manage some parts of their curriculum

organisation. By 2014, at least 212 school clusters and schools had autonomy contracts (OECD, 2014[29]).

More recently, important national reforms such as the Profile of Students at the end of Compulsory Schooling (2017) and the PNPSE (2016) have adopted implementation models, which centre on stimulating innovation at the school level through supporting greater school autonomy.

Nevertheless, within the Portuguese education system, several key areas remain under central authority, including teacher recruitment, placement and pay, as well as curriculum and the planning of the school network. Furthermore, OECD research indicates that a lower share of decisions was taken at the school level for lower secondary education in Portugal (15%) than on average across OECD countries (34%) in 2017 (OECD, 2018[31]).

Setting objectives

In today's interconnected and fast-changing world, effective governance requires going beyond traditional "piecemeal" and "input-output" approaches (OECD, 2017[32]). Systems-thinking and foresight emerge more clearly as tools that can support governments as they work to improve.

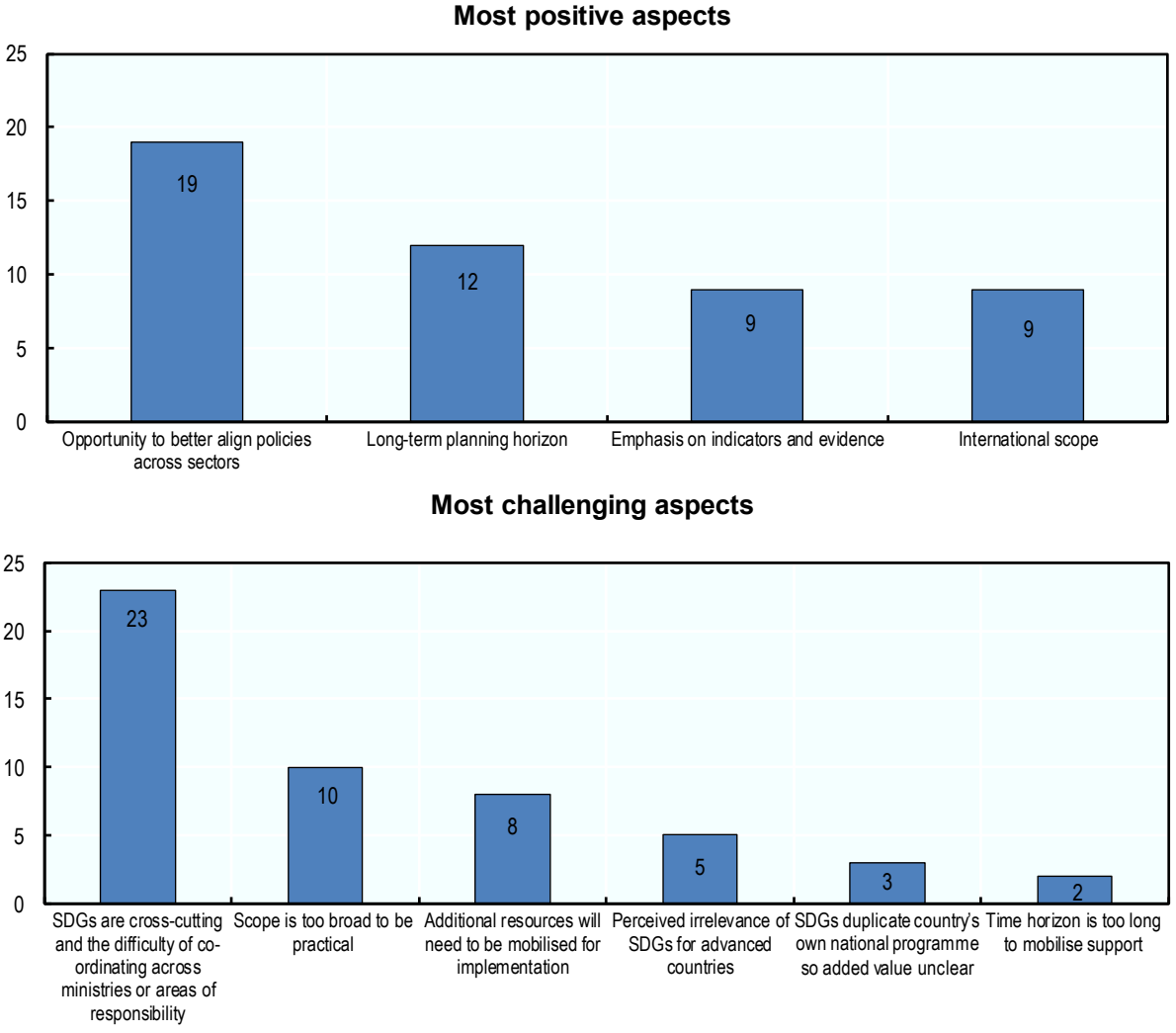
The systems-thinking approach considers the different elements and actors that may be affected by policy problems to a greater or lesser extent, as well as their dynamics and interactions. Also, the uncertainty associated with complex problems is taken into account, and citizens are understood as co-producers of government policies and services. For central governments, this means that formulating an adequate definition of the purpose and objectives of envisaged policy change is crucial. This also requires time and resources for complex analysis, as well as participatory processes of engagement with citizens and stakeholders. It means using "stewardship", or transformative leadership, to provide a strategic vision of the desired changes and to steer and monitor the implementation of proposed reforms (OECD, 2017[33]).

Furthermore, foresight has been increasingly seen as a tool to address the opportunities and challenges of complex policy problems (OECD, 2017[34]). Foresight is a type of prospective analysis that facilitates debate and systemic thinking about multiple futures. It helps to shape the future through processes of participation and engagement. Foresight is a tool to avoid being trapped by the need to deal with the short term and provide space for longer-term strategic thinking.

An example of the kind of complex policy issues that can call for the use of systems and foresight approaches to governance can be found in the United Nations' Sustainable Development Goals (SDGs). The implementation of the 17 goals contained in the SDGs poses different challenges for countries, depending on their starting positions. Results from an OECD survey among 28 OECD countries and 3 OECD accession countries in 2016 suggest that countries recognise the role of centres of government and the need for foresight in delivering on the SDGs (OECD, 2017[32]). Countries in the survey also identified several significant opportunities and challenges arising from the implementation of the SDGs (Figure 4.6). Among the opportunities, the most frequently mentioned were better aligning policies across sectors, a long-term planning horizon, and the emphasis on indicators and evidence. Among the challenges, the most frequently mentioned are the difficulty of co-

ordinating across ministries or areas of responsibility, the broad scope of the goals, and the additional resources needed for implementation.

Figure 4.6. Positive and challenging aspects of implementing the SDGs, according to governments, 2016



Notes:

1. These figures include information for the following OECD countries and partner economies in 2016 Australia, Austria, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Luxembourg, Mexico, Netherlands, Norway, Slovenia, Slovak Republic, Sweden, Switzerland, Turkey, United Kingdom, the United States, as well as Colombia, Costa Rica and Lithuania. Information for the European Union is also included.
2. Answers reflect responses to the question, "What do you see as the two most positive aspects of the process of organising the planning for implementing SDGs from the perspective of the centre of government?" and "What do you see as the two main challenges of organising the planning for implementation of the SDGs from the perspective of the centre of government?" Answer option "Other" is not displayed.

Source: OECD (2017[32]), Government at a Glance 2017, OECD Publishing, Paris, https://doi.org/10.1787/gov_glance-2017-en.

StatLink http://dx.doi.org/10.1787/888933997436

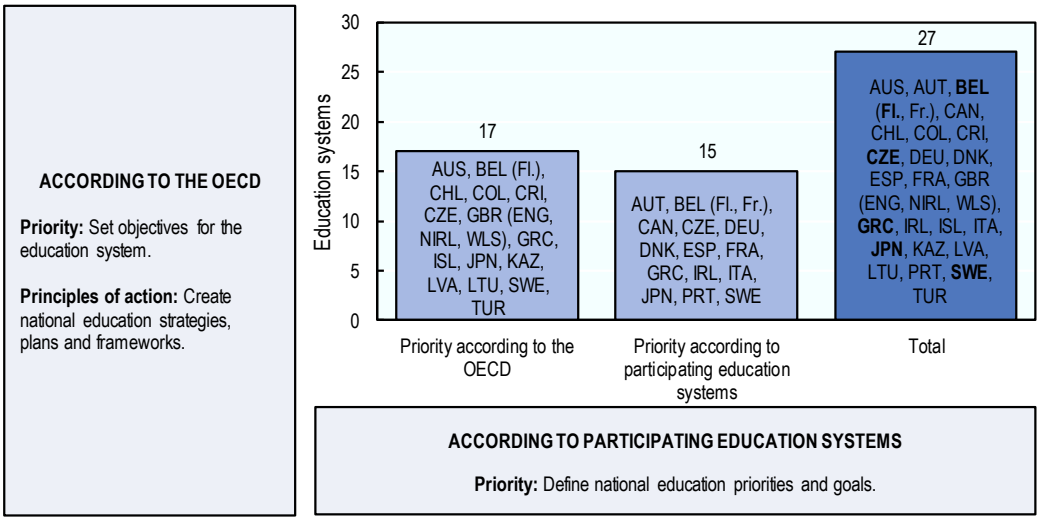
In education, a whole-of-system vision that keeps the focus on agreed goals and principles is key for effective education system governance (Burns and Köster, 2016[1]). Indeed, a common feature among top-performing education systems is setting clear learning expectations for students, and ensuring coherent policy implementation over sustained periods of time (Schleicher, 2018[35]). As seen in this section, governments (through their ministries) recognise the need to define objectives and strategic plans as a national priority and are using a variety of policy tools to put these priorities into practice.

Policy priorities

Defining national education priorities and goals

A policy priority shared by education systems is the need to define national education priorities and goals to help ensure policy coherence and steer the various components of a system in a common direction. This shared clarity needs to come together with adequate accountability mechanisms and capacity building to favour consistency, as well as strategic foresight to ensure continued relevance. Between 2008 and 2019, this policy priority was identified in at least 27 education systems, either by the OECD in previous country-based work (17 education systems), by participating education systems (15 education systems), or both (5 education systems) (Figure 4.7).

Figure 4.7. Defining national education priorities and goals



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the Education Policy Outlook (EPO) Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

OECD work on governance in different education systems has identified defining national education priorities and goals as a priority in at least 17 education systems. For 13 of those, including Colombia, Iceland and Japan, the OECD identified this policy priority in 2015-19, and in 4 more education systems (the Czech Republic, Turkey and the United Kingdom (Northern Ireland and Wales)), this was identified as a priority between 2008 and 2014.

General principles of action identified by the OECD include creating national education strategies, plans and frameworks to set common expectations about the direction of the system. In its review of education in Sweden, the OECD noted that improved understanding of national priorities and resource implications for local decision making was required. It therefore recommended defining a set of education priorities that are ambitious and forward-looking, pursued consistently at all levels of the system and supported by mechanisms for building ownership through early engagement (OECD, 2015[36]).

Another principle of action is to reform curriculum to modernise learning expectations. For example, in a country review of Kazakhstan, the OECD recommended collaborative educational programmes such as joint curriculum development to exploit digital technologies and promote "internationalisation through the curriculum" (OECD, 2017[37]).

Several education systems reported defining national education priorities and goals as a policy priority. In Belgium (Flemish and French Communities), the Czech Republic, Denmark, Portugal and Sweden, this was reported as an emerging priority (2015-19), while this priority was first reported in 2008-14 by nine other education systems, including France, Ireland and Spain.

There has been extensive policy work in this area. For example, in Australia, the policy plan Quality Schools, Quality Outcomes (2006) sets out five priority areas for policy action: improving student performance; teaching quality and school leadership; preparing students for a globalised world; targeting support where it is most needed; and increasing accountability and transparency. The Danish programme, Together for the Future (2015), proposed a new set of objectives, measurable goals and targets covering all levels of education.

Policy trends

Education systems are using educational planning to prioritise different policy objectives, set goals and measurable targets, and monitor achievement. This is consistent with research findings from the OECD demonstrating the importance of having a clear vision for the education system (Schleicher, 2018[35]; Burns and Köster, 2016[1]).

The EPO Survey 2016-17 collected several policies that aimed to review the objectives of the education system. As shown in Table 4.2, these policies can be classified into two types: national strategies and plans that define goals or expected outcomes; and reforms that aim to modernise the curriculum and the standards or qualification frameworks that define learning expectations.

Table 4.2. Policies to review education systems' objectives, 2008-19

Setting objectives	
National strategies and plans	**Modernising curricula and qualifications frameworks**
Recent (Implemented between 2015 and 2019)	
Australia: New Child Care Package (2018), as part of the National Partnership Agreements	**Belgium (Fr.):** Harmonisation of diplomas (2016)
Belgium (Fl.): Master Plan for Secondary Education (2018)	**Finland**: Reform of general upper secondary education (2018)
Belgium (Fr.): Steering decree 13th September 2018 (part of the Pact for Excellence in Teaching, 2015)	**Finland**: National Framework for Qualifications and Other Learning (FiNQF, 2017)
Canada: Early Years Plan (2016-20)	**France:** Transformation of the vocational path (2018)
Canada: Five-year agreement between the New Brunswick Teachers Federation and the local, provincial government (2017-22)	**France:** Secondary school reform (2016)
Chile: Higher Education Reform (2018)	**France:** Transformation of the vocational path (2018)
Chile: Higher Education Information Service (2007), Higher Education Reform on strengthening the collection, validation, updating and regular dissemination of information (2016)	**Greece**: Curriculum reform (2017-19)
Denmark: Together for the Future (2015)	**Iceland:** Updates to National Curriculum Guides for Compulsory Schools (2015)
France: Plan Étudiants (2017); Parcoursup' (2018)	**Ireland**: Well-being as a subject in the lower secondary cycle (2015)
France: Baccalaureate Reform (2017)	**Korea**: Revision of Education Curriculum (2015)
Germany: Excellence Strategy (2018)	**Latvia**: Competence-based general education content (2017/18)
Greece: Three-year education plan (2017-19)	**Latvia**: National Centre for Education (2017)
Hungary: HE Strategy (2015)	**Mexico**: Educational Model for compulsory education (2017)
Hungary: Digital Education Strategy (2016)	**Norway**: New model for competency development (2016-17)
Ireland: Whole-of-Government Strategy for Babies, Young Children and their Families (2018)	**Portugal**: Curriculum Guidelines for Pre-School Education (2016)
Ireland: System Performance Framework for HE (2017-21)	**Slovak Republic**: Act on Vocational Education and Training (2015)
Ireland: Action Plan for Education (2016-19); a new set of strategic goals for 2019-21	**Slovak Republic**: State curriculum for primary, lower secondary and general upper secondary schools/gymnasiums (2015)
Ireland: International Education Strategy (2016-20)	**Slovenia**: Slovenian Qualification Framework (2016)
Ireland: Innovation 2020 Strategy (2015-20)	**United Kingdom (England)**: Higher Education and Research Bill - Teaching Excellence Framework (2016)
Ireland: National Access Plan to HE (2015-19)	
Italy: Three-year planning of universities (2016-18)	
Italy: Good School Reform (2015)	
Japan: Compulsory Education Schools (2016)	
Japan: Third Basic Plan for the Promotion of Education (2018)	
Kazakhstan: Update of the State Compulsory Standard (SCS) of Primary Education and SCS for General and Secondary Education (2017)	
Latvia: Agreement with World Bank to improve governance in HEI (2016)	
New Zealand: Blueprint for Education System Stewardship (2016)	
New Zealand: Education Amendment Acts (2017, 2018)	
New Zealand: Better Public Services (2012)	
Slovak Republic: Amendments to the School Act (2015)	
Slovenia: Strategic Guidelines for further Implementation of ICT in the Slovenian Education until 2020	
Spain: Spanish Strategy for HE (2017)	
Turkey: Ministry of Education Strategic Plan (2015-19)	
Still in place (Implemented between 2008 and 2014)	
Australia: Universal Access to Early Childhood Education (2009), part of the National Partnership Agreements	**Czech Republic**: National System of Occupations (NSO, 2004)
Australia: Melbourne Declaration on Educational Goals (2008)	**Czech Republic**: National Register of Qualifications System (NQS, (2006)
Australia: Annual Closing the Gap report (since 2007)	**France**: France Digital University (FUN, 2014); replaced by new online learning portal (2015)

Setting objectives	
National strategies and plans	**Modernising curricula and qualifications frameworks**
Belgium (Fr.): "Landscape" Decree for HE (2013)	**Germany**: German Qualifications Framework (DQR, 2013)
Canada: Learn Canada 2020 (2008)	**Hungary**: Decree on the National Core Curriculum (2012); reformed (2016)
Czech Republic: Strategy for Education Policy until 2020 (2014) **[*]**	**Ireland**: Framework for Junior Cycle (2014)
Czech Republic: Long-Term Plan for Education and the Development of the Education System (2011, modified in 2015)	**Latvia:** Vocational education curricula (2008-20) **[*]**
Denmark: Reform of primary and secondary schools (Folkeskole, 2014)	**New Zealand**: New Zealand Curriculum (2007) and Te Marautanga o Aotearoa (2008)
Germany: HE Pact 2020 (2007-23)	**Norway:** Knowledge Promotion Reform (2008, modified in 2016) **[*]**
Germany: Quality Pact for Teaching in Higher Education (2010)	**Norway**: National Qualifications Framework for HE (2009)
Hungary: Lifelong Learning Strategy (2014)	**Norway**: National Qualifications Framework for Lifelong Learning (2011)
Ireland: National Strategy to Improve Literacy and Numeracy (2011-20)	**Turkey**: Standards for Primary Education (2011-12)
Italy: National Operational Programme (2014)	**Turkey**: Standards for Preschool and Primary Education Institutions (2014)
Mexico: Pact for Mexico (2012)	
Mexico: Educational Reform of Mexico (2013)	
New Zealand: Tertiary Education Strategies (2014-19); development of a new International Education Strategy (2019-25) **[*]**	
Slovenia: National HE Programme (2011-20), based on the NHEP Resolution	
Slovenia: Opening up Slovenia Initiative (2014)	
Spain: National Reform Programme (2012)	
Turkey: Tenth Development Plan (2014-18)	
Turkey: Strategic Plan for the Ministry of National Education (2010-14)	
Turkey: Strategic Vision 2023 (TSV, 2008-23)	

Notes: "HE" stands for higher education.
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

According to evidence of progress or impact for the policies collected, when it comes to national strategies and plans, some of the most effective policies appear to be those that introduce specific, measurable target outcomes. This allows for improved monitoring that produces useful feedback across the implementation period. For example, the Czech Republic is making positive progress towards its 2020 goals for ECEC participation and lower secondary attainment. A 2017 review recommended improving communication between education stakeholders and improving the quality of administration at all educational levels to support the achievement of the goals.

With regard to curricular reform, many countries are opting for implementation plans that put the focus on local levels of governance, either through schools and institutions or municipalities. For example, Norway's efforts to increase student competency development is implemented according to differentiated measures based on municipalities' needs and developmental capacity. This allows for local context to play a more central role in decision making.

National strategies and plans

National strategies and plans have been a major part of educational governance during the last decade. These policies serve to set up policy goals, actions, and monitor results. The OECD Secretariat selected 55 national strategies and plans enacted between 2008 and 2019 for this report. Among these, 22 policies were first implemented at some point between 2008 and 2014 and 33 policies were developed more recently, between 2015 and 2019.

In some cases, strategies and plans encompass all education levels, from pre-primary to higher education, as in the Czech Republic's Strategy for Education Policy until 2020 and Turkey's Ministry of Education Strategic Plan (2015-19). In other cases, there is a focus on specific education levels, as seen in Denmark's Folkeskole reform (2014). Other collected strategies and plans focus on higher education, such as New Zealand's Tertiary Education Strategy (2014-19), or Germany's Higher Education Pact 2020. Plans and strategies focusing on primary and secondary education are particularly common among the policies collected by the OECD for this report.

National strategies and plans also differ in terms of their components, which vary according to contextual needs. Some of them focus on defining general goals or priorities for the education system and do not propose specific targets or actions to achieve them. This appears to be the case in Australia's Melbourne Declaration on Educational Goals for Young Australians (2008), Canada's Learn 2020 (2008), the Czech Republic's Strategy for Education Policy (2014), Turkey's Tenth Development Plan (2014-18) and New Zealand's Blueprint for Education System Stewardship (2016). Other national strategies and plans also include specific actions to achieve their goals by using empirical measures to monitor results and progress. This is the case for the Czech Republic's Long-Term Plan for Education (2011, modified in 2015), Hungary's Lifelong Learning Strategy (2014) and Ireland's National Strategy to Improve Literacy and Numeracy among Children and Young People (2011-20).

Policy focus

- The **Strategy for Education Policy of the Czech Republic until 2020** (2014) **guides education policy making**. It defines the purpose of education through its four primary objectives: 1) personal development that is conducive to the quality of human life, 2) the preservation and development of culture as a system of shared values; 3) the pursuit of active citizenship as a prerequisite for the development of society, based on solidarity, sustainable development and democratic governance; and 4) preparation for employment. The strategy's priority areas are: 1) reducing inequalities in education; 2) supporting quality teaching and teachers as the key prerequisite for quality teaching; and 3) governing the education system in an accountable and efficient manner (MEYS, 2014[38]). The European Commission's Operational Programme for Research, Development and Education makes up one of the principal funding streams for the implementation of the specific measures of the strategy (Eurydice, 2018[39]).

Progress or impact: To establish responsible and effective management of the education system, the Czech School Inspectorate began assessing schools in 2015/16 by focusing on new criteria, conditions, courses and the results of education (Czech School Inspectorate, 2016[40]). Since 2015/16,

as part of its annual report, the Czech School Inspectorate included overviews of the development of the implementation of the Strategy for Education Policy of the Czech Republic (Czech School Inspectorate, 2016[40]). For example, the participation in pre-school education had reached 91.8%, moving closer to the minimum target of 95% of enrolment by 2020. The government had also made amendments to make the last year in pre-primary school compulsory by 2017. At the same time, the Inspectorate considered "problematic" the level of literacy identified in 6th grade of primary school and in the first year of selected secondary schools, according to an Inspectorate's survey.

The government set the goal of having no more than 5.5% of the population with education ISCED 2 (lower secondary education) as their maximum attainment and outside of the formal education system (the rate was at 5.4% in 2014). The government also set the goal of increasing the number of teachers below the age of 36 by 2020, which was 23.1% in the 2013 Strategy.

Besides the Inspectorate, further evidence shows that achievements have been made as regards the goal to foster partnerships between schools and employers (European Commission, 2017[41]). In 2016, a standard procedure for contractual relationships was established to encourage employers to uphold quality standards in practical training (European Commission, 2017[41]). Although the goals related to each priority have not yet been achieved, the conclusions of the 2017 external evaluation of the 2020 Strategy confirm the persisting relevance of its three priorities (MŠMT (Ministerstvo školství, mládeže a tělovýchovy České republiky) [Ministry of Education, 2017[42]). The review recommends improving communication between education stakeholders as well as improving the quality of administration at all educational levels. If the ministry decides to create a new strategy or update the 2020 Strategy, it should reflect on the concept of education in the digital age or the update of its educational objectives and content (Eurydice, 2018[43]).

- **New Zealand**'s **Tertiary Education Strategy** (TES, 2014-19) focuses on **developing relevant skills for entry into the labour market for at-risk youth, and on improving achievement rates of Māori and Pasifika youth**. The strategy also seeks to improve literacy and numeracy among adults, improve the quality of research-based institutions, and build international relationships to improve teaching and expand access programmes and institutions abroad. Through these priorities, the government seeks to build strong links between the tertiary education system and the labour market, local communities and the global economy (Ministry of Education, 2018[44]).

Progress or impact: In 2015, the government allocated funding to increase the number of people enrolled in apprenticeships from 42 000 to 50 000 by 2020, with the intention of particularly benefiting participants in Māori and Pasifika Trades Training (Ministry of Education, 2017[45]).Three new information and communication technology (ICT) graduate schools provide industry-focused education and research, built on connections made with

related high-tech firms. Following the approval of the Tertiary Education Strategy, the government anticipated the following demographic changes: a peak in 2018 of 18-22 year-olds in New Zealand, followed by a decline; and an increasing share of young people identifying as Māori, Asian and Pasifika, increasing until 2031. This changing context poses challenges to support achievement and transitions into the labour market for all students (Ministry of Education, 2017[45]).

Between 2014 and 2015, the proportion of individuals aged 15-24 who were not in employment, education or training (NEET) remained stable at 14%, while 83.3% of 18-year-olds achieved NCEA Level 2 (ISCED 3) or equivalent, an increase of 9 percentage points since 2011. Māori and Pasifika youth (aged 18-24) continue to have lower participation rates in tertiary education; however, Māori and Pasifika degree-level graduates had smaller employment gaps with their peers immediately after graduation, compared to graduates with lower level qualifications.

Between 2005 and 2015, the number of international doctoral students increased from 704 to 4 066, which was reported as a success due to the government's policy of domestic fees for international PhD students. In 2016, the government announced the development of a new International Education Strategy that will develop objectives to broaden the scope of international education through to 2025 (Ministry of Education, 2017[45]). Work is currently underway on developing a new TES for release in mid-2019.

Modernising curricula

Another key policy trend regarding the revision of educational objectives is the **modernisation of curricula**. A total of 32 education policies related to curricular reforms implemented during 2008-19 were collected for this report. Among these, 13 policies were first implemented between 2008 and 2014, and 19 policies were first implemented between 2015 and 2019. Many of these reforms aim to introduce a competency-based approach to instruction and learning, as opposed to the more traditional content-based approach (Echazarra et al., 2016[46]).

For example, Latvia's National Centre for Education (2017) started the development and implementation of new competency-based general education content, covering pre-school to upper secondary education. Some of these policies also have the explicit goal of updating their curricula to prepare students with 21st-century skills, which include not only knowledge and cognitive skills, but also social and emotional skills, and attitudes and social values such as democracy, citizenship and sustainable development (OECD, 2015[47]). Policy efforts in this direction were collected for Mexico, through the New Educational Model for compulsory education (2017) and Norway's Knowledge Promotion Reform (2008, modified in 2016).

Education systems have been working to reform curricula to respond to large-scale changes brought about by the globalised knowledge economy, which increasingly requires a more complex set of skills and interactions across borders. In Slovenia, for example, the new National Higher Education Programme (2011-20) seeks to increase foreign-language study programmes and the share of international students and faculty in higher education institutions. The curricular reforms focused on vocational education are of particular

interest, which aim to match students' skills with labour market needs. New qualification requirements and apprenticeships often accompany changes in vocational education and training (VET) programmes' curricula, as in France's Transformation of the Vocational Path (2018), Latvia's vocational education curricula reforms (2008-20) and the Slovak Republic's Act on VET (2015).

Policy focus

- Since 2009, **Latvia** has been carrying out a **comprehensive programme of reforms that touches upon the overall operation and content of vocational education**. It aims to improve the attractiveness and quality of VET pathways, increase relevance through greater engagement with social partners, modularise programmes and occupational standards and increase work-based learning.

> **Progress or impact:** During 2010-15, the number of VET schools under the Ministry of Education and Science's responsibility were rearranged from 60 to 24. Following procedures established in 2013, 17 of those had been granted the status of vocational education competence centre (VECC) by the end of 2016 (OECD, 2017[48]). This status is awarded to centres that surpass specific benchmarks related to the quality of provision and the development of partnerships (Cabinet of Ministers, 2013[49]). In terms of curriculum, Latvia managed to update 230 of 242 occupational standards by the end of 2018, despite a slow start. However, modularisation has been slower, and 172 of 242 modular programmes remained to be developed as of the end of 2018. Latvia now expects to finalise the reform by the end of 2021 instead of 2020 (European Commission, 2019[50]). Changes related to embedding work-based learning (WBL) approaches have made positive progress. A WBL pilot programme launched in 2013/14 included six vocational schools covering 148 students and 29 companies, and in 2016, Latvia developed and adopted new regulations to implement WBL (OECD, 2017[48]). In the academic year 2017/18, some 1 000 students were enrolled in WBL programmes and over 4 000 students in work practice. A total of 18 professional education institutions now offer WBL for second- and third-level professional qualifications. Also, up to 230 vocational programmes covering 85 professional qualifications now include embedded WBL components (European Commission, 2019[50]).

- In 2006, **Norway** introduced the **Knowledge Promotion** (Kunnskapsløftet) reform (explained as well in Chapter 6). While results from international studies (such as PISA 2015; PIRLS [Progress in International Reading Literacy Study] 2016; TIMMS [Trends In International Mathematics and Science Study] 2015; ICICLS 2013 and ICCS [International Civic and Citizenship Education Study] 2016) show an overall positive development in results from Norwegian schools after its introduction, some challenges persist related to low student performance and dropout. There are ongoing efforts that aim to renew the reform. In a white paper presented in 2016, the Ministry of Education highlighted the need to update subject curricula with fewer and more clearly articulated competence objectives; to integrate topics on democracy and citizenship, sustainable development, and public health and well-being for students' social development; and to revise the core curriculum for primary and secondary education (Norwegian Ministry of

Education and Research, 2016[51]). The new subject curricula will come into force by autumn 2020.

Progress or impact: A 2017 white paper (Meld. St. 21 [2016-17] Lærelyst – tidlig innsats og kvalitet i skolen) highlights that between 15-20% of students who leave primary school do not have the necessary competencies to cope with further education and working life. This figure is equivalent to roughly 10 000 students every year. Along with subject curricula as a main lever, Norway is continuing to support ECEC initiatives that can better prepare students for primary school. The Ministry of Education and Research has also proposed and approved a new model for competence development, Prop. 1 S (2016-17) that differentiates measures based on municipalities' needs and developmental capacity as part of a decentralised municipality-level scheme. This measure puts municipalities and local governing bodies in more control of competency-related initiatives, allowing local context to play a more central role in decision making.

Engaging stakeholders

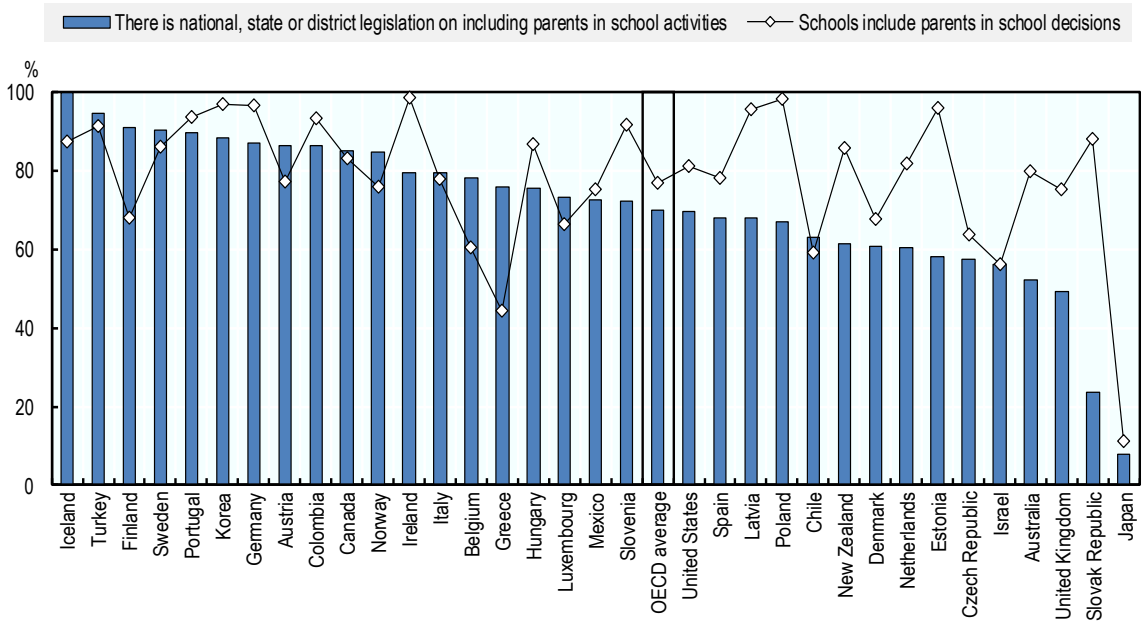
In modern education systems, stakeholders have grown in diversity and become increasingly invested in how education systems function and what they provide students. Engaging stakeholders means that a larger set of people becomes more involved in the process of making key educational decisions. It includes parental engagement in school, and it can also mean that students, organisations or the private sector from local communities or other actors participate in how schools and education systems are run.

School networks that bring together individuals or educational institutions in a horizontal partnership can be powerful forces for the dissemination of innovative educational practices among principals and teachers in different schools (OECD, 2003[52]). For example, apprenticeships and other forms of work-based learning can be effective in easing students' school-to-work transitions (OECD, 2018[53]). Furthermore, union engagement with governments is another pathway of improvement followed in education systems (see Chapter 7). Research also shows a positive relationship between educational outcomes and parental engagement, understood as parents and school staff working together to support student learning (Epstein and Sheldon, 2002[54]).

The use of legislation on including parents in school activities is prevalent among OECD countries, according to PISA 2015 data. On average, across OECD countries, some 70% of 15-year-old students attend schools whose principals reported that there is a national, state or district legislation on including parents in school activities (Figure 4.8). In all participating OECD countries, except Japan and the Slovak Republic, the majority of students attend schools that operate under legal rules on parental engagement. The school practice of including parents in school decisions is also very prevalent, according to school principals' responses.

Figure 4.8. Parental engagement: Legislation and school efforts to involve parents

Percentage of students in schools whose principals reported that there is legislation on including parents in school activities or that the school includes parents in decisions



Source: OECD (2016[7]), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264267510-en. Tables II.3.24 and II.3.26.

StatLink http://dx.doi.org/10.1787/888933997455

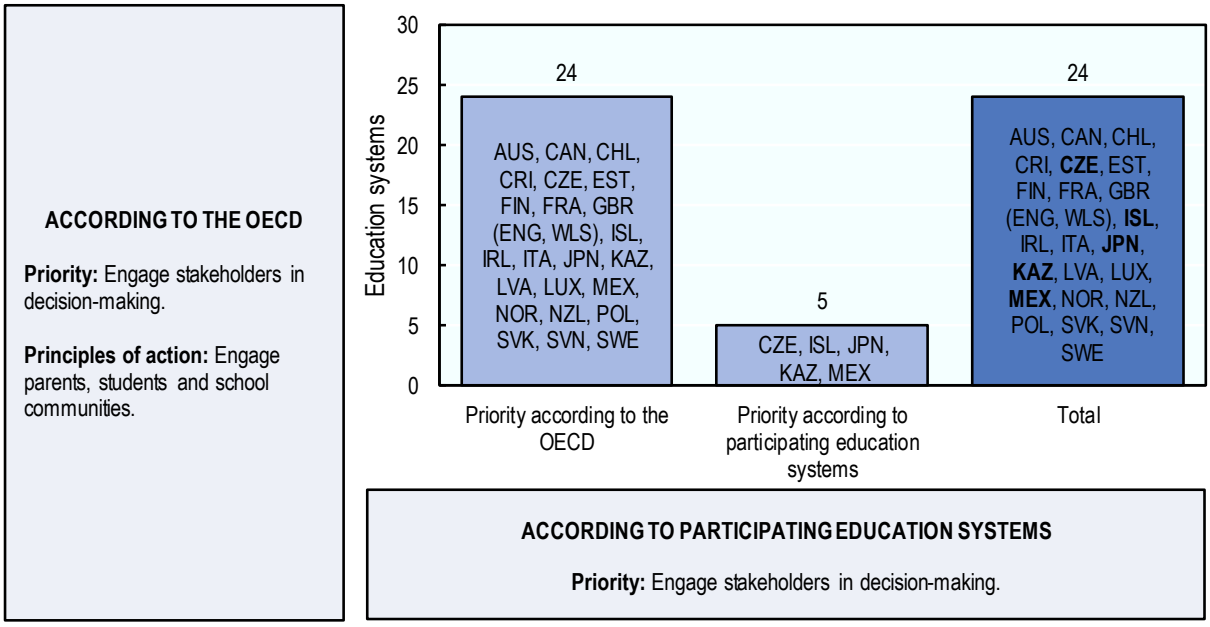
Policy priorities

Engaging stakeholders in decision making

Another policy priority related to education governance shared by many education systems refers to the need to effectively engage stakeholders in decision making processes. Exploring the views, interests and capacities of system actors is necessary to understand education policy implementation; equally, engaging stakeholders in policy design processes can ensure the key message and logic of a policy are successfully communicated and build consensus around objectives (Viennet and Pont, 2017[55]). Between 2008 and 2019, this policy priority was identified in at least 24 education systems, either by the OECD in previous country-based work (24 education systems), by participating education systems (5 education systems), or both (5 education systems) (Figure 4.9).

Previous OECD work on governance has identified engaging stakeholders in decision making as a priority across many education systems. For at least seven education systems, including France, Mexico and Sweden, the OECD identified this as a priority between 2008 and 2014. More recently, from 2015-19, the OECD identified this policy priority for 11 education systems including Australia, Canada and Poland. For six education systems (Italy, Japan, Luxembourg, New Zealand, Slovenia and the United Kingdom [England]), the OECD identified this priority both before and after 2014 (Figure 4.9).

Figure 4.9. Engaging stakeholders in decision making



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the Education Policy Outlook (EPO) Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

General principles of action include engaging parents, students and the school community; promoting school networking and peer learning; engaging employers and the private sector; and encouraging systems to be more internationally-facing, particularly at tertiary level. For example, an OECD review of the United Kingdom (England) recommended engaging parents and communities as providers of support for early childhood education and care through "play centres" open for one to five sessions each week to provide play, social and learning opportunities for children (Taguma, Litjens and Makowiecki, 2012[56]). In Poland and New Zealand, the OECD recommended enhancing collaboration between industry and higher education institutions to develop applied research (OECD, 2018[57]; OECD, 2017[58]). In Estonia, the OECD recommended financial incentives to encourage private sector participation in vocational education and training (OECD, 2017[59]).

A much smaller number of education systems reported engaging stakeholders in decision making as an explicit policy priority, although this does not necessarily mean that stakeholder consultation does not happen in other education systems. The Czech Republic, Kazakhstan and Mexico reported it as a priority during 2015-19, while this priority was first reported in 2008-14 by Iceland and Japan.

In terms of efforts to involve stakeholders, Mexico has been working to reactivate social participation councils at the school, municipality state and national levels to increase parental and societal engagement in education since 2009. These councils are composed of parents, school principals, teachers' union representatives, former students and community members (OECD, 2010[60]). Following recommendations from the OECD, Kazakhstan introduced new regulations that would provide more school autonomy in 2018, and also promoted stakeholder engagement by establishing two new Boards of Trustees in lower and higher education (OECD, 2018[61]).

Policy trends

Most decisions are made at the school level in a majority of countries, although this varies depending on whether the decision is related to curriculum, administration, personnel or other decisions (OECD, 2018[31]).

As explained above, analysis of ongoing key policies reported by education systems for this report shows that policies aimed at engaging stakeholders such as parents, students, local community, school networking, and local employers and the private sector are becoming increasingly relevant in the contemporary policy landscape. Through collaboration with the private sector and employers, education systems and policy makers are better able to align targeted goals with the skills that are needed now, as well as in the future. Table 4.3 presents some specific examples of collected policies.

Table 4.3. Policies to engage education systems' stakeholders, 2008-19

Engaging stakeholders
Enhancing participation in decision making
Recent policies (Implemented between 2015 and 2019)
Australia: Parental engagement, part of the Family Partnership Agreement of the Smith Family, Learning For Life Program Expansion (2016-17 to 2019-20); Learning Potential app and website (2015); ARACY Parent Engagement Project (2014-19); funded national parent bodies
Belgium (Fr.): Pact for Excellence in Teaching (2015-30)
Estonia: Reform of management at Tallinn University of Technology (2015)
Greece: Committee for National Social Dialogue in Education (2015)
New Zealand: Enhancing the role of school boards of trustees under the Education Amendment Act (2017)
Portugal: Schools Participatory Budget (2016) **[*]**
Turkey: School Administrative Boards of VET (2016)
Turkey: Turkey Maarif Foundation (2016)
Policies still in place (Implemented between 2008 and 2014)
Estonia: Reform of management at the University of Tartú (2011)
Japan: Revision of Act on the Organisation and Operation of Local Educational Administration (2014)
Kazakhstan: Establishment of Boards of Trustees in schools (2007)
Kazakhstan: Establishment of Boards in higher education (2008)
Mexico: Social Participation Councils (1992/93; reactivated in 2009) **[*]**

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

The relatively small number of policies collected for this area of governance perhaps reveals that engaging stakeholders is often seen as an important element across all policy work rather than a separate area of its own. Indeed, from looking at progress and impact collected for other policy areas, consultation and dialogue with stakeholders have been employed during policy design, implementation and review processes in a large number of education systems. However, more formal mechanisms for engagement can be valuable.

Increasing stakeholder participation in decision making

Several education systems have implemented policies to **increase the involvement of local and school communities** in educational processes and decisions. One way they are doing so is by creating participatory boards or councils composed of actors such as parents, school principals, teachers, union representatives, former students and community members. This has been done, for example, by Mexico, through efforts aimed at reactivating the Social Participation Councils (1992/93, reactivated in 2009) and by Australia, through the Australian Research Alliance for Children and Youth (ARACY) Parent Engagement Project (2014-19). Some governments have trained members of these councils in topics such as education assessment and school management, or created websites to register its affiliates and provide information. Japan has also had long-standing mechanisms that foresee engagement from local stakeholders on education policy.

There are also participatory boards that have been put in place that aim to engage the private sector and local employers in the administration of vocational schools and professional programmes, as was done by Turkey's School Administrative Boards of Vocational Education and Training (2016), Kazakhstan's establishment of Boards of Trustees in schools and higher education (2007 and 2008 respectively) and New Zealand's efforts to enhance the role of school boards of trustees under the Education Amendment Act (2017).

Student voice also matters; fewer examples of formal mechanisms were collected in this area, however. In Portugal, students at secondary education level can be involved in budgetary decisions in their schools (2017), as below.

Policy focus

- As mentioned above, **Mexico** has been working to **reactivate Social Participation Councils** (Consejos de Participación Social en la Educación). Having been formally established during 1992/93, they did not function in practice before 2009 (OECD, 2010[60]). Mexico has relaunched social participation councils at the schools, municipalities and states, and at national level to increase parental and societal engagement in education. They are composed of parents, school principals, teachers, union representatives, former students and community members. In many councils, the Secretariat of Public Education (Secretaría de Educación Pública, SEP) has trained members in education assessment and management (OECD, 2018[62]).

> **Progress or impact:** In 2016, a National Council (CONAPASE) was established to reflect and support the school councils across Mexico. It has quarterly national sessions and follows a formal and legal structure for consultation and operation (OECD, 2019[63]). Data indicates that the coverage of participation councils has continued to expand in recent years. In 2017, 94% of states and 65% of municipalities had their own council (National information reported to the OECD). A total of 1 597 Municipal

Councils of Social Participation in Education were registered in the Public Registry of the Councils of Social Participation in Education (REPUCE) with the slowest development seen in the State of Mexico, Oaxaca and Mexico City. The expansion has been particularly significant at the school level: in 2017, there were around 200 000 School Councils of Social Participation in education with almost 2 million counsellors participating (National information provided to the OECD) (SEP, 2017[64]).

- As part of **Portugal**'s Schools Participatory Budget (2016) all public schools providing lower and upper secondary education receive an additional amount from the state budget to be used according to the democratic will of students. Groups of students develop proposals for school improvement, secure a minimum number of signatures from their peers and then submit a proposal to the school principal. Once approved, these proposals are voted on by all students. This aims to reinforce student engagement with the community and their civic values.

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Chapter 5. Education funding: Policy priorities and trends, 2008-19

This chapter identifies developments in policy priorities related to education funding between 2008 and 2019, both from the perspective of participating education systems in OECD member countries and non-member economies, and previous OECD country-based work. Such policy priorities, often shared by different education systems, include: increasing or maintaining educational expenditure; improving efficiency in the use of resources; refining criteria and mechanisms used to allocate funding; and revising funding sources.

Taking a comparative approach, this chapter also analyses policy trends identified for education governance between 2008 and 2019, providing evidence of progress or impact for a selection of policies.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Highlights

- This chapter **analyses policy priorities and trends in education funding** across participating education systems in terms of the **overall amount of financial resources that countries invest in education systems and at educational levels**; **sources of funding for education, considering the distribution of funding across public and private sources**; and the **use of financial resources both at system and institutional levels**.
- The **most frequently observed funding-related policy priorities** between 2008 and 2019 were: **increasing or maintaining educational expenditure** (identified in 24 education systems); **improving efficiency in the use of resources** (identified in 23 education systems) and **improving equity in resource allocation** (also identified in 23 education systems). Other priorities identified were: revising the sources of funding for educational institutions (identified in 16 education systems); refining the mechanisms used to allocate funding to schools and other educational institutions (identified in 15 education systems); and tackling shortages in human and material resources in schools (identified in 12 education systems).
- The **most frequently observed funding-related policy trends** between 2008 and 2019 were on policies to: **invest in early childhood education and care** (ECEC), **primary and secondary education**; **use performance-based and needs-based funding formulas in higher education**; **better use time, human and material resources**; **explore public financial aid for students**; **allocate targeted support to population sub-groups**; and **seek greater involvement from the private sector or student tuition fees**.

Setting the scene

Education funding policies, as defined in this chapter, refer to the investment of different kinds of resources in schools and educational institutions, as well as to how effectively and efficiently resources are used to ensure quality and equity in education. In recent years, OECD countries have placed increased attention on the mechanisms that govern, distribute and monitor funding for education, so as to ensure that resources go where they can most impact teaching and learning outcomes (OECD, 2017[1]; OECD, 2015[2]).

The overall level of funding in an education system matters for student learning, but only up to a certain point. For example, at the school level, evidence collected through the Programme for International Student Assessment (PISA) shows that once funding reaches a certain threshold, it is *how it is allocated* between schools, and *how resources are used* within schools, that become more important.

PISA 2015 data show that a strong positive correlation exists, on average, between the level of funding in a school system and learning outcomes for students aged 15, among countries whose cumulative expenditure per student is under USD 50 000 (OECD, 2016[3]). However, among countries that spend more than USD 50 000 per student, as is the case in most OECD countries, the positive correlation between funding per student and learning outcomes is no longer observed. In other words, adequate funding for schools and educational institutions is a necessary prerequisite for high educational performance, but the highest spending education systems are not guaranteed to be the top-performing. Furthermore, differences in the level of funding in education explain only about 25% of the

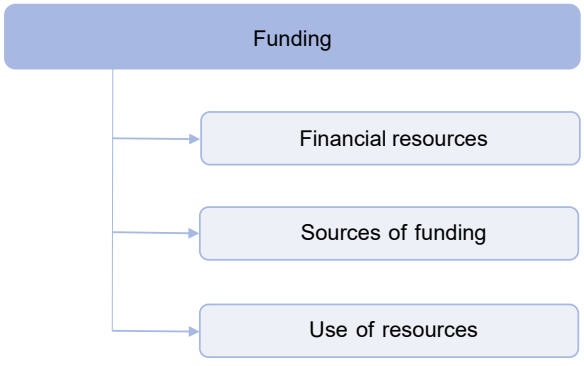
variance in average student performance in science in PISA 2015 among OECD countries. The remaining 75% is explained by other factors, including public policy decisions.

Equitable approaches to funding appear to have a positive impact on student outcomes, in general: on average across OECD countries in PISA 2015, education systems that allocate educational resources more equitably performed higher in PISA than systems with lower levels of equitable funding (OECD, 2016[3]). Policies that help allocate resources more equitably across socio-economically advantaged and disadvantaged schools can include ensuring that pre-primary and tertiary education (which in many countries require more private funds from families) remain affordable for all students and families. Another example would be employing funding formulae or mechanisms that take into consideration schools' socio-economic profiles (OECD, 2012[4]).

However, funding allocations involve making informed choices in the face of various possible priorities. The division of funding across education levels (ECEC, primary, secondary or higher education) is an obvious example, or assigning investment across different inputs such as human resources (e.g. salaries for teachers and other staff) or material resources and infrastructure. In this regard, public funding instruments can help greatly to improve transparency and counter individuals' or employers' tendencies to underinvest in skills development (OECD, 2012[5]).

The Education Policy Outlook Analytical Framework analyses education funding by looking at three specific areas: the financial resources invested in education (measured, for example, in terms of public expenditure per student, by educational level); the sources of funding (i.e. the relative weight of both governmental and private sources); and the use of resources (including human, material and time resources) (Figure 5.1).

Figure 5.1. Education funding as defined by the Education Policy Outlook Analytical Framework



Source: OECD (2015[2]), *Education Policy Outlook 2015: Making Reforms Happen*, OECD Publishing, Paris, https://doi.org/10.1787/9789264225442-en.

With this framework as a basis, this chapter provides a comparative overview of the evolution of policy priorities related to education funding as identified by the OECD in previous country-based work and as reported by participating education systems at different points between 2008 and 2019.

General principles of action, as identified by the OECD to support countries in tackling these priorities, are then explored.

The chapter also analyses policy trends in over 100 education policy developments undertaken mainly during 2008-19. Over half of the policies collected have been in place since at least 2014, offering evidence of progress or impact in most cases. Throughout this chapter, evidence of progress or impact is included, in order to assist the reader in analysing factors relevant to the implementation of these policies (also see Chapter 1 and the Reader's Guide).

All of the policy reforms relating to education funding and collected by the OECD are listed in the policy trends tables included in this chapter; more detailed descriptions of each of these policies and, where possible, their progress or impact, can be found in Chapter 8.

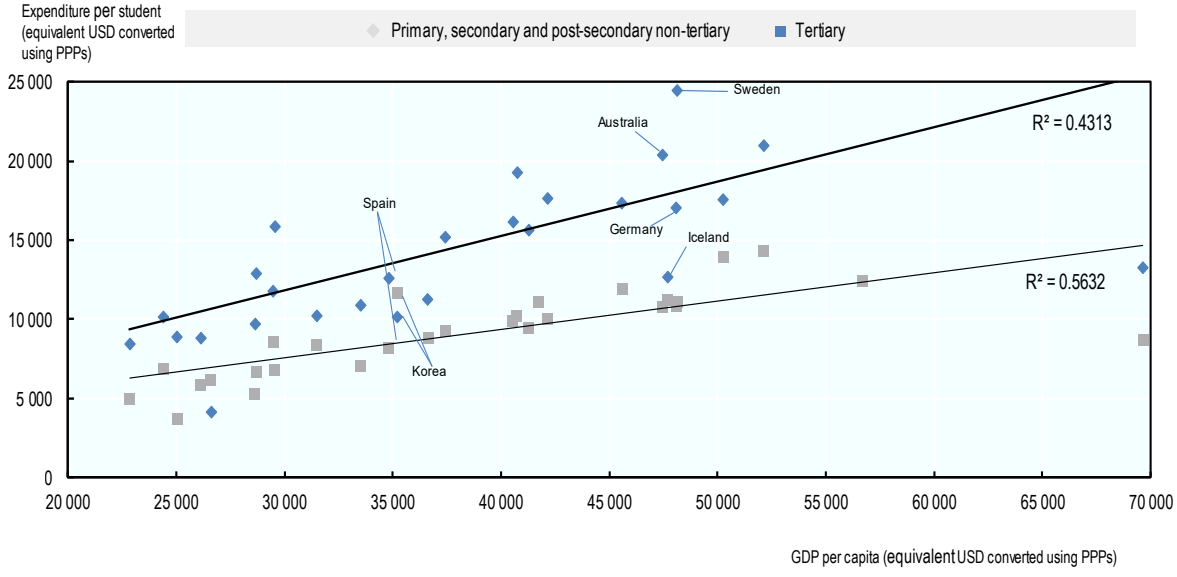
Financial resources

Higher overall levels of funding can make it more likely that all schools in the education system will have the resources they need, but the strategies and mechanisms used to allocate funding are also important. Given that the financial resources available for education systems are limited, using these resources efficiently is crucial (OECD, 2017[1]).

How much a country spends on education depends partly on its wealth: countries with a higher gross domestic product (GDP) per capita tend to have greater levels of expenditure per student (Figure 5.2). This is true for expenditure at all levels of education, but the relationship between GDP per capita and education spending is strongest at the primary, secondary and post-secondary levels (hereafter, non-tertiary) (R^2=0.56) than at the tertiary level (R^2= 0.43).

Figure 5.2. Expenditure on educational institutions per student relative to GDP per capita, 2015

Annual expenditure on educational institutions per student versus GDP per capita in equivalent USD converted using PPPs, by level of education



Source: Based on data from OECD (2018[6]), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/eag-2018-en.

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Also, at all levels of education, there are some countries with similar GDP per capita that nevertheless present very different levels of education spending. For example, Korea and Spain present a similar level of GDP per capita (around USD 35 000), but Korea invests significantly more per student than Spain in non-tertiary education and significantly less than Spain in tertiary education. Similarly, Australia, Germany, Iceland and Sweden have similar levels of GDP per capita (around USD 48 000); however, their spending per student in tertiary education differs significantly: it is higher in Australia and Sweden and lower in Germany and Iceland. These findings suggest that regardless of their level of economic development, there is a lot that countries can do to control how much they spend in education.

In the same way, as mentioned above, although countries may face limitations on how they allocate resources, depending on their specific governance arrangements, they can make policy decisions to optimise resources so that they reach where they are most needed. It is possible to achieve and sustain improved outcomes for students, without having a high level of resources: Colombia and Portugal are examples of education systems that have achieved this (OECD, 2018[7]).

Policy priorities

Increasing or maintaining educational expenditure

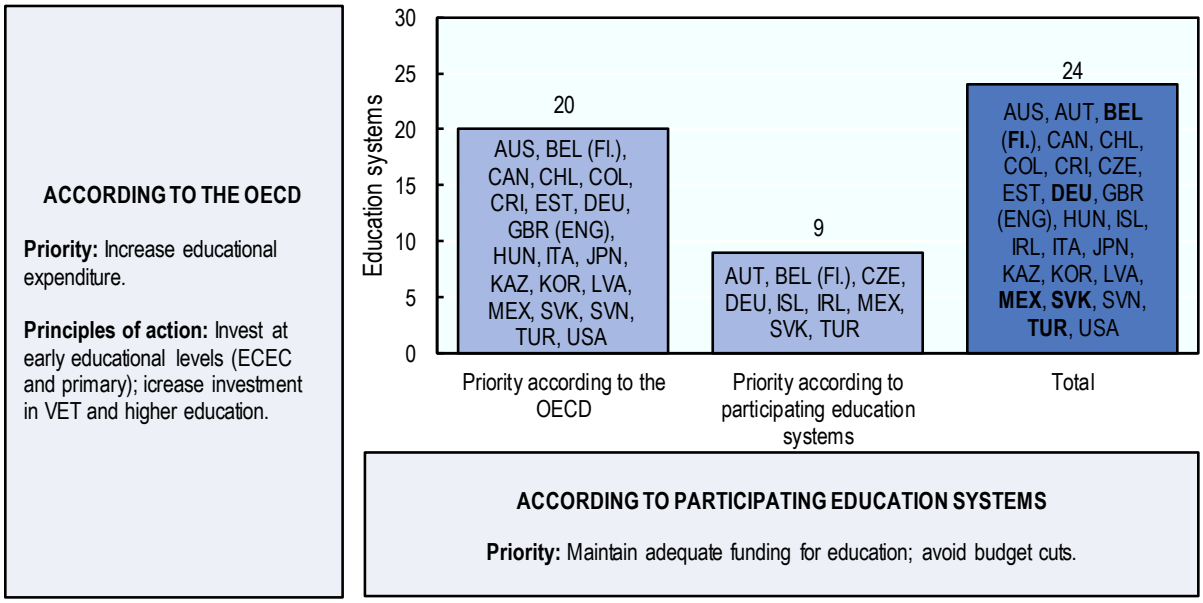
A common policy priority related to education funding refers to increasing or maintaining educational expenditure. The desire among education systems to expand access to educational opportunities and to improve the quality of education can translate into higher costs per student (OECD, 2018[6]). Between 2008 and 2019, this policy priority was identified in at least 24 education systems, either by the OECD in previous country-based work (20 education systems), by participating education systems (9 education systems), or both (5 education systems) (Figure 5.3).

Previous OECD work identified this policy priority for at least 15 education systems, including Latvia, the Slovak Republic and the United Kingdom (England), between 2015 and 2019. The OECD identified it as a priority for four other education systems (Japan, Korea, Slovenia and Turkey) in 2008-14. For Mexico, the OECD identified this priority both before and after 2014.

To address this policy priority, general principles of action as proposed by the OECD to participating education systems include introducing new funding at early educational levels (ECEC and primary) or re-orienting funding from secondary and post-secondary to focus on these earlier levels. This follows empirical evidence that the highest returns to education are seen in the earliest years. Another general principle of action seen in OECD work regards increasing investment in vocational education and training (VET) and higher education. This is generally to increase participation rates and improve transitions from education to work.

In terms of increasing investment in education in general, Chile and Colombia are examples of education systems for whom the OECD identified a need to raise educational expenditure to improve school quality, given that the level of spending per student was lower than the OECD average (OECD, 2015[8]; OECD, 2017[9]). In Estonia, the OECD found that more investment in pre-primary education was necessary to raise staff salaries and the overall quality of education at this level (Santiago et al., 2016[10]). In Germany and Hungary, the OECD recommended increasing funding in higher education in order to improve access to, and quality of, tertiary education (OECD, 2012[11]) (OECD, 2016[12]).

Figure 5.3. Increasing or maintaining educational expenditure



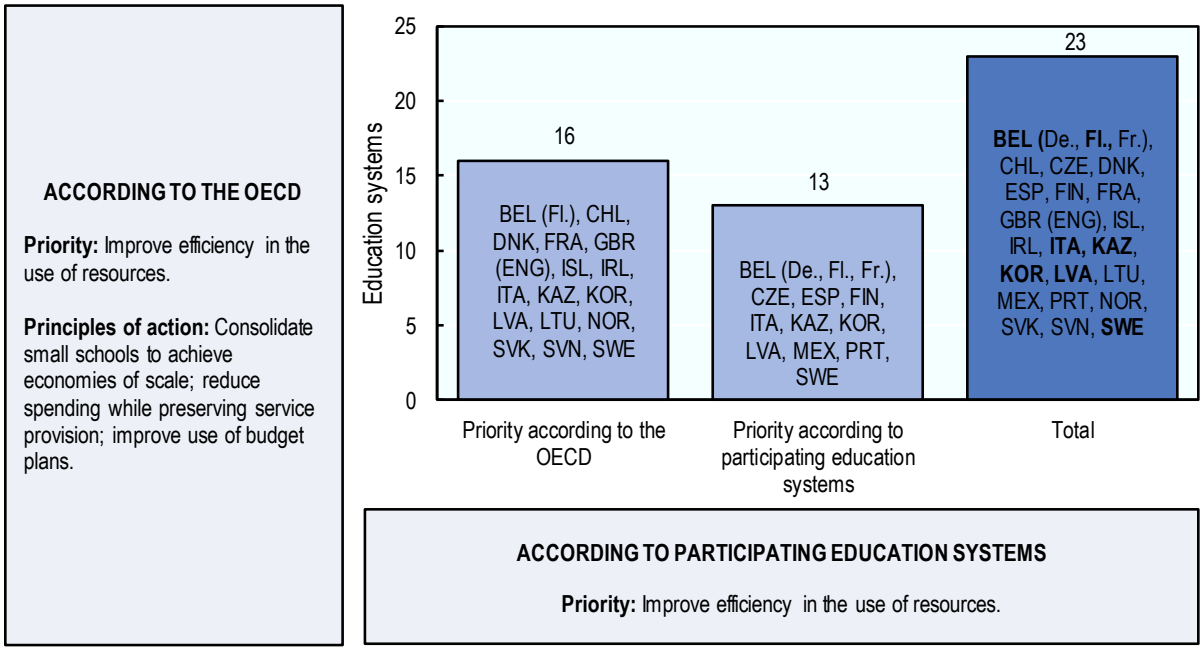
Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide**)**.
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

Figure 5.3 also shows that nine education systems reported increasing or maintaining educational expenditure as a policy priority between 2008 and 2019. For five of these education systems, Austria, Belgium (Flemish Community), the Czech Republic, Germany and Mexico, this can be classed as an emerging priority having first been reported in 2015-19. The remaining four education systems first reported this as a priority in 2008-14. In tackling this emerging priority, Austria introduced a one-off levy on banks in 2016 for a four-year period to create an overall fund of EUR 1 billion entirely dedicated to education projects such as the expansion of all-day schools, establishing a foundation for innovation and research in education, and creating new student places at Universities of Applied Sciences.

Improving efficiency in the use of resources

As the majority of education funding comes from public budgets, improving efficiency, both in economic and educational terms, is a key concern for policy makers. Between 2008 and 2019, this policy priority was identified in at least 23 education systems, either by the OECD in previous country-based work (16 education systems), by participating education systems (13 education systems), or both (6 education systems) (Figure 5.4).

Figure 5.4. Improving efficiency in the use of resources



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD has identified improving efficiency in the use of resources as a policy priority for at least 16 education systems since 2008. For 13 of those education systems, including Denmark, Korea, and Sweden, this policy priority was identified between 2015 and 2019, while for 2 education systems it was first identified between 2008 and 2014. The OECD identified this as a priority for Iceland and Slovenia both before and after 2014.

In supporting education systems to address this policy priority, the OECD has proposed general principles of action focused on rationalising school networks. This is generally recommended through the consolidation of small schools to achieve economies of scale. Other principles of action regarding efficiency in educational spending evident in OECD work include reducing spending while preserving quality service provision and better use of budget plans. As with all principles of action, the context of implementation must also be taken into account.

France and the Slovak Republic are examples of education systems for which the OECD recommended merging small schools or classes in order to increase efficiency (OECD, 2015[13]; Santiago et al., 2016[14]). In Belgium, the OECD recommended reducing spending while preserving service provision, specifically by, for example, eliminating the option for

teachers to stop working, while retaining most of their salary, before qualifying for early retirement (*mise en disponibilité*) (OECD, 2015[15]). In Kazakhstan, the OECD recommended improving efficiency by enhancing analytical capacity within the governance structures for education funding, specifically in terms of budgeting, accounting, budget monitoring and supervision (OECD/The World Bank, 2015[16]).

Some 13 education systems reported improving efficiency in the use of resources to the OECD as a policy priority. For five education systems, including Kazakhstan, Spain and Sweden, this is an emerging priority, having been reported for the first time between 2015 and 2019. However, 8 education systems including Belgium (French and Flemish Communities), the Czech Republic and Latvia first reported this as a priority in 2008-14.

In Greece in 2011, the Ministry of Education undertook a mapping of schools across the country to identify and facilitate mergers and consolidation within the network, particularly in the context of the specific geographic conditions of the country. With some guidance from the OECD, Kazakhstan implemented a new funding model in 2018 in order to help make school funding more transparent, efficient and equitable (OECD, 2018[17]). In Spain, financial constraints created by the economic crisis led to a 2012 decree introducing lower growth in salaries for primary and secondary school teachers, increases in teaching hours per teacher and relaxation of class size restrictions. These measures have recently been repealed (Ley 4/2019).

Refining the criteria and mechanisms used to allocate funding to educational institutions

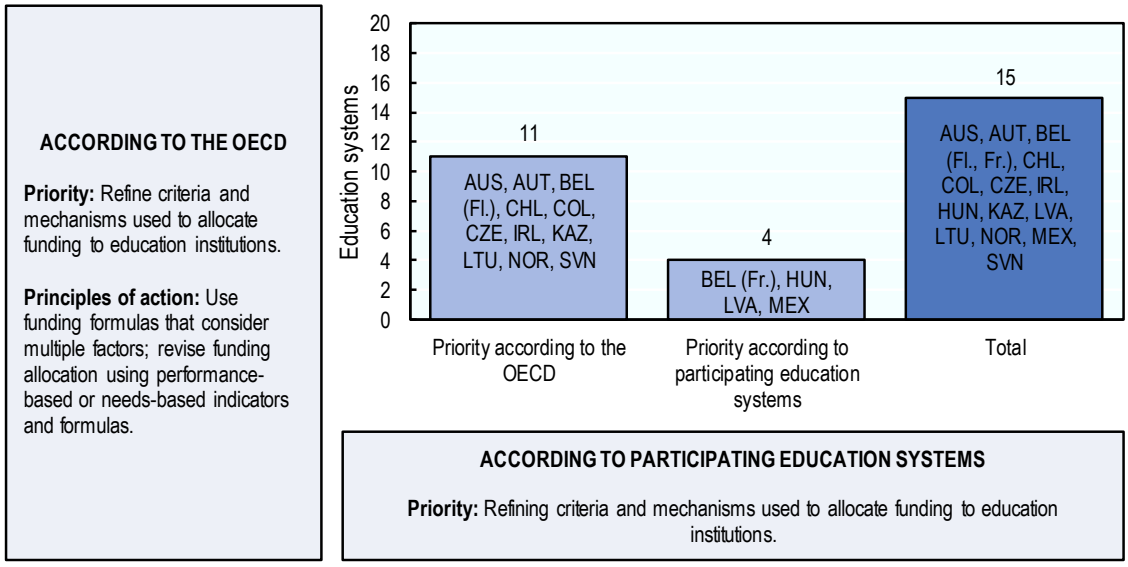
Another policy priority related to education funding which is relevant for several education systems refers to refining the criteria and mechanisms used to allocate funding to educational institutions. This includes questions about how allocations are determined, distributed and by who, as well as how to ensure mechanisms and criteria remain optimal over time (OECD, 2017[1]). Between 2008 and 2019, this policy priority was identified in at least 15 education systems, either by the OECD in previous country-based work (11 education systems) or by participating education systems (4 education systems). There are no examples where this priority was identified by both (Figure 5.5).

The OECD identified this as a policy priority for at least 11 education systems. For eight education systems, including Austria, Colombia and Norway, this policy priority was first identified between 2015 and 2019. The OECD identified it as a priority for two education systems, Australia and Ireland in 2008-14 and for Slovenia both before and after 2014.

General principles of action recommended by the OECD in response to the policy priority of refining funding allocation mechanisms include the use of funding formulae that consider multiple factors. Additionally, depending on the context of implementation, formulae that allocate more funding based on performance-based factors are required in some countries, whereas, in others, it may be more appropriate to attribute more weight to needs-based factors.

In Austria, the OECD recommended introducing needs-based funding formulae for the distribution of teaching and other resources in schools, in order to address the lack of transparency in the system (Nusche et al., 2016[18]). In contrast, Colombia and Ireland are examples of education systems for which the OECD recommended that a larger share of resources for higher education institutions be distributed based on key performance indicators (OECD, 2016[19]; OECD, 2013[20]).

Figure 5.5. Refining the criteria and mechanisms used to allocate funding to educational institutions



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

Figure 5.5 also shows that four education systems reported refining the criteria and mechanisms used to allocate funding to educational institutions as a policy priority. Belgium (French Community) and Mexico first reported this as a priority in 2015-19 whereas Latvia and Hungary first reported it in 2008-14. In response, Latvia introduced a new funding model for tertiary education in 2015 which combines the core funds with a performance-oriented funding pillar and an innovation-oriented funding pillar. Also, in 2015, Mexico established a national fund regarding the teachers' payroll and operative expenditure to better direct funding to the most disadvantaged regions.

Policy trends

The policy changes in the area of financial resources reported to the OECD during 2008-19 show two key trends, as presented in Table 5.1. The first trend relates to a group of policies that place a particular focus on funding early educational levels, especially early childhood education and primary education. The second identifiable trend groups policies focused on higher education, emphasising not only the level of funding, but also the mechanisms used to allocate funding at this level. In particular, there is growing evidence of performance-based funding being used to incentivise better performance among universities and other higher education institutions.

Table 5.1. Policies regarding education systems' financial resources, 2008-19

Financial resources	
Investing in early childhood education and care, primary and secondary education	**Performance-based and needs-based funding in higher education**
Recent (Implemented between 2015 and 2019)	
Australia: Recurrent Funding Model for Schools (2018)	**Czech Republic**: Operational Programme Research, Development and Education (2014-20)
Australia: Quality Schools' package (2017)	**Estonia**: New funding model for Estonia's vocational and educational institutions (2018)
Austria: Bank levy (2016-20)	**Estonia**: New funding model in higher education increases baseline funding (2017)
Belgium (Fl.): Additional funding to higher education (2019) in response to decree shifting responsibility for higher professional education courses from adult education to higher education (2018)	**Finland:** New funding model for universities and for universities of applied sciences (2019)
Chile: Fund to Support Public Education (2014)	**Hungary**: Decree on the financing of the basic activities of HEIs (2016)
Czech Republic: Education funding reform (2017)	**Ireland:** Innovation and Transformation Fund (2018)
Finland: Introduction of new funding model, as part of the reform of vocational upper secondary education (2018)	**Latvia**: New funding model for HE (2015)
Ireland: The Childcare Support Act (2018); the Affordable Childcare Scheme (2018)	**Norway:** New changes and adjustments to the performance-based component in the 2017 national budget
Slovak Republic: Optimisation of funding allocated for ECEC and primary and secondary schools (2016)	**Slovak Republic**: Changes to the allocation of public subsidies to public universities for research performance (2017)
United Kingdom (England): National Funding Formula for Schools (2016)	**Slovenia:** The Higher Education Act (2016)
	Sweden: Additional measures to lower inequality (2017)
Still in place (Implemented between 2008 and 2014)	
Belgium (De.): Decree to reduce education costs in kindergarten and primary education (2014)	**Austria**: Goal-oriented budgeting (2013)
Belgium (Fl.): Increase in education funding (2014-16, 2017, 2019)	**Austria**: Universities Act (2002, amendments in 2013, 2014 and 2018)
Belgium: Sixth State reform (2014)	**Chile**: Programme to Improve the Quality of Higher Education (MECESUP, 2008; modified 2012)
Denmark: Folkeskole reform (2014) to improve the competencies of teachers and pedagogical staff	**Ireland**: Expert Group on Future Funding (2014)
Estonia: National investment programme to support the consolidation of the upper secondary school network for general education (2014-20)	**Ireland**: System Performance Framework (2014); development of new System Performance Framework (2017-21)
Germany: Investment programmes to support the expansion of ECEC services [from 2008] **[*]**	**Ireland:** Introduction of performance budgeting in higher education (2013) **[*]**
Japan: Free-of-charge and universal ECEC (2014) **[*]**	**Italy**: Operating Fund (2010)
Norway: Block grants for ECEC (2011)	**Korea**: University Assessment System (2014)
Spain: Royal Decree 14/2012 to improve control and efficiency of spending (2012); derogation by Law 4/2019	**New Zealand**: Performance-Based Research Fund (2003, modified 2008, 2015) **[*]**
United Kingdom (England): School Funding Reform (2014)	**New Zealand**: Tertiary education performance indicators (EPIs, 2010)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

The evidence collected on the progress or impact of policies collected for this report highlights the importance of aligning policies related to financial resources with clear guiding objectives at the system level, particularly in decentralised systems. In Ireland, for example, a major challenge in the introduction of performance budgeting for higher education institutions lay in ensuring institutions have sufficient flexibility to respond to local needs while also having specific priorities set at the system level. Similarly, evidence collected on the implementation of extra investments for teacher training made as part of Denmark's Folkeskole reform shows that achieving coherence across municipalities was among the key challenges identified.

Furthermore, the longest-standing reforms to financial resources are those that have been able to reflect evolving education ecosystems by adapting those objectives over time. New Zealand's Performance-Based Research Fund (2003) was modified between 2015 and 2018 to clarify and simplify objectives and processes and an independent review launched in 2019 is further investigating how to update the fund to ensure that it best supports the evolving environment of research and tertiary education.

Investing in early childhood education and care, primary and secondary education

With more than 20 policies collected in this group, the majority of which have been introduced since 2015, **investing in early childhood education and care, primary and secondary education** appears to be an area of policy work receiving increasing attention across participating education systems. Looking more closely at the type of policies introduced within this group, improving access to, and quality of, early childhood education and care through increasing funding has clearly been a key focus for several education systems.

Germany, for example, has repeatedly worked to expand and strengthen its ECEC system since 2008 with four large-scale investment programmes. Ireland has recently invested public funds in expanding support to families for childcare, as well as increasing the subsidies for childcare providers through the Affordable Childcare Scheme (2019). Japan introduced free ECEC from 2014 to ensure that all children, regardless of their family's financial situation, have the opportunity to receive high-quality pre-school education.

Other countries have developed more general investment programmes targeted at early stages of education, including both ECEC and primary school. For example, the German-speaking Community of Belgium passed a decree, in 2014, to increase the amount of per-student funding for children in kindergarten and primary school.

In some countries, funding has been re-oriented from higher levels of education towards earlier levels in order to improve efficiency in spending. For example, in the Slovak Republic, a fall in the student population, particularly acute at the secondary level, led to a policy of optimisation from 2016. The resulting efficiency gains have been redirected to improve access to ECEC, particularly for children from low-income backgrounds.

Other countries have focused on specific funding policies for primary and secondary education. In Chile, a special fund to support public education was created in 2014. This aims to tackle the education budget deficit faced by many municipalities by contributing substantial funds for the costs incurred by municipalities in providing and administering public education services at primary and secondary levels. In Estonia, a national investment

programme to support the consolidation of the upper secondary school network for general education was created in 2014.

Policy focus

- Since 2008, **Germany** has launched **four investment programmes to support the expansion (investment and operating costs) of ECEC services** throughout the country. The federal government provided EUR 3.28 billion in the first three investment programmes for the expansion of ECEC places for under 3-year-olds (BMFSFJ, 2019[21]). The fourth investment programme (2017-20) aims to support the increase of up to 100 000 additional ECEC places for 3-year-olds with an allocation of EUR 1 126 billion (BMFSFJ, 2017[22]). The federal government supports the *Länder* by granting them tax releases (valued-added tax [VAT]) to subsidise the operating costs of services for children under the age of three. In addition, in 2019, a new law on ECEC quality (Gutes-Kita-Gesetz) took effect with a total budget allocation of EUR 5.5 billion from 2019 to 2022 (BMFSFJ, 2019[23]).

Progress or impact: Within the first three investment programmes, from 2008 to 2018, 400 000 additional places for children under three were created (BMFSFJ, 2019[21]) As of 2018, it was put forward that in early childhood education and care, unsatisfied demand and demographic changes necessitate more than 600 000 additional places until 2025 for children up to school age (European Commission, 2018[24]). Issues persist around service quality and flexibility (European Commission, 2018[24]). The federal and *Länder* governments have taken further initiatives to improve access to and quality of early childhood education and childcare, such as with the programme "Entry into ECEC – Building bridges to early education" (KitaEinstieg – Brücken bauen in Frühe Bildung), the programme "KitaPlus" or "child care centres with a focus on language education and development" (Sprach-Kitas). The government has also supported improving the qualifications of daycare staff. The federal government and the *Länder* have also taken stock of progress in improving quality and identified further steps to be taken (OECD, 2018[25]).

- Under **Japan**'s **Second Basic Plan for the Promotion of Education** (2013-17), **access to free and universal early childhood education and care for all children** (2014) **became a priority** to ensure that all children, regardless of their family's financial situation, are able to receive high-quality pre-school education. The policy's objectives included the elimination of tuition fees and incremental provision of free early childhood education to 5-year-olds as of 2014. Also, the plan aimed to provide free early childhood education at kindergarten for children whose parents are welfare recipients, alleviate financial obligations for large families starting in 2014, and increase financial support for children whose parents qualify for municipal tax exemption starting in 2015 (OECD, 2015[26]).

Progress or impact: As of 2014-15, Japan eliminated childcare costs for families who receive social benefits (approximately JPY 6 600 per month) as well as those under an annual income limit (approximately JPY 6.8 million) for the tax breaks of half-price fees for a second-born child

and free tuition for any children after the second one. In 2015-16, the cost of childcare for families exempt from their municipality' residence tax decreased from JPY 9 100 to 3 000. In 2016-17, families with a total annual income below JPY 3.6 million began paying half-price for childcare for the second child and received free childcare for three or more children. During the same year, tuition was no longer required for children with single parents exempt from residence tax. In addition, single-parent families with income under JPY 3.6 million began paying half-price for their first child and received free childcare for all future children. Finally, in 2017, the government planned to eliminate tuition for second-born children and any additional children of families exempt from residence tax. Single-parent households with annual income below JPY 3.6 million would benefit from reduced monthly costs for the first child from JPY 7 550 to JPY 3 000. Similarly, the costs for the first child would be reduced from JPY 16 100 to JPY 14 000 for two-parent households with a similar income (OECD, 2018[27]).

Performance-based and needs-based funding in higher education

In higher education, a key identifiable policy trend is the **introduction of performance-based funding**. A variety of performance-based funding mechanisms now exist across participating education systems. Some countries are increasing the percentage of public funding that is based on institutional performance indicators, for example. This is the case in policies such as Austria's Goal-Oriented Budgeting implemented from 2013, Hungary's Decree on the Financing of the Basic Activities of Higher Education Institutions (HEIs) (2016), Italy's Operating Fund (2010) and Latvia's new funding model for higher education (2015). Some of the performance indicators employed within these new funding mechanisms include: graduation rates (or graduation within nominal time); the share of graduates who are employed or that continue into masters or doctorate programmes; research outcomes; and the proportion of international students attracted to the institution. In some education systems, the evaluation of institutional performance takes into account a range of such performance indicators. This can be seen in the modifications to New Zealand's Performance-Based Research Fund in 2008 and 2015, and the funding regime introduced within Slovenia's Higher Education Act (2016).

Another form of performance-based funding is the use of competitive tenders. This approach sees higher education institutions compete for funds through developing proposals for institutional improvement, the best of which are selected to receive financial support. Chile's Programme to Improve the Quality of Higher Education (2008) is an example of this approach, as is Ireland's Innovation and Transformation Fund (2018).

Introducing or enhancing performance-based funding usually involves reducing the share of "basic funding". This refers to public funding allocated to higher education institutions based on structural characteristics such as institutional size (number of students or academic staff). However, some countries have introduced changes in the opposite direction, increasing baseline funding at the sake of performance-based funding. This is generally done to provide more stability of resources for institutions. In Estonia, a new funding model for the higher education system, introduced in 2018, shifted funding from being primarily performance-based to a combination of 80% baseline and 20% performance funding.

Policy focus

- **Ireland**'s **Higher Education Authority** (HEA) has been **introducing performance budgeting** since 2013. The first System Performance Framework (2014), which was part of the National Strategy for Higher Education, introduced a strategic dialogue process between HEIs and the HEA by which a performance compact is produced. This ensures that HEIs engage with national strategic objectives while maintaining institutional autonomy. Accountability has also been strengthened: the HEA has a monitoring role across the system, HEIs must produce annual compliance statements and progress is ongoing through strategic dialogue. (Higher Education Authority, 2017[28]). The 2017 OECD and EU Country Review of Entrepreneurship in Higher Education fed into the development of a new System Performance Framework for higher education (2017-21) with a stronger focus on research, development and innovation.

Progress or impact: By 2017, the Higher Education Authority finished the compact-agreement phase and two reviews of progress cycles. Though the HEA had expected resistance, a great number of HEIs had set very ambitious goals by 2017, despite a decline in funding and growing student numbers. However, it was found that some HEIs did not have clear strategic planning processes to meet the new expectations. Furthermore, many HEIs under-performed in priority setting. A major challenge lay in having specific priorities set at the system level, while at the same time ensuring that multiple sets of responses could be taken to implement these priorities. Despite these ongoing challenges, only three institutions did not fulfil the goals and so had their funding held back. All three then secured funding after revising and resubmitting the compact (HEA, 2017[29]).

- **New Zealand**'s **Performance-Based Research Fund** (PBRF, 2003) **encourages and rewards excellent research in New Zealand's degree-granting organisations**. It does not directly fund research but supports it through assessing the research performance of organisations, as well as funding them based on the assessment results. The PBRF is the primary form of government funding for general research capability in higher education institutions and contributes to the government's wider science, research and innovation objectives by supporting research activities that provide social, economic, cultural and environmental benefits to the country, including the advancement of mātauranga Māori.

Progress or impact: A 2012 review indicated that the Performance-Based Research Fund has contributed to an increase in the research performance and productivity of tertiary education organisations (TEOs) and has gained positive recognition internationally. Following this, New Zealand introduced changes to increase its efficiency and effectiveness. The 2013 PBRF assessment analysed survey responses from current students and recent graduates about teaching and supervision practices during 2003-11 and found that the introduction of the PBRF did not hurt teaching quality (Smart, 2013[30]). Between 2015 and 2018, the government committed to adopting further changes to make fund objectives clearer, simplify the quality evaluations, improve reporting on research performance and place

more value on user perspectives of research quality and user-oriented research.

An independent review of the PBRF will commence in 2019 to refresh the programme so that it better supports the evolving environment of research and tertiary education. Interim results for the most recent quality evaluation show that the number of researchers awarded with a funded Quality Category has increased by 66.2% between 2003 and 2018. The number of awards given by the Pacific Research Panel to the top two categories is in line with the national average and, for the Māori Knowledge and Development Panel, it is well above the national average (Tertiary Education Commission, 2019[31]).

Sources of educational funding

Sources of educational funding refer to how much investment in education comes from public sources and how much from private sources. Public sources include governmental funds that may be sourced centrally or at the various decentralised levels of governance. Private funds include international sources of funding, financial support from employers and individual contributions from households.

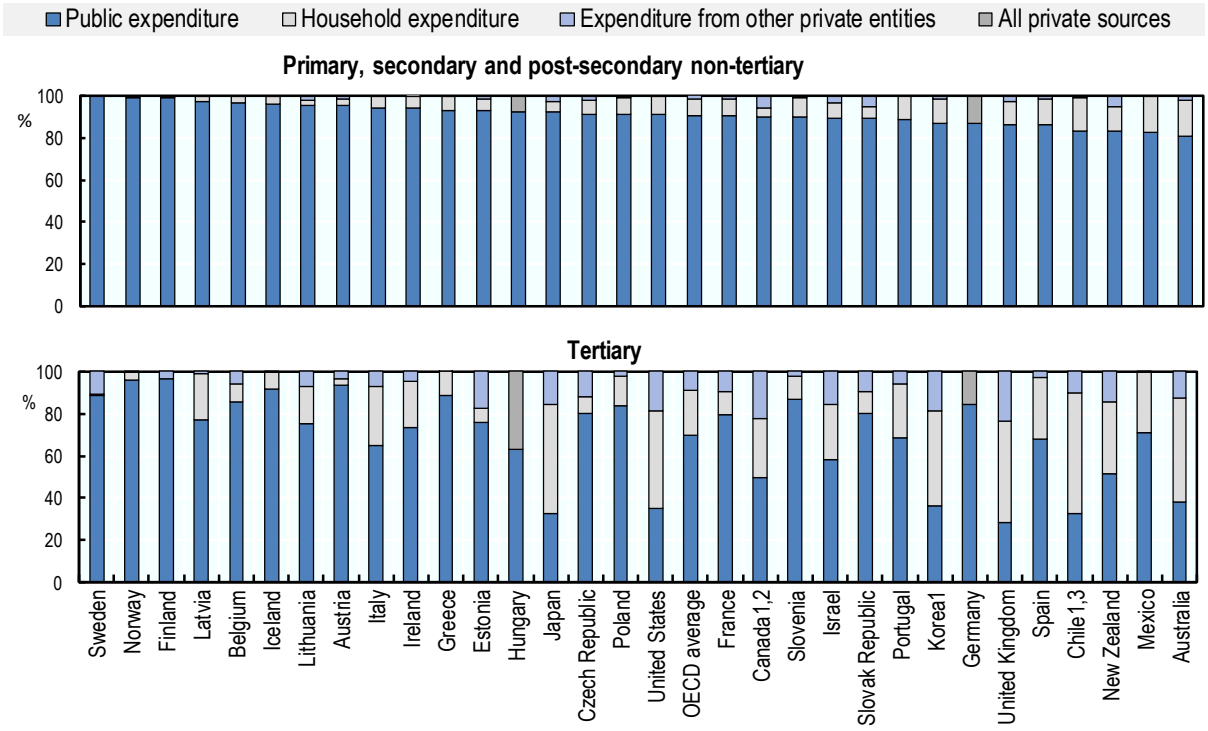
Different trends apply at different educational levels. Public funds constitute by far the main source of funding for education systems across OECD countries at primary, secondary and post-secondary non-tertiary levels. On average, in 2015, public sources accounted for 91% of all expenditure on non-tertiary educational institutions. There is very little cross-national variation in this measure: only in Australia, Chile, Mexico, New Zealand and Turkey does the share of spending in non-tertiary education come from private sources larger than 15%, and only in Colombia does it exceed 20% (OECD, 2018[6]). In Colombia, fee-paying, independent private schools account for a significant proportion of school enrolments, and so almost all of the private financing at these levels of education is sourced from households (Radinger et al., 2018[32]).

In comparison, at pre-primary level, private funds account for a larger share of expenditure: on average across OECD countries, 17% of expenditure on pre-primary education comes from public sources (OECD, 2018[6]). In a small number of countries, the share of privately sourced funding is much higher. Nevertheless, in those cases where a significant proportion of private expenditure is sourced from fees to parents, there is evidence of a growing trend to increase and expand the targeted public subsidies transferred to households. Alternatively, some countries are gradually expanding their commitment to tuition-free pre-primary education by guaranteeing free access for specific age groups or durations (OECD, 2017[33]).

The role of privately sourced funds is most significant in tertiary education, although even at this level, it is still rarely the main funding source (Figure 5.6). On average across OECD countries, 31% of expenditure on tertiary educational institutions comes from private sources, including households, businesses and subsidised private payments such as tuition fee loans (OECD, 2018[6]). Countries in which the majority of funds for tertiary education comes from private sources include: Australia, Canada, Chile, Colombia, Japan, Korea, the United Kingdom and the United States. Where a significant proportion of private expenditure comes from tuition fees for students, including international students, governments usually employ public transfers to households in the form of student

scholarships, loans and grants as a key policy initiative to promote equitable access. Taking public to private transfers into account, the average direct private investment in educational institutions at the tertiary level is around 25% on average across OECD countries (OECD, 2018[6]).

Figure 5.6. Distribution of public, private and international expenditure on educational institutions, 2015



Notes:
Countries are ranked in descending order of the proportion of public and international expenditure on educational institutions. The figure shows the final source of funds. International expenditure is aggregated with public expenditure for display purposes.
1. Excluding international sources.
2. Primary education includes data from pre-primary and lower secondary education.
3. Year of reference 2016.
Lithuania was not an OECD member country at the time of preparation of the report that this figure is sourced from. Accordingly, Lithuania is not included in the OECD average in this figure.
Source: OECD (2018[6]), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/eag-2018-en.

StatLink http://dx.doi.org/10.1787/888933997493

Defining the sources of educational funding can be a complex area of education policy. Education systems have a duty to protect an individual's right to free primary education, accessible secondary education and equitable tertiary education (OHCHR, 1966[34]). Public funding must therefore adequately deliver on each of these commitments. Accordingly, governments' policy decisions regarding the sources of educational funding must carefully balance individuals' rights and the wider economic and social benefits of a well-functioning education system, with significant private returns to education for individuals and growing pressures on public funds.

Many governments across the OECD are finding it increasingly challenging to adequately fund education through public sources alone. As a result, the role of private sources of funding is growing. Between 2010 and 2015, the share of private sources of expenditure on educational institutions from primary to tertiary increased by 11% on average across OECD countries (OECD, 2018[6]). Higher returns can be found through investment at earlier education levels, although in the right policy environments, increasing public expenditure on education at higher levels can be done without necessarily inhibiting equitable outcomes, as long as some conditions are met (OECD, 2012[35]; OECD, 2008[36]). Likewise, despite a common belief to the contrary, cross-country analysis demonstrates that there is no observed correlation between increased decentralisation of financial resources to local governance structures and inequality in education outcomes (Vermeulen, 2018[37]).

Policy priorities

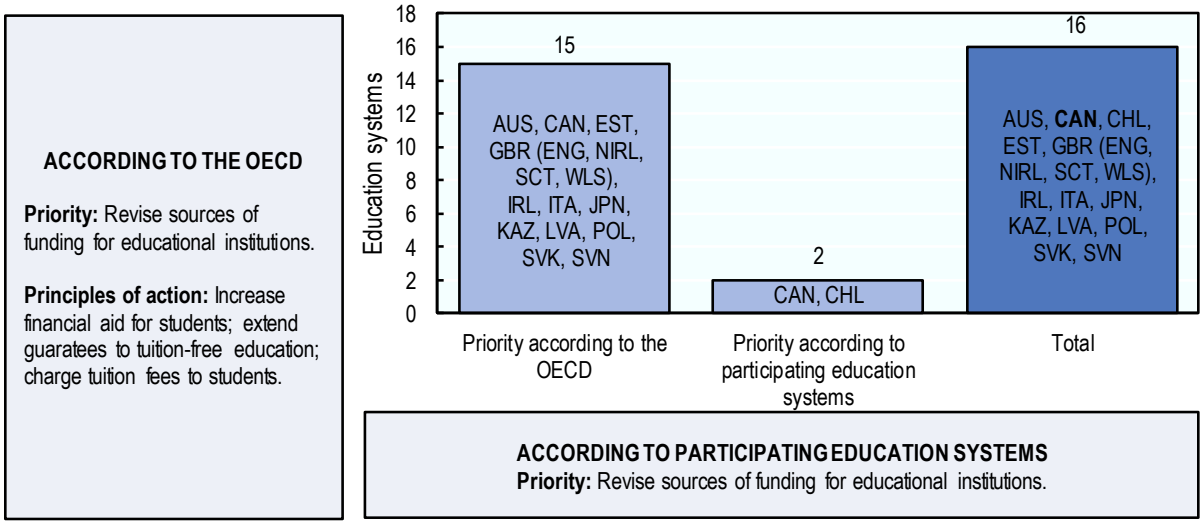
Revising sources of funding for educational institutions

Revising the sources of funding for educational institutions is another funding-related policy priority for several education systems as pressure on public funds is, in many cases, leading to a growing role for private sources of funding. Between 2008 and 2019, this policy priority was identified in at least 16 education systems, either by the OECD in previous country-based work (15 education systems), by participating education systems (2 education systems), or both (1 education system) (Figure 5.7).

The OECD identified revising the sources of education funding as a priority for least 15 education systems between 2008 and 2019. For 12 of these education systems, including Australia, Canada and Estonia, the OECD identified this priority in 2008-14. The OECD identified it as a priority for three other education systems (Kazakhstan, Latvia and Slovenia) in 2015-19.

While remaining cognisant of implementation contexts, certain general principles of action have been identified by the OECD to support education systems in addressing this policy priority. This includes increasing the share of funding coming from public sources by guaranteeing free education or increasing the share of funding coming from private sources by charging tuition fees to students. To mitigate potential equity concerns for certain disadvantaged groups when private sources of funding increase, another principle of action identified by the OECD is to increase financial aid for students through, for example, scholarship, grant or loan systems.

Figure 5.7. Revising sources of funding for educational institutions



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

In terms of increasing the share of private funding in education, the OECD recommended introducing or increasing tuition fees in Ireland, Italy, Poland and Slovenia. To balance the cost to households, the OECD also recommended that these education systems develop, strengthen or increase financial aid schemes (OECD, 2009[38]; OECD, 2013[39]; OECD, 2012[40]) (OECD, 2013[41]). In Canada, Estonia and the United States, the OECD recommended improving or increasing targeted financial assistance for students in need (OECD, 2012[42]; OECD, 2012[43]; OECD, 2016[44]).

Figure 5.7 also shows that two education systems reported revising the sources of funding for educational institutions to the OECD as a policy priority. For Canada, this priority has persisted across the period 2008-19, whereas for Chile it emerged between 2015 and 2019.Canada initially reported the need to improve access to tertiary education and efficiency of funding at this level, including through strengthening and expanding student financial assistance. More recently, Canada reported the priority of making all post-secondary education more affordable for students from low- and middle-income families and making student loan repayments more manageable. In Chile, the School Inclusion law (2015) eliminated "shared financing" (*co-pago*), that is, fees that families were asked to pay to schools on top of the public subsidy per student. To compensate for the loss of funds in the privately subsidised schools that used shared financing before the reform, the law also increased the amount of resources destined for school administrators.

Policy trends

Analysis of the key policy work addressing the sources of funding, as undertaken by participating education systems during 2008-19, suggests that the policies in this area fall into two main trends. The first group of policies is aimed at increasing the share of public funds through guaranteeing tuition-free education or through increasing access to public-private transfers in the form of financial aid schemes. The second group brings together policies aimed at increasing private sources of funding and reducing public spending by charging part of the cost of education to students, mainly through higher tuition fees.

The evidence collected in this report on implementation processes shows, again, that reforms in this area should not be seen as operating in isolation. Successful reforms to sources of funding appear to be supported by accompanying initiatives that share common objectives. In the case of France, for example, following the expansion of its national bursary system for students from low-income families (2013-16), the government committed to guaranteeing a minimum proportion of tertiary study places for needs-based grant holders.

Alternatively, the comparative evidence collected also shows that possible shocks to the system caused by reforms to funding sources should be offset by compensatory efforts elsewhere in the system. For example, following the introduction of tuition fees for international students, and a subsequent fall in enrolments, Sweden launched an inquiry into measures to strengthen the internationalisation of Sweden's higher education system. In both the cases of France and Sweden, the initiatives were implemented consecutively.

Public financial aid for students

Many countries have strengthened their commitment to **public funding for education**. For a significant number of countries, this has involved increasing public expenditure on higher education via public to private transfers through student financial aid policies such as grants, loans or free-tuition enrolment. For example, in 2016, Canada increased the value of its non-repayable grants for both students from low- and middle-income families and part-time students in tertiary education by 50%. Similarly, France reformed its national bursary system in 2017 to increase grants to students from low-income families.

Financial aid policies are also being implemented in countries where education is already heavily funded through private sources. Examples include Chile's State Guaranteed Loans and Scholarships, Japan's interest-free scholarship loans and Korea's National Scholarship System, all of which were introduced in 2012. In contrast, some countries have expanded their commitment to free education either for targeted populations or full cohorts. For example, reforms introducing free higher education have been introduced in Chile (2016) and Estonia (2013).

Policies introducing or expanding student financial aid are not restricted to higher education. Some countries have implemented policies to create or enhance their scholarship, loan or tuition-free programmes for secondary level students. Examples include France's Secondary School Scholarship Scheme (2016) and Japan's Free Tuition Fee at Public High Schools (2012). In Chile, the School Inclusion Law (2015) outlawed tuition fees in any primary and secondary schools receiving governmental funding with the aim of transforming private-subsidised schools into tuition-free schools.

Table 5.2. Policies regarding the sources of funding for education systems, 2008-19

Sources of funding	
Public financial aid for students	**Private sector involvement and tuition fees for students**
Recent (Implemented between 2015 and 2019)	
Canada: Student Loans Program (2008, modified 2016) **[*]**	**New Zealand**: Reform to National Industry Training (2015)
Canada: Increase of the loan repayment threshold for the Repayment Assistance Plan (2016)	**United Kingdom (Northern Ireland):** Review of Post-18 Education and Funding (2018-19)
Chile: Free higher education (2016)	
Chile: School Inclusion Law (2015)	
Finland: Reform of Student Support Act (2016)	
France: Secondary school scholarship scheme (2016)	
Ireland: Means-tested grant and scholarship scheme (2015)	
Slovak Republic: Scholarships for student teachers (2016)	
Still in place (Implemented between 2008 and 2014)	
Chile: State Guaranteed Loans and Scholarships (2012)	**Iceland:** Framework providing incentives for companies to train and support students in the workplace (2011)
Estonia: Higher Education Reform (2013)	**Ireland**: Higher Education Reforms (Increase of students' tuitions) (2011)
France: Reform of the National Bursary System (2013)	**Latvia**: State financial support to private ECEC providers (2013) **[*]**
Ireland: Third-Level Bursary (2012)	**Norway:** Public funding for private kindergarten (2011)
Japan: Interest-free scholarship loans (2012)	**Slovenia**: Act on Occasional Student Work (2014)
Japan: Act on Free Tuition Fee at Public High Schools and High School Enrolment Support Fund (2010; modified 2014)	**Sweden**: Swedish National Agency for Higher Vocational Education (NAHVE, 2009)
Korea: National Scholarship System (2012)	**Sweden**: Tuition fees for foreign students in HE (2011) **[*]**
Sweden: Free tuition for all students from the European Union, the European Economic Area and Switzerland (2011)	**Turkey**: Private Teaching Institutions Law (2013)
	United Kingdom (England): Review of Post-18 higher education funding (2018)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

Policy focus

- **Canada**'s **Student Loans Program** (CSLP) is among the actions undertaken by the Government of Canada to **help make post-secondary education more affordable**. The CSLP provides financial assistance to eligible students to cover part of their living and education-related costs with grants and loans. It has offered non-repayable grants to more than 3 million higher education students since 1995 (Government of Canada, 2019[45]). A 2017 national statistical review reported that in 2016/17, 380 000 students received non-repayable Canada Student Grants (CSGs) equivalent to CAD 1 014.6 million, which represented an increase from 369 000 students in 2015/16 who received CAD 719.5 million (Government of Canada, 2019[45]). Further national data highlights that 64% of CSG recipients in 2016/17 were low-income full- and part-time students, 27% were students from middle-income families, 10% were students with permanent disabilities, and 9%

were students with dependents (Government of Canada, 2019[45]). In 2016, the Government of Canada budget increased by 50% the value of CSGs for students from low-income families and middle-income families, as well as part-time students. This was equivalent to an increase from CAD 2 000 to CAD 3 000 per year for students from low-income families; from CAD 800 to CAD 1 200 per year for students from middle-income families; and from CAD 1 200 to CAD 1 800 per year for part-time students. On 1 August 2017, new, more generous eligibility thresholds for the Canada Student Grant for Full-time Students (CSG-FT) were introduced. CSG eligibility for part-time students and students with dependents was also expanded as of 1 August 2018.

Progress or impact: Employment and Social Development Canada (ESDC)'s Evaluation Directorate has undertaken multiple evaluations of Canada's Student Loans Program to monitor its implementation and effectiveness. A summative evaluation of the CSLP during 2006-10 reviewed the validity of the programme's rationale, needs assessment and success at promoting access to post-secondary education (Government of Canada, 2012[46]). The evaluation found positive results, such as the CSLP serving its purpose and mandate, or reducing students' financial constraints. Research on general effects of loans and grants on post-secondary education enrolment of low-income students showed a positive correlation between the total loan amount disbursed and the post-secondary education participation rate. At the same time, research on the Canada Student Grants Program has been less conclusive in identifying strong relationships between grants alone and participation, except in survey results. One suggested explanation was the corresponding reduction in student loan amounts caused by the grant amounts and, hence, overall student financial aid remaining constant in most cases (Government of Canada, 2016[47]).

Private sector involvement and tuition fees for students

An alternative strategy used in some countries to ensure sufficient funding for education is to seek **greater involvement from the private sector**. In both Latvia (2013) and Norway (2011), for example, the governments have offered public funds to private providers of ECEC in order to expand provision and increase student enrolment at this level. In 2015, New Zealand's government reformed the VET training system to give private employers the option of directly managing public funds for workplace training, as opposed to working together with industry training organisations. In some countries, higher education institutions have been allowed to introduce or increase tuition fees charged to students. Examples include Belgium's 2015 Budget Reshuffling and the introduction of tuition fees for international students in higher education in Sweden in 2011.

Policy focus

- During 2013-15, **Latvia** granted **state financial support to private pre-school institutions and childcare providers** under the condition that by the end of 2015, municipalities would find satisfactory solutions to the shortage of pre-school education provision. Although the number of ECEC institutions increased from 550 to 617 between 2003-14, Latvia continued to face shortages of ECEC places, largely due to rural to urban migration (OECD, 2017[48]).

Progress or impact: Municipalities had not solved the issue by the end of 2015, and the government continued to provide financial support until 2016. In 2016, 89% of three-year-olds in Latvia were enrolled in pre-primary education, compared to an OECD average of 76%, and an increase of 23 percentage points from 2005 (OECD, 2018[6]). In 2016, municipalities and the private sector collaborated to open several child development and play centres. At that time, local governments assumed responsibility for providing financial aid to parents with children between 18 months of age and the start of primary education who were not able to enrol in public childcare in municipal kindergartens due to lack of space (National information reported to the OECD). Since 2016, the assessment of the costs to municipalities for this measure has been calculated via a single method in order to improve transparency and consistency. In 2017, municipalities provided EUR 213 per month, on average, for each child between the ages of one and a half and four years old who was unable to access state-provided ECEC, and EUR 155 per month for those aged five or six who did not receive a place in state-provided, mandatory pre-primary education (Government of Latvia, 2017[49]).

- Tertiary education has always been free of charge in **Sweden** for all students who come from Sweden, the European Union, the European Economic Area (EEA) and Switzerland. However, for international students from outside the European Union and the EEA, **a tuition fee was introduced in 2011**. All students, including those from outside of the European Union and the EEA, who wish to enrol in Swedish universities, can apply for financial support (through study grants and study loans) to pay for living expenses, with eligibility determined according to a minimum performance level and the number of credits achieved. Non-Swedish residents, who moved to Sweden for a reason other than to study, are also eligible for financial support in most cases (OECD, 2018[7]).

Progress or impact: Following a dramatic fall in the number of foreign-born students with the introduction of tuition fees in 2011, international student numbers are now rising, including among those eligible for fees (European Commission, 2018[50]). The Swedish Higher Education Authority reports that for the last ten years, the number of first- and second-cycle foreign students in Swedish universities has surpassed the number of Swedish students abroad (SOU, 2018[51]). During 2017/18, there were 2 740 new incoming students who paid tuition fees, an increase of 23% compared to the year before (Swedish Higher Education Authority, 2017[52]).

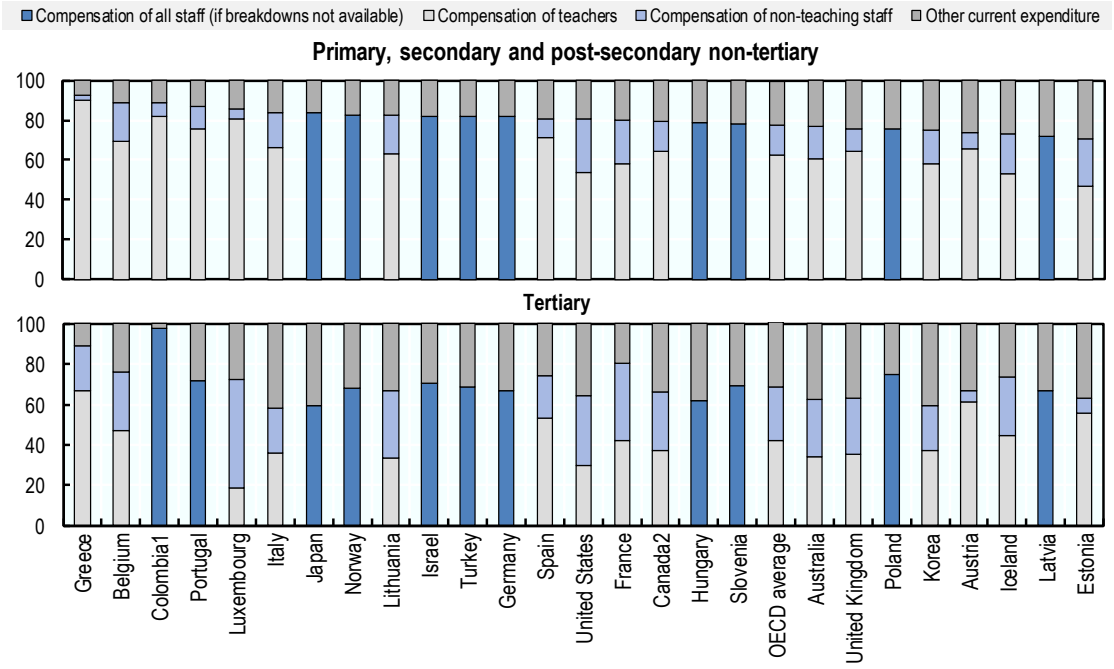
In 2017, the Swedish government launched an inquiry into measures to strengthen the internationalisation of Sweden's higher education system. A key proposal of the final report is to attract more international students by simplifying the application process and increasing scholarship funds. Higher education institutions must also increase transparency regarding tuition fees. The new measures are planned for implementation between 2020 and 2030 (SOU, 2018[51]).

Use of resources

How different resources are used and distributed across educational institutions to effectively meet the needs, priorities and capacities of the education system is a crucial part of funding policies in education (OECD, 2015[2]). Key tasks in the use of resources in education involve decisions related to investing in human, time and material resources as well as infrastructure, and allocating resources more equitably across socio-economically advantaged and disadvantaged schools.

In all OECD countries, the largest part of funding for education is dedicated to human resources, specifically in the compensation of teachers and non-teaching staff. On average across OECD countries in 2015, teacher remuneration accounted for 63% of all current expenditure[1] in primary, secondary and post-secondary non-tertiary education, and 42% of all current expenditure in tertiary education (Figure 5.8). This illustrates the large share that teachers' salaries have in educational spending. It also shows the indirect impact on expenditure that teachers' salaries can have through other policies. For example, policies aiming to implement full-day schools to increase students' learning time might require an increase in the number of teachers hired or in the number of teaching hours.

Figure 5.8. Use of current expenditure in educational institutions, by educational level, 2015



Notes:
1. Year of reference 2016.
2. Primary education includes pre-primary programmes.
Countries are ranked in descending order of the share of all staff compensation in primary, secondary and post-secondary non-tertiary institutions.
Source: OECD (2018[6]), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, https://doi.org/10.1787/eag-2018-en.

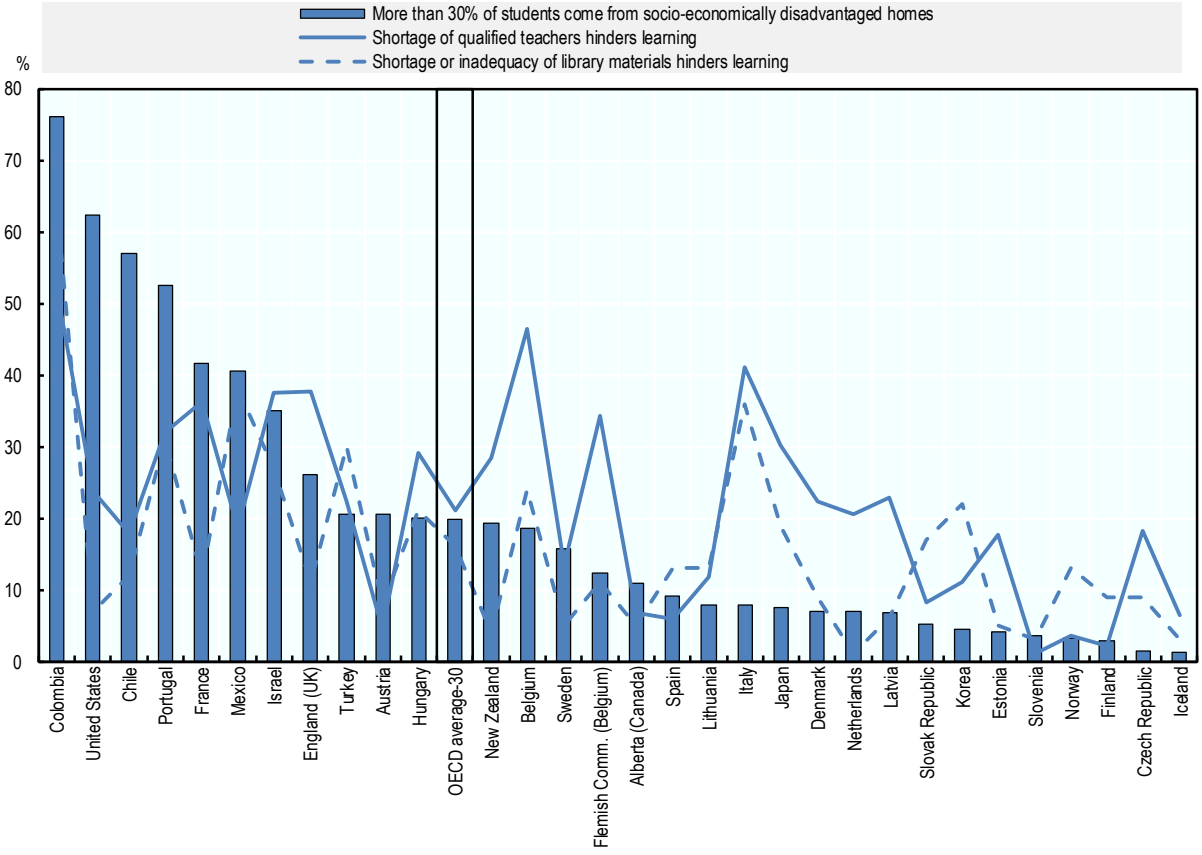
StatLink http://dx.doi.org/10.1787/888933997512

Figure 5.8 also shows that a smaller, yet significant, part of education funds are used in things that are not related to staff compensation, such as teaching materials and supplies, maintenance of school buildings, providing students' meals and renting school facilities. These "other current expenditure" account for 22% of current expenditure in non-tertiary education levels, and 32% in tertiary education.

At school level, resource shortages may hinder a school's capacity to provide quality instruction. According to lower secondary principals' reports in the OECD Teaching and Learning International Survey (TALIS) 2018, two of the five biggest hindrances, relate to human resources (shortages of support personnel and teachers with competency in teaching students with special needs), another two relate to time resources (shortages of time for instructional leadership and time with students) and one more relates to material resources (shortage or inadequacy of physical infrastructure). Perhaps unsurprisingly, among teachers, the spending priorities considered to be of highest importance relate to human resources: the three most commonly cited were increasing teacher recruitment to reduce class sizes, increasing teacher salaries and offering high-quality professional development for teachers (OECD, 2019[53]).

Although certain types of school (e.g. those located in rural areas or those with a higher proportion of disadvantaged students) appear more vulnerable to experiencing resource shortages, careful policy decisions can help to mitigate this. Previous OECD analysis has demonstrated that principals of schools serving more disadvantaged students are more likely to report perceived human and material shortages than their counterparts in schools with a high proportion of advantaged students (OECD, 2013[54]). However, despite this proven correspondence, there are exceptions. For example, according to evidence from TALIS 2018, experiences across education systems vary considerably; certain countries, such as Chile and the United States, appear to have successfully limited perceived teacher and material resource shortages, despite having a higher share of schools with a large proportion of disadvantaged students (Figure 5.9).

Figure 5.9. School composition and resource shortages, according to lower secondary principals, 2018



Source: OECD (2019[53]), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/1d0bc92a-en.

StatLink http://dx.doi.org/10.1787/888933997531

In other cases, there is a marked difference in the equitability of distribution between material and human resources. For example, although France and the United Kingdom (England) appear to have minimised perceived shortages of library materials, shortages of teachers remain high. For a much smaller group of countries, including Mexico, the inverse is true. Therefore, policy makers must successfully match resources to need and where there is pressure on resources, decisions should be informed by factors relating to both economic and educational efficiency. Disadvantaged students, for example, who are less likely to have access to books and other library materials outside school, may experience a more positive impact from having these materials provided in the school setting than their more advantaged peers.

Policy priorities

Improving equity in resource allocation

A common policy priority related to education funding and shared by several education systems relates to improving equity in resource allocation. This includes both horizontal

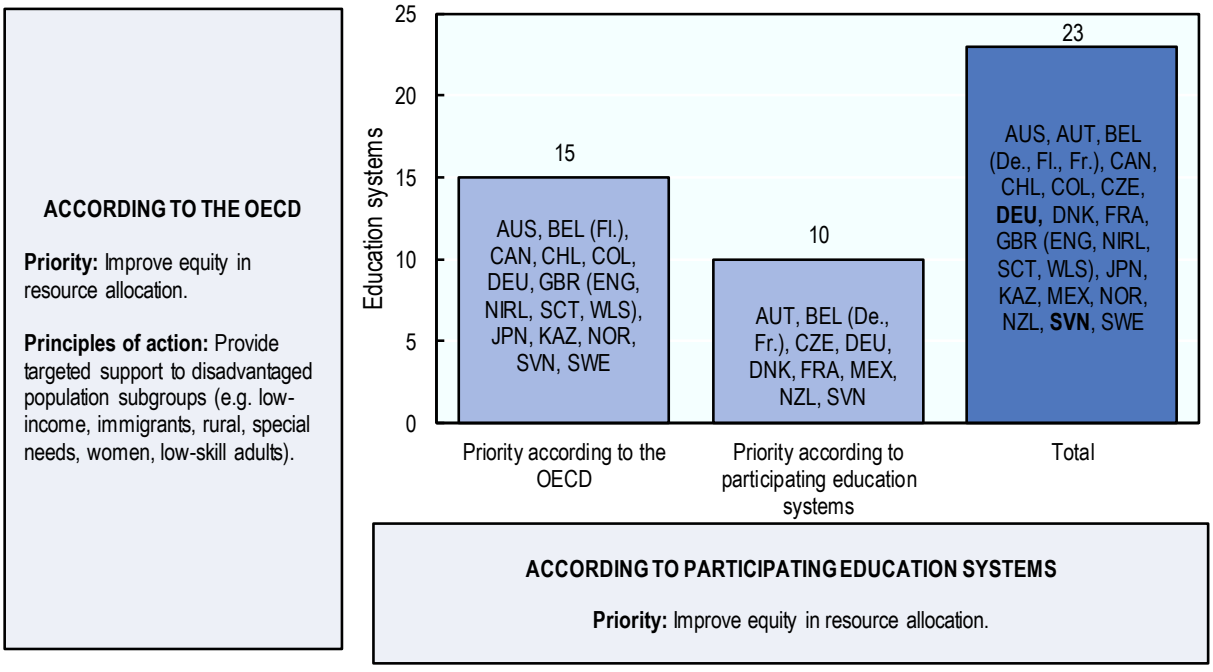
equity (allocating similar levels of resources to similar types of provision) and vertical equity (allocating different levels of resources to student groups with different needs) (OECD, 2017[1]). Between 2008 and 2019, this policy priority was identified in at least 23 education systems, either by the OECD in previous country-based work (15 education systems), by participating education systems (10 education systems), or both (2 education systems) (Figure 5.10).

The OECD identified this as a policy priority for at least 15 education systems between 2015 and 2019, including Australia, Japan and Norway. In supporting education systems to tackle this policy priority, general principles of action identified by the OECD include providing targeted support to disadvantaged population sub-groups, including students with socio-economically disadvantaged or immigrant backgrounds, students living in rural areas, students with special needs or at risk of dropout, female students and adults with low skills.

For Canada, for example, the OECD identified the need to invest in indigenous students to improve their participation rates in early childhood education (OECD, 2017[55]). In Colombia, the OECD identified the need to increase enrolment and completion rates at the upper secondary level among socio-economically disadvantaged students and recommended measures to improve equity in resource allocation. This included more locally responsive and flexible allocation of resources that prioritise rural areas and less-developed departments and municipalities (OECD, 2016[19]). In Kazakhstan, the OECD recommended targeting funding to specifically help students at risk of failure when transferring from higher education to the labour market, by improving guidance and support (OECD, 2017[56]).

Some ten education systems reported improving equity in resource allocation as a policy priority. For five of these education systems (Austria, Denmark, Mexico, Czech Republic and Slovenia), this emerged as a priority more recently having first been reported between 2015 and 2019. For other education systems, including Belgium (German-speaking Community), France and New Zealand, it was first reported as a priority in 2008-14. Since 2009, the French Community of Belgium has been targeting resources to schools of lower socio-economic status using a differentiated staffing system. Austria has been using gender budgeting since 2013 to reach various performance targets associated with guaranteeing the equality of educational opportunities between women and men.

Figure 5.10. Improving equity in resource allocation

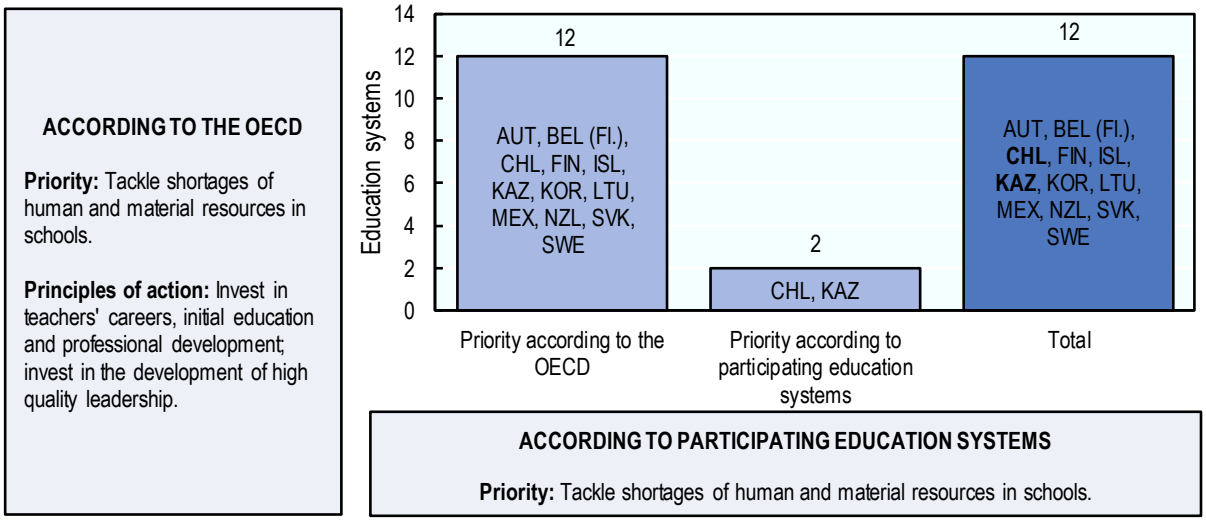


Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

Tackling shortages of human and material resources in schools

For several education systems, tackling shortages of human and material resources in schools is an important policy concern. This requires short-term relief, as well as accurate identification of causes, scope and expected duration and strategic foresight to foster long-term solutions (OECD, 2018[57]). Between 2008 and 2019, this policy priority was identified in at least 12 education systems, either by the OECD in previous country-based work (12 education systems), by participating education systems (2 education systems), or both (2 education systems) (Figure 5.11).

Figure 5.11. Tackling shortages of human and material resources in schools



Notes:
1. **Priority according to the OECD:** See Annex A (OECD publications consulted) and Reader's Guide (years covered).
2. **Principles of action:** Component of a recommendation that draws from international evidence produced on a specific topic, either by the OECD or externally.
3. **Priority according to participating education system:** Based on responses to Education Policy Outlook (EPO) Surveys 2013 and 2016-17, although responses for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden are based on the EPO Country Profiles published during 2017 and 2018. Responses given during the validation processes for all education systems in 2019 are also included (see the Reader's Guide).
4. **Comparing previous OECD analysis and country responses:** Education systems highlighted **in bold** are those where the policy priority was identified by both the OECD and the education system.

The OECD has identified tackling shortages in human and material resources in schools as a policy priority for at least 12 participating education systems since 2008. For 8 of these education systems, including Austria, Kazakhstan, Lithuania and Sweden, the OECD identified this as a policy priority between 2015 and 2019. For the remaining 4 education systems (Finland, Iceland. Korea and the Slovak Republic), the OECD identified this policy priority in 2008-14.

The OECD has identified the following general principles of action to support education systems in tackling shortages of human and material resources in schools: invest in teachers' career pathways, initial teacher education and professional development to increase the impact of teaching on student outcomes; and invest in the development of high-quality school leadership.

In Chile, the OECD recommended strengthening the teaching profession and promoting teaching as an attractive career path to raise the status of the profession and ensure that all children have good teachers (OECD, 2017[58]). Iceland is an example of an education system for which the OECD identified the need to invest in school principals, specifically through training programmes in pedagogical leadership that support leaders to collaborate within informal school clusters (OECD, 2012[59]). In Korea, for example, concerning ECEC, the OECD recommended revising initial teacher education and providing demand-driven teacher training covering a wide range of skills, such as communication with

parents, orientation of curricular content and materials and child-centred teaching and care strategies (Taguma et al., 2012[60]).

Figure 5.11 also shows that only two education systems, Chile and Kazakhstan, reported tackling shortages of human and material resources as a policy priority. Kazakhstan reported this priority in 2015-19 whereas Chile reported it between 2008 and 2014. For Chile, the specific focus has been on material resources Its Strategic Plan for School Infrastructure (2014-18) has seen an estimated investment of over USD 500 million (EUR 438 million) to upgrade infrastructure standards of pre-primary, primary and secondary education schools.

Policy trends

There has been significant policy work across participating education systems from 2008-19 regarding the use of resources in education (Table 5.3). Work in this area can be usefully divided into two main trends. The first group of policy reforms and initiatives relate to targeted support for population sub-groups, predominantly socio-economically disadvantaged students, but also students from linguistic minorities or indigenous or immigrant backgrounds and students with special needs, among others. The second group refers to investments aimed at extending learning time and improving the human and material resources available to students and educational institutions.

Table 5.3. Policies regarding using resources in education systems, 2008-19

Use of resources	
Targeted support to population sub-groups	**Time, human and material resources**
Recent (Implemented between 2015 and 2019)	
Australia: Recurrent Funding Model for Schools (2018)	**Belgium (Fl.)**: School Building Masterplan (2015) **[*]**
Belgium (Fl.): Additional funding to centres of adult education and basic education according to learner profiles (2019)	**Belgium (Fl.)**: Monitoring mechanism for infrastructural capacity (2015)
Belgium(Fl.): M-Decree (2015, amendment in 2017)	**Germany**: Innovative University (2016-27)
France: New secondary school scholarship scheme (2016)	**Ireland**: School Building Programme (2016-21)
Latvia: Revised model for school funding that allocates additional funds for students with special needs (2016); additional developments took place in 2018	**Kazakhstan**: New funding model (2018)
Portugal: Schools Participatory Budget (2016)	**Latvia**: Teacher remuneration scheme (2016) **[*]**
Sweden: Investment in education to lower inequality and improve the academic outcomes of all students (2017)	**Mexico**: Fund for Education and Payroll Operating Expenses (2015)
	Slovak Republic: Value for Money initiative (2017)
Still in place (Implemented between 2008 and 2014)	
Austria: Gender Budgeting (2013)	**Australia**: National Partnership on Improving Teacher Quality (2009-13)
France: Priority Education Plan (2014); reducing class sizes (2018) **[*]**	**Belgium (Fr.)**: ICT school equipment (2011)
Germany: Advancement through Education: Open Universities (2011)	**Chile**: Strategic Plan for School Infrastructure (2014-18)
Iceland: Education and Training Service Centre (ETSC) (2003)	**Chile**: Higher Education Information Service (SIES, 2007)
Ireland: Third-Level Bursary Scheme (2012)	**Germany**: Quality Initiative for Enhancing the Quality of Teacher Education (2013-23)
Slovenia: Kindergarten Act (2008, amended 2017) and the Exercise of Rights to Public Funds Act (2008), Childminding of Preschool Children Programme (2008, amended in 2012)	**Germany**: Pact for Research and Innovation of the federal government and the Länder (2005); renewed (2014)

Use of resources	
Targeted support to population sub-groups	**Time, human and material resources**
United Kingdom (England): School Funding Reform (2013) **[*]**	**Greece:** Mergers and consolidation of the school network (2011)
	Kazakhstan: National Report on the State and Development of the Education System (2006)

Notes:
1. All policies in this table are summarised in Chapter 8 of this report as *selected* education policies (with some evidence of progress or impact) or *additional* education policies of potential interest to other countries.
2. **[*]:** Policies included in the policy focus of this chapter.
3. See Annex B for information on policies reported previously for which no further details were available.
Source: EPO Surveys 2013 and 2016-17, EPO Country Profiles published for Austria, Belgium (Flemish, French and German-speaking Communities), Italy, Kazakhstan, Spain and Sweden (see the Reader's Guide), further policies reported by education systems during validation processes undertaken in 2019, as well as desk-based research by the OECD Secretariat (2018-19).

The evidence collected for this report on progress or impact shows that policies in this area are often implemented incrementally. For example, several countries, including France and Latvia, have been gradually increasing teacher salaries in recent years. Furthermore, the introduction of England's single national funding formula for schools has featured an interim period where funding is distributed to schools via the local authority's funding formula. This system, which postpones direct payments to schools until at least 2021/22, has enabled the reform to develop organically, as local authorities are increasingly opting to mirror the national formula anyway. This suggests that incremental implementation may be an effective way to encourage stakeholder buy-in.

Targeted support to population sub-groups

Many countries are using their resources to provide **targeted support** for socio-economically disadvantaged children and schools. Policies targeting disadvantaged schools, for example, generally focus on improving the quantity and quality of human resources available in those institutions. This is the case in France's Priority Education Plan (2014), for example, which also allocated more time for innovative practices. Other policies target disadvantaged students who demonstrate particularly high academic performance, for example, in Ireland's Third-Level Bursary Scheme (2012). Policies not only provide targeted support for socio-economically disadvantaged students, but also those with special educational needs or second-language needs, such as the Flemish Community of Belgium's M-Decree (2015), Latvia's revised model for school funding (2016) and Sweden's grants to municipalities for newly-arrived students (2017).

Policy focus

- Final implementation of **France**'s **Priority Education Plan** (2014) took place in 2017. According to the European Commission, the primary objective of the plan was to **reduce by 10% the differences in basic skills between students attending priority education schools and those attending schools outside priority education** (European Commission, 2015[61]). The 2014 plan focuses on three key aspects: 1) updating the map of priority networks; 2) providing additional support to improve student-learning; and 3) reforming teaching practices to include collaborative teaching (European Commission, 2015[61]). France's Minister of Education and Youth classified priority education schools into two groups: 1) schools with more students from mixed social backgrounds than in schools outside of priority education, categorised as REP (Réseaux d'éducation prioritaire);

and 2) schools in isolated neighbourhoods where the impact of social difficulties on school success is the highest, classified as REP+ (Réseaux d'éducation prioritaire renforcée) (Éduscol, 2018[62]).

Progress or impact: During 2018/19, some 1 093 schools had been identified according to the map of priority education in France: 731 middle schools with REP status, and 363 middle schools with REP+ status (Éduscol, 2018[62]). France aimed to reduce class size by 50% in first and second grades in Priority Education Networks (REP) and Enhanced Priority Education Networks (REP+), and the goal was reached at the start of the school year 2018/19. In total, nearly 190 000 first and second-grade students in REP and REP+ were in classes of about 12 students (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[63]).

The European Commission reported in 2017 that overall, between 2013 and 2017, some 54 000 additional teaching posts were created across primary and secondary education, and teachers in priority education were allocated extra time for collaborative teaching. France's initial 2017 budget included EUR 814 million to increase teachers' salaries between 2017 and 2020 to improve the attractiveness of the profession, in particular in priority education. Although the government later reduced this amount, it did announce plans to open 9 000 new teaching positions the same year in pre-schools and schools, particularly in priority education (European Commission, 2017[64]).

Additional evidence from the European Commission indicates that public funding for school education in 2018 increased by 2.6 percentage points compared to 2017. The government expects this will help raise teachers' salaries in schools classified as REP. As of the school year 2018/19, teachers assigned to REP+ received a salary increase of EUR 1 000 net per year (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[63]). The overall goal is to gradually increase the remuneration of staff assigned to REP+ schools and colleges until 2020 (National information reported to the OECD). However, while some teachers may benefit from increased salaries, gaps remain in teaching resources across different types of schools and regions in France (European Commission, 2018[65]).

At the beginning of 2019, the first results of the duplication of preparatory classes in REP+ areas were published, showing overall positive results (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[66]). The results showed that compared to a non-treatment group with similar socio-economic profile, there had been a significant decrease in students with great difficulties by 7.8% in French and 12.5% in mathematics (60 000 students have benefited from the measure in the school year 2017/18).

- **England** has undertaken **several reforms of school funding** in recent years. The School Funding Reform (2013-14) (DfE, 2013[67]) aimed to simplify the funding system in primary and secondary schools and make it more student driven to ensure that resources reach the schools and students who need it most (DfE, 2012[68]). The reform established three blocks of funding to be allocated from the Dedicated Schools Grant (DSG): Early Years Block, Schools Block and High Needs Block

(DfE, 2013[67]). Local education authorities, in consultation with their schools' forum, decide on the funding distribution between the blocks and set formulas for allocation to each school and early years provider (European Commission, 2017[69]). As such, by 2016, there existed 152 different formulae to determine funding allocation throughout the country. This, and the fact that funding allocated to local authorities was often based on historic characteristics, resulted in significant inter- and intra-regional variation in school funding. The system also lacked transparency. As a result, a major reform was proposed, establishing one single national funding formula (NFF) based on measures of student and school characteristics with a small provision for local variation (DfE, 2016[70]). Public consultations on the proposal took place during 2016-17.

Progress or impact: The DfE reported 25 222 submitted responses to the consultation process, most coming from parents (66%), followed by governors (9%), teachers (7%) and school leaders (7%). Many responses highlighted common themes such as calls to increase basic per-student funding, a need to balance fairness and stability to ensure schools do not lose funding, and the importance of supporting low-funded schools (DfE, 2017[71]). Following the consultations, the government introduced a new national funding formula (NFF) (2017) based on 14 factors across 4 key themes: basic per-student funding, additional school needs, school-led funding, and geographic funding. This was introduced, in the academic year 2018/19.

Although the DfE originally intended for the NFF to be allocated directly to schools, an adapted model that offers local flexibility by going through local authorities remains in place until at least 2021/22. This system sees schools' funding calculated centrally using the NFF, then distributed to local authorities who allocate funding to schools by setting a local formula that follows government guidelines. To support transparency, DfE publishes illustrative school-level allocations and schools, and local authorities have access to the underlying data with which their allocation is calculated (National information reported to the OECD).

Up to 73 out of 152 local authorities have made efforts to better align their funding models to the NFF, and the DfE has identified 41 local authorities who are now using funding settlements that are mirroring the national funding formula factor values almost exactly (DfE, 2018[72]).

As well as revising funding formulae, the government has committed to investing an additional GBP 1.3 billion for schools funding and high needs funding, across the two financial years 2018/19 and 2019/20. This increase has supported the government to raise the funding floor so that schools receive at least a 1% cash increase per student by 2019-20, compared to 2017-18 (DfE, 2017[71]).

Time, human and material resources

Other funding policies are prioritising effective **investment in time, human and material resources**. In terms of time, education systems are providing resources for extending instructional time to a full day, for example in Austria's All-day schools, Mexico's Full

Day Schooling, and in Germany's Future of Education and Care programme. Regarding human resources, some new funding policies are rewarding the additional workload of teachers outside normal instruction hours. This is the case in Latvia's Teacher Remuneration scheme (2016). Other policies are focused on improving transparency in the allocation of funding for teachers' salaries, as seen in Mexico's Fund for Education and Payroll Operating Expenses (2015). As for material resources, two key policy trends are investment in better information and communication technology (ICT) infrastructure and equipment for schools and improving the general school infrastructure through maintenance or construction programmes. Strengthening ICT facilities is the focus of a school investment programme in the French Community of Belgium (2011); and infrastructure is the focus of Chile's Strategic Plan for School Infrastructure (2014-18) and Ireland's School Building Programme (2016-21).

Policy focus

- The **School Building Masterplan** (2015) is the **Flemish Community**'s **first integrated and comprehensive plan tackling the issue of school infrastructure**. It responds to growing pressure placed on the system by demographic changes, wear and tear and the demands of 21st-century learning. The plan has five strategic objectives: 1) renewing existing educational infrastructure; 2) expanding educational capacity; 3) tapping into alternative sources of financing; 4) developing school buildings of the future; and 5) improving long-term planning and management of school infrastructure (Ministry of Education, 2015[73]). A key project in the implementation of the plan has been the launch of a second and completely revised cycle of the Design, Build, Fund, Maintain initiative (DBFM, 2006 and 2016), which sees the development of public-private partnerships for the building of new schools. Through this model, a DBFM corporation takes on the 30-year ownership, maintenance and financing of school infrastructure expansion. Via government subsidies (around 80%) and the school governing body, the corporation receives performance-related availability funding. At the end of the 30 years, ownership transfers to the school governing body (Eurydice, 2019[74]).

Progress or impact: Schools of Tomorrow (Scholen Van Morgen, 2009), the collective name for the first round of the Design, Build, Fund, Maintain (DBFM) projects, is a partnership between the Government of Flanders, BNP Paribas Fortis and AG Real Estate. Schools of Tomorrow is scheduled to reach completion in 2022 when it will have delivered up to around 200 new school buildings through an investment programme totalling EUR 1.5 billion. So far, 159 school infrastructure projects have been completed, accommodating over 115 000 students; 6 more are in the construction phase. Following a reduction in the VAT (value-added tax) rate on school construction (2016), 17 new DBFM projects were added to the initial Schools of Tomorrow programme; these are currently in the design phase (Schools of Tomorrow, 2019[75]).

However, according to forecasts from the Federal Planning Bureau, the demographic pressure on the school system is set to increase in the medium and long terms, with significant implications for the secondary sector up to 2025, and again from 2035, and for the primary sector from 2026 onwards (National information reported to the OECD).

Accordingly, there has been a reaffirmation of the need for alternative financing models in school construction and renovation and a subsequent commitment to further DBFM operations, approved by decree in 2016. The government's second call for DBFM submissions (2016) incorporates learning from the experience of Schools for Tomorrow and as such focuses on creating smaller, simpler and more project-specific operations with greater involvement from the school boards.

To provide additional support and manage applications, a project office was set up with the Agency for School Investment (AGION), SchoolInvest nv, and representatives from the school network. The Flemish Community has also made efforts to streamline and standardise administrative procedures to reduce transaction costs (Ministry of Education, 2015[73]).

The second call for DBFM projects was launched in 2017, and 52 school building projects were approved, with a total investment commitment of EUR 600 million (AGION, 2018[76]). In search of sustainable solutions to reduce pressure on the infrastructure, in 2019, the government also encouraged infrastructure master planning at the school level, which is aligned with local authorities' visions. To this end, Go!, the principal education provider for the Flemish Community, set up an operational infrastructure database to monitor the quality and quantity of the current infrastructure (National information reported to the OECD).

- In **Latvia**, the **government approved a revised teacher remuneration scheme** (2016) for pre-primary, primary, lower secondary and upper secondary education (Cabinet of Ministers, 2016[77]). This scheme is part of a new funding model that aims to recognise the additional workload of teachers outside instruction hours. It is based on a 30-hour work-week schedule in contrast to the previous model, which was based on a 21-hour teaching workload (OECD, 2017[48]). The new remuneration scheme also introduced a 13.3% increase in teachers' minimum statutory salaries from EUR 420 per month in 2013 to EUR 710 per month in 2018. This led to an initial increase of EUR 9 million in the central budget for teachers' salaries in 2016. The government has also maintained quality-related bonuses linked to teachers' performance, and school principals can provide extra salary bonuses (European Commission, 2016[78]; Government of Latvia, 2016[79]). Going forward, the issue of teacher salaries will be evaluated within the budget-planning process (European Commisssion, 2017[80]).

Progress or impact: Teachers' remuneration has always been a sensitive topic in Latvia and generally attracts significant public attention. Therefore, the government actively involved all relevant stakeholders in the consultation process, ensuring in-depth discussions (National information reported to the OECD). In 2018, the Cabinet of Ministers approved the plan to increase teachers' salaries. The government announced a schedule of increases for 2018-22 by the end of which the minimum monthly salary is set to have reached EUR 900. Accordingly, the government has scheduled additional budget investments of EUR 26.9 million in 2019, EUR 51.5 million in 2020, EUR 81.3 million in 2021 and

EUR 111.1 million in 2022 (National information reported to the OECD). However, as student numbers decrease, maintaining investment in high-quality teaching is increasingly challenging, as a disproportionate share of resources is dedicated to maintaining the extensive school network as opposed to enhancing teaching and learning (European Commission, 2019[81]). Improvements to the structure of the school network in order to better adapt to demographic changes are therefore crucial to overall policy success in Latvia's education system (European Commisssion, 2017[80]). Latvia's former school funding model, where money follows the student, has remained in place under the new remuneration scheme despite having previously caused teacher salaries to diverge greatly (European Commission, 2016[78]). Additionally, municipalities can still opt to assign top-ups to teachers' salaries, which can create similar challenges in consistency (European Commission, 2016[78]).

Notes

1. Current expenditure refers to spending on goods and services consumed within the current year and requiring recurrent production in order to sustain educational services. From primary to tertiary education, 92% of the spending of educational institutions is devoted to current expenditure, on average across OECD countries in 2015. Current expenditure is different from capital expenditure, which refers to spending on assets that last longer than one year, including construction, renovation or major repair of buildings, and new or replacement equipment. From primary to tertiary education, 8% of the spending of educational institutions is devoted to capital expenditure, on average across OECD countries in 2015. For more information, see (OECD, 2018[6]).

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Chapter 6. Implementing education policies: Supporting school improvement in Norway and the United Kingdom (Wales)

This chapter presents recent research that has shaped an analytical framework on effective education policy implementation. Following an introduction presenting this framework, it presents two case studies of education systems to which the OECD has provided tailored support: Norway and the United Kingdom (Wales).

The importance of education policy implementation

Policy reforms do not always translate into concrete actions and visible results in schools, however well designed they may be. Failure to produce the desired policy outcomes may come from the gap between the keen attention given to the policy while it is being designed and a lack of attention when it comes to implementing it, as well as resistance against the reforms or lack of capacity to put them in place, among other reasons. Not implementing proposed education policies may result in expectations for education improvement failing to live up to reality, not to mention the erosion of trust in governments, and wasted public resources.

The chapters in this report have presented a selection of education policy priorities and trends across 43 education systems between 2008 and 2019. Through *ex post* policy reform analysis, these chapters presented, when possible, available evidence of the factors that facilitated or hindered the reforms' success in their specific contexts, and according to their objectives.

Indeed, education reforms and policy initiatives involve highly complex processes, which can often fail to translate into concrete actions and visible results in schools. With high investments and high expectations, policies that do not reach schools or contribute to improving education jeopardise public resources, risk eroding public confidence in their government's effectiveness and may create reform fatigue among stakeholders.

Some of the factors that can prevent policies from reaching schools include piecemeal policy making; weak capacity and insufficient support; lack of engagement from key actors; and poor policy alignment. These weakening factors often become visible during what is commonly called the "implementation phase" of an education policy, even if most of them originate from broader policy issues.

The definition of education policy implementation varies from one policy maker to the next, depending on his/her approach to policy making and understanding of the policy cycle. Based on a literature review and experience of OECD work with countries in this area, effective education policy implementation refers to the process that aims to translate specific policy objectives into concrete education changes (Viennet and Pont, 2017[1]).

Policy makers can tackle most implementation challenges by adopting a strategic, vision-led approach to education policy implementation and policy making in general. Strategic policy making implies considering implementation issues early in the elaboration of a policy to inform its design, engaging key stakeholders, and building on the policy's context. It also involves adapting the implementation strategy throughout the process to stay in line with the policy vision.

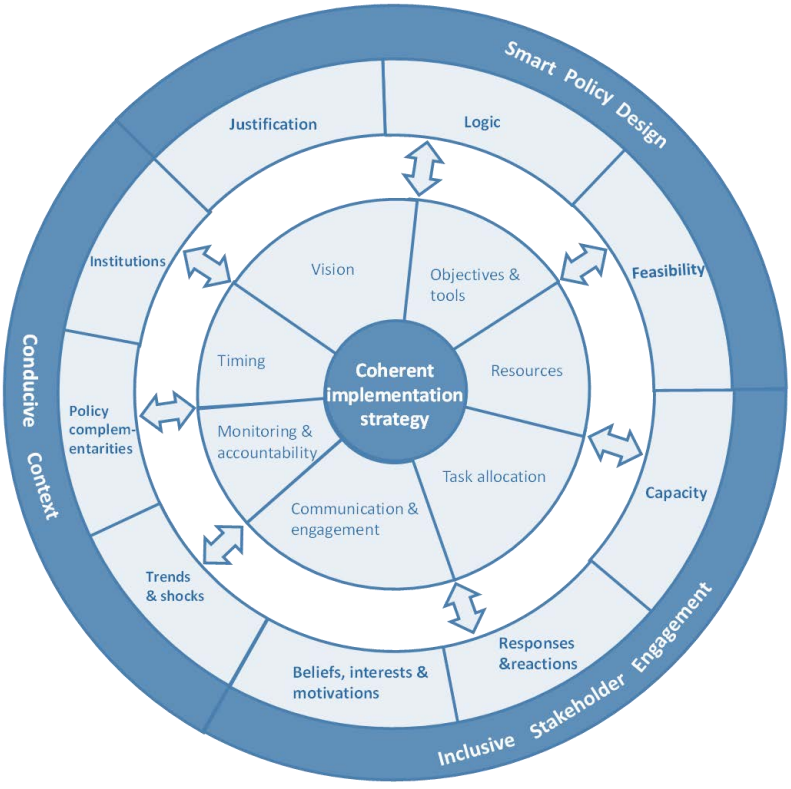
Building on this perspective, the OECD developed a framework to analyse education policy implementation and help countries enhance their processes. The framework (Figure 6.1) categorises the factors of effective implementation by four dimensions that can contribute to bringing effective change in schools:

1. **Smart policy design**: To be "smart", a policy must be justified, logical, feasible and adapted to the context. If a policy is perceived as legitimate by a wide number of actors, if it offers a logical and feasible solution to the educational issue at stake, it is more likely to be implemented.
2. **Inclusive stakeholder engagement**: A policy can only be implemented effectively if key stakeholders are actively engaged throughout the process. It is crucial to

identify their vision of education and their interests, the relationships they have with other stakeholders, and to acknowledge how they can contribute to (or oppose) setting up the policy. To guarantee coherent implementation, policy makers must secure support for the policy, clarify the role of each actor, and regularly engage with all stakeholders.

3. **A conducive context**: An effective policy implementation process is adapted to the political, socio-economic and institutional environment that surrounds the education system. It recognises the existing policy environment and takes advantage of policy complementarities. As much as possible, it comes up with measures that are aligned with the existing educational governance and institutional settings. The process should also take into account what is happening in politics, in the economy and in society in general, as these factors can have a strong influence on how the policy unfolds on the ground.
4. **A coherent implementation strategy**: The strategy outlines concrete measures to address all the determinants in a coherent manner to make the policy operational at the school level. A coherent strategy is essential to structure the implementation process properly and to guarantee that the policy impacts educational practices on the ground. It is a central tool for policy makers to co-ordinate the process, and it must be flexible enough to take into account variations in the context and among the key stakeholders.

Figure 6.1. An analytical framework for effective education policy implementation



Source: Updated from Viennet, R. and B. Pont (2017[1]), "Education policy implementation: A literature review and proposed framework", *OECD Education Working Papers*, No. 162, OECD Publishing, Paris, http://dx.doi.org/10.1787/fc467a64-en.

Given the need to increasingly focus on implementation for success in education policy, a new OECD Implementing Education Policies project has been supporting education systems in their efforts, offering peer-learning opportunities and tailored support. This consists of three complementary strands: a policy assessment to take stock of reforms, policies and change strategies; strategic advice to support the policy leaders and main actors of implementation; and implementation seminars to bring together key stakeholders, for them to discuss, engage and shape the development of education policies and implementation strategies (OECD, 2019[2]).

This chapter presents two case studies drawn from OECD collaboration with the Norwegian Government, and the Welsh Government in the United Kingdom. Implementation is dynamic, and as such, the assessment and recommendations provided for each case study are valid for the timeframe when the assessments were conducted: 2018-19 for Norway, and 2016-17 for Wales (United Kingdom).

Norway: Implementing a new competence development model

Norway introduced a new competence development model for schools in which national funding for collaborative, continuous professional development is based on school and local analysis of needs, and decision making in networks (White Paper No. 21, "Desire to learn: Early intervention and quality in schools", 2017).

This case study reviews the implementation of the competence development model in terms of its design, stakeholder engagement, whole-of-system approach, and the coherence of its implementation strategy. It builds on the collaboration between Norway and the OECD Implementing Education Policies and Strategic Education Governance teams, which has included country visits, stakeholder events and exchanges with a Reference Group to provide implementation support for the model since 2018. The detail of the analysis and recommendations can be found in *Improving School Quality in Norway: The New Competence Development Model* (OECD, 2019[3]).

Policy background

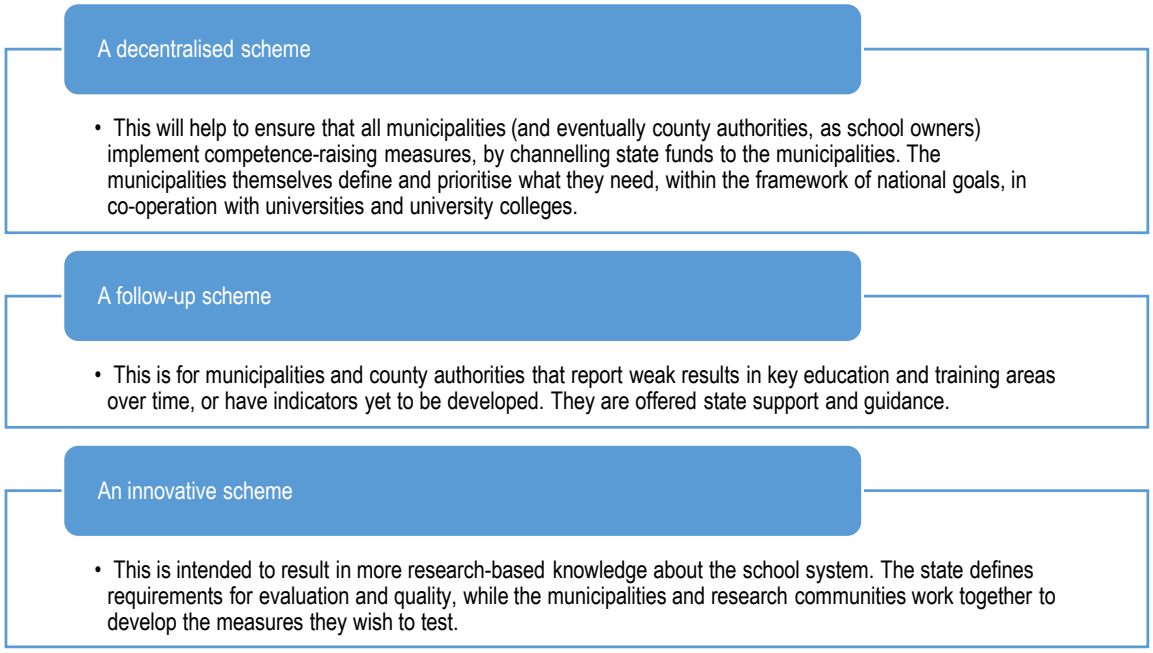
The new Norwegian competence development model for schools (Government of Norway, 2017[4]) complements individual professional development, and aims to establish a sustainable approach for school improvement that responds to local contexts and the diversity of needs among Norwegian schools. The new model relies on three complementary pillars that cater to any school's needs: a decentralised scheme; a follow-up scheme; and an innovative scheme (Figure 6.2).

To benefit from national funding through the decentralised scheme, school owners have to contribute 30% of the grant to ensure that funds from national, municipal and county authorities contribute to the same end. The two other schemes are designed to ensure that the system is responsive to all schools, and caters to equity.

This policy adopts a new implementation approach: municipalities are encouraged to participate in collaboration forums and jointly agree on how the public funds will be used, and what measures will be prioritised. While designed from the centre, the model ultimately aims to empower those at the school level to change their practices and deliver better education through training and collaborative work, in partnership with universities at the local level. This implies a structural shift of responsibilities from the Directorate for Education and Training at the national level to county governors and municipalities, and

requires a careful process of ownership and allocation of responsibilities by different key players.

Figure 6.2. The three pillars of the Norwegian competence development model for schools



Source: Based on Government of Norway (2017[4]), "Desire to learn: Early intervention and quality in schools", *White Paper No. 21*, Government of Norway, Oslo.

However, if the policy is not realised in full, this will likely result in no change to the current situation, at best, or an increase in inequalities, at worst. This implies either a waste of public resources, or unintended consequences.

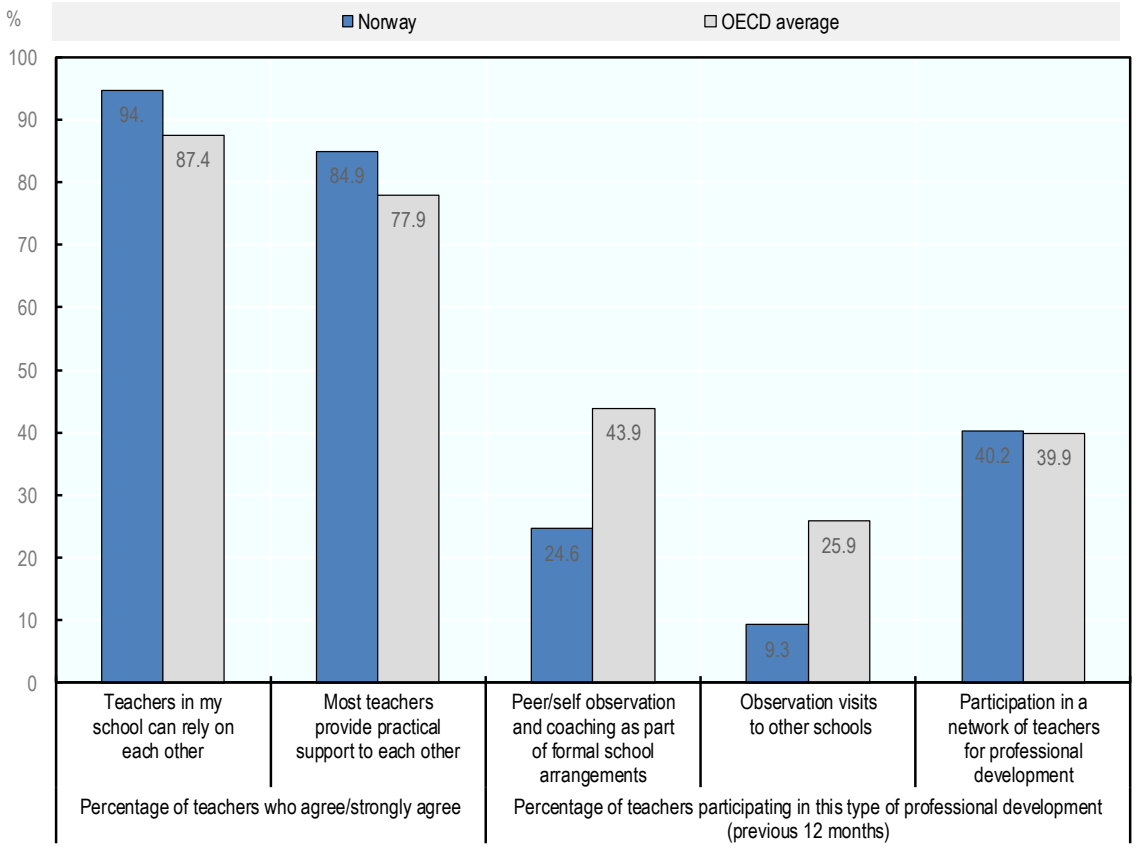
As the new competence development model ambitiously aims to change the roles of many different actors, it requires a careful implementation strategy for all stakeholders to achieve the expected objectives. Some elements have been already disseminated in the White Paper (Government of Norway, 2017[4]), but overall, the implementation strategy is loosely developed with the engagement of stakeholders, who are expected to shape it along the way, and using the room for county and regional adaptation that is deliberately built-in.

Refining the policy design

The new model is designed to develop collaborative professionalism between teachers, and better reflect local needs in terms of continuous professional development. In the OECD's Teaching and Learning International Survey (TALIS) 2013, while teachers in Norway reported higher than average levels of co-operation in schools, they participated less than average in collaborative professional learning (OECD, 2014[5]). Evidence from the following TALIS cycle, in 2018, suggests this discrepancy has persisted: although Norwegian teachers more commonly reported a collaborative culture among teachers in their school, they took part considerably less frequently in certain forms of collaborative professional development approaches, such as peer observation, according to their reports. Although they appear to participate in professional development networks at a similar rate to teachers on average across the OECD, less than half of Norwegian teachers reported

experiencing this type of collaborative learning (Figure 6.4). The OECD considers that this gives the new competence development model room to improve the situation, under the condition that network collaboration and partnerships with the many different players effectively reflect teachers' needs for competence development.

Figure 6.3. Teacher co-operation among lower secondary teachers in Norway, 2018



Source: OECD (2019[6]), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris https://doi.org/10.1787/1d0bc92a-en.

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Teachers in lower secondary education in Norway reported lower participation in professional development and lower satisfaction with their experiences than the OECD averages (OECD, 2019[6]). According to Norway, identifying priorities at the school level through the new model can increase the relevance of professional development delivered by universities. The OECD team noted the importance to link school evaluation with development processes for the new model to support adequately teachers' continuous professional development.

The OECD team also highlighted that the success of the model will rely on many education stakeholders adopting new practices. For instance, teachers and school leaders are expected to recognise their capacity development needs and translate them to the model, and municipalities to take ownership of school improvement. This implies improving professional development at numerous system levels.

Other critical success factors suggested by the OECD included ensuring that stakeholders engage and shape the overall vision, play their agreed role, and collaborate according to the new scheme. Otherwise, there are high risks that the model will not have the intended effect. Participants in a stakeholder seminar for the project pointed to the complexity of the model. Some asked for examples of good practice, shared information, and priority-setting processes.

The OECD considered that for the policy design to have an impact, the new model has to be strategically prioritised, and a vision needs to be developed. Clear incentives should be communicated to the different stakeholders, and a systematic assessment and monitoring of the implementation and realisation of objectives should be established.

Promoting inclusive stakeholder engagement

In line with the tradition of stakeholder participation in Norwegian policy making (Directorate for Education and Training, 2015[7]), the Norwegian Ministry of Education and Research consulted a broad array of stakeholders while preparing the policy.

In the first stage of the implementation, the Directorate for Education and Training engaged key stakeholders, such as the county governors and the universities, while leaving room for counties to organise regional networks according to regional contexts and needs. During the OECD Norway Seminar, participants discussed the need to clarify the existing roles; to consider students' and parents' views when the school defines its priorities for competence development; and to clarify the decision-making process for selecting the training delivered by universities.

However, the OECD team noticed that stakeholder involvement at the national level was narrowed down as the model started to be implemented. It seemed that the Directorate was concentrating its efforts on what were perceived to be the essential stakeholders, while communication with teachers, school leaders and other stakeholders was more passive.

To strengthen the support and ownership of the stakeholders of the model, the OECD team recommended that the roles of the different stakeholders (especially of the government, counties, municipalities and representative organisations) have to be clarified and communicated clearly, while developing capacity at every level so key players can act as intended. The OECD also signalled that transparency about the available resources and their deployment should be integral to the communication strategy.

Shaping a conducive context

The OECD found that the competence development model for schools fits the Norwegian decentralised context. It recognises the highly complex policy environment in Norwegian education and supports political legitimacy and democratic values with its aim to boost local development processes. The model also builds on experience with municipal and school networks, but recognises the reality that capacities vary among different municipalities and schools. The model can be aligned with broader policies and strategies to develop the teaching profession and promote partnerships between schools and teacher education providers.

However, while the model is designed based on the knowledge of the current context, the OECD team considered the need to continuously gather feedback on how well key aspects of the model work in the varying contexts among municipalities and counties. If not adequately addressed, contextual factors may provide barriers to the longer-term success of the model (Table 6.1).

In particular, for the decentralised scheme, it will be critical to evaluate the effectiveness of regional partnerships, and to plan for university provision within the collaboration forum, both locally and nationally. For the follow-up scheme, it will be essential to gauge how well the support delivered by an Advisory Team reaches the municipalities in greatest need and meets their local school development needs.

Thus, the OECD found that the conditions for long-term planning require that universities broaden their offer to meet identified local priorities. A whole-of-system approach would help position the new model in relation to complementary policies and should be mainstreamed in collaboration forums. The responsiveness to schools and municipalities, with identified capacity, needs to be strengthened.

Table 6.1. Implementing the Norwegian competence development model for schools: Barriers and suggestions for addressing them

Main barriers	Suggestions for addressing the barriers
Competition between continuous professional development schemes, and lack of coherence	Strategic dialogue including all levels to ensure policy coherence
Lack of strategic planning capacity at the municipal level	Build strategic capacity at the municipal level (at least): • Major action: County governors raising this as a priority during the next collaboration forum. • Use current networks/capacity-building platforms (e.g. KS' seminars).
Lack of feedback on money use and change in the classroom	Integrate this to school and municipal quality development processes and establish new feedback mechanisms where necessary, e.g. classroom observations
Lack of shared understanding (language) among actors (e.g. owners vs. universities)	Develop a common language based on scientific terms to facilitate dialogue between school owners and universities

Source: Stakeholder seminar, Oslo, 18 October 2018.

Adapting the implementation strategy for impact

Analysing the implementation strategy and understanding how its components are developed and aligned coherently can help ensure that it will be effective over the long run. This can include a range of actions, such as defining actors' roles, allocating tasks, and setting a clear calendar and pace. Following widespread consultations and engagement with education stakeholders across Norway, the OECD team proposed concrete actions to enhance the implementation strategy of the competence development for schools and to improve its local anchoring:

- **Refine the objectives of the new model**: Set a clear vision and associated operational objectives with the involvement of all stakeholders, while clarifying the position of the new model compared to other professional development strategies and the new curriculum.
- **Review the policy tools and align them with the broader policy context**: Review incentives to maximise the take-up and impact of the new model, such as embedding the new model in the assessment framework. Communicate the expectation that the prioritisation of school-based competence development flows naturally from regular school evaluation and planning processes.
- **Clarify roles and responsibilities**: Clearly define task allocation and enhance transparency at every layer on the actions undertaken by the different stakeholders

as an accountability mechanism. Focus in the county forum on how to safeguard the full participation of municipalities with limited capacity.

- **Gather data for improvement**: Translate objectives into indicators to monitor the implementation process and the new model. Ensure that local data are fed back to the Directorate so it can help county governors and school owners, and monitor the take-up of the model. Publicly release information and data on inputs, processes, and outcomes of the model at the municipal, county, and national levels.
- **Design a communications and engagement plan**: Design a targeted communications strategy for the different stakeholders that aligns with the agreed role expectations. Organise feedback loops to encourage ownership of the model among the different stakeholders, and include information on accountability relationships, data and indicators to measure progress and information on the evaluation of the model in the communications strategy.
- **Secure financial and human resources**: Ensure long-term resources and consider linking the level of required co-funding requirements to the municipality level of deprivation. Encourage capacity development at every level by allocating sufficient time and funding resources to enable stakeholders to fully endorse their agreed roles in the new model.
- **Clarify expectations on timing and pace**: Within a central framework allowing county variation, each county governor needs to work with stakeholders to set objectives linked to the phasing in of the new model and offer a clear timeline to stakeholders.

United Kingdom (Wales): Developing schools as learning organisations

In 2011, Wales embarked on a large-scale school improvement reform that has become increasingly comprehensive and focused on the ongoing development and implementation of a new 21st-century school curriculum (Donaldson, 2015[8]). This case study analyses the implementation of the school as a learning organisation policy in Wales in terms of its design, approach to stakeholder engagement, its context and the coherence of its implementation strategy. The detail of the analysis and recommendations can be found in *Developing Schools as Learning Organisations in Wales* (OECD, 2018[9]).

Policy background

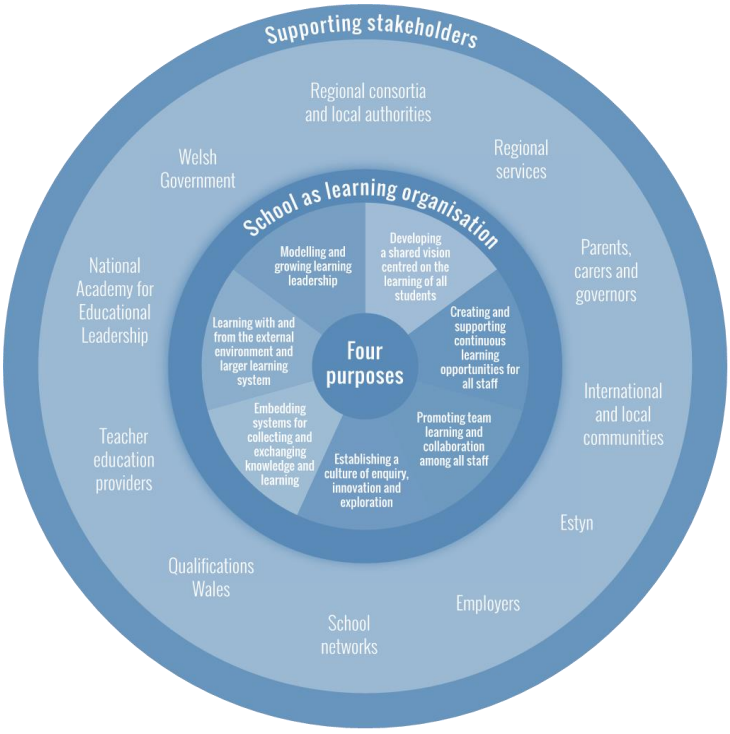
Wales has considered the development of schools as learning organisations (SLOs) a key means for realising the new curriculum (Government of Wales, 2019[10]; Government of Wales, 2017[11]). A SLO can change and adapt routinely to new environments and circumstances as its members, individually and together, learn their way to realising their vision. Collective working and learning, expanding skills and learning new ones by many teachers, teaching support staff, school leaders and others involved is believed essential for bringing Wales' new curriculum to life (Kools and Stoll, 2016[12]; Senge et al., 2012[13]; Giles and Hargreaves, 2006[14]).

The SLO model for Wales (Figure 6.4) aims to focus efforts from school leaders, teachers, support staff, parents, (local) policy makers and all others involved in realising its seven dimensions in schools. These seven action-oriented dimensions and their underlying elements highlight both what a school should aspire to and the processes it goes through as it transforms itself into a learning organisation.

The realisation of the "four purposes" of the new school curriculum is placed at the heart of the model. These refer to developing children and young people into "ambitious, capable and lifelong learners, enterprising and creative, informed citizens and healthy and confident individuals."

Wales' SLO model was designed through a process of co-construction with key stakeholders and was shaped through a series of workshops and meetings that were facilitated by the OECD between November 2016 and July 2017. The result of this collective effort is Wales' SLO model, released in November 2017 and implemented in schools across Wales since then. The OECD has been supporting Wales in this effort to help schools develop into learning organisations.

Figure 6.4. The schools as learning organisations model for the United Kingdom (Wales)



Source: (OECD, 2018[15]) *Developing Schools as Learning Organisations in Wales*, Implementing Education Policies, OECD Publishing, Paris. https://doi.org/10.1787/9789264307193-en.
Note: Estyn is the education and training inspectorate for Wales.

An OECD study revealed that in 2017, the majority of schools in Wales seemed on their way towards developing as learning organisations. However, a considerable proportion was still far from realising this objective: 42% of schools seemed to have put in practice four or less of the seven SLO dimensions, and 30% of schools reported the realisation of only two or fewer. The survey and other sources of information showed that schools were engaging unequally with the seven dimensions that make up Wales' SLO model. Two dimensions were less well developed: "developing a shared vision centred on the learning of all students" and "establishing a culture of enquiry, innovation and exploration". Many schools could also do more to "learn with and from the external environment and larger system."

The study also showed that secondary schools found it more challenging to develop as learning organisations and that more critical reflections were needed for deep learning and sustained progress to take place. High-stakes assessment, evaluation and accountability arrangements may have been a factor influencing people's willingness to critically reflect on their own behaviour, that of their peers and the school organisation at large (OECD, 2018[9]).

The study found that although Welsh schools need to be adequately supported to develop as learning organisations, many actions remain within their control. School leaders play a vital role in creating a trusting and respectful climate that allows for open discussions and sharing of knowledge. Teachers and learning support workers also need to do their part to work and learn with colleagues beyond their department, subject area or school.

At the system level, the OECD explored which policies enable or hinder schools' development as learning organisations, and which steps Wales could take to ensure effective implementation – or "realisation" as it is often referred to in Wales – of its SLO policy (OECD, 2018[9]). This section reviews the determinants of implementation: smart policy design, stakeholder engagement, a conducive context and an effective implementation strategy.

Refining the policy design

The OECD found that promoting a shared vision centred on learning and well-being of all students was key to realising the SLO model. The development of an inclusive and shared vision that promotes equity and well-being was central to the first dimension of Wales' SLO model. Set at the heart of the model, the realisation of the "four purposes" of the curriculum was also a strength of the reform effort. The evidence suggested Wales' SLO policy had been well received by the education profession. Its justification, logic and its place in the larger curriculum reform effort had started to be understood by parts of the education profession and other stakeholders in Wales, although there was more work to be done in this respect. Progress was also being made to strengthen the system infrastructure supporting schools in developing as learning organisations.

Three issues called for further attention, however: first, there was a need for better communication on the "why" and "how" of the SLO model. The OECD highlighted the importance of the Welsh government having developed an easy-to-understand narrative that explains how Wales' SLO model can guide schools in their development, forms an integrated part of the curriculum reform and relates to other policies. This narrative was to be shared widely through various means. The SLO model would be more likely to be implemented if accompanied by careful monitoring of the education budget and a review of the school funding model to ensure adequate funding for all schools to develop as learning organisations. What's more, the Welsh government was advised to continue strengthening the system support infrastructure.

Maintaining the inclusive engagement of stakeholders

According to evidence identified by the OECD, the process of co-construction which characterises the reform approach in Wales has played a pivotal role in ensuring strong ownership of policies and has helped bring about greater policy coherence. But despite the progress made, the OECD team identified several examples where there was scope for greater policy coherence. One such example was the ongoing development of the assessment, evaluation and accountability framework, which did not seem to be sufficiently connected to the work on the development of the curriculum. There was also a need to

better co-ordinate the ongoing work on the development of system-level key performance indicators with the development of the school self-evaluation and development planning toolkit. Failing to co-ordinate and align these strands of work may have resulted in a lack of coherence between the curriculum and the assessment, evaluation and accountability arrangements which in turn puts the whole curriculum reform effort at risk. The Welsh government and other stakeholders recognised the initial lack of coherence between the SLO policy and related policy areas, and started enhancing policy coherence, for example, by integrating the SLO model into leadership development programmes.

The OECD team also found significant differences in the extent and ways in which regional consortia had engaged with schools in their regions to disseminate the model and support them in putting it in practice. Therefore, continuing the work of the SLO Implementation Group may help ensure co-ordination and collaboration between the regional consortia and other stakeholders, to collectively look for the best ways to support schools in developing as learning organisations. Although room needed to be left for regional variance, one important step forward the OECD identified was the joint formulation of a national SLO implementation plan. It was also suggested that the Implementation Group should have a clearer role in supporting the Welsh government's efforts for greater policy coherence to realise the curriculum in schools throughout Wales. This included, for instance, co-ordinating and collaborating with those working on the establishment of a national professional learning model, the development of a school self-evaluation and development planning toolkit, and other related working groups.

To continue Wales' fruitful efforts to engage key stakeholders, the OECD recommended continuing to strengthen the capacity of the regional consortia to support schools developing as learning organisations. It was also advised that Estyn (the office of Her Majesty's Inspectorate for Education and Training in Wales) should monitor the progress of consortia in enhancing and streamlining their services to schools, and that the SLO Implementation Group be continued in support of the realisation of Wales' SLO policy, while striving for greater policy coherence.

Shaping a conducive context

In Wales, the institutional, policy and societal context has been conducive to large-scale education reform, and a wide range of stakeholders from all levels of the system have been engaged in shaping the process. The involvement of schools and other stakeholders in the development of Wales' SLO model supported its ownership by the education profession. This fertile ground for reform also contributed to schools' willingness to engage with Wales' SLO model.

Some contextual issues remained to be addressed, however. First, there was a need to expand the public dialogue generated by the Programme for International Student Assessment (PISA) results so as to align it with the ambitions of the new curriculum. Second, Wales had to ensure that its governance arrangements enabled all schools to develop as learning organisations, and that as such they responded to the learning and other needs of all its students.

Increasing alignment with and integration into other policies helped place the SLO on the agenda of regional consortia and Education Directorate governance bodies like the Change Board. In line with the vision that promotes equity and well-being, Wales' school system had expressed a strong commitment to equity and student well-being and had implemented various policies such as the Pupil Deprivation Grant and free school meals to target equity challenges in the school system. However, two policy issues called for further attention:

the school funding model and the lack of a common understanding of what student well-being entails.

In addition, promoting the development of professional capital and a thriving learning culture was also found as a key enabler for the SLO model. SLOs reflect a central focus on the professional learning of all staff, aimed at creating a sustainable learning culture in the organisation and other parts of the (learning) system. Wales had made good progress in several areas in recent years, including the promotion of school-to-school collaboration and the clarification of professional expectations through its teaching the need for:

- basing selection into initial teacher education on a mix of criteria and methods
- promoting strong collaboration between schools and teacher education institutions
- prioritising certain areas for professional learning in enquiry-based approaches to teaching and learning, strengthening inductions and promoting mentoring and coaching, observations and peer review
- developing a coherent leadership strategy to promote learning organisations across the system
- increasing support for secondary school leaders.

Another important enabler (or barrier) identified for schools developing as learning organisations were assessment, evaluation and accountability arrangements. Major improvements can be achieved when schools and school systems increase their collective capacity to engage in ongoing "assessment for learning", and regularly evaluate their interventions.

At the time of finalising this study of Wales' assessment, evaluation and accountability arrangements were currently undergoing review; this process is still ongoing in 2019. This review is essential, as these arrangements lacked coherence and were driven by accountability demands, rather than serving the purpose of learning and improvement. As a result, they did little to encourage schools to engage in enquiry, innovation and exploration and develop as SLOs more generally – a particular area for improvement for many schools in Wales.

The OECD suggested the Welsh government continue the review of its assessment, evaluation and accountability arrangements by:

- **Developing national criteria for guiding school self-evaluations and Estyn inspections/external evaluations**. These criteria or quality indicators should promote Wales' SLO model, monitor student learning and well-being across the curriculum, and recognise staff learning needs and their well-being in staff development plans. These and potentially other criteria should encourage schools to assess their own strengths and priorities for improvement.
- **Promoting a participatory self-evaluation process**. Peer reviews among schools should complement this process.
- **Using Estyn evaluations for safeguarding school quality**, while focusing more on the rigour of self-evaluation processes.
- **Providing clarity to schools and other stakeholders on the transition to the new system of school self-evaluation and Estyn evaluations**.

- **Refining performance measures to go beyond the key subjects of English/Welsh, mathematics and science** – also in the transition period. The Welsh government could consider performance measures (indicators) on student well-being and staff well-being to align assessment, evaluation and accountability with the ambitions of the new curriculum and Wales' SLO model. National monitoring of student learning and well-being should be informed by a rolling programme of sample-based assessments and Estyn reports, as well as research.

Developing a coherent implementation plan

At the time of finalising this study, work had started on the development of an SLO implementation plan intended to form an integrated part of a larger reform effort. Several activities had been undertaken already, were planned or were ongoing, that should be part of this plan:

- The objective to develop all schools and other parts of the system into learning organisations was included in the education strategic action plan, "Education in Wales: Our National Mission" (September 2017) (Government of Wales, 2017[11]).
- Wales' SLO model was co-constructed and released in November 2017.
- The SLO model was integrated into leadership development programmes (autumn 2018).
- The school self-evaluation and development planning toolkit was developed, in which the model is likely to be integrated (started in May 2018).
- An online SLO self-assessment survey will be free for school staff to use (scheduled to be launched in May 2019).
- In addition, the Welsh government's Education Directorate and several middle-tier organisations have committed themselves to develop as learning organisations.

The OECD provided several recommendations to strengthen the implementation of Wales' SLO model.

- **Developing and putting into practice a national SLO implementation plan**: The SLO Implementation Group should lead the development and realisation of a national SLO implementation plan to empower schools across Wales in developing as learning organisations.
- **Setting and monitoring objectives holistically to progress towards the vision**: Wales should ensure that the setting of objectives and monitoring of progress did not become a high-stakes exercise for schools. One option could be to regularly mine the anonymised data that will be collected through the online SLO self-assessment survey.
- **Prioritising the timing and sequencing of actions**: Phasing in actions allows efforts to be focused, bearing in mind schools' capacity to develop as learning organisations and to realise the new curriculum. One action requiring immediate attention is to clarify the transition period to new approaches to self-evaluation and Estyn evaluations.
- **Strengthening the communication and engagement strategy**: Wales should establish a clear communications and engagement strategy with all stakeholders so as to share the SLO narrative widely and guide and support schools in their development.

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Chapter 7. Success in hard times: Learning from effective union partnerships in education policy reform

This chapter was prepared by the Trade Union Advisory Committee to the OECD. It presents teacher unions' views on collaboration between themselves and governments. Drawing on three main sources of evidence, it aims to provide readers with an update of how governments and unions are collaborating in different areas of education improvement, drawing on the precedent of the 2015 report, Education Policy Outlook 2015: Making Reforms Happen. *It also aims to help readers identify examples of positive collaboration processes in education policy between governments and unions.*

This chapter discusses, among other things, that even though pay and conditions can be a contested area, there is more perceived progress among survey respondents in their collaboration with governments in the area of teachers' pay and conditions, and less perceived progress on teacher policies. Given the centrality of teacher policy to the profession, the chapter calls for greater coherence in these areas of policy. As part of its analysis, this chapter discusses achievements and possible new milestones of collaboration between governments and unions via the example of the International Summits of the Teaching Profession.

Introduction

The first comparative report of the Education Policy Outlook (EPO) (OECD, 2015[1]) contained a chapter by the OECD's Trade Union Advisory Committee (TUAC) on education union partnerships in policy reforms. It was based on a survey by Education International (EI) on behalf of TUAC (EI, 2013) of those unions representing teachers, which send representatives regularly to TUAC's Working Group on Education and Skills. The survey focussed on relationships between education unions and governments in negotiating and consulting on education reforms.

As the conclusion of the chapter noted, while the TUAC survey presented an encouraging picture of union involvement in most OECD countries according to member union reports, it perceived that there remained room for improvement concerning stabilising and institutionalising union-government dialogue. The chapter further noted that, according to TUAC's views, such arrangements needed to recognise the importance of pluralism, involving respect for agreement and disagreement since education systems were dependent on high-quality teachers and their role in implementing education reform. For this reason, the chapter concluded that TUAC considered it essential that teachers and their governments should be at the centre of policy development, practice and reform.

Five years on from TUAC's original survey, the OECD asked TUAC to explore whether perceptions on government/union relations have changed, by using a similar approach. In particular, TUAC was asked to provide examples of positive collaboration in education policy between governments and unions. This chapter presents these examples and explores the conditions needed for successful engagement, from the point of view of TUAC.

The evidence collected for this chapter comes from three primary sources. The first is a new survey carried out by Education International for TUAC of unions attending its Education and Skills Working Group entitled, "Success in Hard Times". The second draws from the outcomes of the International Summits of the Teaching Profession 2011-18. The third comes from a review of the summits carried out by Education International involving all EI-affiliated teacher unions that have attended one or more of the summits.

Success in Hard Times

"Success in Hard Times" is a survey conducted by Education International for the Trade Union Advisory Committee's Working Group for Education and Skills at the OECD (EI/TUAC, 2018[2]). It focused on examining the conditions for successful partnerships between unions involved in education and governments that deliver changes to education policies. It was carried out specifically for the OECD's Education Policy Outlook 2019. The survey explores the areas of educational policy that are most important to unions and examines possible joint union/government partnerships that may have delivered success. It also aims to look at the process of implementation followed by governments and the extent to which unions were able to shape progress towards policy objectives. The ability of unions to evaluate government policy was the final strand.

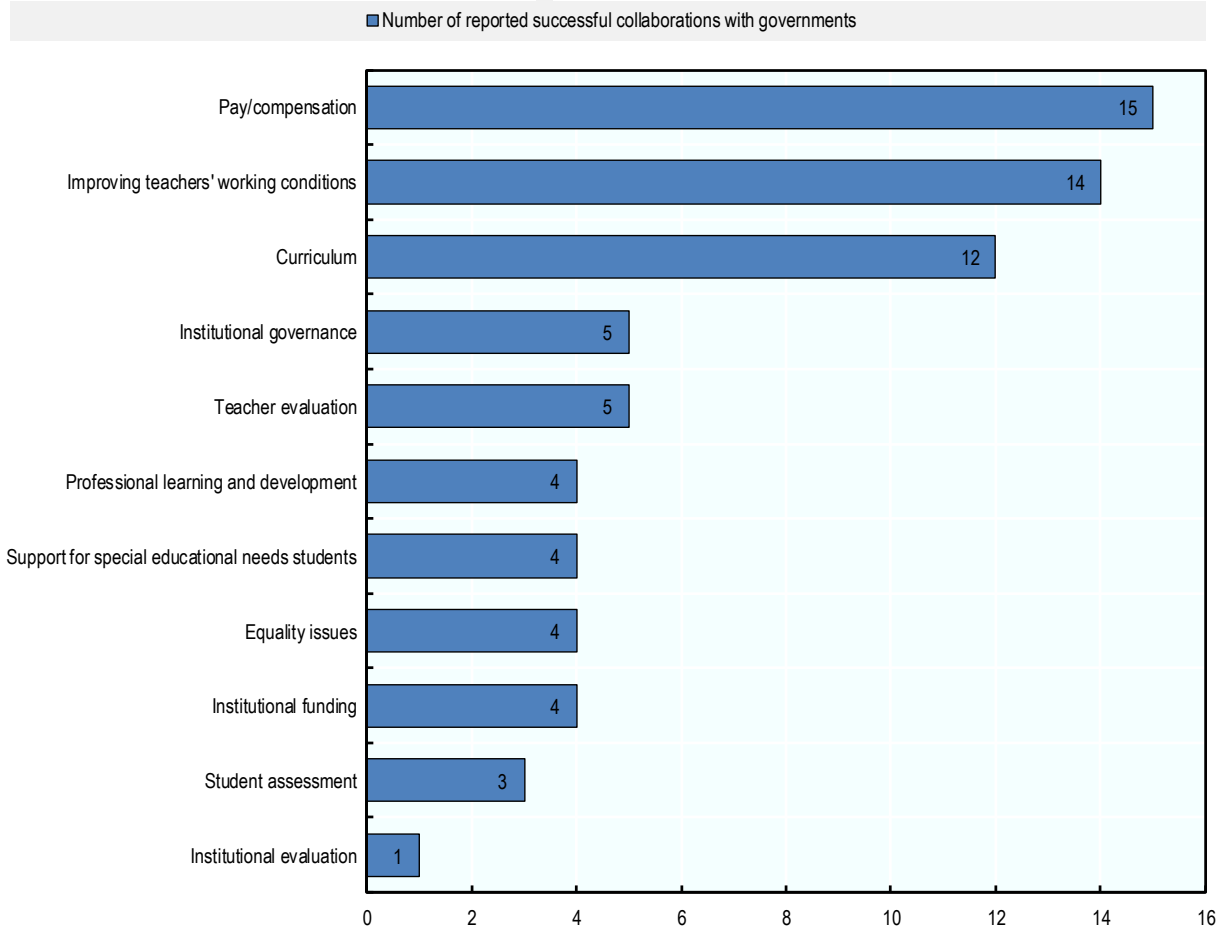
The survey was sent to representatives of education unions who regularly attend the TUAC working group. EI received 38 responses, of which 29 can be considered as complete responses, and 9 were partial responses. Over three-quarters of the respondents' unions were the same as those who had responded to the EI/TUAC survey for the Education Policy Outlook report published in 2015 (OECD, 2015[1]). This suggests a high level of interest from unions attending TUAC and is a statistically robust sample. The respondents provided

demographic data and indicated three policy areas with which they had engaged successfully with government. They chose the three areas from a drop-down list, which they ranked in order of importance, but were given the option of including other policy areas that were not on the list.

Selection of policy areas

Survey respondents selected pay and compensation (52%) as the area where most successful collaboration took place. This was followed by teachers' working conditions (48%). It was not surprising for TUAC that these traditional areas of union activity retained their central position for teacher unions. However, less predictably, the third most selected area of collaboration was the curriculum (41%) (Figure 7.1).

Figure 7.1. Areas of collaboration between teacher unions and governments, 2018



Notes: This figure considers 29 survey responses. The total number of responses received for each category is included at the end of each bar.
Source: EI/TUAC (2018[2]), "Success in Hard Times", survey conducted by Education International for the Trade Union Advisory Committee's Working Group for Education and Skills at the OECD.

StatLink http://dx.doi.org/10.1787/888933997569

In descending order of collaboration, these percentages represent an average of the top three policy areas in which unions believed that they had experienced successful policy

engagement with governments. TUAC found that this helps illustrate the range of activity undertaken by education unions and can highlight the importance of teacher unions and governments working across the intersection of industrial and professional matters.

The fact that curriculum is ranked as one of the most common professional issues where unions perceived they had most influence raised an interesting question for TUAC. The EI survey for EPO 2015 (EI, 2013) focussed on the numbers of unions that were involved in specific types of policy engagement with governments. While teachers' pay, working conditions and the curriculum occupied places in the top five areas of engagement, the area that received the most common incidence of engagement at that time was professional learning and development (PLD). Equality issues was also included in the top five.

The reason PLD did not retain its number one ranking is not clear. The questions in the original EI survey were slightly different, focussing on perceptions of engagement rather than perceptions of successful policy partnership. Also, even though a significant majority of union respondents were the same, the inclusion of different unions in the second survey compared to the first could have led to different results. However, the question of whether or not union and government priorities for PLD have slipped in the past five years is worth investigating –likewise for the priority given to equality issues.

It is also interesting that union respondents should identify salaries and conditions of service as areas of successful policy engagement with governments. These areas, which are at the core of the interest of union memberships and union negotiating teams, are often seen to be areas of dispute. The results of this survey are a reminder that negotiation and engagement in these areas can deliver results that both unions and governments consider to be both beneficial to teachers and to student learning (Carter, Stevenson and Passy, 2010[3]).

Institutional governance (17%) and teacher evaluation (17%) were the next most common examples of successful engagement. A smaller number of unions in the sample reported that they were successfully engaged with governments in shaping student assessment (10%). Given that there is a symbiotic relationship between assessment, learning and the curriculum, this raises the question as to why unions reported more often that they have successfully engaged with unions on developing the curriculum than for assessment (Black and William, 1998[4]). Again, this would benefit from further investigation.

Alongside PLD, only 16% of unions cited support for students with special educational needs, equality issues and institutional funding as areas for successful engagement. It is useful to consider why this is the case as these are important areas of education policy. For example, 22.2% of lower secondary teachers who responded to the OECD Teaching and Learning International Survey (TALIS) 2018, on average, reported teaching students with special needs as an area of need for professional development (this was the largest share among the reported needs) (OECD, 2019[5]).

Student behaviour drew no responses which, for an issue with such a high profile in many countries according to TUAC's experience, was surprising. Student well-being and bullying are dominant issues in our work, with unions consistently reporting these as such. It may be that for many unions, these issues are folded in with other areas of work such as negotiations on teachers' conditions of service.

A broad range of examples was included within the survey's responses. They included specific examples of successful engagement with governments, ranging from a thaw in previously frozen relationships between a government and its teaching profession to the creation of a national teachers' register and the regulation of academic research. One union

representing teachers in further education (FE) reported having been successful in persuading an external inspectorate to remove graded lesson observations of FE colleagues, having commissioned independent research to support their case. Another reported that their government had agreed to freeze a plan for teacher evaluation that placed students and teachers into categories.

A small number of respondents referenced decisions taken at International Summits of the Teaching Profession, which is also discussed later in this chapter. For example, one reported that their government had expressed its clear intention to work in collaboration with the profession on all educational issues including a partnership project that supported teachers in engaging more intensively with the national curricula.

Teacher unions reported successful examples of actions to improve teachers' conditions of service. For example, one union reported having conducted a comparative survey of teachers' working hours, which showed that, compared with other professions, teachers, worked much longer hours. Consequently, as reported by the union, the Ministry of Education established mechanisms to reduce the length of teachers' working hours.

A small number of unions reported successes in creating formal structures for reforming teachers' PLD. One reported that arrangements for the change in PLD were investigated by a government-sponsored group that included union representatives. Another reported that its government had established a wide forum for developing teacher education and continuous professional learning and development (CPLD) as a result of its proposal.

Most unions reported that there were established monitoring mechanisms (expert and reference groups) in relation to the implementation of teachers' pay and conditions of service agreements. Such groups were either linked to the employers or governments depending on which body was responsible for these two areas. From the survey, it appears that the majority of unions negotiate with governments or employers on pay and conditions of service issues, while formal engagement through consultation appears to characterise reforms in the curriculum. Some countries have created national bodies for developing national curricula and assessment. One example is a national council that includes teacher union nominees. One union reported that, as a result of its advocacy and its members implementing the teaching of ways of learning as well as subject knowledge, its Ministry of Education accepted the concept in the national curriculum.

A union in one country reported that it had been a key actor in the development of government policy on institutional governance in higher education. This had involved policy conferences and the inclusion of union representation in a government review body. Subsequent legislation included a provision for elected chairs and a requirement for representatives of universities, teacher unions and student representatives to be elected on student governing bodies.

Most unions reported that new, incoming governments changed the nature of their dialogue with ministers, with one union saying that dialogue had ceased.

Implementation, evaluation, policy initiation and new governments

Education International asked survey respondents whether they had been involved in implementing and evaluating the policies they had identified as the successful product of a partnership between themselves and governments and/or employers. EI also asked whether respondents felt they were able to initiate new policy proposals and whether their involvement in policy design, implementation, and evaluation changed when new governments were elected. The results of the survey for the top three areas of

engagement - pay/compensation, school teachers' working conditions, and curriculum reform - are set out in Figure 7.2.

The perceived ability of unions to "always" initiate new policy developments (compared to "sometimes" or "never"), as reported in this survey, is highest with regards to conditions of service. In addition, some 27% of respondents said that they always feel able to initiate reforms to the curriculum, and 64% of respondents reported that this was sometimes the case. Given that the curriculum is core to teaching and learning and the self-efficacy of the profession, it is a matter of interest for TUAC that less than one-third of respondents said that they always feel able to initiate reforms in this area.

An important share of unions reported the election of new governments as a factor likely to trigger changes in teachers' conditions of service (40%) and the curriculum (41%). A smaller share (35%) reported that these changes are likely to concern pay and compensation. However, in each category, a higher share of respondents reported that they did not consider that a new government leads to change.

The relatively high numbers of unions reporting engagement in implementation and evaluation of pay and conditions reforms is not surprising for TUAC. In our experience, teacher unions themselves have seen this as core business, and it is in these areas that employers have held a key, if not a dominant role. Furthermore, long-standing joint union/government structures to oversee the implementation of pay and conditions agreements have often been in place.

With the exception of the curriculum, it appears from this survey that far fewer unions could identify successes in the area of teacher policy than in the areas of pay and conditions. For example, there are far fewer incidences of success reported in areas such as student assessment, teacher and institutional evaluation, professional learning and development and special educational needs. At least in the setting of teacher policy objectives, survey results suggest that participating unions perceive that governments involve teacher unions less in the implementation and evaluation of teacher policy than in the area of teachers' pay and conditions. Since teacher policy is at the core of teachers' professional lives, this is an area of collaboration that needs to continue being strengthened.

The International Summit on the Teaching Profession

The first International Summit on the Teaching Profession (ISTP) took place in New York in 2011. The initiative to establish the summit was taken by US Education Secretary Arne Duncan and the US teacher unions; the National Education Association and the American Federation of Teachers. Education International and the OECD were asked to become the two co-partners in organising the summits. The intention of the ISTPs was, and continues to be, to enable education ministers and teacher union leaders to both learn from each other about developments in teacher policy and to collaborate in setting teacher policy objectives for the coming year for their own countries.

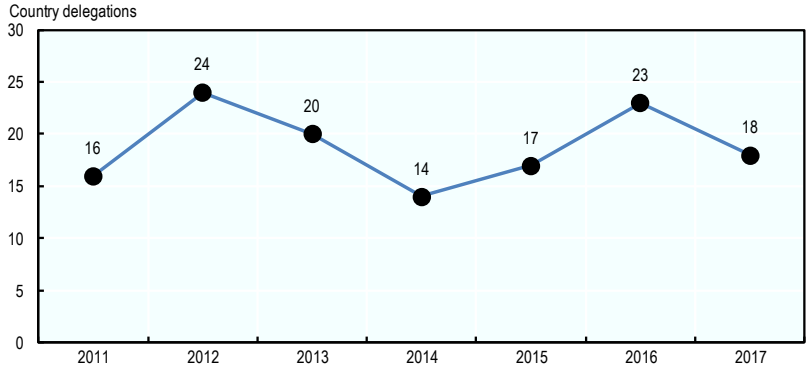
Figure 7.2. Types and extent of involvement of teacher unions in different areas of policy, 2018

Source: EI/TUAC (2018[2]), "Success in Hard Times", survey conducted by Education International for the Trade Union Advisory Committee's Working Group for Education and Skills at the OECD.

StatLink http://dx.doi.org/10.1787/888933997588

Figure 7.3. Attendance at the International Summit on the Teaching Profession, 2011-17

By number of country delegations and year



Source: Education International (2018[6]), "A Review of the International Summits of the Teaching Profession: Results of the Questionnaire to Affiliates which have attended one or more summits", Education International, unpublished.

StatLink http://dx.doi.org/10.1787/888933997607

So far, nine ISTPs, or summits, have taken place: the United States (2011-12), the Netherlands (2013), New Zealand (2014), Canada (2015), Germany (2016), the United Kingdom (2017), Portugal (2018) and Finland (2019) were the previous summit hosts. The number of country delegations has varied year on year, from 16-23 countries between 2011 and 2017 (Figure 7.3).

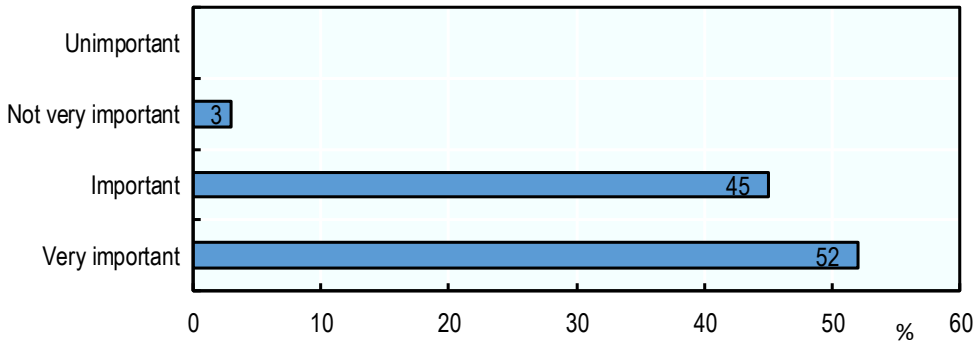
Recently, Education International carried out a review of the summits with questionnaires sent to all EI-affiliated teacher unions that had attended one or more summits between 2011 and 2018 (Education International, 2018[6]). According to the survey, just under two-thirds of affiliates returned the survey forms. Only 7 out of the 32 countries that had sent delegations to the summits were not covered by one or more responses from these affiliates.

An overwhelming majority of respondents (97%) said that the summits were a uniquely important event, both for themselves and Education International (Figure 7.4). Well over two-thirds of respondents thought that the presence of elected education ministers lent credibility to the summits, reinforced collaboration and ensured that those who took decisions were responsible for country commitments.

One quote from an EI-affiliated teacher union encapsulates the responses of unions to the summits:

> *The ISTP is the only international event of its kind, where union leaders and Ministers of Education … meet and dialogue together on an international basis. It serves as both a target (in a positive sense) and platform for collegial discussions about important issues affecting education. Working alongside government leaders, even when we are not in agreement with their views, is vitally important for the work of teachers' unions. Doing so, at an international event, where union leaders may also support and learn from others, expands participating unions' sphere of influence and our capacity to advocate for quality education and the teaching profession in our countries as well as globally.* CTF-FCE in *(Education International, 2018[6])*

Figure 7.4. How important are the ISTPs for the influence of teacher unions globally?



Source: Education International (2018[6]), "A Review of the International Summits of the Teaching Profession: Results of the Questionnaire to Affiliates which have attended one or more summits", Education International, unpublished.

StatLink http://dx.doi.org/10.1787/888933997626

The plenary sessions in the summits address the themes agreed by the ISTP host country, the OECD and EI. They have covered all aspects of teacher policy and have included such topics as:

- The recruitment and initial preparation of teachers, teacher evaluation and compensation.
- Teacher engagement in education reform, developing effective school leaders.
- Using evaluation to improve teaching.
- Developing high-quality teachers for the schools with the greatest needs.
- Achieving equity in increasingly devolved education systems.
- Strengthening teachers' confidence in their own abilities.
- What policies can help teachers acquire the knowledge and skills they need?
- Professional learning and development to support teachers' work.
- Ensuring national education structures and policy environments.
- Enabling pedagogies for the future.

For every International Summit of the Teaching Profession, the OECD has provided background reports that have been used to provide an evidence base for summit discussions (OECD, 2011-18). The Asia Society has been responsible for the official reports of the summits (Asia Society, 2011-18).

The discussions within the summit plenaries are carried out under Chatham House rules. However, the outcomes of the objective-setting meetings between union leaders and ministers are presented in an open final session at the summits by country delegations.

The summits have developed a structure, format and focus which, in our view, have enabled them to become embedded as a unique fixture in the international calendar of debate on

education policy. As the survey results help illustrate, they have also acquired buy-in from a significant group of countries, both from union leaders and ministers.

What are the results?

A key outcome of each summit takes place during the final session, in which union leaders and ministers agree on objectives focussed on one or more aspects of teacher policy for the coming year. The objectives often appear ambitious, but they are drawn from the accretion of knowledge amassed from previous summits.

It is worth looking at an individual summit in some detail. A particularly well-attended summit was the 2016 ISTP, held in Berlin, and hosted by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK).

The 2016 International Summit of the Teaching Profession

The 2016 ISTP focused on:

- policies that would help develop teachers' competencies so that they are effectively prepared for teaching
- policies that help teachers' professional learning and growth
- the competencies/skills, knowledge and dispositions that successful teachers require.

The themes were developmental. As in previous summits, they built on objectives agreed by country delegations. For instance, under the "teachers' competencies" theme, previous conference objectives had included: strengthening teachers' lifelong development of skills; establishing a systemic approach to teachers' learning opportunities; strengthening teacher collaboration; and creating a stakeholder summit to expand teacher leadership opportunities.

Similarly, policies that helped teachers' professional learning and growth also drew on a rich knowledge base. Country objectives from previous summits had included, for example: government and unions collaboratively developing an outcome agreement on a measurable process to improve attainment; establishing a stakeholder summit to clarify the country's vision for education; and discussing a national structure for CPLD with stakeholders.

Under the theme of skills and knowledge teachers require, previous objectives included from earlier summits focussed on: fostering deeper forms of teacher collaboration that measurably improved student outcomes; developing teachers' competencies in identifying special educational needs; and establishing better practices in relation to student diversity in schools.

Of course, not all summit themes have been open to such a developmental approach. Some agreed objectives have been specific and have focussed on a breaking issue in a particular country. Thus, for example, previous summits' country commitments have included: developing a national action plan for upgrading science teaching in schools; establishing a national council of teachers and career registry; and increasing teacher leadership opportunities by 20%.

The evidence collected by TUAC suggests that, among respondents, country delegations have found it relatively straightforward to agree on objectives, whether they have been general or have responded to a particular educational development in a country.

As with any objective-setting exercise, it is one thing to agree to a commitment. It is another to carry it out. In fact, an implementation exercise is built into the summits. Requests are sent to countries that have participated in the previous year's summit to send in short reports on the progress made on the previously agreed objectives. The Berlin Summit received a range of reports from countries that had participated in the previous year's summit, hosted by Canada in Banff. For example, an extract from the report submitted by Canada included the following commitment:

> *Commitment 1: To focus on teacher leadership and real forms of collaboration, with particular attention to teacher recognition and career enrichment.*
>
> - *Jurisdictional activities*
>
> *Several jurisdictions responded to this commitment to enhance the role of the teacher by pursuing new initiatives for professional development, enrichment, and recognition. For example, one jurisdiction passed an Education Statutes Amendment Act, while another continues to successfully run a Teacher Learning and Leadership Programme. Such initiatives and programmes set the stage for teachers to hone their skills. In addition, several jurisdictions have established Minister's Excellence in Training Awards to commend the work of outstanding educators on an annual basis.*
>
> - *Teacher organisation activities*
>
> *Teacher organisations in many jurisdictions across Canada support teacher-initiated and teacher-led action research. Support includes opportunities for professional learning about action research as well as funding and release time for specific projects on topics or concerns that affect teachers' daily work with students.*

The KMK also submitted a similarly extensive report on progress. It described the actions of the *Länder* in meeting the agreed 2015 goal of strengthening teachers' capacity to deal with diversity in the classroom, improving learning and teaching in the digital world, developing a modern understanding of leadership in schools in the 21st century, and expanding collaboration between governments and teacher unions.

Like Canada, it referenced the actions of teacher unions in relation to the objectives, alongside those of the *Länder*. For example:

> *The unions GEW and VBE consider a nationwide further development of teacher training necessary in this context (dealing with diversity in the classroom) and themselves offer continuing education, counselling and support as well as publications to prepare teachers in dealing with heterogeneous learning groups.*
>
> *From the point of view of the unions GEW and VBE, the expansion of systematic further and continuing education on the key topic of Digital Education is absolutely essential for teachers in service. This was made clear to the Ministers … by the (Unions) in talks and at the same time backed up by their own advanced training offers and conferences for teachers and school principals.*

New Zealand submitted a Summit Report Card, which identified achievements against the agreed commitments of exploring "the digital platform to create more teaching quality

time" and fostering "deeper collaboration to grow and develop teaching practice for measurably improved student outcomes." The card included:

> *New and expanded online platforms and tools for teachers to share teaching resources, access high-quality education content and support consistent teaching practice. Over 90% of schools connected to ultra-fast broadband with 98% of teachers supported by a managed network of teachers.*
>
> *A third of schools and students are already in Communities of Learning that focus on sharing expertise in teaching and learning to improve student outcomes.*

In the same batch of reports, Singapore reported achievement against its range of commitments for innovation, including the introduction of a Programme for Active Learning at primary level and Learning for Life and Applied Learning Programmes for students at secondary level. On its commitment to developing teacher leaders at all levels, Singapore said it was *offloading provisions to reduce teacher leaders' workload by 20% … to focus on mentoring teachers and building the requisite skills to do so*. Singapore also committed to growing the number of its professional learning communities by one-third.

The length of the reports varied. Some countries submitted only single paragraphs describing the actions of their ministries in achieving the objectives. Yet, the question is how did the partnership involved in agreeing the objectives extend to their implementation and evaluation?

Some of the progress reports received for the Berlin Summit detailed joint actions between unions and governments in achieving the 2015 Summit objectives. Examples of two that explain how partnership was extended into implementation are set out below.

Denmark reported that, in 2014, it was:

> *decided by the Minister of Education then in power and the Executive Committee of DUS (a national body of social partners in the domain of education in Denmark) to set up a working group to discuss the follow up to the joint Danish priorities phrased out (sic) in conjunction with the ISTP 2014 … It was decided by the group that the ongoing discussions on nurturing a culture of evaluation and feedback could remain a core thematic component in future (ISTP) priorities … it was also decided to jointly set up a national conference on evaluation and feedback that was held in February 2016.*

Another country, the United States, described joint actions between its unions and the Education Secretary to implement summit commitments in what was the Obama Administration's final progress report to an ISTP:

> *The US took the international ISTP model and applied it domestically… convening the first National Summit on Teacher Leadership (NSTL) on February 5-6, 2016, in Washington DC. The summit - sponsored by the American Federation of Teachers (AFT), the National Education Association (NEA), and the Council of Chief State School Officers (CCSSO) with participation by the US Department of Education (Ed) - featured collaborative teams from 18 states and one team from UD Department of Defense schools. Additionally, the Acting Secretary of Education, John King, the Executive Director of CCSSO, Chris Minnich, and the Presidents of the two unions, Randi Weingarten and Lily Eskelsen Garcia, engaged the participants in substantive discussions around the challenges faced in designing and implementing teacher leadership initiatives … Several states made real and meaningful commitments to expand leadership opportunities… some even*

> *committed to hosting their own state summits … the NSTL could be a meaningful first step towards changing the narrative around teacher leadership to one which empowers teachers to lead from inside and outside their classrooms.*

The report then described the parallel efforts of the US teacher unions and the Obama Administration to take action on the United States' other 2015 commitment, that of increasing the access for children aged 0-5 years to high-quality learning opportunities.

The 2016 progress reports were generally of high quality, although most had been written exclusively by ministries. Some focused on describing the actions of ministries in following up summit objectives. Some also aligned with the implementation of existing pre-determined policies. Other ministries described parallel union activities that mirrored these developments.

Relevant findings from Education International's review of the International Summits on the Teaching Profession

In the survey conducted for this chapter, there was a consensus among participating teacher unions about the importance of the final session, in which future objectives were agreed (55% felt the final session was very important and 38% said it was important). To quote the New Zealand teacher unions' response:

> *Without this happening, there would be no commitment, and the whole event would become meaningless.* (NZEI/PPTA)

The Portuguese Union FENPROF added a qualification that:

> *there should be in every summit a moment to evaluate the accomplishment of the objectives agreed upon in the previous meeting.* (FENPROF)

The Canadian Teachers' Federation amplified this view:

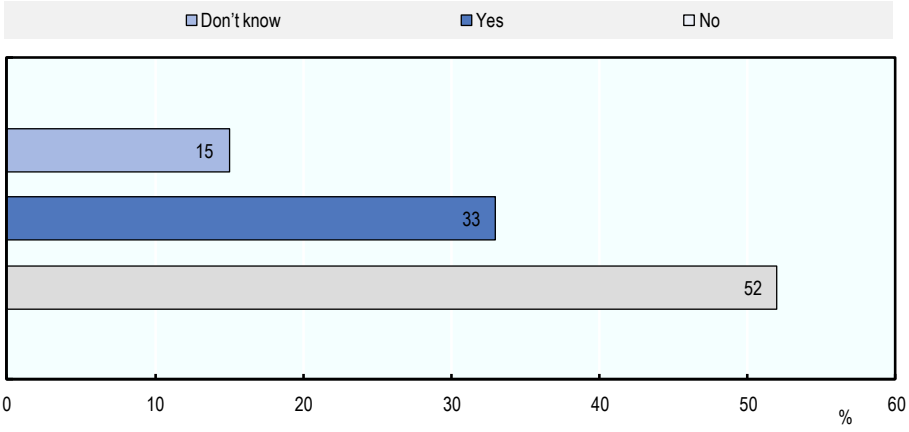
> *This aspect of the ISTP is vital … the final session provides both a clear mandate and an opportunity to unions and ministers for collaboration; it serves as a practical or action-orientated time in a meeting that could otherwise be simply a lot of talk and no action. That said, CTF believes much more needs to be done at least at national level to ensure that there is actual and meaningful collaboration to meet (or at least to make progress towards) the country commitments following ISTP.* (CTF-FCE)

A Swedish union pointed to another important quality of the summits:

> *The agreements reached at the ISTP are normally in line with what we are already discussing at home … however, the* shared *plenary input may give inspiration to ongoing national processes … meeting in a third country may function as a neutral space which facilitates dialogue.* (Lararforbundet)

While objective setting during the summits appears to be valued by participating unions, continued work on objectives post-summit is also vital. Among those surveyed, 52% of survey respondents disagreed that ministers give sufficient focus to developing agreed objectives after the summit. However, 33% of unions agreed, and a further 15% reported that they don't know (Figure 7.5).

Figure 7.5. Do affiliates agree that ministers give sufficient focus to developing agreed objectives after the summit?



Source: Education International (2018[6]), "A Review of the International Summits of the Teaching Profession: Results of the Questionnaire to Affiliates which have attended one or more summits", Education International, unpublished.

StatLink http://dx.doi.org/10.1787/888933997645

A German union explained why, in their view, implementation had been more complicated, and how the process could be improved:

> *So far it has been difficult for us to discuss the implementation of the agreements and to pursue them in an appropriate way … it should, therefore, be ensured that … all representatives … have ample formats to make progress in relation to the evaluation of agreements and the joint planning of next steps…*(VBE)

Nevertheless, one-third of teacher unions thought the implementation of agreed objectives was working for them. As one Scottish teacher union put it:

> *Can only speak for Scotland really … but we are advancing this year's outcomes in very practical terms … (it) … requires outcomes to be more than pious statements to begin with.* (EIS)

The Canadian Teachers' Federation felt that although a:

> *lack of concrete follow-up has been one of the greatest disappointments in the ISTP … communication between the Council of Ministers … and CTF-FCE has improved significantly, and we are confident this may be the year where we move from talk to action, from communication to collaboration.* (CTF-FCE)

Similar responses were collected with regards to concrete action in pursuit of agreed objectives. As the Danish union DLF said, for example, the summits had directly contributed to improving dialogue between the unions and the government in Denmark:

> *…we are sure that this has an impact on … education policy … the ISTP has been the direct reason for a constructive co-operation between the Danish teacher unions and the minister of education, which has resulted in annual conferences … (on teacher self-efficacy and feedback)…* (DLF)

In fact, prior to the 2014 ISTP in New Zealand, a dispute on teachers' working hours took place between the Danish employers' organisation and the teacher unions, which led the Danish government to enact legislation on the issue (see Box 7.1). From the view of Danish unions, the 2014 ISTP saw the beginning of an improvement in exchanges between unions and government when they agreed to re-establish dialogue and co-operation. This process has now extended to an improved relationship between teacher unions and employers.

Box 7.1. Restoring relationships between employers and teacher unions in Denmark

In 2013, collective bargaining negotiations between the Danish teacher unions and the Danish Employers (Local Government-KL) broke down, leading to a total lockout of teachers in primary and lower secondary schools (Folkeskole) by the employers. The focus of the dispute was teachers' working hours. After three weeks' lockout, the government intervened with legislation on teachers' working hours. A further collective agreement was reached later in 2015 between the employers and the teachers' union.

During collective bargaining negotiations in 2018, the parties (the municipal employers and the teacher unions) had to decide whether or not they were able to enter an agreement about the teachers' working hours. While the parties recognised that they had very different conceptions of the situation in schools and the framework for an agreement, the parties agreed that the current situation was unsustainable. Therefore, the unions and employers agreed that they needed external assistance, which they described as a "New Start".

New Start consists of two parallel measures:

- A commission that is to come up with recommendations for the next negotiations about teachers' work hours.
- Binding co-operation between Local Government Denmark and the Danish Union of Teachers at the central and local level regarding initiatives that can promote the co-operation within the Folkeskole.

The Commission

Together, the parties have set up the Commission, which consists of a Chair and seven members. The parties have set aside the resources to pay the Commission for their work and to establish a secretariat (one full-time and two part-time staff).

The chair of the Commission is a former municipal school director. Members of the Commission are two teachers, two municipal school managers, a school researcher, a management researcher and a judge. The commission will be working until the end of 2019 without any prior binding requirements from any of the parties.

The Commission will present an analysis and recommendations, which will lay down the basis of the negotiations between the parties.

Co-operation

Parallel to the Commission's work, the parties will take common initiatives in these fields:

- promoting the recruitment of teachers
- introducing measures for newly trained teachers
- strengthening co-operation between shop stewards and school leaders
- removing micromanagement and bureaucracy.

Other unions, while not reporting major changes resulting from the summits themselves, described an improved climate of joint working and co-operation:

The Finnish teachers' union, OAJ, said that the summits had:

> *…certainly improved the collaboration between the Ministry and the Union and in that respect… (they have)…improved education policy.* (OAJ)

The Netherlands teachers' union the AoB took a similar view:

> *(the Summits)…have been a source of ideas not so much in the formal conclusions … but in the informal meetings within the delegation as well as with delegates from other countries.* (AoB)

The quality of the background reports and evidence at the summits was also cited as having a positive effect by a UK union, the NASUWT:

> *…for example, several of the OECD reports have been very helpful in arguing with government about the primacy and importance of the teacher and of the need for CPD…(which had)…encouraged a change of tone and the opening of a debate.* (NASUWT)

Do the International Summits on the Teaching Profession have a positive national and international impact?

Since their inception in 2011, the summits have continued on an annual basis. Participating ministers and unions have developed their own protocols and methods of working. For the countries involved, they have introduced new forms of dialogue on teacher policies between teachers and governments and, in a number of cases, they have led to real and positive changes in those policies, as indicated by the progress reports. As one union put it, simply the fact that the summit provided a neutral space for unions and ministers to dialogue was an important additional benefit in itself.

However, given the importance of the summits for the teacher unions, the evidence presented in this chapter gives rise to the question: What could be done to make the summits more effective? What is clear, and the ISTP 2016 reports are typical of other progress reports in this respect, is that there is a difference in the perception of progress between various unions and governments. The summits themselves provide the mechanisms for creating joint objectives. In a number of cases, they certainly improve working relationships between ministers and teacher unions, which is valuable in itself.

The question becomes: How are the agreed country objectives implemented following the summits? From the examples given by respondents, a number of ministries do appear to believe that the agreed objectives are significant. Yet, from the evidence Education International has received from unions, a smaller number of countries create specific arrangements to implement summit objectives.

Responsibility for improving implementation of summit commitments rests with both governments and unions. The International Summits on the Teaching Profession enable unions and governments alike to agree not only to policy objectives, but also mechanisms for the implementation and evaluation of those objectives. In TUAC's view, the social partnership relationship within the summit need not be confined to the summits. It can be continued after the summits.

Summary and conclusions

Some conclusions can be tentatively drawn from the evidence of Education International's survey for TUAC, "Success in Hard Times" and its Review of the International Summits on the Teaching Profession. Both the evidence from the survey and the summits show that participating unions still do not perceive successful government/union collaboration on teacher policies to be as advanced as collaboration in the area of teachers' pay and conditions, even though pay and conditions can be a highly contested area.

The International Summits of the Teaching Profession are perceived by survey respondents as a uniquely valuable opportunity for exchange between ministers and union leaders. Among the reasons provided is that the summits aim to provide a neutral space for productive dialogue, with what TUAC perceives as a willingness for often ambitious teacher policy objectives to be agreed on.

However, this is a success in the making and improvement is ongoing. Around half of teacher union leaders participating in the EI survey did not agree that there is sufficient focus on developing agreed objectives after the summit. In contrast, around one-third of unions believed that the objectives they have agreed, and their implementation, have been effective. The remaining share was not certain about this.

What is clearer from the survey responses collected for this chapter is that, in many cases, the implementation of agreed summit objectives has been left exclusively to ministries. Too often, there has been no agreed post-summit mechanism for the implementation and evaluation of objectives. From the point of view of TUAC, this may have left teacher unions believing that progress in these areas has been limited.

For TUAC, this finding contrasts with the experience of teacher unions in negotiating teacher pay and conditions. Here there is a longer history of joint policy implementation and evaluation as well as, in a number of cases, policy initiation, particularly in the area of conditions of service. The incidence of successful *engagement in curriculum reform* as reported among survey participants is a welcome finding, but, in TUAC's view, needs to be matched by a similar *engagement on student assessment*, as their success is closely inter-related.

Overall, the evidence highlights the importance of gatherings such as the International Summits on the Teaching Profession, whose aim is to focus on the practical advancement of teacher policy. However, it also suggests that many governments, in collaboration with unions, could also give greater priority to the initiation, implementation and evaluation of teacher policy alongside teachers' pay and conditions.

The evidence from the OECD background reports for the summits indicates that a coherent, systemic approach to policy work on teachers' pay, conditions and professional lives is key in supporting the development of the best possible conditions for teaching and young people's learning (Schleicher, 2018[7]). Since teacher policy is at the core of teaching and learning, as well as key to the self-confidence and efficacy of the profession, achieving this coherence must be a continuing priority.

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Chapter 8. Education policy country snapshots

The snapshots in this chapter provide an overview of education policy developments in 29 OECD countries (34 education systems) between 2008 and 2019. Designed for policy makers, analysts and practitioners, these snapshots bring together the education priorities and policy actions outlined in Chapters 2-5 of this volume, as well as information regarding the progress and impact of policy implementation. This is contextualised against key information regarding system organisation and outcomes. The snapshots are based on the analytical framework developed for the Education Policy Outlook, with special attention to school improvement, evaluation and assessment, governance and funding. As such, they build on the snapshots included in the Education Policy Outlook 2018: Putting Student Learning at the Centre*, which covered equity and quality and preparing students for the future.*

Australia

Context

Schools in Australia have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.19 (the OECD average index value was 0.00). Student truancy was higher than the OECD average: 29% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to an average of 19.7%. However, students in Australia were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.2 compared to an average of 0.01 (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the highest reported by school leaders at 0.66 (the OECD average was 0.01) (OECD, 2016[1]). In 2017, teachers in Australia had more net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 865 hours at primary level and 797 hours at lower secondary level, compared to averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to principals' self-reports in PISA 2015, schools have higher levels of autonomy over curriculum compared to the OECD average: 83.3% of principals reported that the school had primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Lower secondary teachers earned 93% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was more than the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 82.8% of teachers in Australia said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6%. Furthermore, 44.7% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Australia are more likely than the OECD average to conduct self-evaluations of their schools (98.7% of students were in schools whose principal reported this, compared to the OECD average of 93.2%), and more likely than average to undergo external evaluations of their school (81.4% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). However, teacher appraisal levels as reported in the earlier cycle of TALIS 2013 were lower than the average: 36% of all teachers had reported then having received a teacher appraisal in the previous 12 months, compared to the TALIS 2013 average of 66.1% (OECD, 2014[4]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 75% of decisions in Australia were taken at the school level, compared to the OECD average of 29%.

Annual expenditure per student at primary level in 2015 was USD 9 546, which was higher than the OECD average of USD 8 631. At secondary level, Australia spent USD 12 303 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Australia spent USD 20 344 per student, compared to the OECD average of USD 15 656.

In 2015, expenditure on primary to tertiary education in Australia as a proportion of gross domestic product (GDP) was 6%, which was above the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was more than twice as high as the OECD average (33.6% compared to the OECD average of 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education decreased by 10.7 percentage points, compared to an OECD average decrease of 1.3 percentage points. During the same period, private expenditure increased by 30.8 percentage points, whereas the average increase across the OECD was 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Australia's key education policy priorities have evolved in the following ways over the last decade (Table 8.1).

Table 8.1. Evolution of key education policy priorities, Australia (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the challenge of an ageing vocational education and training (VET) teacher labour force as well as inefficient training package development and implementation processes. OECD evidence also stressed the need to establish strategies to strengthen the linkages to classroom practice. [2008; 2011]	Australia had reported a commitment to improving the quality of initial teacher education and to providing continued support for the professional development of teachers and school leaders with a focus on improving student outcomes. These priorities prevail. A recently reported priority is to work with states and territories so that teachers select high-quality professional learning to maintain currency of practice, enhance professional growth and have a positive impact in the classroom. Priority is also put on school leaders' role in building a professional learning community in their school, focused on continuous improvement, and identifying and implementing teacher professional learning opportunities aligned with staff learning plans and school priorities. [2013; 2016-17]
Evaluation and assessment	OECD evidence underlined weaknesses and gaps in the relevant data available. The OECD found a need for greater consistency in evaluation and assessment practices across jurisdictions (and school sectors), capacity building and better-defined articulations between teacher appraisal and student assessment. [2008, 2011, 2016]	Australia reported that clearer evaluation and assessment on how schools can improve remains a key priority. In the same way, Australia has worked to harmonise its different regulatory frameworks in early childhood education and care (ECEC). [2013, 2016]
	For the VET system, the OECD found that the division of responsibilities between the Commonwealth, state and territory governments is unclear. The involvement of both the federal and state governments in education adds further complexities and challenges to implementing reform. [2008; 2014]	Australia reported the ongoing challenge of increasing the clarity of policies within the decentralised education system. [2013]
Funding	The OECD found that for VET, the principles underpinning funding are neither apparent nor consistent with human capital policies and principles. Considerable state-Commonwealth overlap is also found in the regulation and funding of VET. An additional challenge identified was the complex and opaque funding arrangements and concerns about	Australia reconfirmed a need to increase the clarity of funding within the decentralised education system. [2013]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	the efficiency of service provision that result from the shared responsibilities in schools. [2008; 2014]	

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In Australia, under the Australian Education Act 2013, school funding is linked to educational reform. States and territories have to enter into agreements with the government to receive funding.

> **Progress or impact:** Following up on the 2013 Students First and Quality Schools, Quality Outcomes, the Australian Government announced its Quality Schools package (2017) and introduced the enabling legislation, the Australian Education Amendment Bill 2017. The bill was successfully passed by the Commonwealth Parliament mid-2017, amending the Australian Education Act (2013) to enable the government to deliver record levels of school recurrent funding from 2018 to 2027 (National information reported to the OECD). All Australian governments developed a new National School Reform Agreement that came into effect in 2019. It is a joint commitment between the Commonwealth, states and territories to provide high-quality and equitable education for all students. It also includes a requirement for an annual public report from the Education Council to the Council of Australian Governments (COAG) outlining progress towards implementation, with the first progress report due in late 2019. The National School Reform Agreement was informed by the findings and recommendations of the Review to Achieve Educational Excellence in Australian Schools (Government of Australia, 2018[5]), the Independent Review of Regional, Rural and Remote Education (Government of Australia, 2019[6]) and the STEM Partnerships Forum (National information reported to the OECD).

- The Australian Institute for Teaching and School Leadership (AITSL, 2010) has aimed to clarify the roles of the teaching and school leadership profession through the Australian Professional Standards for Teachers (Teacher Standards, 2013), and the Australian Professional Standard for Principals (the Principal Standard, 2011). The Teacher Standards are a public statement of what constitutes teacher quality, and what teachers should know and be able to do at different career stages across four proficiency levels: Graduate, Proficient, Highly Accomplished and Lead. The Principal Standard also specifies four proficiency levels, aiming to provide examples of practice for each focus area (AITSL, 2019[7]).

Progress or impact: A 2016 evaluation of the Teacher Standards found that as soon as awareness is established among the teaching body, a positive attitude towards the standards develops, which then fosters use and knowledge of the standards (AITSL, 2016[8]). One of the results is then that positive experience with the standards leads to improved attitudes and knowledge, which then contributes to further implementation. It was also found that it needs ongoing strategies and overall support to ensure sound implementation and sustainable change. The AITSL has been the driver of implementation and utilisation of the standards. However, the standards have to be installed throughout the entire education sector to allow for further reform development and continuation, which requires the backing by all education stakeholders (AITSL, 2016[8]). The standards have underpinned other policy efforts undertaken to improve the quality of teaching and school leadership, such as the Australian Teacher Performance and Development Framework (2013); the Australian Charter for the Professional Learning of Teachers and School Leaders (2013); and Leading for Impact: Australian Guidelines for School Leadership Development (2018) (National information reported to the OECD and (AITSL, 2018[9])).

- The Teach for Australia (TFA, 2009) programme aims to help improve teacher quality and student outcomes in disadvantaged schools, address teacher shortages and develop effective school teachers. TFA recruits high-performing graduates (called associates) and fast-tracks them into disadvantaged secondary schools. On completion of the programme, associates receive a Master's of Teaching qualification. During the programme, associates receive support from teaching advisors and mentors who are expected to provide frequent classroom observation and feedback.

Progress or impact: Between 2009 and 2018, the Teach for Australia programme expanded from one jurisdiction (Victoria) to five jurisdictions (the Australian Capital Territory, the Northern Territory, Victoria, Western Australia and Tasmania) at its peak. The programme has also steadily increased the number of associates placed in schools (125 in 2018). In 2016, the government committed an additional AUD 20.5 million to finance the placement of up to 315 associates, as part of cohorts nine and ten, in secondary schools from 2018 to 2021 (Government of Australia, 2016[10]). Two independent evaluations of the TFA programme indicate that it produces high-quality teachers and has a positive impact on participating schools (Government of Australia, 2016[10]). The most recent 2017 report found that the programme attracts top talent and associates provide skills that schools need, especially in the science, technology, engineering and mathematics (STEM) fields. Overall, improvements should be made to further align the programme to the government's objectives. An example on how this has so far been addressed is, in 2018, the government announced that for 2020 and 2021 employment-based pathways into teaching would be funded through an open and competitive tender process known as the High Achieving Teachers Program.

- In Australia, a national approach to the accreditation of initial teacher education programmes aims to ensure programme quality across the country. The 2014 Teacher Education Ministerial Advisory Group (TEMAG) *Action Now: Classroom-Ready Teachers* report identified several areas for improvement in initial teacher education. Since 2015, AITSL has led the implementation of the government's response to the report's recommendations. Implementation is a collaborative undertaking involving states and territories, higher education providers, teacher regulators, relevant experts and the non-government sector. Reforms concentrate on: 1) improved quality assurance of teacher education courses; 2) a more rigorous selection for entry to teacher education courses; 3) improved and structured practical experience for teacher education students; 4) robust assessment of graduates to ensure classroom readiness; and 5) national research and workforce planning capabilities (Government of Australia, 2018[11]).

Progress or impact: The Australian Government allocated AUD 16.9 million from 2015–16 to 2018–19 to implement its response to the TEMAG report to improve initial teacher education and preparedness for teaching (Government of Australia, 2018[11]). In 2015, all education ministers agreed to revisions to the Accreditation of Initial Teacher Education Programs in Australia: Standards and Procedures to give effect to the majority of the TEMAG recommendations, including: 1) requirements relating to the selection of entrants to teacher education and the use of the national literacy and numeracy test; 2) new requirements for all primary teaching students to complete a subject specialisation; 3) a greater focus on building partnerships and communication between initial teacher education providers and schools for improved professional experience; 4) a final year classroom teaching performance assessment; and 5) requirements for providers to demonstrate the impact of their programmes on pre-service teacher performance and the new teacher's impact on their students. Initial teacher education providers are required to consider the impact of their programmes as well as aspects such as: being evidence-based; showing continuous improvement; striving for flexibility, diversity and innovation. Two integrated elements support the national accreditation system: the Graduate Teacher Standards (graduate career stage of the Australian Professional Standards for Teachers), and the Accreditation of Initial Teacher Education Programs in Australia: Standards and Procedures (National information reported to the OECD).

Evaluation and assessment

- The national framework for teacher registration (2011) shapes the current approach to registration in Australia. The framework is underpinned by the Australian Professional Standards for Teachers (Teacher Standards), a public statement of what constitutes teacher quality and what teachers should know, and be able to do, at different stages across their careers (Graduate, Proficient, Highly Accomplished and Lead) (AITSL, 2018[12]). The framework includes a set of eight elements common to the registration processes and requirements of each state and territory. These elements include an initial and fixed period of registration, alternative authorisation to teach, discipline and de-registration, suitability, qualifications,

English language proficiency and mutual recognition across states and territories. All eight elements of the framework were reviewed as part of the National Review of Teacher Registration (AITSL, 2018[12]). In 2017, all education ministers agreed to a National Review of Teacher Registration to identify ways to build on, and further strengthen, teacher registration in Australia. The review considered how the current national registration framework is operating, including all elements of the framework as they relate to consistency and best practice, as well as challenges and barriers to successful implementation. An additional consideration was the extent to which the Teacher Standards are used within regulatory arrangements and appraisal procedures to drive teacher quality and how to strengthen them further. The review also covered the registration of early childhood teachers and vocational education and training teachers in schools.

Progress or impact: The National Review of Teacher Registration report, *One Teaching Profession: Teacher Registration in Australia*, was published in 2018 (AITSL, 2018[13]). All education ministers agreed that the Australian Institute for Teaching and School Leadership would, in consultation with key stakeholders, develop an implementation plan for the report's 17 recommendations, according to national information reported to the OECD; see also (AITSL, 2018[14]; Education Council, 2018[15]) for the specific recommendations to strengthen teacher registration.

At the time of writing this report, the finalisation of the plan is set for late 2019. In the interim, the focus was put on implementing the review's priority child safety recommendations 9, 10 and 11 that link to the work of the Royal Commission on Institutional Responses to Child Sexual Abuse (National information reported to the OECD).

- In Australia, the National Assessment Program – Literacy and Numeracy (NAPLAN, 2008) nationally monitors student performance, assesses students in Years 3, 5, 7 and 9 in reading, writing, language conventions (spelling, grammar and punctuation) and numeracy.

Progress or impact: In 2018, the National Assessment Program – Literacy and Numeracy test was applied for the first time to students in an online format, and nearly 20% of students took the test in this modality (NAPLAN Online 2017-18) (NAP, 2018[16]). The goal is to do online assessments with the majority of students by 2020 (Australian Government, 2019[17]). A 2018 review of Australian schools identified limitations of the current assessment tools or tests as only a few aim to measure individual student learning over time (Boston et al., 2018[18]). According to the review, Australia faces the challenge of providing timely information at the classroom level that can show not only student achievement, but also individual student learning progress, to help teachers, as well as provide more detail on steps to improve student learning and outcomes (Boston et al., 2018[18]).

Systems

Selected education policy responses

Governance

- The Australian Skills Quality Authority (ASQA, 2011) is an independent national quality regulator that focuses on vocational education and training (VET) at the tertiary education level, with its operations established under the National Vocational Education and Training Regulator Act (NVETR, 2011). The ASQA seeks greater national consistency and increased rigour in registering training providers, accrediting courses and monitoring the quality of the VET sector. To ensure VET sector quality, the ASQA aims to identify two kinds of risks: systemic risks that are likely to exist across the sector or in a portion of providers, and the risk an individual provider might present through specific choices and actions.

> **Progress or impact:** A 2017 review indicates that the Australian Skills Quality Authority has monitored over 4 000 registered training organisations (RTOs), by regulating their entrance to, continuation in, or exit from the market. These included private providers, technical and further education (TAFE) institutes and community education providers, as well as universities, schools, and enterprise providers (Braithwaite, 2018[19]). In 2017, the Australian National University also led an independent review of the ASQA and its underpinning NVETR Act 2011. This review identified the ASQA and NVETR as a helpful start to establishing a VET regulatory framework to clean up abuses in the system (for example, prevent unconscionable contracts between RTOs and students that placed learners at a serious disadvantage), as well as reducing overlaps and duplication across Australia. The review also acknowledged the complex and challenging environment in which the ASQA performs its role. At the same time, it advised ASQA to continue transforming its philosophy and practice, develop broader partnerships with informal regulatory forces, and make improvements in the provision and use of data as means of improvement (Braithwaite, 2018[19]).

- Australia's Tertiary Education Quality and Standards Agency (TEQSA, 2011) is an independent national quality assurance and regulatory agency. Its role is to ensure that higher education providers meet minimum standards, promote best practice and improve the quality of tertiary education for all students (TEQSA, 2017[20]). By complying with three regulatory principles (regulatory necessity, reflecting risk and proportionate regulation) the agency aims to support the alignment of the system with the population's social and economic needs (TEQSA, 2017[21]). The Higher Education Standards Framework is the basis for TEQSA's regulation of higher education providers and courses (Department of Education and Training, 2018[22]).

Progress or impact: The Tertiary Education Quality and Standards Agency obtained an additional AUD 24.3 million over four years in the 2018–19 government budget to strengthen TEQSA's regulatory oversight, meet the significant increase in applications for registration from prospective providers, and maintain the country's reputation for high-quality higher education. This measure also provides TEQSA with additional resources of AUD 1.1 million in 2018-19 and AUD 660 000 annually (ongoing) to crack down on contract cheating. TEQSA had 172 registered higher education providers, as of March 2019 (TEQSA, 2019[23]). According to the third TEQSA Stakeholder Survey (2017-18), 71% of provider principal contacts rated its performance as "good" or "excellent". This is a decrease from 80% in 2017 and 82% in 2016, although it remains high. Providers indicated that TEQSA was performing well on matters relating to "conference, quality and relevance of guidance materials and regulatory information". Respondents that "streamlining, speed of response, consultation and case management for all and CRICOS (Commonwealth Register of Institutions and Courses for Overseas Students) applications" be improved, and signalled the need to develop relationships through "engagement and visits". The survey was sent to 235 higher education provider contacts and 42 relevant peak, professional and student bodies (PPSBs) with a response rate of 156 principal contacts (66%) and 24 PPSBs (57%) (TEQSA, 2019[24]).

- Australia's Intergovernmental Agreement on Federal Financial Relations (IGAFFR, 2009) is the framework for collaborating on policy development and service delivery and facilitating the implementation of economic and social reforms in areas of national importance, including the education and skills sectors. It aims to set clearer responsibilities for each level of government, reducing Commonwealth prescriptions on service delivery to states and allowing for greater flexibility. The IGAFFR is overseen by the Council on Federal Financial Relations (CFFR) within the Council of Australian Governments (COAG) and is the principal mechanism for the transfer of funds from the Commonwealth to state and territory governments (COAG, 2012[25]). Under the IGAFFR, the Commonwealth, states and territories co-ordinate to define national and regional objectives and outcomes using National Agreements (NAs) and National Partnership Agreements (NPs) (Department of the Prime Minister and Cabinet, 2016[26]).

Progress or impact: Some recent reports that evaluated the impact of the Intergovernmental Agreement on Federal Financial Relations, the Council of Australian Governments, and National Partnership Agreements showed mixed results on Australian students meeting national minimum standards for literacy, but significant improvement in Years 3 and 5 for literacy, and Years 5 and 9 for numeracy (Australian Government Productivity Commission, 2017[27]). It was also reported that between 2008 and 2017, there was a 12.1 percentage point decrease in the proportion of VET graduates aged 20-64 years with improved employment circumstances after training (Australian Government Productivity Commission, 2017[27]).

Further measures taken under the umbrella of the National Partnership Agreements are the Universal Access to Early Childhood Education with annual to multi-annual agreements taken since 2009 (Government of Australia, 2019[28]). A 2014/15 review of the agreements identified shortcomings in the achievement on the benchmarks on quality and accessibility (Deloitte, 2015[29]).

The new Child Care Package, fully implemented by 2018, intends to address shortcomings identified in a 2014/15 review. The package undergoes ongoing review and evaluation, including a post-implementation review following 2018-19 and an impact evaluation undertaken between 2020 and 2023, according to national information reported to the OECD.

- The Melbourne Declaration on Educational Goals for Young Australians (2008) articulates nationally consistent future directions and aspirations for Australian schooling (Australian Education Ministers, 2008[30]). Objectives include: promoting equity and excellence in primary and secondary schools, and ensuring that all young Australians become successful learners, confident and creative individuals, and active and informed citizens. The declaration recognised that achieving these educational goals is the collective responsibility of governments, schools, businesses, community members and young Australians. Together with these different actors, all Australian governments committed to the support of action in inter-related areas such as supporting quality teaching and school leadership, strengthening education and transitions at all levels and improving education outcomes for minority and disadvantaged students (Australian Education Ministers, 2008[30]).

Progress or impact: According to the 2016 National Report on Schooling, the actions following from the Melbourne Declaration on Educational Goals for Young Australians led to a 9% increase in student enrolment between 2009 and 2016. By 2016, almost 3.8 million students were enrolled in primary and secondary education. In addition, the proportion of 20-24 year-olds who had attained Year 12 or equivalent rose from 84% to 90% between 2011 and 2016. By 2016, Aboriginal and Torres Strait Islander (Indigenous) students made up 5.5% of the total population enrolled in schools. At least 65.4% of Indigenous students enrolled in school that year, and most (83.9%) attended government (state) schools (ACARA, 2016[31]). In 2018, all Australian Education Ministers agreed to review the declaration to develop, in 2019, a contemporary national declaration on educational goals for all Australians, including a wide-ranging consultation phase (National information reported to the OECD).

Funding

- The Australian Government 2018 recurrent funding model is based on recommendations of the Review of Funding for Schooling (2011). Recommendations included implementing needs-based funding that is independent of sectoral difference and targeting resources to support the most disadvantaged students (OECD, 2015[32]). In accordance with the Australian Education Act 2013,

recurrent funding for government and non-government schools is determined on the same basis with reference to a Schooling Resource Standard (SRS), consisting of base funding for every student and loadings for disadvantage faced by a school or its students. For most non-government schools, the base funding is discounted based on the capacity of the school community to contribute towards the school operating costs (CTC). The loadings target students from low socio-economic backgrounds, Aboriginal and Torres Strait Islander students, students with low English proficiency and students with a disability, as well as small schools and schools in regional and remote areas (OECD, 2015[32]).

Progress or impact: The Australian Government will invest an additional AUD 79.3 billion in recurrent funding for schools between 2018-29 (from a 2017 base), bringing the total Commonwealth recurrent investment to AUD 307.7 billion for the same period. In 2018, the government introduced new arrangements for school funding, aiming to move all schools to truly needs-based funding by 2029. These arrangements continue to use a Schooling Resource Standard based on recommendations from the 2011 Review that includes a base amount per student (for most non-government schools it is discounted by the CTC) and additional funding for disadvantage (Gonski et al., 2011[33]).

The CTC methodology was recently reviewed by the National School Resourcing Board. Recommendations were provided to use from 2020 newly available data integration capability to determine the CTC using a direct measure of the income of parents and/or guardians of students at a school. In response, the government announced that they would consult with stakeholders on final policy settings before implementing the measure from 2020. This more targeted measure will aim to ensure that students with greater disadvantage attract higher levels of funding from the Commonwealth for their schools.

The new arrangements will increase Commonwealth funding from an average of 17.5% of the SRS for government schools in 2017 to 20% in 2029 (reflecting its role as a minority public funder of this sector). Funding for non-government schools will also increase from an average of 78.8% in 2017 to 80% in 2029. State and territory governments will also be required to deliver their share of total public funding for schools. The 2018 Report of the Review to Achieve Educational Excellence in Australian Schools suggests three priorities for the investment of funding to improve Australian schools' performance, and grow student achievement (Government of Australia, 2018[34]). The Commonwealth, states and territories should ensure that each student achieves at least one year of growth every school year; that education institutions equip students with necessary skills to be creative, connected and engaged learners in the changing world; and that teaching and leadership practices lend themselves to adaptive, innovative and continuously improving education systems (Government of Australia, 2018[34]).

Additional education policies of potential interest to other countries

Governance

- The Australian Government reports annually to Parliament on progress in closing the gap in outcomes between Indigenous and non-Indigenous Australians. The 2019 Closing the Gap Report found that the target to halve the gap in Year 12 attainment or equivalent rate of Indigenous students by 2020 was on track. The gap has narrowed from 36 percentage points in 2006 to 24 percentage points in 2016 across the country. The share of Indigenous students at or above national minimum standards has improved, and the gap has narrowed between 2008 and 2017. In particular, the share of Indigenous students at or above minimum standards in Years 3 and 5 reading, and Years 5 and 9 numeracy, increased by around 11-13 percentage points, which is statistically significant (National information reported to the OECD and (Government of Australia, 2019[35])).
- Australia's Children's Education and Care Quality Authority (ACECQA) is a national authority established under Education and Care Services National Law Act (2010) to support the administration of the National Quality Framework, which provides a national approach to regulation, assessment and quality improvement for ECEC and outside-school-hours care services across Australia. It aims to ensure consistent implementation across all states and territories and raise quality by driving continuous improvement and consistency in education and care services. The ACECQA publishes annual progress reports on the progression of the National Quality Framework (ACECQA, 2018[36]).
- The Australian Government supports and promotes parental engagement through a number of initiatives: 1) the Learning For Life Program Expansion (2016-17 to 2019-20); 2) the Learning Potential app and website (2015); 3) the Australian Research Alliance for Children and Youth (ARACY) Parent Engagement Project (2014-19); and 4) the funded national parent bodies (National information reported to the OECD).

Funding

- The National Partnership on Improving Teacher Quality (2009-13) provided AUD 550 million to states and territories with AUD 50 million allocated to professional development and support to school principals. The Australian Institute for Teaching and School Leadership (AITSL, 2010) was established to progress work under this national partnership, which concluded in 2013. Although evidence of impact varied depending on the state or territory, many, if not all, agreed that this partnership had resulted in improved professional and leadership development resources for teachers and school leaders across all education sectors of schools. Support programmes for teacher mentors and/or consultants were found successfully implemented in many school networks. It was also found that the partnership allowed states and territories to increase resources for pre-service teachers, initial teacher education and support, and support to teachers and school leaders in "hard to staff" areas. Teacher marketing and recruitment strategies benefited from the partnership (Government of New South Wales, 2013[37]; Government of Northern Territory, 2013[38]; Government of Australian Capital Territory, 2013[39]; Government of South Australia, 2013[40]; Government of

Western Australia, 2013[41]; Government of Queensland, 2013[42]; Government of Tasmania, 2013[43]; Government of Victoria, 2013[44]).

- The Quality Schools' package (2017) covers funding and reform arrangements and provides estimated recurrent funding of AUD 17.5 billion in 2017 to AUD 32.4 billion in 2029 (Government of Australia, 2018[45]). The funding for the package is tied to the Schooling Resource Standard, based on recommendations of the 2011 Review of Funding for Schooling, and will be fixed to evidence-informed reforms (Government of Australia, 2019[46]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Austria

Context

Schools in Austria have some of the most favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.21 (the OECD average index value was 0.00). Student truancy was lower in Austria than the OECD average: 10.9% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Austria were among those least likely to report that their science teachers frequently adapt their instructions, with an index of adaptive instruction of -0.28 compared to an OECD average of 0.01 (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership in Austria (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was lower than the OECD average at -0.07 (the OECD average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in Austria in 2016 aged 50 or more was 49%, which was among the highest in the OECD (the OECD average was 35.4%). In 2017, teachers in Austria had fewer net teaching hours for general programmes than the OECD average. Teachers annually taught 779 hours at primary level and 607 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, school autonomy levels over curriculum in Austria are slightly lower than the OECD average: 72.1% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Lower secondary teachers in Austria earned 90% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was similar to the OECD average of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 84.2% of teachers in Austria said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6% (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Austria are less likely than the OECD average to conduct self-evaluations of their schools (89.2% of students were in schools whose principal reported this compared to the OECD average of 93.2%) and much less likely than average to undergo external evaluations of their school (40.6% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]).

School autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher in Austria than on average across the OECD: 50% of decisions in Austria were taken at the school level, compared to the OECD average of 29%.

Annual expenditure per student at primary level in 2015 was USD 11 689, which was among the highest among OECD countries (the OECD average was USD 8 631). At secondary level, Austria spent USD 15 477 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development) Austria spent USD 17 555 per student, compared to the OECD average of USD 15 656. The proportion coming from private sources (including household expenditure,

expenditure from other private entities and international sources) in Austria was lower than the OECD average (5.2% compared to an average of 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

Austria's key education policy priorities have evolved in the following ways over the last decade (Table 8.2).

Table 8.2. Evolution of key education policy priorities, Austria (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, improving teaching practices and learning for all students can help improve education quality. Progress in fostering cultural acceptance for greater pedagogical leadership within the education system was identified as slow. [2010; 2016]	N/A
Evaluation and assessment	N/A	Austria reported the ongoing challenges of attracting teachers to the profession and improving teacher education in the context of an ageing teacher workforce. [2013]
Governance	OECD evidence showed that quality assurance of apprenticeship training was insufficient, as it did not guarantee the minimum standards. In addition, general compulsory schools were found to rely heavily on local fiscal and political conditions, which led to staff shortages and unequal distribution of personnel resources. As a result, not allowing schools any influence on the selection of teaching personnel could lead to misallocations and frustrations, and prevent schools from developing a particular profile. [2010; 2016]	Austria reported the ongoing needs to improve the quality of teaching and research, co-operation and co-ordination in the tertiary sector, and to provide a forum for the participation of the main stakeholders. More recently, some policy efforts have focused on harmonising teacher education at lower secondary level and better co-ordination between the different teacher education institutions. [2013; 2016-17]
Funding	The OECD identified the division of responsibilities between the federal and the provincial governments as a significant challenge in the current governance and funding arrangements. Within the funding system, resource allocations were based almost entirely on student numbers and thus, lacked flexibility, transparency and trust, among provinces and the municipalities. [2016]	A new priority includes maintaining funding and targeted investments in education and training despite fiscal consolidation needs during the coming years. [2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Austria implemented the School Entry and Primary School package (Schulrechtsänderungsgesetz or Grundschulreform, 2016) that changed and introduced new elements to the School Organisation Act (Schulorganisationsgesetz), the School Education Act (Schulunterrichtsgesetz) and the Compulsory Schooling Act (Schulpflichtgesetz) (BIFIE, 2019[47]). The

implementation of the new package introduced changes to: the review of performance and information exchange on performance; to the conditions for entrance to primary school; and to improve children's transition from early childhood education and care (ECEC) to primary school (OECD, 2017[48]; BIFIE, 2019[47]). It aims to strengthen students' competencies by merging the last year of kindergarten and the first two years of primary school into a single school entry phase (OECD, 2017[48]). This change intends to facilitate earlier diagnosis of learning difficulties as well as exchanges between kindergarten and primary teachers. The package also promoted measures encouraging children's learning German from kindergarten to maximise integration, particularly for those with an immigrant background or who have recently arrived in the country.

Progress or impact: The implementation is supported by a continuous formative evaluation from the school year 2016/17 until the end of 2019 (BIFIE, 2019[47]). In 2017, primary school leaders were interviewed on the implementation process of the reform (Grillitsch and Stanzel-Tischler, 2018[49]). Based on the results of the evaluation, four overall conclusions were identified: 1) the general conditions at the schools greatly influence how the individual measures are implemented; 2) the extent of implementation of the individual measures depends on previous experience and starting conditions as well as the implementation strategy of each state; 3) the implementation of new measures needs time, continuity and adequate support; 4) the inclusion of all stakeholders and close co-operation between the federal level and the nine provinces are essential for the success of the reform measures (Grillitsch and Stanzel-Tischler, 2018[49]).

In addition, the steering mechanisms in primary schools were changed with the 2017 Autonomy of Schools package (Bildungsreformgesetz) (BIFIE, 2019[47]). As of the school year 2017/18, more autonomy is given on selecting the school independent of the place of residence (BMBWF, 2018[50]). This was then followed by the federal act Pedagogy Package (Pädagogik-Paket, 2018), which was decided upon at the end of 2018 and which introduced further changes to primary schools, especially in terms of performance (BIFIE, 2019[47]). An internal evaluation took place on the language support measures with a new package of improved and further developed language measures, which was decided upon mid-2018 and has been implemented since the school year 2018/19 (national information provided to the OECD).

Evaluation and assessment

- In 2013, Austria developed a new national quality assurance system for general education schools (Schulqualität Allgemeinbildung, SQA). The system requires school leaders, in consultation with teachers, to put development plans in place that cover three years each time; they are also required to update them annually. The plan must include self-evaluation, which can be either an internal or external consultation with specially trained school development advisors. Each school and province has assigned SQA co-ordinators who implement and co-ordinate the SQA system.

Progress or impact: For the formative evaluation of the national quality assurance system (SQA), two assessment rounds took place in 2015 and 2018. All school principals, the entire school supervisory authority for general education, the national SQA co-ordinators and the school co-ordinators were surveyed.

Based on the consultation with school principals, the 2015 report found that in 2014/15, school inspectors and SQA co-ordinators perceived the implementation process as positive (Skliris, 2016[51]). The structure and leading questions of the development plans were found to be useful. The development plans at the individual schools served as a tool to promote the development of school and class quality. The goal to establish evaluation talks on the different levels had been only partially reached, however. School principals found the support by actors, such as the SQA co-ordinators, as positive. At the same time, the support had not been used on a comprehensive scale (Skliris, 2016[51]).

The 2018 evaluation results confirmed that support structures anchored within the framework of SQA were generally accepted and assessed positively (Skliris et al., 2018[52]). It underlined that counselling services offered by University Colleges of Teacher Education and support for school management by SQA co-ordinators appeared necessary for successful quality measures at the school level. It was also reconfirmed that feedback and evaluation were not yet common practice, while overall improvements had taken place. Teaching development had played a central role in many schools, and school principals had promoted teacher co-operation. Measures to develop teaching in schools have also increased since the introduction of SQA. In sum, personnel development and further education were considered of great importance at all system levels. Both school principals and school supervisors have reported an increase in these measures in their area of responsibility since the introduction of SQA (Skliris et al., 2018[52]).

This means that in the new quality measures, too, special attention must be paid to evaluation and evidence-based issues. The results form the basis for implementing the legal mandate to further develop a uniform system for all types of schools (Education Reform Act 2017). More specifically, these elements include the development plans, balance sheet and targeted agreement discussions between management levels, school management and school supervision. The aim is also to ensure the link between the new system and the SQA, according to national information shared with the OECD. The anticipated starting date for the new common quality measures system is the beginning of the school year 2020/21.

- In Austria, new, standardised and competence-oriented Matura examinations (Standardisierte Reife -und Diplomprüfung) have been implemented in academic secondary schools since 2014/15 and colleges for higher vocational education since 2015/16. The new *Matura* has both standardised and non-standardised components, including centrally administered written examinations conducted on the same date throughout Austria, as well as other assessments related to the specific focus of the school. The expected impact is to: 1) allow for greater objectiveness and

transparency; 2) establish common framework conditions for all candidates; and 3) improve student possibilities to move on to higher education (Eurydice, 2018[53]).

Progress or impact: As of 2017, the standardised *Matura* and diploma examination also applies to the university entrance exam for vocational education and training (VET) students (BMBWF, 2018[54]).

Additional education policies of potential interest to other countries

School improvement

- As part of Austria's digital education strategy "School 4.0 – Let's get digital", Austria started introducing an innovation package (2017). This package provided broadband to schools, aiming for full coverage by 2021, and established a foundation to support innovative projects in schools (OECD, 2017[48]; European Union, 2017[55]). In 2018, a new Master Plan for Digitalisation in Education was announced, replacing the previous strategy, with the aim of full implementation by 2023 (BMBWF, 2018[56]). The plan comprises three parts: teaching and education content; professional development of education staff; and infrastructure and school administration (BMBWF, 2018[56]).
- Austria's New Teacher Education Scheme (PädagogInnenbildung Neu, 2015/16), requires University Colleges of Teacher Education (Pädagogische Hochschulen) and universities to collaborate to provide a common standard for teacher education. This applies particularly for Master's courses, which all teachers must now complete within the first five years of entering the teaching profession. Teacher education has been re-oriented towards age groups rather than school types. This separation aims to enhance mobility between school types and standardise the status of teachers regardless of the school type they teach in. In 2015, the new training for the primary level started throughout Austria, followed by the nationwide implementation of teacher education studies for secondary level in 2016. In the first year of their career, new teachers will be accompanied by a mentor (induction phase). The New Teacher Education Scheme continues to be implemented in 2019 as planned.
- Austria's new Legislation on the Employment of Teachers (Dienstrechts-Novelle 2013 –Pädagogischer Dienst) started being implemented in 2015. This scheme modified the salary scale by raising teachers' starting salaries and creating new specialist functions (*Fachkarrieren*) in addition to the school principal and administrator roles.
- Between school year 2014/15 and school year 2018/19 teachers could choose between entering the old or the new system. This changes in 2019/20 and for teachers who enter the teaching profession for the first time from 1 September 2019. The employment relationship begins with a compulsory one-year induction period that has to be completed successfully in order to continue being employed in the teaching profession.

Evaluation and assessment

- With the 2015 education reform, Austria introduced pilots of an "education compass", which records a child's talent and development needs, including linguistic needs, based on an assessment of a child's potential at the age of three and a half years (European Union, 2017[55]).

Systems

Selected education policy responses

Governance

- The Agency for Quality Assurance and Accreditation Austria (Agentur für Qualitätssicherung und Akkreditierung Austria, AQ Austria) was established in 2012, for Austrian higher education institutions. According to recent OECD research, all higher education institutions must undergo regular external quality assurance by the AQ Austria or, in the case of an audit, by another internationally recognised quality assurance agency, such as a member of the European Quality Assurance Register (EQAR). Austria's higher education system is comprised by 22 public and 14 private universities, 21 Universities of Applied Sciences (*Fachhochschulen*) and 14 University Colleges of Teacher Education (*Pädagogische Hochschulen*) (OECD, 2017[48]).

> **Progress or impact:** The Agency for Quality Assurance and Accreditation Austria made revisions to the quality assurance procedures following 2016 evaluations and strategy development processes. According to the 2016-17 feedback analysis report based on AQ Austria's performance, satisfaction with the procedure, the work of the Board and the Secretariat had rated as "high" since 2014 (when the preparation of the first feedback report began). However, AQ Austria indicated in its 2017 annual report that despite overall satisfaction, some institutions criticised the usefulness of the accreditation process for their internal quality development (AQ Austria, 2017[57]).
>
> Furthermore, since 2014, AQ Austria must also undergo an external evaluation every five years in order to renew its membership in the European Association for Quality Assurance in Higher Education (ENQA) and its affiliation to the European Quality Assurance Register for Higher Education (EQAR). The Board of AQ Austria set up a working group during the reporting period to conduct its self-evaluation and to prepare the self-evaluation report, which was adopted by the Board in November 2018. The completion of the next external evaluation is scheduled for early summer 2019 (AQ Austria, 2018[58]).

- The Autonomy of Schools Package (Bildungsreformgesetz, 2017) aims to increase schools' decision-making capacity over the organisation of school time and student learning groups to meet students' and parents' needs. It took effect in 2018, with some measures taking effect in 2020. This package also aims to give schools and school leaders more autonomy over staffing recruitment and performance management, by professionalising school leadership and devolving responsibility

for some human resource functions to school leaders. The package includes an administrative reform that establishes new Boards of Education (*Bildungsdirektionen*) for each of the nine provinces as of 2019. These new Boards of Education will be responsible for the administration of both federal and provincial schools, including uniform electronic personnel management for all federal and provincial teachers, and regional management of external school organisation, administrative staff and school inspection. The package also allows for several schools to be clustered for administrative purposes and provides opportunities to test pedagogical approaches to comprehensive schooling for all pupils aged 10-14 years in some designated model regions. The government also planned to develop a concurrent evidence-based quality assurance framework to ensure the quality of the system in general. Additional reforms include the establishment of a foundation to support innovative projects in schools (OECD, 2017[48]). Another reform are pilots of an "education compass" to monitor the needs and development of children from age three and a half years (European Union, 2017[55]).

Progress or impact: The step-by-step implementation of the Autonomy of Schools Package has been taking place since 2017, with the new measures having taken effect as of 2018 (BMBWF, 2018[59]). By 2019, the school administration was reorganised with the establishment of nine Boards of Education (joint authority between the federation and provinces) (National information reported to the OECD). In order to ensure quality in Austrian schools as well as the effective, efficient and transparent use of resources, a comprehensive education controlling system will be set up at all levels of school administration and in all schools. This includes quality management, education monitoring and resource controlling. To monitor its progress, the Minister of Education intends to specify a number of framework conditions, such as: 1) a definition and description of school quality; 2) the recording of important areas of school quality and framework conditions (e.g. learning outcomes, retention rates, social environment, school climate, educational pathways, resources) on the basis of regularly and centrally collected data and indicators (education monitoring); 3) a definition of benchmarks in key quality areas to be defined, which will provide orientation for quality measures at the various levels of the school system; and 4) periodic planning and reporting (development plans, quality reports, quality programmes) and periodic reviews and target agreements at and between the school administration and school levels (quality management).

Funding

- Austria has implemented several initiatives to combat gender stereotypes and promote equality in labour market outcomes, including legally mandated gender budgeting, or setting gender equality as an objective when allocating public funds (OECD, 2017[48]). Gender budgeting requires every line ministry to set at least one gender equality performance target. An annual government report evaluates if the objectives in the previous budget have been achieved. The report is transmitted to Parliament in time for the debate on the next budget. Performance targets include "achieving a better distribution of paid and unpaid work between women and men on the basis of an adequate tax system" (Ministry of Finance), "stronger re-

involvement of women in the labour force after career breaks" (Ministry of Labour), "strengthening women's competencies in business" (Ministry of Economy) and "improvement of equality of opportunities in education" (Ministry of Education and Women Affairs) (OECD, 2015[60]). The government is required to undertake an *ex ante* assessment of the impact on gender equality for any regulation with the impact assessment process for all laws and ordinances (*Wirkungsorientierte Folgenabschätzung*) introduced in 2013. There is a set of rules for assessing impacts on gender equality, as well as a handbook and training for the users, and a mandatory *ex post* evaluation (Downes, von Trapp and Nicol, 2017[61]). The gender budgeting project provides resources to gender-related initiatives proposed outside of the Federal Ministry of Education and Women's Affairs.

Progress or impact: According to a 2015 OECD economic review of Austria, the gender budgeting project has some challenges, which include limited co-ordination across different bodies and levels of government, and a need to assess the budgetary impact of specific targets. The OECD advised that the monitoring of spending associated with gender targets be provided by an independent gender budgeting council.

Other work has also encouraged developing a better link between medium-term gender objectives and gender-related long-term strategies at the EU level (OECD, 2015[60]). By integrating gender equality objectives, measures and indicators into the impact-oriented (budget) management of the education system, the aim is that actors in the education system at all levels become more concerned with gender equality issues. This measure could raise awareness of gender inequalities and generate concrete budget-relevant measures at the various levels of steering (e.g. target and performance plans of University Colleges of Teacher Education and Boards of Education; performance agreements with universities).

Additional education policies of potential interest to other countries

Funding

- The Universities Act 2002 (Universitätsgesetz) has undergone various recent amendments to improve governance and funding mechanisms in higher education. Before 2013, universities' funding models consisted of a basic budget and a formula-based budget. The 2013 amendments of the Act introduced structural funds to replace the formula-based budget and ensure the competitive distribution of funds based on a more comprehensive set of indicators. For example, between 2013 and 2015, the government distributed 60% of structural funds for higher education based on the number of students enrolled in a Bachelor's, diploma and Master's degree courses with weighting based on subject groups. The amendments also introduced access regulations in fields of study that are in high demand to improve study conditions in these programmes and aimed to improve student-teacher ratios by raising the number of staff active in these programmes as part of the performance agreements. In 2014, amendments to the Act adjusted from 40% to 50% of the women's quota of the Equal Treatment Act (Gleichbehandlungsgesetz, B-GlBG), as well as defined binding structures for

university development plans and harmonised admission regulations (Eurydice, 2018[62]). In 2018, an amendment to the Universities Act brought considerable changes to how Austrian universities are funded. The "new model of university financing" provides capacity-oriented, student-related funding. This new financing model was applied in the performance agreement period (2019-21) for the first time.

- The Austrian government has been developing a new set of principles based on goal-oriented budgeting since 2009. Implementation began in 2013 and is expected to end by 2019-21. For each budget year, the federal budget gathers a set of policy goals associated with specific quantitative and qualitative indicators. These goals and indicators will serve as a guideline for policy making and promote more transparency in assessing government performance. For the Federal Ministry of Education, the 2015 budget included the policy goals of raising the level of education of students and improving equity and gender equality in education. Examples of indicators used are graduation rates in upper secondary education and the share of new entrants in higher education (Nusche et al., 2016[63]).
- Austria introduced a one-off levy on banks in 2016 to create an overall fund of EUR 1 billion entirely dedicated to education projects such as the expansion of all-day schools, creating a foundation for innovation and research in education and creating new student places at Universities of Applied Sciences (OECD, 2017[48]). Special consideration has been made for all-day education. Before the levy, Austria already had a EUR 654 million investment programme to increase the number of all-day schools between 2011 and 2018. The investment of the additional EUR 750 million from the bank levy has been postponed to school-year 2019/20 until 2032/33. The reason for this amendment is the availability of remaining funds out of the previous investment programme for all-day schools dating from 2011 to 2018. The aim is to provide a care rate of 40% for students aged 6-14 by 2032/33 (starting with a care rate of 26% in 2018/19).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Belgium

Context

In terms of learning environments, student truancy in Belgium was among the lowest in the OECD: only 7.1% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. At the same time, schools in Belgium have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.16 (the OECD average index value was 0.00. Students in Belgium were also less likely to report that their science teachers adapt their instruction more frequently than the OECD average, with an index of adaptive instruction of -0.38 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of professional development leadership in Belgium (measuring the frequency with which principals report doing leadership activities specifically related to staff professional development) was 0.12, compared to an OECD average of -0.01. However, the index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was lower than the OECD average at -0.31 (the OECD average was 0.01) (OECD, 2016[1]). In 2016, the proportion of lower secondary teachers aged 50 or over was 28.2%, which was below the OECD average of 35.4% (OECD, 2018[2]). However, recent information from the Flemish and the French Communities of Belgium points to a growing teacher shortage from 2018 onwards that will have to address ways of mitigating the replacement of retiring teachers and attracting new teachers to the profession (National data reported to the OECD). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 78.8% of teachers in Belgium said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6%. (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Belgium are less likely than average to conduct self-evaluations of their schools (84.7% of students were in schools whose principal reported this, compared to the OECD average of 93.2%), but more likely than average to undergo external evaluations of their school (85.7% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). According to school principals' self-reports in PISA 2015, schools' levels of autonomy over curriculum in Belgium are close to the OECD average: 75.4% of principals reported that the school had primary autonomy over curriculum, compared to the average of 73.4% (OECD, 2016[1]).

Belgium has three autonomous education systems (for the Flemish Community, the French Community and the German-speaking Community). The role of the federal government is limited, while the distribution of decision making also differs within each Community. In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher within the Flemish Community of Belgium than the OECD average: 50% of decisions were taken at the school level, compared to the OECD average of 29%. In contrast, within the French Community, 25% of decisions were taken at the school level and 25% across multiple levels (OECD, 2018[2]).

Annual expenditure per student at primary level in Belgium in 2015 was USD 10 211, which was above the OECD average of USD 8 631. At secondary level, Belgium spent USD 13 070 per student, compared to the OECD average of USD 10 010, while at tertiary

level (including spending on research and development), Belgium spent USD 17 320 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in Belgium as a proportion of gross domestic product (GDP) was 5.7%, which was above the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (6.8% compared to an average of 16.1%). However, the relative proportion of public expenditure on education from primary to tertiary was 93.2%, compared to the OECD average of 82.7%. Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education decreased by 0.8 percentage points, compared to an average decrease across the OECD of 1.3 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Belgium's key education policy priorities have evolved in the following ways over the last decade (Table 8.3).

Table 8.3. Evolution of key education policy priorities, Belgium (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	For the **Flemish Community**, the OECD identified a need for greater efficiency in the provision of school places, improvement in the quantity and quality of school facilities, and increased transparency at the school level. The OECD identified the need to ensure that well-qualified candidates enter the teaching profession at an adequate rate due to current demographic trends, to improve the functioning of the teacher labour market, and support and enhance teacher preparation and professionalism. [2015]	The **Flemish Community** reported an unequal distribution of experienced teachers across schools. [2016] Challenges persist, according to self-reports, in attracting and retaining new teachers and enhancing school principal preparation and professional development. [2016] More recently, particularly urban schools are increasingly facing difficulties in recruiting qualified and experienced teachers. Expanding pathways to access the teaching profession has been an important topic of policy effort as well. [2013; 2016-17; 2018] The **French Community** set the priority to improve the professionalisation of school leaders and to address the varying levels of quality in initial teacher training. Furthermore, new priorities include creating additional spots in schools to respond to recent demographic changes, addressing teacher shortages and improving overall teaching competencies. [2013; 2016-19] The **German-speaking Community** reported the ongoing challenge of teacher shortages, the lack of teacher career progression opportunities, and the relatively large number of teaching staff without permanent appointments, as well as cuts in positions or hours. [2013]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
Evaluation and assessment	For the **Flemish Community**, the OECD found that for school evaluation to effectively improve quality across the whole education system, all schools must have a clear understanding of the performance level that can be achieved by the most successful schools, and can accurately evaluate how their performance compares. This entails the need to better integrate self-evaluation and inspection, and strengthen the links between school self-evaluation and teaching quality. In addition, there is a need to increase the use of information for both internal and external school evaluation and strengthen teacher appraisal. OECD evidence also underlined the need to make the results of assessment available and understandable for the wider public, including parents. [2011]	In both the 2013 and 2016-17 surveys, the **Flemish Community** reported the ongoing priority of modernising higher education quality assurance. The lack of information on student learning outcomes had previously been identified as making impact evaluations of school funding more difficult. More recently, it was found that the issue is not a lack of information, but rather a lack of empirical evidence of resource outputs in a system where resources are based on school and student characteristics. [2013; 2016-17] More recently, improving the inspectorate has been a priority as well. [2018] A previously reported challenge by the **French Community** is to have evaluations in place that are diversified in terms of objectives and methods while being performed at different system levels. Another ongoing reported priority is to create coherence and linkages between evaluations as well as to ensure that external evaluations systematically cover all disciplines included in the repositories of skills. [2013]
Governance	The OECD identified the need for policy co-ordination across the Belgian regions. [2015] In 2019, the OECD recommended that the **Flemish Community** strengthen the governance of adult learning through establishing a clearer vision for the sector, promoting greater coherence between levels of government and promoting the role of local actors.	Since 2013, the **Flemish Community** has identified rationalising the higher education landscape as a priority. More recently, there has been a focus on modernising secondary education through restructuring programme offers and educational content [2019]. The **French Community** previously identified the need to reform governance at the higher education level, including better co-ordination of activities and representation of the system as a single structure. There is also the need to create additional spots in schools to meet demographic challenges. The structure of the General Administration of Education faced several ongoing challenges. [2013] More recently, improving governance mechanisms to promote school improvement has been a key priority. [2019] The **German-speaking Community** reported ongoing challenges in ensuring that social background and income levels are not barriers to accessing education due to high levels of incidental expenses in the system. Another ongoing need is to update many legacy policies within the education system in order to modernise approaches. [2013]
Funding	OECD evidence underlines the need to increase spending efficiency and coherence of sub-federal governments in higher education. [2011] According to OECD evidence, the school funding system in the **Flemish Community** is complex and not fully transparent or readily understood, and there is an imbalance of spending between elementary and secondary education. There are large social differences in educational achievement despite a high level of public investment. Fiscal constraints make it difficult to maintain a school system, which offers both small schools, as well as varied and complex course options. [2015] In 2019, the OECD recommended exploring options for financially incentivising flexible modes of adult training and grouping all	The **Flemish Community** reported the ongoing policy priority of enhancing schools' infrastructure capacity to respond to demographic evolution. More recently, the Flemish Community identified a need to improve master planning and sustainability of school infrastructure maintenance and construction [2013; 2016-17; 2019]. New challenges have emerged regarding the imbalance in the distribution of funding across levels of education and the lack of a Community-wide reporting system bringing together financial indicators and student outcome indicators. [2019] The **French Community** reported a recent challenge concerning the relatively high level of education funding, while it is no longer possible to observe a correlation between the amounts invested and the results achieved across the system. Other challenges include the creation of additional places in schools due to demographic change, as well as the attribution of resources to

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	existing incentives to reduce complexity. For both the **Flemish Community** and the **French Community**, the OECD raised concerns regarding the long-term sustainability of the higher education funding model. [2017]	communities according to a fiscal key and not based on their needs. More recent priorities include clarifying the funding mechanisms of the *hautes écoles*, improving the overall coherence for higher education and rebalancing spending between fundamental and secondary education. [2013; 2016-17; 2019]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

Flemish Community

- The government of the Flemish Community has introduced several changes to initial teacher education (ITE) in recent years. In 2018, the Flemish Parliament adopted a decree broadening the path to becoming a teacher, reinforcing the profile of prospective teachers, streamlining training and increasing the quality of ITE (National information reported to the OECD). ITE programmes are now exclusively offered by universities, as well as some university colleges, and feature improved content on didactics, classroom management, multilingualism and diversity. From the 2019/20 academic year, prospective teachers can enter one of six ITE programmes: a short-cycle course for teaching in secondary education, three Bachelor's courses for pre-primary, primary and secondary education and two Master's courses in art subjects and secondary education. As such, prospective teachers can now enrol in an ITE programme at any stage of tertiary education, including, for the first time, directly after upper secondary completion. The reform has also eased students' transfer to ITE from other tertiary courses, as well as facilitated mature student pathways into ITE and the transition into teaching for those with three or more years' experience in an alternative profession (Flemish Parliament, 2018[64]). In the 2018/19 academic year, the government introduced a compulsory non-binding, institution-neutral admission test for ITE. This assesses a prospective teacher's preparedness for studies and identifies any possible need for remedial support. Ultimately, this aims to increase completion rates and improve the quality of ITE graduates (National information reported to the OECD).

> **Progress or impact:** A 2013 evaluation of initial teacher education in Flanders first inspired these reforms. Following the evaluation, the Flemish government adopted a concept note, in 2016, containing a set of proposed measures to enhance teacher education and improve the profile of new entrants to the profession. While awaiting legislative approval, the government piloted some measures and established several working groups. For example, it first piloted the test to evaluate the competencies of prospective student teachers in 2015/16, and then expanded the pilot in 2016/17 (OECD, 2017[65]). However, with a recent decline in ITE graduates and an older demographic profile of teachers, the Flemish Community faces

growing recruitment needs in pre-primary and particularly secondary education. The Department of Education and Training predicts that, in general, teacher recruitment needs for the academic year 2023/24 will be 10% higher than 2014/15 (Department of Education and Training, 2015[66]).

French Community

- In Belgium's French Community, the Pact for Excellence in Teaching (Pacte pour un enseignement d'excellence, 2015-30) built on a participatory consultative process (2015 to mid-2016), including key stakeholders (teachers, educators, parents and students). It was also developed in consultation with the economic, social and cultural sectors. The five main goals are: 1) teach the knowledge and skills required for 21st-century society; 2) mobilise education stakeholders within a framework of school autonomy and accountability; 3) make the vocational pathway a stream of excellence; 4) promote inclusive education, and strengthen the fight against school failure, dropout and repetition; and 5) ensure the well-being of each child in a quality school, favouring a democratic school (OECD, 2017[65]).

Progress or impact: In 2018, the government approved two decrees to support the implementation of the Pact for Excellence in Teaching (Ministère de la communauté française, 2018[67]; Ministère de la communauté française, 2018[68]). The Steering of Schools Decree aims to improve the system's governance from the school level, and a second decree regulates that each school enters into a contract with the Central Authority to assess the development of the implementation of the Steering Decree (*délégués au contrat d'objectifs*) (see Governance). Support was provided as well for the implementation of the pact through the allocation of 1 100 staff reinforcements in pre-primary education during 2017-19, granting of administrative or educational assistance for the school leaders of pre-primary and primary education, or additional support for specialised education.

The French Community has also undertaken different measures to strengthen the role of the school principal. A 2019 decree was also adopted to reinforce school principals' pedagogical leadership, aiming to strengthen their role in human resource management.

To strengthen the collaborative work of educational teams, the decree on the organisation of teachers' work (Decree on Teacher's Working Time, 2019, to be implemented in 2020) incorporates into each teacher's timetable a number of periods of compulsory collaborative work and defines all teachers' tasks (National information reported to the OECD and (Ministère de la communauté française, 2019[69]). The decree reform will also increase the number of days of in-service training, and career diversity.

In 2017, increasing the course length for initial teacher education from the current level of three years was discussed (OECD, 2017[70]). Budget constraints may, however, hinder the implementation of a five-year Master's programme for all teachers (European Commission, 2016[71]). A new decree (Décret du 7 février 2019) to enter into force in 2020 redefines initial teacher education that includes, among others, longer study periods

and aims to strengthen the skills and knowledge across all disciplines as well as ensure a better command of the French language. New long-term curricula for initial teacher education will be co-organised by full-time higher education institutions (*hautes écoles* [university colleges], art colleges) as part of a co-diploma programme (Ministère de la communauté française, 2019[72]). The extension of initial teacher education will be matched by an increase of funding to universities and university colleges (*hautes écoles*) with an overall estimated budget of EUR 36-40 million until 2024.

Additional education policies of potential interest to other countries

School improvement

Flemish Community

- In 2018, the Flemish government concluded three collective labour agreements (CAOs) with the social partners (teachers' unions) in compulsory education, basic adult education and higher education. The CAOs aim to make teaching a more stable career and increase job security, particularly for starting teachers. As part of these efforts, the CAOs approved the introduction of a compulsory induction period, a simplified transition process from temporary to permanent appointments (which can now occur after 400 instead of 600 days' work), and improved salary conditions (Eurydice, 2019[73]). Schools now receive additional resources to develop induction processes for new teachers. To increase job security, from 2019, teachers can progress to a temporary appointment of continuous duration (as opposed to definite duration) after a minimum of two years' teaching and after having completed a minimum of 690 days of teaching. This replaces the previous minimum requirements of three years and 720 days, respectively. Progressing to this contract type means that the contract will be automatically renewed if the school continues to be funded for the associated teaching hours (Nusche et al., 2015[74]). To support this, the Flemish Community piloted a teacher platform project during 2018/19 in almost all primary schools and some secondary schools. The project commits to providing a full year of job security to nearly 3 000 starting and temporary teachers. This may take the form of regular replacements, or the long-term replacement of a permanent teacher who chooses to pursue an assignment via the teacher platform, or other meaningful pedagogical tasks across the school year (Ministry of Education and Training, 2018[75]). An initial analysis of the platforms shows that over 3 300 teachers have signed up. However, less than 10% of them have permanent contracts, restricting the chances for new teachers to enter a single one-year teaching assignment (Eurydice, 2019[73]). Additionally, the government has freed up 6 000 extra positions for permanent appointment in posts where the holder is absent due to certain leave schemes (National information reported to the OECD).

French Community

- A 2016 reform of titles and functions for teaching seeks to better match the teaching job functions with the required teaching titles or qualifications needed for lesson teaching and employment opportunities in schools. As part of this reform, each teaching function has a list of qualifying titles. Depending on the function, titles

can be classified as "required" (*titre requis*, considered a priority), "sufficient" (*titre suffisant*) or "in shortage" (*titre en penurie*). Available teachers can register through a portal (PRIMOWEB), which schools must consult when a position is available.

- A new mandatory welcome and support programme for teachers came into effect as of the 2016/17 school year. It includes an interview with the head of the school, introduction to other staff members, explanations of the school's pedagogical approach as well as working regulations and conditions.
- Previously, the DPPR system (Les disponibilités pour convenances personnelles précédant la pension de retraite) allowed teachers to retire at the age of 55. The new system, implemented in 2011, no longer allows for teachers born after 1956 to retire at age 55, which led to an increase of teachers still active at the age of 55 and 56 years in all levels of education in 2014. This measure extended to teachers aged 57 years in 2016. The reform of the system has allowed DPPR to save EUR 19.7 million in 2012; EUR 20.9 million in 2013; EUR 9.2 million in 2014; and EUR 8.6 million in 2015 (Ministère de la Fédération Wallonie-Bruxelles, 2016[76]). DPPR had reached a peak of 6 940 full-time equivalent teachers in 2012 and then continued to decline. In 2019, there are only 1 973 full-time equivalent teachers in DPPR. The annual cost of the DPPR, which amounted to roughly EUR 100 million in 2011, is now down to EUR 40 million in 2018 (National information reported to the OECD, 2019).

German-speaking Community

- In co-operation with the Directorate for Education, Culture and Sport (*Direktion für Erziehung, Kultur und Sport*) of the canton of Fribourg, Switzerland, the German-speaking Community published a brochure on homework practice (2015) (Das Bildungsportal, 2019[77]). The brochure aims to provide a common policy for homework practice, improve the quality of homework and establish homework support in schools to ensure the same conditions for all students. Teachers can request access to the brochure (Das Bildungsportal, 2019[77]). According to national information reported to the OECD, the brochure is regularly promoted by offering a school intern training day, part of the "continuing training catalogue" (Weiterbildungskatalog), and is issued on an annual basis by the Autonome Hochschule (AHS), the only higher education institution in the German-speaking Community.
- A 2010 decree harmonises the various forms of teaching qualifications. It aims to ensure the quality of education and to offer a unified form of teaching ability.
- In the German-speaking Community, the 2008 decree on the reassessment of the teaching profession stipulated that the Baremen reform (2009) come into effect. Following the reform, starting salaries were increased by 10% (3% in 2009, 3% in 2010 and 4% in 2011). This only applies for members of staff in application departments, not for members of staff in the selection and advancement departments.

Evaluation and assessment

Flemish Community

- The Inspectorate 2.0 framework (2018) establishes a new evaluation framework that aims to improve school inspectorate services. The framework was piloted in a few schools during 2016/17, and then approved and first implemented during 2018/19 (Vlaamse Regering, 2017[78]). Previously, the Inspectorate had performed external quality monitoring in each school at least once every ten years via a three-week structured inspection process with criteria focused on four elements: context, input, process and output (CIPO framework). The new inspection framework focuses on enhancing educational quality with a greater emphasis on internal quality assurance, among other changes (Vlaamse Regering, 2017[78]). The new framework is therefore intended to act as a reference against which schools can develop their own policies to ensure and enhance quality (Eurydice, 2019[73]). School inspection visits are now scheduled to take place at least once every six years. They will focus more on fostering improvement-focused dialogue with schools, as well as simplifying procedures, increasing transparency, and reducing the planning burden on schools. As well as monitoring individual teaching and learning practices, school inspections will also now endeavour to consider quality more globally in terms of a school's policies and systems. The framework was developed in consultation with stakeholders and drew on a scientific literature review (National information reported to the OECD).

French Community

- The Declaration on Community Policy (Déclaration de politique communautaire, DPC, 2014-19) in the French Community aims to strengthen the guidance and assessment tools to reduce failure in higher education and increase the number of graduates. More specifically, measures include strengthening higher education teachers' didactic training, developing action plans to guarantee students' success throughout higher education, and enhancing the links between secondary and higher education (Fédération Wallonie-Bruxelles, 2014[79]).

- In 2016, the government of the French Community adopted the draft decree on external evaluations. This decree amended the 2006 Decree on External Evaluation of Student Learnings in Compulsory Education and on the basic education certificate at the end of primary education. The new decree specifies the confidentiality obligations of the staff and the general framework of external evaluations, from design to the administering of the examinations.

- In the French Community, formative assessment in all schools is legally mandated. Evidence suggests that several schools have established "needs-based groups" working on the basis of formative assessment results. Since 2013, the French Community also certifies knowledge, professional competencies and skills by units (Certification par unités, CPU) for students in Grades 5 and 6 of vocational education, and more recently, starting from Grade 4 as well. Evaluation outside validations of learning achievement units (Unités d'Acquis d'Apprentissage, UAA) (for qualifying training) is formative and can lead to remediation, consolidation or overcoming. This longer span of formative assessment and options aims to increase students' opportunities for success in their training and to avoid repetition. Rendering the students as agents of their learning is among the CPU objectives. An apprenticeship file is completed throughout the training by the class council in

consultation with the student. A skills report takes stock of what is acquired, what remains to be acquired and offers suggestions for further training. Project weeks and internships in companies are also carried out to prepare the students for their future jobs. Internal monitoring has shown that a majority of students and teachers adhere to this scheme. The CPU is in the experimental phase until 2020 (National information reported to the OECD).

Systems

Selected education policy responses

Governance

Flemish Community

- In 2015, the Flemish government introduced a significant change to the quality assurance system for higher education. A new decree gave universities and universities of applied science and arts more control over their own quality assurance in order to both simplify and strengthen the system. Institutions were granted the choice between undertaking either an institutional review, as well as programme assessments and accreditation, or an extensive institutional review (*eigen regie*), including an assessment of the ability of institutions to safeguard programme quality for the future (VLUHR QA, 2019[80]). This means that while the government assesses the implementation, follow up and adjustments of education policy in higher education quality assurance, institutions themselves are expected to be able to guarantee the ongoing quality of their programmes. As such, previously accredited training courses no longer require periodical inspections from an external evaluation body; these accreditations are extended automatically, as long as the institution obtains a final positive assessment in the institutional review (National information reported to the OECD).

Progress or impact: Prior to these changes, a dual system had been in operation since 2012. This dual system introduced compulsory institutional reviews to complement the programme accreditation framework that historically took place in eight-year cycles. However, higher education institutions (HEIs) found this dual approach too demanding (VLUHR QA, 2019[80]). Following the 2015 reform, all universities and universities of applied sciences and arts in Flanders opted for an extensive institutional review. The independent bi-national Accreditation Organisation of the Netherlands and Flanders (NVAO, 2003) carried out a pilot round involving all the institutions in 2016-17. This pilot focused, for the first time, on the global efficiency and effectiveness of policy in the area of tertiary education as opposed to the efficiency of individual programmes. An evaluation of the pilot pointed to favourable views from stakeholders on proceeding with this new model of quality assurance (Eurydice, 2019[81]).

The outcomes of the pilot informed a new decree, passed in 2018 and due to come into force in 2019. This new system puts the institutional review at the centre of the quality assurance process across six-year cycles. HEIs are legally obliged to conduct quality assurance and continuous monitoring of their educational activities, involving internal and external stakeholders and

independent experts in the process (Flemish Parliament, 2018[82]). Any new programme or joint programme covered by European funding is excluded from these cycles but remains subject to programme assessment undertaken by the institution and the NVAO. The first cycle of the new quality assurance system will run from 2019-2025. From 2015 onwards, the role of the Flemish Council of Universities and University Colleges Quality Assurance Unit (VLUHR QA, 2013), an independent organisation for external quality assurance, has been significantly reduced and its staff size diminished. However, in recognition of the expertise of its former staff members, many have been recruited by HEIs to support the strengthening of institutional review processes (VLUHR QA, 2019[80]).

- NVAO has operated as the formal accreditation body for higher education programmes in the Netherlands and the Flemish Community of Belgium since its establishment in 2005. It previously passed three European Association for Quality Assurance in Higher Education (ENQA) reviews (2007, 2012 and 2017) and has been registered in the European Quality Assurance Register for Higher Education (EQAR) since November 2008 (NVAO, 2019[83]). In 2016, NVAO processed a total of 496 applications from existing and new programmes in Dutch and Flemish higher education institutions, compared to 652 in 2015. In both 2012 and 2017, the ENQA panel found NVAO to comply with the Standards and Guidelines for Quality Assurance in the European Higher Education Area. Both years, the panel recommended that NVAO's full membership of ENQA be confirmed for five more years (NVAO, 2019[83]).

Progress or impact: In the 2017 NVAO Agency Review, the European Association for Quality Assurance in Higher Education recommended that the organisation make more efforts to remain aware of implementation issues as experienced by stakeholders, as well as adopt a clearer terminology to differentiate between substantively different approaches to the follow-up of decisions (NVAO, 2017[84]). Concerning its accreditation system, it was recommended that the grading system should be more comprehensive and straightforward for yes/no/conditional accreditation. To improve the quality of information that Flemish universities need to have about their future accreditation processes, the report recommended that the NVAO issue coherent development plans following consultations with relevant stakeholders regarding their expectations about quality assurance in higher education. ENQA also recommended developing a complaint procedure by, for example, opening a section such as "Complaints and appeals" on the NVAO website with appropriate formats for complaints and appeals (NVAO, 2017[84]).

French Community

- In 2018, a new decree was implemented that had been passed in 2017 on the steering of schools plans (*plans de pilotage*). The new decree was implemented to help implement the first decisions taken under the Pact for Excellence in Teaching (2015-30). It also included specific support for the school heads in pre-primary and

primary, ordinary and specialised education, and a supplementary framework for instructional and administrative staff in specialised secondary education. The decree aims to reaffirm school and system governance by setting objectives at the system level and by geographical area. This decree redefined the levers around which the school steering plans should be designed, extending them from 11 to 15: 1) teaching and learning that supports all students; 2) tackling school dropout; 3) targeted intervention schemes; 4) measures for inclusion; 5) career guidance; 6) citizenship, health, media literacy, the environment and sustainable development education; 7) anti-bullying measures and pastoral support; 8) embedding digital approaches; 9) teacher induction; 10) parental engagement; 11) cultural education and opportunities; 12) physical education and opportunities; 13) partnerships with local business and industry; 14) school infrastructure; and 15) school fees (Ministère de la communauté française, 2018[85]).

Progress or impact: As part of the Pact for Excellence in Teaching, each head of school is required to draw up a steering plan, while heads of school from under-performing schools are tasked with also tackling low achievement (European Commission, 2016[71]; OECD, 2017[70]). The aim is to make on-the-job teacher education more relevant to the school and ensure that teachers are better equipped for social, cultural and pedagogical diversity (European Commission, 2016[71]; OECD, 2017[70]). At least one-third of the schools have already been involved since 2017, and it is expected that all schools will be covered by the end of 2019 (Ministère de la communauté française, 2018[85]).

The first steering plans were planned to be developed by the education teams as of 2018, in schools that had been selected on a voluntary basis in 2017 (Ministère de la communauté française, 2018[68]). Once approved, the plans include the institutional school objectives for a six-year period. The submission of the draft steering plans by schools is organised in three sections with 900 schools submitting their plans by April 2019, the following group of schools in 2020 and the last group of schools by 2021 (National information reported to the OECD).

To assess the developments, each school enters into a contract with the Central Authority that was established in a 2018 decree (Service des directeurs de zone et délégués au contrat d'objectifs). Schools self-assess their progress annually with the Central Authority assessing the developments every three years. An appropriate monitoring process may be put in place if an institution refuses to contribute to the process or if its indicators reveal large deviations from the average (National information reported to the OECD). The decree is also based on the autonomy and increased responsibility of school leaders and teachers (see School improvement).

- In the French Community, the Agency for Quality Assurance in Higher Education (Agence pour l'Évaluation de la Qualité de l'Enseignement Supérieur, AEQES, 2002), both independent and publicly funded, carries out quality assurance. Though AEQES is governed by representatives from each of the four higher education sectors (universities, *hautes écoles*, arts colleges and social advancement education) as well as student, labour market and trade union organisations, it is

operationally independent of the higher education institutions, as well as the Ministry of Education (Eurydice, 2019[86]). Aside from regularly evaluating study programmes and facilitating and reporting on higher education quality, AEQES ensures co-operation between all higher education areas to encourage the implementation of standard practices to improve quality and liaising with relevant national and international bodies on behalf of the French Community's higher education system. In 2011, AEQES became a full member of ENQA and was listed in the EQAR as of 2012 (Ryan et al., 2017[87]).

Progress or impact: In addition to its ten-year evaluation timetable (*plan décennal*), the European Association for Quality Assurance in Higher Education developed a self-evaluation report, including a SWOT (strengths, weaknesses, opportunities and threats) analysis, conducted for the 2016-20 Strategic Plan. This self-evaluation identified the implementation of a formative type of evaluation in line with the AEQES's missions as a *strength* (AEQES, 2016[88]). *Weaknesses* identified included the business model, which was considered fragile; the workload of the Executive Unit and the working groups; and the uncertain sustainability of human and financial resources. The possibility for development and experimentation in response to requests from stakeholders as well as new methodologies, including co-operation between operators, was identified as an *opportunity*. Finally, the risk of "evaluation fatigue" in some institutions, exacerbated by the mobilisation of academic staff in implementing the new Landscape Decree was identified as a *threat*.

A goal set in this strategic plan was to have carried out all the formative and programme-based first evaluations of all Bachelor's and Master's degree programmes offered by 2018 (AEQES, 2016[88]). In 2017, the ENQA agency conducted an external review of the AEQES to analyse its compliance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). This review identified progress since their previous review, including substantial efforts towards the implementation of previous recommendations that required legislative changes. AEQES was found in compliance with almost all of the Standards and Guidelines for Quality Assurance in the European Higher Education Area. The agency identified several AEQES achievements: 1) the establishment of new robust standards and criteria that had enabled it to engage in consistent and coherent activities; 2) the reinforcement of mid-term follow-up evaluations (mandatory for all programme evaluations between two evaluations); 3) the diversity of experts' profiles; 4) the quality of its staff members; 5) the meta-analysis; and 6) its international visibility in recent years. At the same time, AEQES was only found "partially" compliant with the standard concerning resources. In order to be fully compliant, agencies should be supplied with adequate and appropriate resources, both human and financial. ENQA determined that, although the AEQES had gained autonomy in staff appointments, the financial resources available to the agency had not changed since 2012, with AEQES being underfunded for the following five years, from 2017 onwards. (Ryan et al., 2017[87]).

Funding

Flemish Community

- Between 2014 and 2016, the parliament of the Flemish Community authorised significant increases to the annual education budgets, amounting to an overall increase of EUR 72.3 million in 2015 (National information reported to the OECD). Further increases were introduced in 2017 (OECD, 2017[70]). Over the same period, the government introduced a series of measures to increase efficiency in educational expenditure. In large part, these aim to address recommendations provided in a 2015 OECD report, which highlighted inefficiencies within the schooling system. These included the following: a greater funding emphasis on the later stages of education, despite returns to education being highest during the earlier years; inefficiencies in the provision of specific resources, such as targeted funding for disadvantaged students; and a lack of clarity as to how outputs relate to specific resource inputs (Nusche et al., 2015[74]).

> **Progress or impact**: The Flemish Community has one of the highest total education expenditures per student among OECD countries (OECD, 2018[89]). Since 2015, a higher proportion of education expenditure has been shifted from secondary level to pre-primary and primary education. Significant savings were made through an increase in the staff "put at disposal" (i.e. exempted from teaching duties and replaced by temporary staff). Additionally, the Flemish Community has increased and targeted resources for refugees and other immigrant children more specifically through, for example, greater support for linguistic integration. More recent efficiency efforts are part of the government's implementation of the Sustainable Development Goals. From 2016-18, the Flemish Community invested EUR 52 million in energy efficiency projects in school buildings. In 2019, the government added another EUR 21 million to this fund (National information reported to the OECD). The Department of Education and Training is now working to support schools to develop future-facing learning environments within the constraints of their current infrastructure. This includes the publication of a handbook, *Get more out of your school: 21st-century skills, new competences, new physical learning environments*, which has been informed by research conducted by the Free University of Brussels (National information reported to the OECD). However, per student spending remains high in the Flemish Community and, as student numbers are set to increase over the next ten years, this may put pressure on the system (OECD, 2018[89]).

- The School Building Masterplan (2015) is the Flemish Community's first integrated and comprehensive plan tackling the issue of school infrastructure. It responds to growing pressure placed on the system by demographic changes, wear and tear and the demands of 21st-century learning. The plan has five strategic objectives: 1) renewing existing educational infrastructure; 2) expanding educational capacity; 3) tapping into alternative sources of financing; 4) developing school buildings of the future; and 5) improving long-term planning and management of school infrastructure (Ministry of Education, 2015[90]). A key project in the implementation of the plan has been the launch of a second and

completely revised cycle of the Design, Build, Fund, Maintain initiative (DBFM, 2006 and 2016), which sees the development of public-private partnerships for the building of new schools. Through this model, a DBFM corporation takes on the 30-year ownership, maintenance and financing of school infrastructure expansion. Via government subsidies (around 80%) and the school governing body, the corporation receives performance-related availability funding. At the end of the 30 years, ownership transfers to the school governing body (Eurydice, 2019[73]).

Progress or impact: Schools of Tomorrow (Scholen Van Morgen, 2009), the collective name for the first round of the Design, Build, Fund, Maintain (DBFM) projects, is a partnership between the Government of Flanders, BNP Paribas Fortis and AG Real Estate. Schools of Tomorrow is scheduled to reach completion in 2022 when it will have delivered up to around 200 new school buildings through an investment programme totalling EUR 1.5 billion. So far, 159 school infrastructure projects have been completed, accommodating over 115 000 students; 6 more are in the construction phase. Following a reduction in the VAT (value-added tax) rate on school construction (2016), 17 new DBFM projects were added to the initial Schools of Tomorrow programme; these are currently in the design phase (Schools of Tomorrow, 2019[91]).

However, according to forecasts from the Federal Planning Bureau, the demographic pressure on the school system is set to increase in the medium and long terms, with significant implications for the secondary sector up to 2025, and again from 2035, and for the primary sector from 2026 onwards (National information reported to the OECD).

Accordingly, there has been a reaffirmation of the need for alternative financing models in school construction and renovation and a subsequent commitment to further DBFM operations, approved by decree in 2016. The government's second call for DBFM submissions (2016) incorporates learning from the experience of Schools for Tomorrow and as such focuses on creating smaller, simpler and more project-specific operations with greater involvement from the school boards.

To provide additional support and manage applications, a project office was set up with the Agency for School Investment (AGION), SchoolInvest nv, and representatives from the school network. The Flemish Community has also made efforts to streamline and standardise administrative procedures to reduce transaction costs (Ministry of Education, 2015[90]).

The second call for DBFM projects was launched in 2017, and 52 school building projects were approved, with a total investment commitment of EUR 600 million (AGION, 2018[92]). In search of sustainable solutions to reduce pressure on the infrastructure, in 2019, the government also encouraged infrastructure master planning at the school level, which is aligned with local authorities' visions. To this end, Go!, the principal education provider for the Flemish Community, set up an operational infrastructure database to monitor the quality and quantity of the current infrastructure (National information reported to the OECD).

- The Parliamentary Act on Students with Specific Educational Needs (M-Decree, 2015) promotes inclusive education in Flanders by reinforcing the right of students with special educational needs (SEN) to enrol in mainstream education. In the Flemish Community, educational spending per student is three times higher in special needs provision than in mainstream provision. The decree's guarantee scheme stated that any funds that are saved in special education provision when a student is transferred to mainstream education must be diverted to mainstream providers to support students with SEN (Nusche et al., 2015[74]). On introduction of the decree, the Flemish Community also earmarked an annual provision of EUR 545 949 for in-service training resources for professional development of school teams, funding five projects annually to support with the implementation of the M-Decree. In its first year (2015-16) this measure benefited nearly 3 000 teachers (Government of Flanders, 2017[93]).

Progress or impact: In 2014, before the introduction of the M-Decree, 30 340 students attended primary level special education schools in Flanders; this number decreased to 26 607 students by 2017. This represents a 12% reduction over two school years, and a decrease from 4.34% of the student population in 2014 to 3.67% in 2017. Although smaller, a reduction was also seen at secondary level between 2015 and 2017 (Government of Flanders, 2017[94]). Nevertheless, while commending the M-Decree's intentions, the OECD identified a number of implementation challenges, largely related to inflexibilities in the distribution of human and financial resources that restrict the capacity of mainstream schools to provide the level of support students with SEN require and are entitled to (Nusche et al., 2015[74]).

To address some of these challenges, an amendment to the Act on Students with Specific Educational Needs was approved in 2017. M-Decree 2.0 (2017) introduced a support network model. Support networks group together mainstream schools, special education needs schools, student guidance centres and pedagogical counsellors into networks that can be cross-sectoral and cross-level. In this way, human and financial resources are shared across networks to support students with SEN according to their intervention needs, as identified via a preliminary individual needs assessment.

Furthermore, the financial resources of the network are grouped and allocated to establishments as follows: 70% of the funding allocation is based on the total number of students per school; the remaining 30% is based on the average number of students with SEN attending that school during the six preceding years (Minister of Education, 2016[95]). In 2017-18, the Flemish Community earmarked EUR 25 million to guarantee the transfer of staff from special education to mainstream provision (Government of Flanders, 2017[94]). In 2018, following a complaint submitted to the Council of Europe by the Mental Disability Advocacy Center (MDAC), and a subsequent investigation into the M-Decree, the European Committee on Social Rights found that the policy violates the right of children with intellectual disabilities to social integration. This contravenes Article 15 (1)

of the European Social Charter (ESC) (European Committee on Social Rights, 2018[96]).

Additional education policies of potential interest to other countries

Governance

Flemish Community

- The Flemish Government has begun to progressively implement measures for the new Master Plan for Secondary Education (Masterplan Secundair Onderwijs, 2018). In the medium to long term, the plan aims to improve quality and equity in secondary education by reducing early school leaving; introducing a broader first stage of secondary education to delay tracking and allow students to make choices based on their talents and interests; and establishing a simplified structure for the second and third stage of secondary education (European Commission, 2017[96]). Provisions for changes in the primary sector will also be made, for example, to allow for more differentiated teaching and learning to better adapt to individual student needs and facilitate transitions into secondary education (Nusche et al., 2015[74]). Reforms to the structure of secondary education are strongly aligned with the curricular reform and the rationalisation of education programmes which are also currently in progress. Together, these initiatives support the modernisation of the secondary education system.

French Community

- In the French Community of Belgium, the Landscape Decree for Higher Education (Decret du 7 novembre 2013 définissant le paysage de l'enseignement supérieur et l'organisation académique des études, 2013) aimed to provide a more coherent vision of the higher education system by legally defining the higher education system and organisation of instruction (Parlement de la Communauté française, 2013[97]). The decree also created the Academy for Research and Higher Education (Académie de recherche et d'enseignement supérieur, ARES) to serve as a platform for co-ordination and dialogue among institutions in the higher education system. In 2019, changes existing in the system through this decree included: harmonisation of school calendars, harmonisation of enrolment procedures (and conditions for enrolment), changes towards a competency-based focus in studies, a credit-based system of learning, among others (National information reported to the OECD).
- The Harmonisation of Diplomas (2016) draft decree determines the conditions and procedure for granting equivalence of foreign higher education qualifications. The order includes the Benelux decision of 2015 of an equivalence process. According to this equivalence process, any Bachelor's or Master's degree issued in the French Community is automatically recognised in Flanders, the Netherlands or Luxembourg, and vice versa. This simplified procedure will also be faster for a series of European higher education degrees (European Commission, 2018[98]).

German-speaking Community

- National data indicate that Belgium's German-speaking Community adopted the Decree on Educational and Administrative Innovations in Public Education (2010) and proposed measures including setting baseline requirements for teacher training;

new rules around students moving between schools, including in special education; and updating the conditions for granting of equivalence to foreign diploma and certificates.

Funding

- The Sixth State reform (2014) of Belgium reconfirmed the principle of allocation of resources based on the number of students to avoid divergence of resources between the three communities. The OECD reports that the resources allocated to education were, starting in 2016, related to inflation, demographic changes (number of people under 18 years) and 91% of economic growth. Communities then receive funding based on the number of 6-17 year-olds enrolled in primary and secondary education (Ministère de la Fédération Wallonie-Bruxelles, 2016[76]).

Flemish Community

- In 2018, the Flemish Parliament adopted a decree shifting responsibility for higher professional education courses (short-cycle degree programmes) from adult education institutions to higher education institutions only. As such, these will become available as short-cycle associate degree courses within higher education institutions to grant more people the opportunity to access tertiary education (Flemish Parliament, 2018[64]). From 2019 onwards, the Flemish Government will provide an extra EUR 10 million to HEIs to enable them to expand their facilities or address new equipment needs. Additionally, an open-ended mechanism will initially fund the future associate degree courses. In this way, the budget will adapt to student numbers to guarantee an institution's resources for Bachelor's and Master's programmes (National information reported to the OECD).
- In 2018, the Flemish Parliament adopted a new financing decree for adult education. From 2019 onwards, centres of adult education and basic education will receive funding according to learner profiles. The centre receives supplementary funding when an unemployed person, a job seeker or someone without an upper secondary education qualification (HSE) enrols in a course. This initiative aims to incentivise providers to better target high-need and vulnerable learners. Additionally, an element of funding is linked to course completion or certification incentivising providers to better support learners throughout their learning pathways (National information reported to the OECD). Centres will also receive more financial support to provide courses in Dutch as a second language and programmes focused on high-demand skills and courses leading to the HSE will be better financed (Eurydice, 2018[99]).
- A new monitoring mechanism for infrastructural capacity in the Flemish Community was introduced in 2015. It produces municipality-level population estimates and publishes updated reports every three years to inform capacity planning at local level. This aims to offer decision makers more accurate and timely information regarding changing student numbers and the impact on funding for the school system. This forms the basis for additional targeted investments that support municipalities in the short and long-term (National information reported to the OECD). Between 2010 and 2018, the government allocated EUR 371.7 million to those municipalities facing capacity pressures (Nusche et al., 2015[74]).

French Community

- According to the Brussels Regional Informatics Centre (Centre d'Informatique pour la Région Bruxelloise, BRIC), by 2017, almost 380 schools were connected to high-speed Internet (using optic fibre) (CIRB, 2017[100]). Investments have been made since 2011 to equip schools in their community with resources to promote information and communication technology (ICT) skills and innovative teaching practices. These include providing Internet connections for Walloon schools (EUR 35 million) and multimedia equipment for schools in the Brussels Capital Region (EUR 6 million). The OECD reports that a new Fibre to the School initiative will also invest EUR 10 million to roll out high-speed broadband in all 168 secondary schools between 2014 and 2019 (Ministère de la Fédération Wallonie-Bruxelles, 2016[76]).

German-speaking Community

- The primary objective of the German-speaking Community of Belgium's Decree to Reduce Education Costs in Kindergarten and Primary Education (2014) was to provide financial planning for parents and schools. The Community increased the amount of per-student funding for educational purposes to EUR 100 per student for primary school children and EUR 25 for kindergarten school children, to help alleviate the cost of educational expenses for children's families. As part of the funding increase, schools are no longer allowed to charge parents fees for sporting activities organised by schools or other school events such as diploma ceremonies. While the cost of extracurricular activities, such as outside excursions may still be charged to parents, schools also have the option to cover these costs themselves using funding distributed by the government for this purpose.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Canada

Context

Schools in Canada have similar disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.01 (the OECD average index value was 0.00). Student truancy in Canada was below the OECD average: 17.8% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Canada were among those most likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.26 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership in Canada (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the highest reported in the OECD at 0.58 (the OECD average was 0.01) (OECD, 2016[1]). In 2017, net teaching hours for general programmes in Canada were close to the OECD average. Teachers annually taught for 798 hours at primary level and 745 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 86% of teachers in Alberta (Canada) said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6%. Furthermore, 62.7% of teachers in Alberta (Canada) felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]). According to school principals' self-reports in PISA 2015, schools in Canada have lower levels of autonomy over curriculum compared to the OECD average: school autonomy levels over curriculum were among the lowest in the OECD: 62.9% of principals reported that the school had primary autonomy over curriculum compared to the OECD average of 73.4% (OECD, 2016[1]).

School leaders in Canada are less likely than the OECD average to report that self-evaluations are used in their schools (85.8% of students were in schools whose principal reported this compared to the OECD average of 93.2%) and also less likely than the OECD average to report that external evaluations are used in their schools (63.7% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools in Canada whose principal reported that standardised tests are used to make decisions on students' promotion or retention was 49.3%, which was higher than the OECD average of 31.3%, as reported in PISA 2015 (OECD, 2016[1]).

In 2017, local governments in Canada had full autonomy when making decisions related to resource management (allocation and use of resources for teaching staff and principals) compared to 18% on average across the OECD, where the highest level of autonomy (29%) went to schools. In 2015, expenditure on primary to tertiary education in Canada as a proportion of gross domestic product (GDP) was 6%, which was above the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was higher than the OECD average (26.5%, compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education in Canada decreased by 3.8 percentage points, a bigger decrease than the OECD average of 1.3 percentage points. During the same period, private expenditure on education in Canada increased by 12.2

percentage points, compared to an OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Canada's key education policy priorities have evolved in the following ways over the last decade (Table 8.4).

Table 8.4. Evolution of key education policy priorities, Canada (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified a need to support teachers and leaders to address issues related to Indigenous students, such as engaging indigenous families. [2017]	Canada reported that it continues to face challenges in achieving a well-sized and prepared teacher population where it is most needed. The priority of providing support and guidance to schools prevails. [2013]
Evaluation and assessment	According to OECD evidence, there is no systematic monitoring of the well-being of Indigenous students in schools. [2017]	N/A
Governance	According to OECD evidence, improvements in tertiary education are critical to support socially inclusive growth in a knowledge-driven economy. Generating high attainment among the working-age population and increasing participation at the tertiary level will help maintain a highly skilled labour supply as the population ages. More recently, the OECD reaffirmed this need, stressing the importance of developing a more flexible delivery model of higher education and boosting technology transfer from academia. [2012; 2016]	Canada reported ongoing efforts to continue setting pan-Canadian priorities while committing to practice variety within a decentralised system. [2013]
Funding	N/A	Canada had previously reported a need to improve access to tertiary education and the efficiency of funding at this level, including student financial assistance. A more recent reported priority is to make overall post-secondary education more affordable for students from low- and middle-income families, and make student debt repayments more manageable. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In the province of Ontario, the New Teacher Induction Program (NTIP, 2006) aims to support the growth and professional learning of new teachers. It builds upon the first step of initial teacher education and is the second step of on-the-job learning along a continuum of learning and growth for new teachers. The NTIP consists of the following induction elements: 1) orientation for all new teachers with information about the Ontario curriculum and context, and their specific school; 2) professional development and training in areas such as literacy and numeracy

strategies and classroom strategies; and 3) mentoring for new teachers by experienced teachers (Government of Ontario, 2018[101]; Queen's Printer for Ontario, 2010[102]). In addition to the NTIP induction process, new permanent teachers are evaluated twice within their first 12 months of employment through the Teacher Performance Appraisal process. Upon completion of two satisfactory evaluations, a notation reflecting completion of NTIP is placed on the teacher's certificate of qualification and registration that appears on Ontario College of Teachers' public register.

Progress or impact: Since 2009, the New Teacher Induction Program has been providing support for first-year, long-term occasional (LTO) teachers with assignments of 97 days or longer. In 2018, the scope of NTIP was expanded to enable school boards to support any teacher in their first five years of practice. The inclusion of these teachers in any of the NTIP induction elements is designed to provide boards with flexibility to respond to local hiring realities and to potentially support new teachers for a greater length of time. Boards may decide to include an entire category of NTIP eligible teachers or base the support they offer on a case-by-case basis. Overall, each year, approximately 8 000 new hired teachers access NTIP support. Including second-year teachers and mentors, the total number of teachers participating in NTIP exceeds 18 000 annually (National data provided to the OECD). The results of longitudinal research from 2012 to 2015 show that new teachers have made meaningful and sustained improvements in all four of the core goal areas of NTIP (confidence, efficacy, instructional practice and commitment to ongoing learning) (Christine Frank and Associates, 2018[103]).

Evaluation and assessment

- The province of Alberta's digitally based Student Learning Assessments (SLAs, 2013) replaced the Grade 3 Provincial Achievement Tests. SLAs take place at the start of the school year and assess literacy and numeracy in language arts and mathematics in Grade 2 (Alberta Education, 2018[104]). Based on the results, the report aims to deliver information on the student's strengths and areas for improvement relative to provincial standards at the beginning of the school year to students, teachers, and parents. In 2014/15, a pilot of the SLAs in Grade 3 took place (Alberta Education, 2018[105]).

Progress or impact: Some 20 randomly selected school authorities took part in the Student Learning Assessments Grade 3 pilot during 2016/17 (Alberta Education, 2016[106]). In 2018, SLAs had extended to Grade 3 in all schools (Alberta Education, 2018[107]). The teachers' preview of the SLA digital questions and performance tasks aim to tailor the SLAs to the grade level. The SLAs can be used at the teacher's discretion. Grade 3 SLAs cover four elements in English and French: digital literacy questions, literacy performance tasks, digital numeracy questions and numeracy performance tasks. It is expected that the SLA will continue to reference the current Grade 2 provincial programmes of study until the new programmes of study are implemented (Alberta Education, 2018[104]).

Additional education policies of potential interest to other countries

School improvement

- In the province of Saskatchewan (Canada), the Digital Citizenship Education in Saskatchewan Schools (2015) is a policy guide. It is designed for school division officials to work with school administrators and teachers to help students build an understanding of safe and appropriate online behaviour. The guide was developed in response to one of the recommendations in the Saskatchewan Action Plan to Address Bullying and Cyberbullying (2013) (Government of Saskatchewan, 2019[108]).
- The province of Nova Scotia's Instructional Leadership Academy (NSILA, 2010) Program is offered by the Nova Scotia Department of Education and Early Childhood Development, in partnership with the Nova Scotia Educational Leadership Consortium. The goal of the programme is to improve the capacity for school-based instructional leadership, aimed at increasing student learning and achievement in Nova Scotia public schools. The programme extends over three years and leads to a Diploma in Instructional Leadership. The diploma indicates the level of commitment to the field of practice, increases and validates skills and knowledge, and recognises professionals who have met the standards of achievement.

Evaluation and assessment

- The Pan-Canadian Assessment Program (PCAP, 2007) was developed by the provinces and territories, through the Council of Ministers of Education, Canada (CMEC), building on the School Achievement Indicators Program (SAIP, 1993). It assesses the performance of Grade 8 (Secondary II in Quebec) students in reading, mathematics, and science on a cyclical basis. PCAP is designed as a system-level assessment to be used primarily by provincial/territorial ministries of education to examine their education systems. PCAP data are reported at provincial/territorial levels, by the language of the school system, and by gender. The goal of national and international large-scale assessments is to provide reliable information about academic achievement and to gain a better understanding of the contextual factors influencing it. They also aim to provide policy makers, administrators, teachers, and researchers with insights into the functioning of education systems and how they might be improved. The assessment is not, however, designed to report valid results at the student, school, or school-board level. As of the 2019 PCAP, the assessment will be on line, in order to respond to technological developments and improve access to PCAP for special education needs students (CMEC, 2018[109]). Estimates expect approximately 30 000 students to participate in each cycle of the PCAP.

Systems

Selected education policy responses

Governance

- The Learn Canada 2020 framework (2008) is a joint declaration by provincial and territorial ministers of education, through their Council of Ministers of Education,

Canada (CMEC). The framework aims to enhance Canada's education systems, learning opportunities and overall education outcomes (National information reported to the OECD). It is built on what are considered the four pillars of lifelong learning, which are the same today: early childhood learning and development; elementary to high school systems; post-secondary education; and adult learning and skills development (Government of Canada, 2018[110]).

Progress or impact: Key priority areas within the Learn Canada 2020 framework include persisting gaps in academic achievement between Indigenous and non-Indigenous students across Canada. In 2012, for example, the Conference Board of Canada reported that between 2003 and 2012, the number of adults with inadequate numeracy skills had increased from 49% to 55%. Among the adult population, Indigenous people were more likely to have inadequate numeracy skills than the non-Indigenous population (The Conference Board of Canada, 2018[111]). In 2012, the gap was highest in Saskatchewan, where 79% of the Indigenous population had inadequate numeracy skills, compared with 54% of the non-Indigenous population (The Conference Board of Canada, 2018[111]). As a result, in 2013, ministers of education across Canada agreed that numeracy was a key priority and that "provinces and territories would work together to identify and share best practices on innovative teaching and learning strategies to raise student achievement in this area" (CMEC, 2013[112]).

Several Canadian provincial and territorial policies published since 2008 identify literacy as an ongoing challenge for their regions (Kozyra, Motschilnig and Ebner, 2017[113]). According to the 2017 UNESCO report on adult education in North America, the Government of Quebec published in 2017 its Policy on Educational Success and lists adult literacy as one of the major objectives, resolving to increase by five percentage points the proportion of the adult population of Quebec who demonstrates high-level literacy skills by the time results of the OECD Survey of Adult Skills (Programme for the International Assessment of Adult Competencies, PIAAC) 2022 are available (Kozyra, Motschilnig and Ebner, 2017[113]). Also, in the province of British Colombia, the government promised CAD 2.4 million in funding for community adult-literacy programmes (Kozyra, Motschilnig and Ebner, 2017[113]).

- The Canadian province of Saskatchewan established the Early Years Plan (2016-20). The plan aims to ensure the development of all children aged 0-6 so that each year, at least 90 students exiting kindergarten are ready for learning in primary education (Government of Saskatchewan, 2017[114]). The plan is based on five pillars: healthy beginnings; early learning; childcare; strong families and healthy children; and community planning and alignment (Ministry of Education, 2016[115]).

Progress or impact: The Saskatchewan Government's Annual Education Report for 2016-17 indicated that at least 15 269 children were enrolled in early learning and childcare services. The Saskatchewan province's Ministry of Education also reported collaboration with post-secondary

institutions, and the Ministries of Economy and Advanced Education, to support an increase in trained early childhood educators to ensure enough staff in place to support all 810 new childcare spaces planned for 2017. Some progress had also been achieved to ensure preparation for learning in primary school (Ministry of Education, 2016[116]).

Funding

- Canada's Student Loans Program (CSLP) is among the actions undertaken by the Government of Canada to help make post-secondary education more affordable. The CSLP provides financial assistance to eligible students to cover part of their living and education-related costs with grants and loans. It has offered non-repayable grants to more than 3 million higher education students since 1995 (Government of Canada, 2019[117]). A 2017 national statistical review reported that in 2016/17, 380 000 students received non-repayable Canada Student Grants (CSGs) equivalent to CAD 1 014.6 million, which represented an increase from 369 000 students in 2015/16 who received CAD 719.5 million (Government of Canada, 2019[117]). Further national data highlights that 64% of CSG recipients in 2016/17 were low-income full- and part-time students, 27% were students from middle-income families, 10% were students with permanent disabilities, and 9% were students with dependents (Government of Canada, 2019[117]). In 2016, the Government of Canada budget increased by 50% the value of CSGs for students from low-income families and middle-income families, as well as part-time students. This was equivalent to an increase from CAD 2 000 to CAD 3 000 per year for students from low-income families; from CAD 800 to CAD 1 200 per year for students from middle-income families; and from CAD 1 200 to CAD 1 800 per year for part-time students. On 1 August 2017, new, more generous eligibility thresholds for the Canada Student Grant for Full-time Students (CSG-FT) were introduced. CSG eligibility for part-time students and students with dependents was also expanded as of 1 August 2018.

Progress or impact: Employment and Social Development Canada (ESDC)'s Evaluation Directorate has undertaken multiple evaluations of Canada's Student Loans Program to monitor its implementation and effectiveness. A summative evaluation of the CSLP during 2006-10 reviewed the validity of the programme's rationale, needs assessment and success at promoting access to post-secondary education (Government of Canada, 2011[118]). The evaluation found positive results, such as the CSLP serving its purpose and mandate, or reducing students' financial constraints. Research on general effects of loans and grants on post-secondary education enrolment of low-income students showed a positive correlation between the total loan amount disbursed and the post-secondary education participation rate. At the same time, research on the Canada Student Grants Program has been less conclusive in identifying strong relationships between grants alone and participation, except in survey results. One suggested explanation was the corresponding reduction in student loan amounts caused by the grant amounts and, hence, overall student financial aid remaining constant in most cases (Government of Canada, 2016[119]).

Additional education policies of potential interest to other countries

Governance

- An agreement (2017-22) between the province of New Brunswick's Teachers Federation and the local provincial government includes several specific measures designed to help with the successful implementation of the 10-Year Plans (2016) for education (Government of New Brunswick, 2018[120]). The 10-Year Plans identified priority areas to improve education and performance at all education levels in the local Anglophone and Francophone sectors. Priorities include: establishing a culture of belonging; improving literacy and numeracy skills; ensuring proficiency in fundamental language skills; and fostering leadership, citizenship and entrepreneurial spirit (Government of New Brunswick, 2016[121]). In 2018, in accordance with the recent agreement, 17 schools across the province began participating in an initiative to increase by one hour per day the instruction time for students in kindergarten to Grade 2. The government anticipates that the additional instruction time will provide greater opportunities for teachers to help students achieve expected learning outcomes with a focus on literacy, numeracy, physical education, art and music. This is a joint initiative between the federation and the department. The project will run for three years and will be evaluated by independent experts. The agreement will also see the addition of 250 school-based teachers to the education system to support classroom teachers and work with students, particularly in classrooms with classroom composition challenges (Government of New Brunswick, 2018[120]).

Funding

- The Repayment Assistance Plan (RAP) for the Canada Student Loans Program had an increase in the loan repayment threshold in 2016. RAP consists of two stages of assistance. During Stage 1 (accounting for 81% of RAP recipients), the government covers the outstanding interest not met by the borrower's reduced payment. During Stage 2 (accounting for 12% of RAP recipients), the government covers both the principal and interest amounts not met by the borrower's reduced payment so that the balance of the loan is gradually paid off. This ensures that borrowers who use RAP on a long-term basis do not take longer than 15 years to repay their loan (10 years for borrowers with permanent disabilities). During 2017/18, more than 326 000 borrowers received assistance under RAP (an increase of 11% from the previous year). Some 88% of all RAP recipients were not required then to make any monthly payments for the duration of their RAP term (Government of Canada, 2019[122]). For borrowers who apply for RAP, monthly student loan payments depend on family income (limited to no more than 20% of a borrower's family income) and family size (proportional changes were made to the thresholds for family sizes). The Government of Canada increased the loan repayment threshold in 2016 to provide increased flexibility in repayment and to better reflect minimum wages, helping to ease students' transition into the workforce. The increase ensures that no eligible student has to repay their Canada Student Loan until they earn at least CAD 25 000 per year. The threshold is adjusted for family size. For example, for a family of four, no payment would be required until they are earning at least CAD 59 512. Above the no payment thresholds, the borrower could be eligible for an affordable payment.

- The Federal Government of Canada Budget launched the Skills Boost Initiative (2018-21) to provide enhanced student financial assistance and make better use of Employment Insurance (EI) flexibilities targeted to working or unemployed Canadians looking to return to school to upgrade their skills. It includes a three-year pilot project that will invest nearly CAD 300 million over its duration to develop and test new approaches. The pilot initiative proposes CAD 1 600 per-year top-up grants per school year to the Canada Student Grant for Full-time Students (CSG-FT) for students from low- or middle-income families who have been out of upper secondary education for at least ten years and are returning to follow a full-time post-secondary education programme of at least two years. This is equivalent to an additional CAD 200 per month for the student. The pilot also introduced flexibility to assess student eligibility for a Canada Student Grant based on the current (instead of previous) year's income for applicants whose financial circumstances have changed significantly. The initiative also expands on funding measures implemented in the previous budget for full- and part-time students. Starting in 2018/19, part-time students from low- and middle-income families can benefit from up to CAD 1 800 in CSG. Also, students with dependent children will have access to grants: full-time students with children can receive up to CAD 200 per month per child; and part-time students with children can receive up to CAD 1 920 per year in grants. Skills Boost also provides more opportunities for Employment Insurance claimants to take training on their initiative and continue receiving EI benefits. EI claimants can take self-funded training and receive EI benefits when they continue to search and be available for work. They may also be referred to full-time training by designated authorities (i.e. provinces, territories or Indigenous organisations) and continue to receive EI benefits. This referred training may be self-funded or paid for by the designated authority. Finally, starting 5 August 2018, eligible EI claimants who have lost their jobs after several years in the workforce can ask Service Canada for permission to continue receiving EI benefits when taking a full-time course or training programme at an approved institution (Government of Canada, 2018[123]). [Note: The province of Quebec has its own programme for student loans and grants.]

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Chile

Context

Schools in Chile have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.11 (the OECD average index value was 0.00). Student truancy was lower, however, than the OECD average: 9.3% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. Students in Chile were also more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.21 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was below the OECD average at -0.03 (the OECD average was 0.01) (OECD, 2016[1]). In 2016, the proportion of lower secondary teachers in Chile aged 50 or over was 27.7%, compared to an OECD average of 35.4%. Teachers in Chile had among the highest net teaching hours for general programmes in 2017 compared to their peers in other OECD countries. Teachers annually taught 1 064 hours at both primary and lower secondary levels, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Chile have slightly lower levels of autonomy over curriculum than the OECD average: 72.3% of principals reported that the school has primary autonomy over curriculum, compared to 73.4% on average (OECD, 2016[1]).

Lower secondary teachers in Chile earned 82% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was below the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 80.8% of teachers in Chile said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6% (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Chile are about as likely as the OECD average to conduct self-evaluations of their schools (93.8% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and slightly more likely to undergo external evaluations of their schools (76.5% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). However, teacher appraisal levels, as reported in the earlier cycle of TALIS 2013 were higher than the average: 81.2% of all teachers in Chile had reported then having received a teacher appraisal in the previous 12 months, compared to the average of 66.1% (OECD, 2014[4]). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 37%, compared to an average of 31% (OECD, 2016[1]).

In 2017, local autonomy levels over resource management (allocation and use of resources for teaching staff and principals) in Chile were higher than the OECD average: 50% of decisions in Chile were taken at the local level, compared to the OECD average of 18%. Annual expenditure per student at primary level in 2016 was USD 5 064, which was among the lowest across OECD countries (the average was USD 8 631). At secondary level, Chile

spent USD 4 930 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Chile spent USD 8 406 per student compared to USD 15 656. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was the largest in the OECD (37.5% of overall spending compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education in Chile increased by 14.7 percentage points, compared to an average decrease of 1.3 percentage points across OECD countries (OECD, 2018[2]).

Evolution of key education policy priorities

Chile's key education policy priorities have evolved in the following ways over the last decade (Table 8.5).

Table 8.5. Evolution of key education policy priorities, Chile (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the need to promote the role of the teaching profession, better preparing and engaging them to participate. The OECD identified the need to strengthen the incentives for teachers to improve their competencies, and the matching process between teachers' levels of competence and the roles that need to be performed in schools. The OECD also identified the need to strengthen the framework for professional development provision for all teachers and school leaders. Both the profile of school leadership needed to be improved, and a strong professional cadre of school leaders and principals developed. [2013; 2017]	Chile reported the ongoing need to improve teaching conditions and support schools with strong school leaders to implement and drive improvements. Chile reported the ongoing challenge of designing and implementing the school leadership track as a complement to the teaching track. A more recent priority is to develop the capabilities of educational leaders, teachers and other educational professionals to promote student inclusion and diversity. Another new priority is to strengthen the capabilities of local and intermediate-level school leaders to improve education quality and equity. [2013; 2016-17]
Evaluation and assessment	OECD evidence found strong municipal leadership essential in establishing teacher appraisal as a priority at the local level and supporting schools to use evaluation results for improvement. The OECD identified the need to support teachers to understand evaluation procedures and benefit from evaluation results. Despite the existence of teacher appraisal practices in private schools, there was a limited guarantee that they were aligned with the national student learning objectives. More recently, the OECD found that teacher evaluation was well established, but its formative function remains limited. [2013; 2017]	Chile reported the ongoing priority of conducting evaluations and designing frameworks to generate information to support and inform teacher recognition and development processes. Another priority is to develop early childhood education definitions, processes and assessments instruments, ensuring alignment with the overall education system. [2013; 2016-17]
Governance	According to OECD evidence, a largely unregulated school market has contributed to inequitable schooling outcomes and poor overall educational performance. The OECD identified the need to complete the review of the Good Teaching Framework and to develop aligned professional standards that take teachers' career structures into account. Regarding the observed level of excess employment (of teachers and other personnel) at the municipal level, the OECD found it important that adjustments are made before de-municipalisation takes place to avoid transferring this source of inefficiency to the new local education services. There is a need for a rural education strategy. [2015; 2017]	Chile previously reported providing local authorities and institutions with the capacity to deliver quality provision within a national vision as being a priority. New challenges include reducing inequalities and segregation among students by ensuring free tuition, non-selective and non-profit public and/or private-voucher schools for all students, as well as strengthening public education by transferring municipal schools to new local education services in charge of both the management and pedagogical support, and development of local public schools. The new challenges apply right across the students, institutions and the systems level. [2013; 2016-17]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
Funding	Disadvantaged Chileans begin encountering barriers to access long before they are of age to enrol in post-secondary education. In terms of efficiency of spending, the OECD identified that strengthening pre-primary and compulsory education could likely improve equity in higher education (HE) more than direct changes to the HE system itself. Nevertheless, important changes at the HE level would also expand equity and access for disadvantaged students. Furthermore, while social and education spending has increased in Chile, inequality remains high. [2017; 2018]	Public funding and quality assurance of tertiary education institutions remained key priorities to ensure efficiency and equity. The government continued to focus on ensuring adequate provision and maintaining public funding to private third parties that participate in the mixed education system. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In Chile, the Good Teaching Framework (Marco para la Buena Enseñanza, MBE, 2003) outlines what teachers are expected to know and be able to do. It identifies four domains: 1) preparation for teaching; 2) creation of an environment favouring the learning process; 3) teaching that allows learning for all students; and 4) professional responsibilities. Within each domain, the MBE describes criteria and performance levels (outstanding, competent, basic or unsatisfactory). The framework also outlines four elements of teacher appraisal: portfolio, self-assessment guidelines, interview by a peer evaluator and a third-party reference report (OECD, 2017[124]).

Progress or impact: The OECD has praised the Good Teaching Framework (MBE), reporting that it gives a clear and concise profile of what teachers are expected to know and be able to do, providing a sound frame of reference for teachers in Chile (OECD, 2017[124]; Santiago et al., 2017[125]). In 2016, a revision of the MBE with updates to criteria and performance levels reflecting the latest research on good teaching practice was released for public consultation. The process of approval for the revised MBE remains ongoing. The OECD commended efforts taken to review and refresh the MBE (OECD, 2017[124]; Santiago et al., 2017[125]).

In addition, the System for Teacher Professional Development (Sistema de Desarrollo Profesional Docente, Ley 20903, 2016), aims to bring together and build on the various initiatives developed and implemented over the previous ten years to present a more organised vision of improvement for the teaching profession. It also provides an overarching framework for development in this area up to 2026. It introduces mechanisms such as multi-stage career structure, an increase in the proportion of non-teaching hours and mandatory accreditation, among others (Santiago et al., 2017[125]). Immediately following the launch of the new system, the OECD praised the

increased clarity and goal setting it offered. However, the OECD also suggested that Chile consider introducing a coherent set of professional standards to better delineate teachers' roles and career progression as well as more rigorous and formative teacher evaluation procedures and relevant professional development. The OECD also highlighted the importance of actively involving stakeholders throughout the implementation process in order to build trust and a sense of ownership, particularly among teachers (OECD, 2017[124]).

- The Teacher Vocation programme (Beca Vocación de Profesor, BVP, 2012) offers scholarships to high-performing students who enter teacher training at the higher education degree level. Depending on the students' university selection test scores (Prueba de Selección Universitaria, PSU), they may also have the opportunity to opt for an additional monthly stipend and a fully funded semester abroad. Students who receive the scholarship must work in government-subsidised schools for at least 3 years during the 12 years after receiving the scholarship.

Progress or impact: A preliminary report demonstrated that, with the implementation of the Teacher Vocation programme (BVP), the average scores of enrolled students increased (Gallego et al., 2012[126]). A 2014 evaluation of the programme estimated that the introduction of the BVP had increased the percentage of top-scoring PSU students entering teacher education from 11% to between 16% and 19% (Pérez Mejías, Flores Serrano and Reveco Vergara, 2014[127]). Furthermore, a 2017 government analysis found that a greater number of high-performing students had entered teacher education since the introduction of the BVP.

Nevertheless, the report also raised some equity concerns. On joining the profession, a lower percentage of BVP recipients were placed in subsidised urban schools, considered disadvantaged in comparison to the rest of the teaching force (80%, compared to 90%), and a significant number entered private non-subsidised schools (7%). Furthermore, in 2016, a considerable percentage of students who received a grant came from private schools, thus posing a risk that they would go on to work in their former schools after qualification. This is not in line with the goals of the programme (MINEDUC, 2017[128]).

Furthermore, despite the increase in enrolment of higher performing students, a limitation remains at the systemic level. Overall, 60% of teaching students are not part of the BVP, and there is no obligation for these students to comply with the PSU scoring standards. Reports found that BVP demonstrated that it is meeting its goals to attract high-performing graduates and increase the attractiveness of the teaching profession. However, the OECD has noted that Chile will need to consider long-term, sustainable measures to ensure its continued growth and impact. These measures would continue to support fee waivers, scholarships and forgiving loans to candidates in order to financially incentivise graduates and attract high-performing students to the profession (Santiago et al., 2017[125]).

- In Chile, various reforms and initiatives have been introduced to improve the quality of school leadership. In 2011, the Law for Quality and Equity in Education (Ley 20501: Calidad y Equidad de la Educación, 2011) introduced competitive and open selection processes for school directors in public establishments. It also introduced new responsibilities and powers for school leaders, including greater flexibility to remove teachers, higher salaries and more support for professional development in schools with a high concentration of priority students (MINEDUC, 2011[129]). The same year, MINEDUC launched the Principals' Training Plan (Plan de Formación de Directores, 2010). This consisted of two phases: 1) strengthening training offers for school leaders through increasing flexibility in programme structures and improving quality assurance; and 2) offering scholarships to incentivise professionals to enrol in training programmes. In 2014, Chile's commitment to improving school leadership was further established through the launch of the School Leadership Strengthening Policy (Política de la Fortalecimiento del Liderazgo Directivo Escolar, 2014). This aimed to strengthen leadership skills within the system in order to enhance the role of school leaders as agents of change. The policy had five lines of action: 1) definition of the role of the school leader; 2) improved selection processes; 3) capacity development; 4) establishment of school leadership centres; and 5) building an evidence base to support policy making (MINEDUC, 2018[130]).

Progress or impact: From 2011-14, 2 969 acting and new school leaders received scholarships through the Principals' Training Plan (MINEDUC, 2017[131]). However, an OECD review found that the plan had not been effectively applied to inform the teacher career structure, professional development plans, evaluation processes or salary scales (OECD, 2017[124]). Furthermore, the lack of a school leadership career path also meant that no related salary structure was in place, apart from the salary allowances introduced as part of the Law for Quality and Equity in Education for those working in schools with high socio-economic disadvantage, high numbers of students with disabilities and schools in rural areas.

The School Leadership Strengthening Policy hoped to address some of these issues. For example, MINEDUC launched the Good School Leadership and Management Framework (Marco de Buena Dirección y el Liderazgo Escolar, 2015) to better focus the work of school leaders and their professional development. Two national school leadership centres (Centro de Desarrollo de Líderes Educativos and Centro de Liderazgo para la Mejora Escolar, 2015) opened to improve the quality of training and support offered to school leaders. The centres have led several research and innovation projects in the area of school leadership and have built up an international profile (MINEDUC, 2018[130]). Chile's Centre for Improvement, Experimentation and Pedagogical Research (Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas, CPEIP) launched an induction programme for school leaders in 2017.

The OECD recognised Chile's work in the area of school leadership as a promising step in the development of the profession, but signalled a persistent challenge in the lack of sufficient career differentiation between

teachers and school leaders, which most likely contributes to the continued low status of the profession (Santiago et al., 2017[125]).

Systems

Selected education policy responses

Governance

- The National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education (Sistema Nacional de Aseguramiento de la Calidad de la Educación Parvularia, Básica y Media, SAC, 2011) is an accountability system that brings together the Ministry of Education, the National Education Council (Consejo Nacional de Educación, CNED), the Quality of Education Agency (Agencia de Calidad de la Educación, ACE, 2012), and the Education Superintendence (Superintendencia de Educación Escolar). The School Quality Assurance Plan 2016-19 (launched in 2016) aims to articulate and co-ordinate the SAC (OECD, 2017[124]). Its main objectives include: 1) developing and implementing strategies by schools based on their education improvement plans (Plan de Mejoramiento Educativo, PME) and other tools available to them; 2) providing schools with continuous access to the Support and Capacity Strengthening System for Education Improvement (Sistema de Apoyo y Fortalecimineto de Capacidades para el Mejoramiento Educativo); and 3) providing education actors in the system with useful, pertinent and contextualised information as well as tools and resources to help them improve their schools (OECD, 2017[124]).

Progress or impact: An OECD review identified the National System for Quality Assurance of Early Childhood, Basic and Upper Secondary Education (SAC) as a chance for Chile to ensure that key institutions within the education system can actually reach schools and positively affect educational practice. However, SAC needs to ensure that its constituent institutions can achieve an effective model of collaboration. Co-ordination across these institutions will help educational authorities identify how to better support students as they progress through the education system. It will also help the government identify gaps or problems as well as successes and areas of potential collaboration (OECD, 2017[124]).

- In 2015, Chile created two new institutions to strengthen early childhood education (Law 20835). The new Secretariat for Childhood Education (Subsecretaría de Educación Parvularia) within the Ministry of Education is responsible for designing, co-ordinating, implementing and evaluating early childhood education and care (ECEC) policies and programmes. The second new agency is the division for pre-school education within the Education Superintendence (Intendencia de educación parvularia). It creates guidelines to ensure that ECEC centres for 0-6 year-olds, which are officially authorised and recognised by the Ministry of Education, comply with educational regulations.

Progress or impact: Before the creation of these agencies, expanding access to quality early childhood education was a special policy priority for Chile's government. In 2013, a law made kindergarten compulsory for children aged 4-6 years old (Law 20710). In subsequent years, a substantial increase was observed in the number of day care facilities across the country and also in the number of children aged 0-2 years old with access to early childcare and education (OECD, 2015[132]). The net attendance rate of children aged 0-5 years in pre-school education increased from 49.1% in 2013 to 51.2% in 2017. Specifically, for children aged 0-3 years old, there was an increase from 28.4% to 31.6% in the same period (National information reported to the OECD).

Furthermore, Chile's ECEC quality assurance system has addressed providers' regulatory compliance and financial stability, leadership and management, and implementation of the official curriculum (Bertram et al., 2016[133]). However, a recent OECD review found that the ECEC quality assurance system has not yet met some international standards, specifically in terms of staff performance, children's well-being, parental satisfaction and value for money (OECD, 2017[124]).

The OECD recommended that Chile continue its trajectory of expanding access to ECEC, particularly for children from disadvantaged backgrounds or living in rural areas, but at a pace that ensures children have access to high-quality learning opportunities, as soon as possible. The OECD considered that the development of a system-wide strategy to identify and disseminate effective pedagogical and professional practices in ECEC was essential to achieving this (OECD, 2017[124]).

In 2018, the Subsecretaría de Educación Parvularia released Curriculum Guidelines for Early Childhood Education (Bases Curriculares de la Educacion Parvularia, BCEP), which provide ECEC with an updated national curricular framework that will better prepare children for the transition to primary school. This replaced the 2001 ECEC curricular framework (MINEDUC, 2018[134]).

Chile is also prioritising the early development of technological skills through ECEC. For example, as part of the Plan de Calidad, a "Bee Bot" robotic toy has been trialled to help children in nursery schools become familiar with basic programming and robotics (MINEDUC, 2018[135]).

In 2019, two new draft legislations were submitted for debate. The Law for Equity in Nursery Education proposes various financial subsidies to support children aged 2-4 years old to attend ECEC, including targeted funds for disadvantaged children and those with special educational needs. The Law for Compulsory Kindergarten proposes making kindergarten attendance a requirement of enrolment in primary education. Additionally, the Advisory Council for the quality of Early Childhood Education (CACEP, 2019) also came into operation to oversee the various bodies and agencies responsible for quality assurance in the ECEC sector. Finally, a Fund for Innovation in Early Childhood Education (FIEP) has been established to promote

pedagogical innovation and experimentation around the key curriculum areas established in the BCEP (National information reported to the OECD).

Funding

- In 2012, Chile launched the third implementation stage of the Programme to Improve the Quality of Higher Education (Programa de Mejoramiento de la Calidad de la Educación Superior, MECESUP, 1998) which has been supported by the World Bank. The third stage (MECESUP 3) saw the awarding of 179 performance agreements to tertiary education institutions (World Bank, 2018[136]). This followed MECESUP 1 (1999-2004), which consisted of launching a "competitive fund" (*fondo competitivo*) that allocated financial resources to develop plans designed by higher education institutions. Funding priorities in this first stage were academic infrastructure, institutional capacity building and accountability mechanisms. MECESUP 2 (2006-08) funded 371 projects, this time prioritising academic innovation, staff development, doctoral programmes and academic management. During the first two stages, the total investment was approximately USD 50 million per year (Ricardo, 2012[137]).

Progress or impact: The Programme to Improve the Quality of Higher Education (MECESUP) programme has contributed to an increase in the share of public funding in tertiary education that is conditional on competitions or tied to specific activities. Whereas in 2004, conditional funds represented 30% of all direct government funding to higher education institutions (HEIs), by 2015, the share had increased to 42%. However, conditional funding still comprises a rather limited proportion of the revenue for HEIs, given that Chile's higher education is funded largely through private sources. World Bank evaluations suggest that MECESUP has been beneficial in various ways. Through MECESUP, Chile's government has been able to select plans and investments that reflect its priorities for tertiary education. At the same time, the programme has allowed HEIs to design plans that address shortcomings unique to their institutions. Furthermore, a World Bank report suggests that plans funded through MECESUP have led to improvements in teacher quality (specifically through the appointment of more full-time faculty members who hold doctoral degrees), curriculum design (through larger shares of students pursuing teaching degrees or vocational training in programmes with redesigned curricula), retention of first-year students and also higher student graduation rates (World Bank, 2018[136]).

- Chile has introduced a series of reforms to its policies concerning financial aid for students enrolling in higher education. In 2012, the State Guaranteed Loan System (Crédito con Aval del Estado, CAE, 2006) lowered its actual interest rate to 2% per year (it had been 5.8% since its creation) and included a limit on the amount of future income that may be dedicated to repayment (up to 10%). CAE is a loan programme that covers up to 100% of a "reference tuition fee", which is set by MINEDUC based on the estimation of the cost of every career. Private financial institutions (banks) grant the loans, and the State acts as the guarantor of the

payment (OECD, 2017[124]). Chile's government also provides a series of scholarships programmes. At the undergraduate level, the three most important scholarships are the New Millennium Scholarship (Beca Nuevo Milenio, BNM), the Juan Gómez Millas Scholarship (Beca Juan Gómez Millas, BJGM) and the Bicentenary Scholarship (Beca Bicentenario) all of which target students from the seven poorest income deciles. The first two are available to students who are also eligible for the CAE. There are also scholarship programmes that specifically target Indigenous students as well as those for postgraduate programmes and high-performing students (OECD, 2017[124]). Since 2016, free higher education (*Gratuidad*) is available for students from the bottom six deciles of family income who enrol in accredited HEIs (universities or professional and technical institutes and training centres) that voluntarily agree to participate in the scheme. It is expected that from 2019, the *Gratuidad* programme will extend free higher education to higher income deciles for vocational education and that by 2030, it will cover a further income decile for general education programmes (National information reported to the OECD).

Progress or impact: In 2014, about two-thirds (62%, compared to 30% on average across OECD countries) of expenditure in tertiary education came from private sources; among OECD countries, only Japan comes close to Chile in these terms. Furthermore, fees increased between 2004 and 2014 in all types of HEIs (including public universities).

OECD reviews suggest that financial aid policies have been one of the enabling factors of the rapid growth in access to higher education observed in Chile. Student enrolment in tertiary education doubled between 2004 (584 000 students) and 2016 (1.2 million students). The number of recipients of some types of student financial aid (loans, scholarships and *Gratuidad*) more than quadrupled between 2006 and 2017 (from about 200 000 to about 860 000 recipients). In terms of loans and scholarships, the number of recipients increased steadily until 2015 but declined with the implementation of *Gratuidad* (with a reduction in CAE loan recipients from 370 000 in 2015 to 300 000 in 2017, and a fall in scholarship recipients from 400 000 in 2015 to 265 000 recipients in 2017. In 2016, the number of recipients of free higher education through the *Gratuidad* programme was about 139 000 students, growing to around 261 000 in 2017. Correspondingly, government spending in financial aid grew steadily between 2006 and 2017, but the allocation of funding to different types of financial aid changed substantially after the introduction of *Gratuidad*. In 2017, some 30% of governmental spending in financial aid was spent on CAE loans (compared to 50% in 2015), while 21% was spent on scholarships (compared to 43% in 2015) and about 49% was spent on the *Gratuidad* programme, benefiting around 23% of enrolled students (MINEDUC, 2018[138]).

- With an estimated investment of over USD 500 million, Chile's Strategic Plan for School Infrastructure (Plan Estratégico de Infraestructura Escolar, 2014-18) aims to upgrade infrastructure standards and remedy the deficits and shortcomings of pre-primary, basic and upper secondary education schools. This plan is based on an assessment of the state of infrastructure conducted between 2012 and 2014 that

found significant gaps among municipal schools (Santiago et al., 2017[125]). Approximately 20% of the 5 509 registered schools were identified in that assessment as having a precarious drinking water system and deficient construction standards (Santiago et al., 2017[125]). The plan's lines of action include constructing 30 public schools with the highest quality standards; improving infrastructure for at least 1 000 schools, including 150 ECEC institutions; updating infrastructure (preventive work) in at least 600 schools; updating equipment; and repairing damage caused by natural disasters.

Progress or impact: In 2016, within the framework of the Strategic Infrastructure Plan for the Strengthening of Public Education, the Department of School Infrastructure of the Ministry of Education of Chile established 12 standards for educational infrastructure projects. These aim to ensure the construction of high-quality learning environments and cover criteria such as innovation, security, flexibility and openness to the community (MINEDUC, 2016[139]).

The Department of School Infrastructure also convened a series of competitions, aimed at selecting the best architectural ideas to develop definitive blueprints for 14 educational establishments (MINEDUC, 2019[140]). In order to participate, architects were required to be legally authorised to practice in Chile and to have at least five years of professional experience, including having previously built at least 3 000 m^2 in school infrastructure or equipment. The ministry announced this contest on its website and on Plataforma Arquitectura (Architecture Platform, a regional website of ArchDaily, one of the most visited architecture websites in the world). A total of 106 proposals were received (MINEDUC, 2019[140]). From this, 15 winning proposals were selected for project locations across the country. A further 13 school infrastructure projects have been developed as part of a specific plan for rural schools in Araucanía. Of these, eight were selected through architectural competitions. These projects are due to be completed by the end of 2019 (National information reported to the OECD).

Additional education policies of potential interest to other countries

Governance

- Chile's Higher Education Information Service (Servicio de Información para la Educación Superior, SIES) is a dependent entity of the Division of Higher Education. It was established as part of the Law for a Higher Education Quality Assurance System (Sistema Nacional de Aseguramiento de la Calidad de la Educación Superior, 2007) in an effort to establish a national higher education information system to support better governance, policy making and quality assurance in the higher education sector (MINEDUC, 2007[141]). One key objective is to provide better information to students to help them make informed decisions about their futures. Information published for this purpose includes data on economic returns by area of study, indicators on the financial situation of institutions and academic attributes such as vacancies, enrolment rates and the number of professors. A recent report highlighted how the SIES could be strengthened to improve transparency in Chile's higher education sector.

Specifically, Chile's 2016 higher education reform focuses on strengthening the collection, validation, updating and regular dissemination of information provided by institutions and other actors to inform public policy, institutional management and the public. This includes information on enrolment, staffing, resources and infrastructure. It also includes information on institutions' legal statuses, partners and leadership, and details of institutional property and financing, including audited financial statements (OECD, 2018[142]).

- Chile's New Public Education System (Nueva Sistema de Educación Pública, Law 21040, 2018) established a new system of public school governance aimed at consolidating resources and administrative capacity (MINEDUC, 2017[143]). The reform mandated the transfer of school administration, previously under the authority of more than 300 local municipalities, to about 70 local education services (Servicios Locales de Educación, SLEs), a new set of intermediate agencies created especially for this purpose. Each SLE administers a group of schools according to their geographical location and/or cultural characteristics, replacing school administrations by municipalities (*desmunicipalización*) (Santiago et al., 2017[125]). A new body within MINEDUC, the Directorate for Public Education (Dirección de Educación Pública, DEP), became responsible for working in co-ordination with the SLEs. The establishment of SLEs and the transfer of school management from municipalities to SLEs will be progressively rolled out until 2025 (OECD, 2017[124]). As of 2019, four SLEs were operating in the areas of Barrancas (77 educational establishments), Huasco (63 educational establishments), Costa Araucanía (93 educational establishments) and Puerto Cordillera (61 educational establishments). In total, this covers 61 086 students (MINEDUC, 2019[144]). By 2025, when the process of de-municipalisation ends, the New Public Education System aims to have around 7 000 officials, 100 000 teachers and 75 000 education assistants, and 1.3 million students in 5 000 educational settings (MINEDUC, 2018[145]).
- Chile's Higher Education Reform (2018) aims to address access and quality issues and proposes important changes to the steering of higher education. The reform creates a new Sub-Secretariat for Higher Education covering universities and vocational education and training (VET) at tertiary level, bringing HEIs together in a unified system; and a new Higher Education Superintendency (OECD, 2018[142]). It introduces measures to strengthen quality assurance processes, through the reinforcement of a national quality assurance system for higher education and the creation of a new VET Advisory Committee (Consejo Asesor de Formación Técnico Profesional) composed of the higher education Sub-Secretary, the Superintendency and the National Council of Education. Furthermore, efforts to increase the involvement of the government in higher education have been made by creating two public universities and 15 public VET centres (OECD, 2018[142]).

Funding

- Chile's School Inclusion Law (2015) aimed to reduce socio-economic segregation and introduced three main changes to the school funding system. First, it mandated that private subsidised schools must be owned by non-profit organisations to ensure that public funds are used for educational purposes only. Second, the law eliminated "shared financing" (*co-pago*) through which fees were paid to schools by families to supplement the public subsidy, although voluntary monetary contributions by parents for extracurricular activities are allowed. To compensate for the loss of

funds in private-subsidised schools, the law increased the amount of resources destined for school administrators. Finally, the law forbade public and private-subsidised schools from employing any form of selection criteria when enrolling students (Santiago et al., 2017[125]). They are also forbidden from expelling students due to behavioural, academic, political, ideological or other reasons (OECD, 2017[124]). It was expected that, by 2018, all private schools receiving public subsidies would be administered by non-profit organisations. However, in October 2018, 15 for-profit schools remained (0.13% of all schools in Chile) (National information reported to the OECD). According to the Ministry of Education and the Ministry of Finance, in 2014, 977 000 students attended schools with shared funding. This was expected to decrease to 108 900 students by 2025. In terms of adjustments, more recent developments in Chile were in process in 2019 to potentially reintroduce selection by academic criteria in schools from Grade 7, balanced with new prioritisation and inclusion criteria to protect vulnerable students (MINEDUC, 2019[146]).

- Chile's municipalities receive school grants and allocations for public education from several special funds or programmes (Santiago et al., 2017[125]). The Fund to Support Public Education (Fondo de Apoyo a la Educación Pública, FAEP, 2014) is the main existing fund and replaces the Fund to Support Municipal Governance (Fondo de Apoyo a la Gestión Municipal, FAGEM, 2007). It largely aims to cover the administrative costs incurred by municipalities in providing education services, and Chile introduced it in response to the education budget deficit faced by many municipalities. This deficit reveals possible over-employment of education staff in many municipalities, as well as shortcomings in educational management (Santiago et al., 2017[125]). In 2015, the fund corresponded to 4.8% of the budget for education grants (MINEDUC, ACE and ES, 2016[147]). FAEP has so far been guaranteed up to 2022 under the New Public Education Reform. Within the School Inclusion Law, a further FAEP has been introduced guaranteeing the provision of EUR 315 million each year between 2016 and 2019 (National information reported to the OECD).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Czech Republic

Context

Schools in the Czech Republic have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.24 (the average index value was 0.00). However, student truancy was among the lowest in the OECD: 8.1% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to an average of 19.7%. Students in the Czech Republic were less likely, though, to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.16 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was 0.04, which was higher than the OECD average of 0.01 (OECD, 2016[1]). At 35.9%, the proportion of lower secondary teachers aged 50 or over in 2016 was similar to the OECD average of 35.4%. In 2017, teachers in the Czech Republic had fewer net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 617 hours at both primary and lower secondary levels, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in the Czech Republic have higher levels of autonomy over curriculum than on average across the OECD: 94.9% of principals reported that the school had primary autonomy over curriculum, which was above the average of 73.4% (OECD, 2016[1]).

In 2016, lower secondary teachers earned 61% of the average salary of a full-time, full-year worker with tertiary education, which was below the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 74% of teachers in the Czech Republic said that if they could choose again, they would still become a teacher; this was close to the OECD average of 75.6% (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in the Czech Republic are more likely than average to conduct self-evaluations of their schools (96.7% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) but less likely than average to undergo external evaluations of their schools (61.2% of students were in schools whose principal reported this, compared to 74.6% on average) (OECD, 2016[1]). However, teacher appraisal levels, as reported in the earlier cycle of TALIS 2013 were higher than average: 89% of all teachers had reported then having received a teacher appraisal in the previous 12 months compared to the TALIS 2013 average of 66.1% (OECD, 2014[4]). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was just 3%; the OECD average was 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 38% of decisions in the Czech Republic were taken at the school level, compared to the OECD average of 29%.

Annual expenditure per student at primary level in 2015 was USD 5 207, which was lower than the OECD average of USD 8 631. At secondary level, the Czech Republic spent USD 8 476 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), the Czech Republic spent USD 10 891 per student, compared to the OECD average of USD 15 656. Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education decreased by 4.2 percentage points, compared to an OECD average fall of 1.3 percentage points. During the same period, private expenditure in the Czech Republic fell by 6.4 percentage points, compared to an OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

The Czech Republic's key education policy priorities have evolved in the following ways over the last decade (Table 8.6).

Table 8.6. Evolution of key education policy priorities, Czech Republic (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the low social status of teachers as an issue to be addressed. Another challenge identified was organising the working environment of schools to allow teachers the space for collaborative groups and safe forums to discuss. Further identified aspects that the Czech Republic could strengthen included the decisions on the appointment, appraisal and remuneration of school principals. The need to strengthen pedagogical leadership for school leaders was also identified. [2016]	The Czech Republic reported the prevailing challenge of a lack of systemic support to ensure teachers' and school leaders' capacities to address diverse student needs and provide more inclusive education, with policy undertaken later on to help tackle this. Another ongoing challenge is the implementation of a pay-scale-based teacher and school leader career progression system, although measures are being taken in this regard. [2013; 2016-17]
Evaluation and assessment	Some of the challenges identified included the absence of both teaching standards and a national framework to make school-based practices consistent, as well as of mechanisms to ensure that each teacher receives adequate professional feedback. Also, external school evaluation was found to focus on compliance with legislation, rather than improvement. The national monitoring system for school education was found, too, as in need of national data on student performance. [2012]	The Czech Republic reported an ongoing challenge in integrating an evaluation and assessment framework across the system that includes developing national standardised tests while limiting possible negative effects. A recently reported challenge is that of developing a system of key competence monitoring. [2013; 2016-17]
Governance	As of 2012, no curriculum framework or staff guidelines had been in place for staff working with children aged 0-3 years. Regional level governance of upper secondary vocational education and training (VET) needed more transparency and accountability mechanisms to ensure a match between labour market demand and student choice, and to meet national quality standards. Another challenge found was having VET career guidance under the responsibility of two ministries, which could contribute to system fragmentation. More recently, the OECD identified a need for better support and effective implementation of the Strategy 2020, particularly to ensure sufficient funding. [2012; 2016]	More recently, securing quality in tertiary education provision was identified as a need by the Czech Republic, with policy efforts prioritising this area. [2016-17]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
Funding	According to OECD evidence, the vast majority of grants and transfers to sub-national governments are earmarked, which is a challenge as earmarking is generally associated with lower efficiency and limits regional and municipal governments' abilities to match services provided to local needs. The OECD also identified the challenge that regions' responsibilities for pre-schools and basic schools have created an additional layer of decision making between the state and the municipality, creating difficulties for the assessment of the equity and effectiveness of education finance. In addition, regions' legal obligation to define and implement a very large number of normatives for secondary schools according to a very detailed methodology of different educational programmes were found to leave very little room for a flexible budgeting process at the regional level. [2016]	Ongoing priorities for the Czech Republic include improving the efficiency of overall school funding and transparency within the system, as well as promoting better financing of education for disadvantaged students. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In the Czech Republic, the Metodika I and II (Methodology, 2006-12) project aimed to improve the quality of the teaching profession. It was implemented by the National Institute for Education, Education Counselling Centre and Centre for Continuing Education of Teachers (Národní ústav pro vzdělávání, školské poradenské zařízení a zařízení pro další vzdělávání pedagogických pracovníků, NÚV). It focused on: 1) systematic support of teachers in teaching methodology and didactics; 2) developing learning communities; and 3) effective ways to educate (RVP, 2018[148]). One of the main outputs is a free, online methodological portal for teachers (Metodický portál, 2012), which provides theoretical and practical support to teachers. Users can add tests and teaching materials. The supervision of the portal is with the NÚV. The project was linked with the implementation of the Framework Educational Programme (FEP, 2007), which decentralised the education system.

Progress or impact: The web page of the Methodological Portal at rvp.cz was one of the tools that helped teachers get acquainted with the Framework Educational Programme and now helps to follow it (National information reported to the OECD). Further government information states that the portal is accessible for teachers and is actively used by them. As of 2019, the portal is the main methodological and didactic online support for teachers and school heads, with 31 000 registered users. The specific outcomes are nearly 8 000 new methodical contributions and over

10 000 digital teaching materials; a system of modern tools (Web 2.0); e-learning courses and webinars; and presentations for the professional public, including the articles and digital teaching material modules. According to further evidence reported by the government, the portal is undergoing an innovation process in co-operation with the PPUČ project (a teachers' work support project) to improve usability and implement new modules into the portal's structure, as of 2019.

- An amendment to the Education Act (2012) was introduced to modify the appointment and dismissal of school leaders and introduce a six-year appointment period. School founders hold the authority to start a selection process or renew a school principal's appointment automatically by an additional six years. The Czech School Inspectorate (ŠI) and the school council (*školská rada*) can establish a deadline for the appointment by the school founder. Legal regulations (i.e. the Act on Education Staff No. 563/2004 and Decree No. 54/2005) further clarify specific parts of the selection and appointment process, e.g. the composition of the selection panel. School founders are recommended to consider the selection panel's judgement on the most qualified candidate. Yet, there is no legal obligation to heed the recommendation, and school founders are free to make their own decisions about final appointments (OECD, 2016[149]).

Progress or impact: In accordance with a 2015 amendment to the Education Act (Act No. 561/2004, Paragraph 166, Metodika novela ŠZ 82-2015), school principals no longer have fixed terms, but permanent contracts (OECD, 2016[149]). At the same time, the six-year mandate and the appointment process continue to be valid (OECD, 2016[149]). After five and a half years, the founder can still open the appointment process to select a new principal (National information reported to the OECD). If the current principal does not win the selection process, the former school leader can remain an employee at the school and work as a teacher.

Evaluation and assessment

- The Strategy of the Czech School Inspection (2014-20) aims to strengthen external evaluations for school improvement as well as support building linkages between external and internal evaluations (schools' self-evaluations). Before the strategy, the Czech School Inspectorate finalised the National System of Inspection Evaluation of the Education System in the Czech Republic project (NIQES, 2011-14).

Progress or impact: According to the Czech School Inspectorate (ČŠI), adequate methodology and tools are not available in several areas, while in other areas methods, procedures and tools are still to be supplemented (Česká škola, 2017[150]). The Complex System of Evaluation (2017-22) project aims to address some of these shortcomings. The development of new methods, procedures and tools to assess key competencies also intends to identify and consider the socio-economic and territorial background of students as well as the school level. By monitoring the level of equity in education, the aim is to effectively prevent inequalities (Česká škola,

2017[150]). Also, according to the Strategy for Education Policy of the Czech Republic until 2020 (2014-20), education systems should, among others, support methods of evaluation that stress the progress of each student (MŠMT, 2014[151]).

Additional education policies of potential interest to other countries

School improvement

- To move towards a more inclusive education system, the 2015 Education Act was amended in 2016. The amendment included a revision of the Framework Educational Programme (FEP) and a modification in education delivery, particularly with regard to inclusion and the support of children with special educational needs. Based on the FEP, every school has to develop its own school educational programme that must comply with the FEP. Schools can apply for funding. According to national information reported to the OECD, it also includes specific training measures for teachers to improve inclusive education. Teachers may choose from a wide range of measures, including assistance for pupils with special needs or tutoring. By 2018, it was found that while the change in legislation brought about improved support for children with special needs in mainstream education, there were other challenges, including, among others, the administrative burden put on schools and the need for teachers to be trained to be able to meet the aims of the change in legislation (European Union, 2018[152]). Though, as of 2019, the overall impact has been positive, the impact was found to be modest concerning the participation of children from disadvantaged socio-economic backgrounds in mainstream education (European Commission, 2019[153]). In late 2018, the Czech government put forward a proposal to amend Decree No. 27/2016 Coll. on the education of children, pupils and students with special educational needs. Though this proposal may advance towards greater inclusive education as it proposes to allow special schools to open classes for children without mental disabilities but with behavioural/learning difficulties, which can according to the evidence lead to new forms of social segregation (European Union, 2018[152]). In addition, the Council of Europe's Commissioner for Human Rights expressed major concerns with the proposed legislative changes and called on the Czech government to proceed with its work towards more inclusive education (Council of Europe, 2019[154]).

Evaluation and assessment

- Full-cohort, national, standardised tests at Grades 5 and 9 (2011) in the curricular areas of the Czech language, foreign languages and mathematics take place every four years. The Czech School Inspectorate (ČŠI) is in charge of it. While originally, the tests were planned to also serve as a possible basis for enrolment at a higher level of education, it was decided that they shall only serve for low-stakes purposes for students. The tests aim to evaluate the work of schools and provide information to parents about their quality. Test results also support the monitoring of the performance of the Czech school system and identify differences in regional performance. The latest test took place in 3 700 basic schools and multi-year general academic schools *(gymnázia*) in 2017. As of the 2016/17 school year, a new unified entrance examination for upper secondary schools was put in place

(European Union, 2016[155]). At the end of upper secondary school, common state components of the school leaving examination continue to remain in place (Matura) in 2019.

Systems

Selected education policy responses

Governance

- The National Institute for Education, Education Counselling Centre and Centre for Continuing Education of Teachers (NÚV, 2011) was established following the merger of three institutions run directly by the MEYS: the National Institute of Technical and Vocational Education (NÚOV), the Research Institute of Education (VÚP), and the Czech Institute for Educational-Psychological Guidance (IPPP ČR) (NÚV, 2018[156]). The institute is directly funded by the Ministry of Education, Youth and Sports, and its missions include enhancing continuing development of general, vocational, art and linguistic education; and supporting schools in their pedagogical-psychological, educational and career counselling, as well as in the methodology used in the continuing education of teachers (Shewbridge et al., 2016[157]). Current activities of the NÚV include co-ordinating the project, "Supporting capacity building for the development of basic pre-literacy in pre-school and primary education, Supporting Teachers' Work" (Vladimíra, 2018[158]). In addition, NÚV is working on the revision of the Framework Education Programme (RVP) for nursery, elementary and secondary schools, after the approval of a document on the revisions of the RVP by the Ministry of Education, Youth and Sports (Vladimíra, 2018[158]). Based on the revisions, NÚV put forward the first draft version of expected outcomes on student information and communication technology (ICT) and digital literacy at the end of primary, lower and upper secondary school at the end of 2017.

> **Progress or impact:** The expected student outcomes for ICT include: data, information and modelling; algorithmisation and programming; information systems; computers and how to control them. For digital literacy, topics include: man, society and digital technology; digital content production; and information, sharing and communication in a digital society (Vladimíra, 2018[158]). The NÚV also offers access to online resources for students, teachers and the public. An online database (www.infoabsolvent.cz) provided by NÚV offers information related to the higher education sector (schools, programmes and professions), career guidance, information for disabled students and prevention and intervention mechanisms to reduce the number of school dropouts (Project Goal, 2018[159]). Through the NÚV, the Ministry of Education, Youth and Sports manages an online portal that is open to all teachers to store and share their digital learning resources (articles, discussions) with others. This archive contains almost 10 000 learning materials (Vladimíra, 2018[158]).

- The Strategy for Education Policy of the Czech Republic until 2020 (2014) guides education policy making. It defines the purpose of education through its four

primary objectives: 1) personal development that is conducive to the quality of human life, 2) the preservation and development of culture as a system of shared values; 3) the pursuit of active citizenship as a prerequisite for the development of society, based on solidarity, sustainable development and democratic governance; and 4) preparation for employment. The strategy's priority areas are: 1) reducing inequalities in education; 2) supporting quality teaching and teachers as the key prerequisite for quality teaching; and 3) governing the education system in an accountable and efficient manner (MEYS, 2014[160]). The European Commission's Operational Programme for Research, Development and Education makes up one of the principal funding streams for the implementation of the specific measures of the strategy (Eurydice, 2018[161]).

Progress or impact: To establish responsible and effective management of the education system, the Czech School Inspectorate began assessing schools in 2015/16 by focusing on new criteria, conditions, courses and the results of education (Czech School Inspectorate, 2016[162]). Since 2015/16, as part of its annual report, the Czech School Inspectorate included overviews of the development of the implementation of the Strategy for Education Policy of the Czech Republic (Czech School Inspectorate, 2016[162]). For example, the participation in pre-school education had reached 91.8%, moving closer to the minimum target of 95% of enrolment by 2020. The government had also made amendments to make the last year in pre-primary school compulsory by 2017. At the same time, the Inspectorate considered "problematic" the level of literacy identified in 6th grade of primary school and in the first year of selected secondary schools, according to an Inspectorate's survey.

The government set the goal of having no more than 5.5% of the population with education ISCED 2 (lower secondary education) as their maximum attainment and outside of the formal education system (the rate was at 5.4% in 2014). The government also set the goal of increasing the number of teachers below the age of 36 by 2020, which was 23.1% in the 2013 Strategy.

Besides the Inspectorate, further evidence shows that achievements have been made as regards the goal to foster partnerships between schools and employers (European Union, 2017[163]). In 2016, a standard procedure for contractual relationships was established to encourage employers to uphold quality standards in practical training (European Union, 2017[163]). Although the goals related to each priority have not yet been achieved, the conclusions of the 2017 external evaluation of the 2020 Strategy confirm the persisting relevance of its three priorities (MŠMT, 2017[164]). The review recommends improving communication between education stakeholders as well as improving the quality of administration at all educational levels. If the ministry decides to create a new strategy or update the 2020 Strategy, it should reflect on the concept of education in the digital age or the update of its educational objectives and content (Eurydice, 2018[165]).

- The Long-term Plan for Education and the Development of the Education System (Dlouhodobý záměr vzdělávání a rozvoje vzdělávací soustavy České repufbliky na

období, 2015-20) was implemented, following up on the strategic aims and criteria of the previous plan (2011-15). It is also based on the 2020 Strategy for Education Policy of the Czech Republic until 2020 (2014). These plans have aimed to improve the quality and efficiency of the education system by targeting a wide array of areas, including early childhood education and care, vocational education and training, and evaluation and assessment. Measures of the new plan include increasing access to pre-school education, providing more resources for students in secondary vocational education, enhancing school facilities and increasing teaching profession standards (MŠMT, 2014[151]). The MEYS formulated some priorities outside of the 2020 Strategy based on challenges at the time of implementation (MŠMT, 2017[164]). These include introducing elements of polytechnic education into the kindergarten curriculum and using a similar index of social, economic and cultural status (ESCS) for testing students of the 5th and 9th years of elementary education. The plan must be evaluated every four years before the preparation of a new long-term plan (MŠMT, 2015[166]).

Progress or impact: The following measures have been reported as completed: optimising the network of secondary and vocational education schools; defining new monitoring measures for quality; reducing bureaucracy to lessen administrative burdens on schools and school facilities; and improving equitable conditions in schools to promote inclusive educational practices. At the same time, some of the goals have not been reached, such as to reform funding mechanisms to increase effectiveness and participation in adult education and learning (including the creation of a National Qualifications Framework and links to the European Qualifications Framework). As a follow-up to the 2015-20 Long-term Plan for Education and the Development of the Education System, a long-term intention of education and educational system development was under development at the time of writing of this report (National information reported to the OECD).

- The National System of Occupations (NSO, 2004) and National Register of Qualifications System (NRQ, 2006) are linked to the European Qualifications Framework (EQF) to better align requirements of occupations with those of the qualifications under the NRQ and better respond to the changing needs of the labour market. The development and implementation of NRQ were finalised in 2015, and funded by the European Social Fund (ESF) and the state budget.

Progress or impact: The Strategy for Education Policy of the Czech Republic until 2020 (2014-20) outlines measures to ensure the compliance of the education programmes with the National Register of Qualifications System (NRQ). For example, several actions address an update of the Framework Educational Programmes for Secondary Vocational Education, in line with the descriptions of professional qualifications as specified in the NRQ (MŠMT, 2014[151]).

Additional education policies of potential interest to other countries

Governance

- The Czech School Inspectorate launched the Complex System of Evaluation (Komplexní systém hodnocení, 2017-22) project for the evaluation of the quality of education services and facilities with the overall aim of building on the methods, procedures and tools developed by the National System of Inspection Evaluation of the Educational System (NIQES, 2011-15). The Inspectorate is developing new tools to be used to support schools (e.g. sharing examples of good practices linked to inspection evaluation criteria), to build stronger linkages between schools' external and internal evaluations and to better understand schools' socio-economic backgrounds. The implementation of the first tools will start in 2020. Once the project is finished, the Inspectorate will use the updated evaluation instruments, such as new mechanisms to assess key competencies, to validate learning outcomes and to ensure that socio-economic and territorial considerations do not negatively influence school conditions and students' access to educational pathways and education outcomes. Overall funding is CZK 248.7 million (Czech School Inspectorate, 2017[167]).
- The Amendment of the Higher Education Act in 2016 also addressed the improvement of quality assurance in the Czech Republic through improved accreditation mechanisms. The new National Accreditation Bureau for Higher Education (NAB, 2016) replaced the previous Accreditation Commission Czech Republic (ACCR) and was assigned new responsibilities, i.e. to "not only issue expert statements on applications for accreditation, but also to grant accreditation and apply sanctions" (the Ministry of Education had previously been in charge of this). Further tasks include higher education evaluations and audits of compliance with legal provisions. With the 2016 legislative change, higher education institutions can now also apply for institutional accreditation alongside programme accreditation.

Funding

- The Czech Republic's Operational Programme for Research, Development and Education (Operační program Výzkum, vývoj a vzdělávání, OP VVV, 2014-20) supports projects that address key challenges in education and research. It is a multi-level topical programme led by the MEYS. In the scope of this project, funding can be taken from European structural and investment funds (ESIF) (National information reported to the OECD). The programme is led by the MEYS and has so far supported 9 100 projects focused on capacity for high-quality research, development of universities and human resources for research and development, and equal access to high-quality pre-school, primary and secondary education (MEYS, 2018[168]).
- In 2017, the Ministry of Education, Youth and Sports (MEYS) proposed an education funding reform concerning funding streams to regional and municipal schools. This includes public VET schools, while private and church schools are not included in the reform. The previous system based funding on the number of students in a school, resulting in large funding gaps between schools and across regions (CEDEFOP, 2017[169]). The overall aim is to improve the equality of funding to similar schools within different regions. The parliament approved the

reform through an amendment of the Education Act in mid-2018. The new reform shifts the funding system from schools receiving financial allocations based on student numbers in the classroom to pedagogical work (number of teachers) or hours taught (European Union, 2018[152]). Schools request financial resources from the state budget according to the number of teachers, pay scales and salaries, and the ministry assesses these claims and allocates funding according to the amount defined by the regional legislation (CEDEFOP, 2017[169]). According to the European Centre for the Development of Vocational Training (CEDEFOP), the government anticipates that the reform will also allow schools to provide higher-quality training for its teaching staff. In terms of teachers' salaries, the new system will also take into account average class repletion and the share of students with special educational needs (CEDEFOP, 2017[169]). Implementation takes place in two steps. As of 2019, financial support is provided to "divide the lessons, balance differences between schools in regions and adequate staffing in nursery schools". Full implementation is to be completed by 2020 (Eurydice, 2018[170]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Denmark

Context

Schools in Denmark have slightly more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.03 (the OECD average index value was 0.00). Student truancy was also lower than the OECD average: 17% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. Students in Denmark were also among those most likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.28 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was lower than the OECD average at -0.15 (the OECD average was 0.01) (OECD, 2016[1]). However, according to school principals' self-reports in PISA 2015, schools in Denmark have higher levels of autonomy over curriculum compared to the OECD average: 85.7% of principals reported that the school had primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Lower secondary teachers in Denmark earned 83% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was lower than the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 70.3% of teachers in Denmark said that if they could choose again, they would still become a teacher; close to the OECD average of 75.6% (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Denmark are less likely than average to conduct self-evaluations of their schools (84.2% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and are also less likely to undergo external evaluations of their schools (69.5% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). However, teacher appraisal levels as reported in the earlier cycle of TALIS 2013, were close to average: 64.6% of all teachers had reported then having received a teacher appraisal in the previous 12 months, compared to the TALIS 2013 average of 66.1% (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported that standardised tests are used to make decisions on students' promotion or retention was 14%, which was below the OECD average of 31%, as reported in PISA 2015 (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) in Denmark were higher than the OECD average: 50% of decisions in Denmark were taken at the school level, compared to the OECD average of 29% (OECD, 2018[2]).

Evolution of key education policy priorities

Denmark's key education policy priorities have evolved in the following ways over the last decade (Table 8.7).

Table 8.7. Evolution of key education policy priorities, Denmark (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, a major challenge has been to ensure that vocational education and training (VET) teachers keep their vocational skills up-to-date. More recently, the OECD found that besides conditions in place to focus on goal-oriented teaching and learning, challenges remain in moving from a teaching to a learning focus, and in making better use of the available data. Also, many changes to the school system in Denmark have left teachers struggling to know what it means to be an excellent teacher. The OECD also found that several aspects of teacher professionalism are still at the early stages of development; there is scope to strengthen pedagogical leadership further. [2012; 2016]	Among its priorities for public schools, Denmark reported the following: ensuring that teachers and principals have quality support, feedback and professional development opportunities and that principals take on a more pedagogical role. More recently, priorities also involve strengthening continued development of competencies of teachers and pedagogues in public schools. Denmark also highlighted the priority to strengthen the practical and musical subjects of the oldest classes in primary and lower secondary school. [2013; 2016-17]
Evaluation and assessment	The OECD identified the need to complete the evaluation and assessment framework, including the evaluation of municipalities, school principal and teacher appraisals. In addition, OECD evidence underlined the importance to continue efforts to validate and further develop the national tests and engage teachers in working effectively with the national test results. The need for a stronger emphasis on formative teacher appraisals in schools was also identified. The OECD found the need to develop a strategy to complement existing national monitoring information with broader measures of outcomes. More recently, the OECD identified the need to maintain a focus on broad learning goals, strengthen public reporting about the performance of the system, analyse the effectiveness of resource use in municipalities and schools, as well as develop indicators and measures of system performance that inform a good understanding of how well the system is achieving its objectives. [2011; 2016]	Denmark reported an ongoing priority to complete a framework for evaluation and assessment and use the results in schools. A more recently reported goal for primary and lower secondary schools is to enhance the efficient use of resources and strengthen public reporting about the performance of the school system. [2013; 2016-17]
Governance	The OECD identified the potential for efficiency and innovation through private schools, but a risk of increasing segregation. [2016]	Denmark reported the persisting priority of setting clear education objectives to guide a decentralised municipality environment, building capacities of municipalities and schools to implement national strategies at the local level, and optimising resources in a decentralised context. A more recently reported policy priority is to strengthen the practical and musical subjects in the last years of elementary school with policy measures being taken. [2013; 2016-17]
Funding	According to OECD evidence, there is a need to pay attention to using resources efficiently. [2016]	A funding priority is to increase subsidies to Denmark's free elementary schools and particularly target students with special needs and challenges. [2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In Denmark, the Folkeskole reform aims to improve the quality of the compulsory public primary and lower secondary education (2014-20) by modifying aspects of compulsory education, such as the school day and the curriculum, providing additional support to schools (e.g. through extra support in teaching in the primary and lower secondary school, called assisted learning) and raising the stakes for school leaving examinations before post-compulsory education (Ministry of Education, 2014[171]). To promote improvement in learning environments and student performance, the focus is put on coaching and in-depth study, strengthening the connection between theory and practice, physical activities, homework assistance, student well-being and multi-faceted development (Government of Denmark, 2014[172]).

> **Progress or impact:** One study of the Danish National Centre for Social Research identified increasing student well-being and increasing student interest in the courses taught (SFI, 2016[173]). According to the OECD, whether the recent changes will lead to greater efficiency and effectiveness will depend on the ability of all actors in the system to use resources efficiently and to adapt to the changes that the recent reform implies (Nusche et al., 2016[63]). Evidence collected by the OECD shows that the reform introduced a longer school day for students without a symmetric increase in the number of teachers (Nusche et al., 2016[63]). At the same time, the introduction of a new framework for the utilisation of teachers' working time (Act No. 409) has created greater flexibility for schools to use the time and competencies of their teachers to best effect (Nusche et al., 2016[63]).

- One of the main objectives of the Folkeskole reform (2014-20) is that primary and lower secondary schools reduce the influence of social background on students' academic achievements.

> **Progress or impact:** The 2016 evaluation of the overall reform found that the socio-economic impact, specifically for disadvantaged groups, has reduced since the implementation of the 2014 Folkeskole reform. Specifically regarding students with an immigrant background, academic performance remains below the overall student population. Yet, the gap has decreased in recent years.
>
> In 2016, to ensure a better framework for the integration of refugees, the government strengthened the basis of knowledge regarding reception classes and allocated funds for the development of screening material to help local authorities and schools in their assessment of newly-arrived students' competencies. In addition, guidance and inspirational material are to be developed with a view to the work with newly-arrived students in primary and lower secondary school (Government of Denmark, 2017[174]).

- Measurement and improvement of student well-being (Udvikling af trivselsværktøj og malinger, 2014) is an initiative following the Folkeskole reform (2014-20). The measurement tool to collect national data about student well-being was developed based on the recommendations of an expert group on "Student Well-Being in Primary Schools" set up by the Ministry of Education (UVM) in 2014 (Ministry of Education, 2018[175]). The group's recommendations have provided the basis for annual well-being measurements in both primary and lower secondary schools. Social well-being, professional well-being, support and inspiration, role and order, and general school drive, are four key aspects considered necessary for the students' desires to learn and their ability to do so. At the same time, they are prerequisites for teachers' abilities to teach (National information reported to the OECD). All primary schools and special schools must carry out a well-being survey on these aspects among the children and students in pre-school through the 9th grade each year. Both the average well-being and well-being specific to each of these aspects are measured on a scale from one to five, with one being the lowest possible well-being, and five the highest possible well-being. The first measurement was carried out in 2015, and the measurement conducted in 2018 is the fourth (Ministry of Education, 2018[176]).

Progress or impact: The Danish National Centre for Social Research has monitored the well-being of school children before and after the Folkeskole reform took effect, with surveys conducted for students in Grades 4, 6, 8 and 9 in 2014, 2016 and 2018. The results show, for example, that in 2018, younger students tend to have more positive reports on well-being than older students.

The results of the surveys have been mostly stable in the different years conducted, with only small fluctuations. In 2016 and 2018, 65% of students showed high interest in the courses taught, a small improvement over 2014, compared to 63% in 2014 (Government of Denmark, 2018[177]). In 2018, 68% of students in primary education considered the school day too long, compared to 83% of students in secondary education. This was a slight improvement from 2016, when the share of students reporting this was 78% and 87%, respectively. Still, it remains higher than the shares reported in 2014 of 42% and 52%. At the same time, survey results show that reported levels of well-being remain high on average, even among students more critical of the length of the school day, according to the parameters of the survey. (Government of Denmark, 2018[177]).

Evaluation and assessment

- A Data Warehouse (Datavarehuset, 2014) aims to strengthen evaluation, follow up on initiatives in the entire education sector and facilitate access to steering and performance data for schools and municipalities. It also includes an overview of management information in primary schools, which is available for municipalities and schools. As of 2015, it also includes data from high schools and vocational education and training.

Progress or impact: The Data Warehouse has gradually become the primary statistical tool to use within the Ministry of Education (UVM). The databanks (*databanken*) are being slowly phased out and replaced by the Data Warehouse (National information reported to the OECD and (Ministry of Education, 2018[178]).

Additional education policies of potential interest to other countries

School improvement

- Denmark has made changes to the Individual Mandatory Student Plans (Elevplaner i folkeskolen, 2006) for children in pre-school up to Grade 8 (Ministry of Education, 2018[179]). These changes are meant to respond to the requirements in the Folkeskole Act (2014) of making student plans accessible to students and parents through a digital format. A platform of the student plan helps collect information on progress, goals and student assessments, among others. First, this platform should contain the specific goals for the individual student's learning, with the starting point being common objectives. Second, a status section should show student progress in relation to the goals. Third, a monitoring section should describe how and when to follow up on the goals. Both the student and the teacher must monitor progress on the goals, and the parents can be involved in this process. The plans are mandatory in all subjects in all years (Ministry of Education, 2018[179]).
- In order to implement the new reform (Gymnasiereformen, 2017), which introduces a minimum grade requirement for entry to general upper secondary education, training courses for teachers and principals have been introduced (Ministry of Education, 2017[180]). The total budget allocated is DKK 400 million between 2017 and 2024. According to national information reported to the OECD, PISA 2012 results fed into the design and implementation of the reform. In the upcoming years, courses on Professional Development in Practice (FIP) and School Development in Practice (SIP) aim to support all schools with the necessary knowledge and capacity to implement the reform. The FIP courses are one-day courses in individual upper secondary subjects for teachers and managers, led by professional consultants. The SIP courses take place every six months and target managers and teachers in all upper secondary education. The focus is on selected topics in upper secondary school. In addition, each school is part of one of the total 58 implementation networks. The networks are places to exchange experiences, and each network has a Ministry's Learning Consultant for support and information on the reform implementation. The government will draw up an annual status report to monitor whether the reform meets the political intentions (Ministry of Education, 2018[181]). A follow-up and evaluation programme will take place by 2021.

Systems

Selected education policy responses

Governance

- The government launched the reform of primary and secondary schools (Folkeskole) in 2014 to strengthen the focus on education goals on improving

learning environments, student performance and the quality of its schools. Initiatives implemented under the reform correspond to three national objectives (tre klarer nationale mål): 1) Folkeskolen must challenge all students to obtain as many skills as possible; 2) primary schools must reduce the impact of social background on academic results; and 3) promote trust and well-being within primary and lower secondary schools, namely through improved respect for pedagogical staff and practice. According to a recent report from the OECD, the 2015 government proposed the following additional objectives: improving school inclusion; promoting collaboration between schools and youth clubs; and providing better learning opportunities for children with special educational needs (Nusche et al., 2016[63]).

Progress or impact: The first report on the implementation of the Folkeskole reform (2016) indicates that the majority of municipalities have delegated responsibility for implementation to their schools and that the implementation process benefits from a high degree of mutual trust (European Union, 2017[182]). According to a 2016 survey by the Association of Danish Municipalities, all municipalities see progress through a more varied and motivating school day (KL, 2016[183]).

Funding

- As part of the reform of primary and secondary schools (Folkeskole), the government allocated EUR 134 million (DKK 1 billion) between 2014-20 to strengthen continued development of competencies among teachers and pedagogical staff in schools. The government also aims to equip school principals and administrators to navigate through objectives and evaluations and use continued professional training of teachers and pedagogues strategically to achieve the objectives of their schools. As part of this effort, a state-financed pool of EUR 8 million (DKK 60 million) was set aside for continued professional training of school principals during 2013-15.

Progress or impact: The funds were used to reform initial teaching training and teaching development programmes in Denmark, specifically to strengthen teachers' competencies and practices to better support students' different needs, and especially special educational needs (Nusche et al., 2016[63]). These initiatives aimed to benefit teachers who do not feel competent enough to support the special needs of different students. According to the TALIS report for 2013, 28% of lower secondary teachers in Denmark acknowledged a high need for professional development to support students with special needs (OECD, 2014[4]).

A review study on teacher competencies and funding allocations conducted in four municipalities found that coverage of competence training was an important objective among municipalities and schools. However, some implementation challenges were identified, particularly in terms of the costs of achieving full coverage by 2020. For example, across municipalities, there was a significant difference between whether the municipalities

compensate the schools financially in connection with continuing education, which poses challenges to the coherence of the implementation process.

In terms of student outcomes, no effect of "teacher competence development" was identified on the 9th grade, but a modest effect was found in Danish and mathematics on the 6th grade (Ministry of Education, 2018[184]).

Additional education policies of potential interest to other countries

Governance

- In 2015, the Danish government discontinued its platform "A Denmark that stands together" (2011), which had established early childhood education and care (ECEC) and reforming primary and lower secondary schools in collaboration with teachers and parents as key education priorities for Denmark (OECD, 2013[185]). According to recent OECD research on Denmark, there is a new government programme, Together for the Future (2015), which proposed a new set of objectives, measurable goals and targets concerning all levels of education. The report indicates that the programme aims to ensure smoother transitions for children advancing from day care to ECEC or pre-schools. At the same time, the responsibility of day care would be transferred to the Ministry for Children and Social Affairs (changed from Ministry for Children, Education and Gender Equality in 2016). The new programme continued the 2014 reform of primary and lower secondary school (Folkeskole), and the government planned to launch new measures to further ensure the effective implementation of the reform. For students in upper secondary education, the government aims to facilitate their choices between general and vocational programmes and to reduce school dropout by establishing greater coherence across upper secondary programmes (Nusche et al., 2016[63]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Estonia

Context

Schools in Estonia have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index value of -0.04 (the average was 0.00). Some 23% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. Furthermore, students in Estonia were less likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.17 (the average was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was below the OECD average (-0.06 compared to 0.01) (OECD, 2016[1]). At 53.2%, the proportion of lower secondary teachers aged 50 or over was among the highest among OECD countries, where the average was 35.4%. In 2017, teachers in Estonia had fewer net teaching hours for general programmes than their OECD peers. Teachers taught 585 hours at primary level and 602 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Estonia have high levels of autonomy over curriculum compared to the OECD average: 95.6% of principals reported that the school has primary autonomy over curriculum; the OECD average was 73.4% (OECD, 2016[1]).

In 2016, lower secondary teachers in Estonia earned 91% of the average salary of a full-time, full-year worker with tertiary education, equalling the OECD average (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 74.1% of teachers in Estonia said that if they could choose again, they would still become a teacher; this was around the OECD average of 75.6%. Furthermore, 26.4% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, nearly all school leaders in Estonia conduct self-evaluations of their schools (99.8% of students were in schools whose principal reported this, compared to 93.2% on average), and most undergo external school evaluations (90.8% of students were in schools whose principal reported this, compared to 74.6% on average) (OECD, 2016[1]). However, teacher appraisal levels as reported in the earlier cycle of TALIS 2013 were above average: 89.7% of teachers had reported then having received a teacher appraisal in the previous 12 months, compared to 66.1% on average (OECD, 2014[4]). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 34% compared to an average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) in Estonia were higher than the OECD average: 50% of decisions were taken at the school level, compared to an average of 29%.

Annual expenditure per student at primary level in 2015 was USD 6 327, below the OECD average of USD 8 631. At secondary level, Estonia spent USD 6 861 per student, compared to an average of USD 10 010, while at tertiary level (including spending on research and development), Estonia spent USD 12 867 per student, compared to USD 15 656. In 2015, expenditure on primary to tertiary education as a proportion of gross domestic product

(GDP) was 4.7%, which was below the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (13.3% compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education decreased by 8.5 percentage points, while the proportion of private expenditure increased by 77.3 percentage points, compared to OECD average changes of -1.3 percentage points and +10.6 percentage points, respectively (OECD, 2018[2]).

Evolution of key education policy priorities

Estonia's key education policy priorities have evolved in the following ways over the last decade (Table 8.8).

Table 8.8. Evolution of key education policy priorities, Estonia (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the priority of re-thinking the organisation of school staff as part of the school consolidation process. A challenge exists in attracting new talent for school leadership positions. Teachers expressed concerns about the unaffordability and lack of relevance to professional development courses. This may be due to the programmes considered as most relevant not being offered free of charge as well as a lack of information for providers about teachers' needs. [2016]	As reported by Estonia, challenges remain regarding improving the attractiveness, salary competitiveness and training for the teaching profession despite recently reported improvements in teachers' salaries. In particular, challenges in guaranteeing salary funding for non-teaching staff in general education institutions are ongoing. [2013; 2016-17]
Evaluation and assessment	According to OECD evidence, there is a need to ensure an adequate degree of external scrutiny to challenge the findings of school self-evaluation. There is a pressing need to develop and ensure implementation of a regular and more coherent approach to school leader appraisal. External periodic teacher certification needs to be made a requirement for teachers using the existing competency-based career structure as improvement of teacher evaluation is a means of raising education quality. [2016]	A previously reported challenge was the lack of a systematic appraisal mechanism to incentivise and reward the performance of school leaders, while more recent discussions on a model were underway. [2013; 2016-17]
Governance	According to OECD evidence, there is a need to clarify responsibilities in the education sector, to adapt education to current and future labour market needs and to improve access to lifelong education. [2016; 2017]	Estonia previously reported the need to work on better defining the responsibilities between the national and local government for secured salary payments. This remains a priority. [2013]
Funding	The OECD identified a need to reform tertiary education funding, as well as review the financing of pre-primary provision. Public spending on pre-primary education relative to GDP per capita remained very low by OECD standards, reflected in low salaries for pre-primary education teachers and possibly resulting in lower quality of pre-primary services. This low level of funding is partly explained by the fact that responsibility to provide it lies with the municipalities, which often have minimal resources. [2012; 2016]	N/A

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Due to a demographic decline in Estonia, re-organising the school networks (koolivõrgu korrastamine) has been a policy priority since 2004/05. During the analytical phase, the school-related commutes of all students were mapped to assess, among others, the proximity of students' homes to their upper secondary schools; preferences on studying in larger cities or smaller cities; and the influence of the institutional set-up of a school on the type of students it recruits. In 2012, the first state upper secondary school opened (Ministry of Education and Research, 2015[186]). With the amendments to the Basic School and Upper Secondary School Act (2013), the central government intends to establish at least one state-owned upper secondary school in each county by 2020. The reform aims to improve students' learning environments and optimise the use of educational resources.

Progress or impact: By 2015, seven state upper secondary schools were operating, and co-operation agreements had been made with six local authorities (Ministry of Education and Research, 2015[186]). By 2019, 16 out of the 24 upper secondary schools were also in operation.

A 2016 OECD review found that the reduction in the number of schools and teachers had not caught up with the decreasing number of school-age students, but first measures showed that the system had adapted overall to demographic changes (Santiago et al., 2016[187]). It was found that the funding formula exerted some pressure on municipalities to rationalise their school networks as they faced a decreasing number of students. The OECD review also noted that all stakeholders agreed to continue to strengthen the school network.

The government's support measures included: direct intervention in general upper secondary education; the creation of incentives for municipalities to consolidate their schools; the steering of part of the EU structural and investment funds (2014-20) towards improving educational infrastructure; and readiness to take over the responsibility for part of the educational expenditures so far covered by municipalities. New state-run gymnasiums were also set up in every county capital to increase system efficiency and supply quality instruction to students. The government also helped in the municipalities' efforts to consolidate general upper secondary school networks through incentives.

At the same time, the OECD review team supported the government's approach to not grant municipalities the possibility to set up new schools that combined the teaching of primary and lower secondary education with Years 10-12. The implementation of the "recentralisation" of general upper secondary education was found to encounter obstacles, and the OECD review recommended paying close attention during further implementation (Santiago et al., 2016[187]).

- One of the goals of the Lifelong Learning Strategy 2014-20 is to increase teachers' salaries to 120% of the average national salary by 2020 (from 95% in 2011 and 107% in 2015) (European Commission, 2017[188]). Another goal is to raise the percentage of teachers under the age of 30 to 12.5% by 2020. A further goal is to assess teachers and school principals and to ensure that their salaries are consistent with the qualifications required for the job and work-related performance.

> **Progress or impact:** As of 2017, the *minimum* school teacher monthly salary was set to be raised to EUR 1 050 and the *average* teacher monthly salary to EUR 1 300. The average salary was at EUR 1 201, however, in 2017 (Statistics Estonia, 2018[189]).
>
> In 2019, the *minimum* monthly salary is set to be raised to EUR 1 250. The state provided additional funding to increase pre-primary school teacher salaries to at least 80% of the minimum salary in general education by September 2017 as well as an additional increase of 85% in 2018 and 90% in 2019 (European Commission, 2017[188]).

Additional education policies of potential interest to other countries

School improvement

- A career structure (2014) based on professional standards and the acquisition of competencies has been introduced for both general education teachers (four levels) and vocational education teachers (three levels). According to OECD evidence, the new structure is improved over the previous, complex and resource-intensive system of teacher accreditation, but at the time of writing of this report, its potential has not yet been fully realised (Santiago et al., 2016[187]). Some of the improvements include the fact that the certification process is competency-based; there are better links to teaching practice; and the system appears to be owned by the profession through the leadership of the Estonian Association of Teachers.

Evaluation and assessment

- Estonia has implemented an external evaluation "concept" (2014) to emphasise the analytical and supportive role of the national level and make further use of national databases to inform the public and provide feedback to schools on their performance (Public Information Act). It emphasises the assessment of general competencies and formative assessment. Internal assessment and action plans agreed at the school level are also considered central elements of evaluation. The ministry may support schools by providing counselling for internal performance reviews. Estonia is also developing diagnostic mechanisms in 2019 that will primarily target learning outcomes in science literacy, mathematics and reading.
- Estonia has implemented several programmes to improve evaluation and assessment. Since 2018, the Foundation Innove assesses students' general competencies (learning, self-management, digital and communication skills) and knowledge of scientific literature. In addition, Estonia plans to use an electronic tool to evaluate the digital environment of its schools (http://digipeegel.ee). Information about schools' main indicators is published on the school card website (www.haridussilm.ee). Teachers can access diagnostic tests to help them adapt their

teaching to students' needs. Well-being questionnaires with questions about, for example, students' learning habits, are used to survey students, teachers and parents.

- The Estonian Education Data System (EHIS, 2005) is a public database that collects data on educational institutions, students, teachers, graduation, textbooks and curricula. Responsibility for accuracy of the data lies with the data provider.

Systems

Selected education policy responses

Governance

- The responsibilities of the Estonian Quality Agency for Higher and Vocational Education (EKKA, previously named Estonia Higher Education Quality Agency), the agency responsible for quality assurance in higher education, have changed over the last decade. In 2008, EKKA mandated that an assessment and accreditation of the quality of study programmes in higher education institutions should be conducted every seven years (ENQA, 2013[190]). Accreditation must also provide feedback about the management and work of the higher education institution (HEI) as a whole.

Progress or impact: Between 2012 and 2018, all higher education institutions underwent the accreditation process, and two institutions failed to be accredited (in 2019, at least one of them had been closed down). A pilot launched in 2011 for the accreditation of vocational education and training (VET) study programme groups in 24 institutions (EKKA, 2017[191]). By the end of 2018, 246 VET curricula groups had been evaluated, and of these, 238 received full accreditation. The amendment to the law waived the existing procedure, and quality assessment will now be carried out once every six years in the curriculum groups.

Quality assessment is now carried out to be more supportive of school development by providing input on improvement activities and exemplary practices to the school, the school staff and other stakeholders. Only 3% of all curricula groups of vocational training institutions (eight school curricula groups) had a three-year accreditation at the time of writing this report and will have to undergo a re-evaluation to be eligible for indefinite training (National information reported to the OECD).

As a member of the European Association for Quality Assurance in Higher Education (ENQA) and a registered member of the European Quality Assurance Register (EQAR), Estonia's quality assurance system must undergo an external review every five years, in accordance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) (EKKA, 2018[192]). In a recent self-evaluation report, EKKA described its actions taken in response to ENQA's recommendations following its 2012 external review (EKKA, 2017[191]). Following its 2017 review, ENQA found the agency compliant with the ESG and renewed its ENQA membership until 2023 (EKKA, 2018[193]). ENQA suggested EKKA

could benefit from better tools for information exchange, such as a Stakeholder Advisory Board. ENQA also suggested developing methods for eliciting specific feedback from students, and that experts could be valuable for future improvement (Finance, 2018[194]). EKKA informed ENQA that there was no need to establish a board as the pre-existing channels for communication would be sufficient (National information reported to the OECD).

At the same time, EKKA has started to work on collecting feedback from experts to improve its activities and now also provides the HEIs' feedback about the accreditation process to experts. Further national information reported that steps are being taken to respond to the following recommendations:

1. "EKKA must reconsider its approach to reviewing institutional compliance with the ESG standards on internal quality assurance in the three areas omitted from its mapping. The gaps in its framework in relation to information management and reporting on the new guidelines for PhD Study Programmes should be addressed. On initial assessments, the approach should address comprehensively all of ESG, Part 1, particularly on Teaching and Learning (Standard 1.3)."
2. "EKKA needs to put in place a more structured approach to the dissemination and utilization of thematic analyses and to demonstrate more systematically how it uses the outcomes of these analyses."

Funding

- Estonia's national investment programme to support the consolidation of the upper secondary school network for general education (2014-20) and make public spending more efficient is ongoing. The investment programme aims to raise quality and diversity in learning opportunities and adapt upper secondary education to the country's changing demographics and labour market developments (European Commission, 2016[195]). In 2014-20, total funding for this effort will be EUR 241 million, including EUR 204.8 million from the European Regional Development Fund (ERDF), according to information reported to the OECD.

Progress or impact: Two years after implementation, the European Commission reported that education quality at the upper secondary level varies from Estonian-language schools to Russian-language schools. In response, a gradual shift to Estonian-language upper secondary schools is underway (European Commission, 2016[195]).

Additional education policies of potential interest to other countries

Governance

- Governance reforms took place in the two largest higher education institutions in Estonia (University of Tartu [Tartu Ülikool, UT] and the Tallinn University of Technology [Tallinna Tehnikaülikool, TTÜ]) in 2011 and 2015, respectively, to increase the voice of students and external representatives in the universities' decision-making processes. Following the reforms, the academic and administrative structures of both institutions were redefined. In its 2012 Annual Report, the University of Tartu reported its management reform (2011) had resulted in a new governance model distributing the functions of the former University Council between two new governing bodies, the University Council and Senate. Since the reform, the 11-member University Council holds responsibility for adopting the university's statutes and approving its strategic plan and budget. The council consists of five university members and six members representing the university's external partners (five appointed by the Ministry of Education and Research, and one by the Estonian Academy of Sciences). The 22-member Senate makes academic decisions on behalf of the university and holds responsibility for teaching and research and development activities. Along with representatives from each of the four areas of teaching and research, the Senate includes five student representatives (University of Tartu, 2012[196]). Similarly, amendments to the Tallinn University of Technology Act (Tallinna Tehnikaülikooli seadus) were enforced in 2015, updating TTÜ's governance structure. The reform distributed the functions of TTÜ's Council of the University among three new governing bodies: the Board of Governors, the Council and the Rector (TTÜ, 2015[197]). Following the reform, in 2016, the new Board of Governors adopted a development plan to simplify the institution's academic and administrative governance structures by 2020. In 2016, this prompted the reduction of TTÜ's administrative and structural support units from 18 to 9. TTÜ's 2016 Annual Report describes how the entry into force of these new statutes clearly defined the roles of each governing body: the Rector's responsibility for administrative management of the university, budget issues overseen by the Rector and the Board of Governors, and academic issues under the competence of the Council (TTÜ, 2016[198]).

Funding

- In 2017, Estonia's higher education system shifted from performance-based funding for the most part to 80% baseline and 20% performance funding (up to 17% based on performance indicators and up to 3% on performance agreements) (Lees, 2016[199]). The European Commission reports that criteria for the new model's funding decisions include the proportion of students graduating within the nominal time with the biggest weight (35%), the proportion of graduates employed or continuing to master's or doctorate (20%), the proportion of foreign students (10%) and mobile students (10%) (European Commission, 2017[188]). Additional criteria are the proportion of students accepted to fields of responsibility (15%) and revenues from educational activities (10%). The European Commission also reports that the funding system changed because the previous model, adopted under the Higher Education Reform (2013), risked creating sudden fluctuations in funding in the specific national context. The new funding system provides for more stability of resources, while performance indicators target the timely completion of studies.

Recent data indicate minor improvements in the proportion of students graduating on time, the proportion of students studying in priority fields, an increase in the proportion of foreign students in Estonian universities, and of Estonian students participating in mobility abroad (European Union, 2018[200]).

- Under the Higher Education Reform (2013), higher education became free of charge for students studying full time in Estonian. The reform also introduced a needs-based support system, offering students from disadvantaged backgrounds a study allowance of EUR 75-220 per month. Students are only eligible if they are studying full time in Estonian. As of 2015, the system was accessible to students fulfilling at least 75% of the required semester curriculum (European Commission, 2016[201]). Additional funding is available to students who initially do not qualify for financial aid, whose socio-economic situation has worsened considerably in recent months (European Commission, 2016[201]).
- Since 2018, a new funding model for Estonia's vocational and educational institutions includes basic funding and performance-based funding, replacing the previous system based on per capita financing (CEDEFOP, 2018[202]). The European Commission reports that performance-based funding will account for an average of 8% of the total budget. Eligibility for performance-based funding depends on the proportion of students who complete a study programme within the nominal time; who complete the professional examination then graduate, or who continue their studies after finding employment; and the proportion of students in workplace-based learning. According to the European Commission, the new model fixes basic funding for three years and bases its distribution on student numbers, fields of study, teachers' salaries, integration of students with special educational needs, access to support specialists and school infrastructure. The new funding model aims to promote innovation and better co-operation between schools and companies (European Union, 2018[200]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Finland

Context

Schools in Finland have less favourable disciplinary climates in science lessons than in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.1 (the average index value was 0.00). However, students in Finland were among those most likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.01 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership for Finland (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was much lower than the OECD average (-0.23 compared to 0.01) (OECD, 2016[1]). The share of lower secondary teachers in 2016 aged 50 or over was 32.2%, which was close to the OECD average of 35.4%. In 2017, teachers in Finland had fewer net teaching hours for general programmes than their OECD peers. Teachers annually taught 673 hours at primary level and 589 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, Finnish schools had higher levels of autonomy over curriculum than on average across the OECD: 82.1% of principals reported that the school has primary autonomy over curriculum, compared to 73.4% on average (OECD, 2016[1]).

In 2016, lower secondary teachers earned 99% of the average salary of a full-time, full-year worker with tertiary education, compared to an OECD average of 91%. According to the OECD Teaching and Learning International Survey (TALIS) 2018, 78.9% of teachers in Finland said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6%. Furthermore, 58.2% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

In PISA 2015, school leaders in Finland were more likely than average to conduct self-evaluations of their schools (95.1% of students were in schools whose principal reported this, compared to an OECD average of 93.2%), but less likely than average to undergo external evaluations of their schools (principals of 56.6% of students reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels as reported in the earlier cycle of TALIS 2013, were lower than average: 51.3% of all teachers had reported then having received a teacher appraisal in the previous 12 months, compared to 66.1%, on average (OECD, 2014[4]). At 23%, the proportion of secondary school students in PISA 2015 whose principals reported that standardised tests are used to make decisions on students' promotion or retention was below the OECD average of 31% (OECD, 2016[1]).

School autonomy levels over resource allocation (allocation and use of resources for teaching staff and principals) were slightly lower than the OECD average according to PISA 2015: 50.2% of principals reported that the school has primary responsibility for resource allocation, compared to the OECD average of 53.8% (OECD, 2016[1]). Annual expenditure per student at primary level in 2015 was USD 9 305, which was higher than the OECD average of USD 8 631. At secondary level, Finland spent USD 10 482 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Finland spent USD 17 591 per student, compared

to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in Finland as a proportion of gross domestic product (GDP) was 5.7%, which was above the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (1.6% compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education increased by 0.2 percentage points while on average across the OECD it decreased by 1.3 percentage points. During this same period, private expenditure decreased by 11.4 percentage points, compared to an OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Finland's key education policy priorities have evolved in the following ways over the last decade (Table 8.9).

Table 8.9. Evolution of key education policy priorities, Finland (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified challenges in maintaining a high-quality workforce in early childhood education and care (ECEC), given the ageing population among ECEC professionals that might be related to the unattractiveness of working in a sector where pay is often low and development opportunities are limited. It might also indicate that there is high staff turnover: young people work for a short period in the ECEC sector and quickly move on to work elsewhere. Thus, the OECD identified the need to develop skills among the workforce and leadership and improve staff qualifications. [2012]	Finland reported the prevailing priority of strengthening the capacity of school leaders and teachers to deliver quality education in all schools. More recently, these priorities have expanded to focus on strategic leadership and the management systems within educational institutions. [2013; 2016-17]
Evaluation and assessment	The OECD identified a lack of systematic training for monitoring within ECEC education, especially for staff with internal monitoring responsibilities. [2016]	Finland reported the ongoing priority of ensuring that all stakeholders in the education system can employ evaluation and assessment to improve student outcomes. [2013; 2016-17]
Governance	OECD evidence underlined that there is only limited co-operation between business and universities, although where it does exist, it is successful. [2016]	In Finland, the government reported ongoing work on capacity building to deliver high-quality education across all municipalities. More recently, the government reported key efforts in the area of education and science to enhance collaboration between higher education and the private sector. [2013; 2015-19] One of the government's key goals in the fields of education and science was to enhance co-operation.
Funding	N/A	In Finland, improving the efficiency of funding in tertiary education remains a policy priority, with government measures being taken. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Education policies of potential interest to other countries

School improvement

- The New Comprehensive School Programme is one of the Government of Finland's (2015-19) main policy efforts to renew comprehensive education, learning environments and teachers' competence. The programme focuses on three elements: new pedagogy, new learning environments and digital learning. It is particularly targeted at supporting schools and municipalities to implement creative solutions and initiatives that promote digital learning. The government also plans to support the launch of experiments related to new pedagogies and new learning environments. The programme has also provided guidelines for the support and implementation of the new core curricula for Finnish basic education. As part of this programme, a Comprehensive School Forum (2016), comprised of a broad group of experts and stakeholders, has drawn up a national vision for the future of Finnish education (2017) (Ministry of Education and Culture, 2016[203]).
- The Finnish Teacher Education Forum (TEF) was established as part of the New Comprehensive School Programme. The TEF was charged with developing a more systematic approach to teacher education across a teacher's career, from initial training to continuous professional development (Ministry of Education and Culture, 2016[203]). The Teacher Education Development Programme (TEDP, 2016) was prepared in broad co-operation with almost 100 representatives from different stakeholder groups (including teachers, municipalities and academia). Among its main aims and actions are: 1) adoption of a holistic view of teacher education, with pre-service and in-service education on a continuum; 2) improved selection of student teachers and required competencies; 3) support for the development of the skills required for the generation of new ideas and innovations; 4) improved collaborative culture and networks; 5) supportive leadership; and 6) research-based teacher education (Ministry of Education and Culture, 2016[204]). The Ministry of Education and Culture has awarded nearly EUR 28 million in grants for 45 projects to develop teacher education. The projects will initiate the implementation of the TEDP and will promote the attainment of the programme's objectives. A total of 11 of Finland's 13 universities, along with 5 universities of applied sciences and 129 other education providers are participating in the implementation of the Teacher Education Development Programme. This represents the involvement of 41% of all Finnish municipalities.
- Finland also aims to allocate teacher tutors to each of the 2 500 comprehensive schools as part of the New Comprehensive School Programme. These tutor teachers support other teachers in developing best practices relating to digitalisation in their daily work. Almost 95% of municipalities and education providers have started their own tutor teacher activities during 2016-18. The activities are supported through an investment of EUR 24.8 million, which covers the same period (Ministry of Education and Culture, 2018[205]).

Systems

Selected education policy responses

Governance

- Finland has introduced several measures to improve the governance of the evaluation of the education system. The Quality Criteria for Basic Education (2009) aimed to provide clear criteria, raise quality and facilitate evaluation. In 2014, the various evaluation activities within the education system were merged under the authority of the Finnish Education Evaluation Centre (FINECC), which operates as a separate unit within the Finnish National Agency for Education. FINEEC unites the work of the Finnish Higher Education Evaluation Council, the Finnish Education Evaluation Council and the Finnish National Board of Education. As part of the FINECC Act (2013), an Evaluation Council, working in connection with FINECC, was tasked with the ongoing development of four-year evaluation plans (FINECC, 2016[206]). The approved National Plan for Education Evaluation 2016-19, prepared by the Evaluation Council and approved by the Ministry of Education and Culture (OKM), was published in 2016.

Progress or impact: The National Plan for Education Evaluation 2016-19 includes a variety of evaluation projects, as well as guidelines for the development of the evaluation system and methodologies. The scheduled projects cover 29 audits of quality systems in higher education institutions (HEIs), 10 assessments of learning outcomes in vocational education, and 5 assessments of learning outcomes in basic education. Also, evaluations were scheduled for initial teacher education for teachers of Swedish, maritime education (external), and the self-evaluation and quality management procedures for basic education and general upper secondary education providers.

For 2016, the plan aimed to put into action the Common Assessment Framework (CAF) and to take part in an external European Association for Quality Assurance (ENQA) in higher education review, to maintain full ENQA membership and listing in the European Quality Assurance Register (EQAR). In addition, the Finnish Education Evaluation Centre (FINECC) prepared for a full external review of its activities during the period covered by the plan (FINECC, 2016[206]). The external evaluation took place in 2016 and 2017 and on completion, FINECC's full membership of ENQA and its EQAR listing were secured until 2022. Additionally, the agency was commended for its ongoing efforts to involve stakeholders as well as its commitment to conducting work in Finnish, Swedish and English, thus promoting internationalisation.

The report recommended that going forward, FINECC aim to extend the scope of stakeholder work to include actors beyond institutions, including other key co-ordinators at national level within both the administration and the world of work (Loukkola et al., 2017[207]).

A follow-up National Plan for Education Evaluation (2020-23) is currently in preparation.

- Finland's Universities Act (2009) grants further administrative and financial autonomy to Finnish universities. Performance agreements between universities and the Ministry of Education and Culture define operational and qualitative targets for the whole higher education sector, for each university and universities of applied sciences (*Ammattikorkeakoulut*, UAS). Degree targets in the agreements are also one of the bases for how universities make decisions regarding student enrolment. The UAS reform was implemented in 2014-15 with many similar aims, such as granting further administrative and financial autonomy to Finnish UAS. Since 2015, UAS institutions have been operating as independent legal entities, joining universities, which have been operating as independent legal entities since 2010, following the 2009 Act (National information reported to the OECD). Allocations of core funding for HEIs primarily depends on a performance-based funding model. This funding model also includes a strategic funding component (European Commission, 2015[208]).

Progress or impact: The Education Committee within the Finnish Parliament reviewed the Universities Act in 2016. This review focused on the evolution of the university management structure, universities' decision-making processes, and the relationship between the ministry and universities. According to the evaluation, the Universities Act has increased universities' financial and administrative autonomy. However, despite increased funding autonomy, the OKM culture maintains a strong steering influence on universities' activities (Ministry of Education and Culture, 2016[209]).

In 2018, the OKM published an impact evaluation of higher education (HE) reforms. According to the evaluation, the HE reforms have considerably changed the leadership and operating culture within HEIs. These reforms have afforded HEIs the authority to make decisions on finances while also showing evidence of strengthening their administration. However, there is evidence that some HE staff and communities feel less included in decision-making processes (Ministry of Education and Culture, 2018[210]). Despite external funding for HEIs, the majority of funds come from the government, which can still impose limitations on institutional-level autonomy. External sources primarily come from research funding organisations (such as The Academy of Finland or Business Finland), foundations, international sources like the European Union, and from business organisations. Since 2017, tuition-fee funding from students outside the EU/EEA-area has accounted for only a small proportion of HEI funding in Finland (National information reported to the OECD).

Funding

- In 2016, Finland proposed a reform to the Student Support Act to raise student financial aid (grants and student loans) and harmonise the systems for tertiary and upper secondary financial aid. The reform aimed to support a speedier transition from upper secondary to higher education and to encourage completion rates, while also navigating planned budget cuts (Eurydice, 2019[211]). The reform offers a general housing allowance, instead of the housing supplement, to all students, a measure expected to benefit students with low income. The housing supplement

continues for students attending fee-based studies and expands to include students studying abroad. The maximum amount of student loans would increase from EUR 400 to EUR 650 per month, and from EUR 700 to EUR 800 per month for those studying abroad. Students aged 18 and older, living independently while studying in Finland, would become eligible for as much as EUR 900 per month in total (a study grant of EUR 250, and a loan guarantee of EUR 650). Students studying abroad while enrolled in a Finnish university would be eligible for a maximum of EUR 1 260 per month (a study grant of EUR 250, a loan guarantee of EUR 800, and EUR 210 in housing supplement) in financial aid. In all cases, the ratio of loan availability to grant eligibility increases. Concurrently, the maximum duration of financial aid for all higher education studies is shortened from 64 to 54 months (57 months for bachelor's and master's degrees) and by 2 months per degree. Finally, the reform proposed limits to students' annual income in relation to an index of wage and salary earnings. The Government of Finland adjusts the limit every two years if income limits are raised (Ministry of Education and Culture, 2016[212]). Students receiving financial aid can benefit from a 1% increase in their annual income. Also, students with incomplete studies can now request an extension of the maximum period for which financial aid is available. Universities will no longer have financial aid committees and will not review student applications for financial aid. Decision making for student financial aid will become the responsibility of the Social Insurance Institution (SII or Kela) of Finland.

Progress or impact: Several reform measures came into force from 2017, with full operation from 2018. Following this, a further law amendment, adopted in 2018, granted a provider supplement of EUR 75 per month to guardians of a child under 18 years of age. This amendment extends to students who are also guardians themselves (Ministry of Education and Culture, 2016[213]).

Following the reforms to student financial aid, Finland's expenditure on study grants for higher education decreased by approximately EUR 92 million between 2016 and 2018. Also, the average grant for higher education students is now EUR 222 per month, which is 21% lower than before the reform (National information reported to the OECD). The share of student loans within the student support budget is higher so that the average total amount for grants and loans is EUR 752 per month, which is 10% higher than before the reform. This illustrates that higher education students are now utilising loans more than previously.

Finally, the average general housing allowance is now EUR 311 per month, which is 60% higher than the housing supplement. However, fewer students are eligible for the allowance than were for the housing supplement prior to the reform (National information reported to the OECD).

Additional education policies of potential interest to other countries

Governance

- The reform of general upper secondary education, planned in 2017, aims to increase the attractiveness of general upper secondary education, strengthen the quality of

education and learning outcomes and facilitate the transition from secondary school studies to tertiary education. More individualised and flexible study pathways, student counselling, individual support, cross-curricular studies and co-operation with HEIs play a key role in achieving these goals. A proposal for the reform, developed by the government in consultation with a range of stakeholders, was accepted in Parliament in mid-2018, coming into force in 2019 (Ministry of Education and Culture, 2018[214]). The changes are planned to occur in schools from 2021 when new curricula are also introduced. One of the key changes is the introduction of credits to replace courses, which will facilitate a more flexible organisation of instruction, including greater scope for cross-curricular learning. The Upper Secondary Schools Act also includes provisions on supporting student learning through improved personal career guidance, support for special educational needs and student welfare support (Government of Finland, 2018[215]).

- The National Framework for Qualifications and Other Competence Modules (FiNQF, 2017) aims to improve the effectiveness and transparency of the qualifications system. Based on the European Qualifications Framework (EQF), provisions for the FiNQF were laid down in an Act (93/2017) and Government Decree (120/2017). Through these, the qualifications, syllabi and competencies offered across all education levels and sectors in Finland were divided into eight reference levels based on their learning outcomes (Ministry of Education and Culture, 2017[216]; Ministry of Education and Culture, 2017[217]). The FiNQF was designed as an organic tool to be reviewed and updated, when necessary. Consultation to gather feedback from stakeholders on the new framework began in 2017. Following this, in 2018, the OKM established a working group for the preparation and co-ordination of the expansion of the FiNQF. This working group focused on analysing how the FiNQF could encompass other types of learning, including specialist and preparatory training for professions or careers and programmes that develop specific professional competencies and study skills (Ministry of Education and Culture, 2018[218]). In their final report, the working group proposed additional competence modules that the FiNQF could include. The draft Decree for expansion was appended to the final report, and changes to the Government Decree are being prepared (National information reported to the OECD).

Funding

- Finland introduced a new funding model within the context of its recent reform of vocational upper secondary education (Ammatillisen koulutuksen reformi, 2018). The current funding system, which is based almost entirely on the number of student years (basic funding), will be gradually phased out, with the new model in full operation from 2022. This final model will allocate 50% of available funding according to student years, 35% to performance-based funding via the number of qualifications and units produced and 15% to effectiveness-based funding according to students' access to further education and the labour market, as well as feedback given by students and employers (CEDEFOP, 2018[219]). In this way, the funding model is designed to incentivise providers to better support student transitions post-qualification, and encourage completion. The reform will continue to require vocational education and training (VET) providers to follow the national qualification requirements. However, a new licensing system for VET organisations will grant more autonomy to education providers for decisions

concerning teaching and learning methods, learning environments and pedagogical solutions (CEDEFOP, 2018[219]). According to the European Commission, the reform will decrease the number of vocational qualifications from 351 to 164 (43 vocational qualifications, 65 further vocational qualifications and 56 specialist vocational qualifications). The European Commission expects that access to fewer qualifications may benefit VET learners looking to align their skill development with labour market needs (Eurydice, 2018[220]).

- In 2019, Finland approved a new funding model for universities and a new model for universities of applied sciences, for 2021-24, as part of the Finnish Government's vision for higher education and research for 2030. The proposals for these funding models were prepared through collaboration among the Ministry of Education and Culture, higher education institutions, staff, students and stakeholder groups (Ministry of Education and Culture, 2019[221]). The funding models for both HE sectors will also be performance-based in the future. For UAS, 95% of core funding will be allocated according to output-based indicators. For universities, the share will be 76% (Ministry of Education and Culture, 2019[222]). Furthermore, the share of degrees in the funding of UAS will increase from 40% to 56%, and in universities from 19% to 30% (Ministry of Education and Culture, 2019[223]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

France

Context

Schools in France have less favourable disciplinary climates in science lessons than in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.27 (the average index value was 0.00). However, student truancy in 2015 was below the OECD average: 10.8% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to 19.7% on average. This being said, students in France were among those least likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.29 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the lowest in the OECD (-0.43 compared to 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over in France was 30.5%, compared to an OECD average of 35.4%. In 2017, primary level teachers in France taught 900 hours, well above the OECD average of 784 hours. Conversely, lower secondary level teachers taught 684 hours, compared to an OECD average of 696 hours (OECD, 2018[2]). In PISA 2015, 73% of principals reported that the school has primary autonomy over curriculum, which was similar to the OECD average of 73.4% (OECD, 2016[1]).

In 2016, lower secondary education teachers in France earned 88% of the salary of a full-time, full-year worker with tertiary education, compared to the OECD average of 91% (OECD, 2016[1]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 74.4% of teachers in France said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, only 6.6% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in France are less likely than average to conduct self-evaluations of their schools (77.7% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and also less likely to undergo external evaluations of their schools (56.7% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). However, teacher appraisal levels, as reported in the earlier cycle of TALIS 2013, were above average: 86.1% of teachers had reported then having received a teacher appraisal in the previous 12 months, compared to a TALIS average of 66.1% (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 51%, compared to 31%, on average (OECD, 2016[1]). In 2017, the majority (63%) of responsibility for decisions regarding resource management (allocation and use of resources for teaching staff and principals) in France lay at the provincial or regional level and the remaining 38% at central level. In contrast, on average across OECD countries, decision making is distributed across various levels, with schools having the highest level of autonomy at 29%.

In 2015, annual expenditure per student in France at primary level was USD 7 395, which was below the OECD average of USD 8 631. At secondary level, France spent USD 11 747 per student, compared to the average of USD 10 010, and at tertiary level (including

research and development), France spent USD 16 145 per student compared to USD 15 656. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was below the OECD average (12.3% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

France's key education policy priorities have evolved in the following ways over the last decade (Table 8.10).

Table 8.10. Evolution of key education policy priorities, France (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, there is a need to improve the quality of teaching. [2015]	In 2013, France reported prioritising quality teacher training and the development of adequate learning environments to allow school leaders and teachers to improve student performance. More recently, France reaffirmed this commitment while also taking policy measures to improve teacher training. France also reported prioritising the improvement of equity through the reduction of class sizes in the first two years of primary school. [2013; 2016-17]
Evaluation and assessment	The OECD found that France made several reforms to its early childhood education and care (ECEC) system regarding the quality of education for children aged 2-6 years, but the monitoring of such reforms presents a challenge. [2016]	France previously reported the priority to promote consistency and continuity in system evaluation measures. A more recent challenge identified by France concerns balancing consistent and regular evaluation procedures with an improved state budget and accounting management with policy measures taken. France also reported the more recent priority to reform national assessments in primary and secondary schools. [2013; 2016-17]
Governance	According to OECD evidence, with complex governance and weak quality controls, the vocational education system fails to provide many students with the skills they need to secure employment. The OECD also identified the need to give primary schools more authority, and to reform the tertiary education system. [2015]	Reducing the compartmentalisation and complexity of the system to improve overall performance in tertiary education has been an important area of policy action in France. More recently, France set the priority to have 50% of an age group obtain a higher education degree. France also took measures to reform general and technologically focused upper secondary schools, and reform the vocational path to respond to challenges. [2013; 2016-17] From 2017, the priority has been to tackle inequalities from the beginning of primary school through systemic policy options such as reducing class size in first and second grades in Priority Education Networks (REP) and Enhanced Priority Education Networks (REP+). More recently, France reported the priority of creating a common ground for all children at pre-primary school level (through the requirement to start compulsory education from age 3). [2019]
Funding	The OECD identified the need to increase efficiency in spending within the education system. [2015]	Although policy measures have been taken, France reported that ensuring sufficient resource allocation to meet the specific needs of certain education areas or institutions is an ongoing policy priority. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- France has implemented several reforms to improve teacher preparation. The masterisation reform (2010) introduced the obligation for teachers to obtain a master's degree and brought about a shift away from the prior focus on academic competencies. The reform of teacher training (2013) has aimed to strengthen professional teacher training. This reform created the Graduate Schools of Teaching and Education (Écoles Supérieures du Professorat et de l'Éducation, ÉSPÉ), which are linked to a university or a community of universities. These schools offer initial teacher training at master level, combining theoretical and practical training and provide continuous professional development training. The ÉSPÉs aimed to develop innovative teaching methods by linking with research and internationalisation. The two-year master's degree requirement for primary and secondary school teachers (Master Métiers de l'Enseignement, de l'Education et de la Formation, MEEF) remains, as well, the obligation for teachers to pass a competitive exam to become civil servants. In 2019, the law "for a school of trust" (Loi "Pour une école de la confiance") passed, which aims to strengthen teacher training by allowing for a more progressive entry into the profession, ensuring a more homogenous delivery of training, strengthening initial training and improving linkages to continuous training during the first years as well as throughout a teacher's career (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[224]). This is done as part of the framework of the National Institutes of Higher Education and Teaching (Instituts nationaux supérieurs du professorat et de l'éducation, INSPÉ). The INSPÉ replaced the ÉSPÉs to improve the homogeneity of teacher training and better adapt to teachers' working conditions (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[224]).

Progress or impact: Some 32 Graduate Schools of Teaching and Education (ÉSPÉs), along with 1 ENSFEA (École nationale supérieure de formation de l'enseignement agricole, which specialises in teachers' training in the agricultural sector) were set up in 2013 to offer training. In total, 150 training centres accommodate the students of the ÉSPÉs in the French metropolitan area and overseas regions. In 2017, more than 65 000 students studied at an ÉSPÉ. In addition, over EUR 100 million were dedicated to in-service training for teachers in 2017, which is a 20% increase over 2012. The pathways, careers and remuneration protocol (Protocole parcours, carrières et rémunérations, PPCR) is part of the modernisation of the education profession. It is also the first step in the revaluation of the teaching profession.

A 2016 evaluation found that although it was still too early to declare the reform a success or failure, there had been notable achievements (Desbiolles and Ronzeau, 2016[225]). For example, an increased number of students had enrolled in the first and second year of the MEEF master programme at the start of the 2015 school year. They inferred this was most likely caused by the first results, which showed better performance in the competitive exams

among MEEF master students compared to students in other master programmes. At the same time, difficulties remain, for example, due to questions on the institutional positioning of the ÉSPÉ in the wider university setting (Desbiolles and Ronzeau, 2016[225]).

The Monitoring Committee of the reform (Comité de suivi) found, among others, that the role of the ÉSPÉs should be more clearly defined and that the project budget needs to be transformed into a real piloting tool based on an activity-mapping inspection model (Comité de suivi, 2016[226]). Additional evidence puts forward that continuous professional development should be further developed, and the number of trainers and resources should also be increased (European Commission, 2017[227]). France pointed out the challenge to be tackled under the 2019 reform, which is to ensure more detailed, regular monitoring based on reliable indicators of the training provided by the new institutes, by the Ministry of National Education and Youth and the Ministry of Higher Education, Research and Innovation (National information reported to the OECD).

- France revised the school timetables in primary education (La réforme des rythmes à l'école primaire, 2013) at the start of the 2013/14 school year. The government extended the weekly schedule from 4 to 4.5 days with 24 hours of teaching per school week over 9 half-days. France aims to cater for extracurricular education activities and provide more personalised support for students. As a result, the number of days of schooling in primary education has risen from 144 to 180 days per year, according to national data reported to the OECD. One in four primary schools implemented the new schedule during 2013/14. The reform took effect across all schools in 2014/15.

Progress or impact: The municipal support fund for extracurricular school activities was set up in 2014, and followed up in 2015 and 2017 with a total allocation of EUR 373 million. In 2014, a complementary decree passed, which authorises school principals a certain authority to adopt the reform to local needs in an experimental period (National information provided to the OECD).

A 2015 inspection of the reform found that school time organisation varied considerably among the different municipalities (DEPP, 2013[228]). A 2017 evaluation assessing the students', practitioners' and families' point of view on the different types of organisation found no significant difference between the different school time organisations put in place (DEPP, 2013[228]). As of 2017/18, public nursery and primary schools can also introduce a 4-day week school schedule instead of the 4.5 days (Blanquer, 2017[229]). This aims to allow a certain degree of flexibility for local actors to adopt the school schedules to their local contexts and better meet student needs (Blanquer, 2017[229]).

A new teacher replacement plan (2017) was put in place to better manage teacher absence and better inform students and their families, and thereby ensure learning continuity. Furthermore, a decree will be implemented to define the legal framework of the first degree with an emphasis on de-

compartmentalising and improving the replacement system (National information reported to the OECD).

Additional education policies of potential interest to other countries

School improvement

- The Digital School Plan (Le plan numérique pour l'éducation, 2015), as part of a comprehensive education strategy, is designed to develop educational innovation and promote academic and student success. The total investment for public authorities is estimated at EUR 1 billion. Digital technology is now fully integrated into elementary school curricula to upper secondary education, in the form of learning how to program in lower secondary education, and optional computer and digital education at upper secondary education. In 2017/18, teacher training was delivered on site (three days per teacher per year) and on line (at least 660 000 teachers took a magister course). In 2016, the government aimed to equip at least 20% of public and private lower secondary education institutions with teaching resources and individual digital equipment for 5th graders. By 2016, some 1 668 digital lower secondary schools had been put in place, and 25% of lower secondary schools were equipped with tablets, aiming to reach 50% by 2017. In addition, the digital training plan was renewed in 2017 (three days of digital training for teachers and organised in the academies). Also, the M@gistere online training platform (2013) continued to be expanded, with new modules on digital pedagogy. As of 2017/18, around 260 000 teachers participated, and 440 training courses were offered (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[230]). The Digital Resource Bank for School (Banque de ressources numériques pour l'école, BRNE) opened in 2016/17. BRNE provides free resources for teachers and students at primary and lower secondary level as part of the educational framework. As of 2019, content in French and mathematics are available that are complementary with national assessments (National information reported to the OECD).
- France has been taking several measures to improve the overall school climate for students (Climat scolaire à l'école, 2013) as well as tackling bullying and violence (Lutte contre le harcèlement et les violences à l'école, 2013). For example, the 2017-18 campaign website against bullying (Non au harcèlement) provides information on what witnesses, parents or professors can do for students who are bullied (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[231]). As part of this, since 2015, annual campaigns aim to raise student awareness on the topic. Further measures are proposed on the website. The 2018-19 campaign focuses on the prevention of cyber violence and specifically on addressing "sexting" (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[232]). A 2017-18 national study on school climate and victimisation found that the number of lower secondary education students who in general feel "good" at school with 94.1% in 2018 has remained stable since 2011 (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[233]). The type of reported victimisation has not changed between 2013 and 2017, according to the results of the study, while forms of harassment have changed with an increase in cyber harassment. Evaluations on school climate have taken place since 2008 (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[233])

Evaluation and assessment

- In the school year 2018/19, France introduced national assessments in mathematics and French in Grades 1, 2 and 6 with the aim to allow teachers to adapt their teaching to help all students succeed (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[234]). For first graders, the assessments take place early on in the school year and again halfway through the school year, whereas assessments in second and sixth grade take place at the beginning of the school year. The results are accessible a few days after the tests (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[234]). National assessments are based on four principles: 1) rigorous and scientific construction of assessment tools conducted by the Directorate of Assessment, Forecasting and Performance (DEPP), in collaboration with the Scientific Council for National Education (CSEN) and the General Directorate for School Education (DGESCO); 2) securing procedures; 3) providing results for families; 4) supporting teachers to respond effectively to the difficulties of their students (National information reported to the OECD).

Systems

Selected education policy responses

Governance

- The National Council for the Evaluation of the School System (Conseil national d'évaluation du système scolaire, CNESCO, 2013) aims to produce evaluations and evaluation summaries; provide methodological expertise on existing evaluations; and promote an evaluation culture for education professionals and the general public. In 2019, a new School Evaluation Council (Conseil d'évaluation de l'école) was set up under the "For a school of trust" law, eventually replacing CNESCO. Its mission is to develop the methodological framework and tools for regular school evaluations and thereby better comply with international recommendations.

> **Progress or impact:** In 2017, the National Council for the Evaluation of the School System (CNESCO) published the results of the activities for the first three years of operation. To support the schools' evaluation, the council engaged more than 200 researchers, published 21 reports, and organised 3 international comparative conferences and 3 consensus conferences. In 2017, CNESCO focused on school inequalities of territorial origin, educational differentiation and quality of life at school (CNESCO, 2017[235]).

- France recently launched a new online admissions portal for first-year students applying for higher education. The new portal, Parcoursup' (2018), was launched as part of France's Plan Étudiants (2017), a set of policy measures aiming to improve the transition and integration of students in their first year of tertiary education. A key goal of this reform is to reduce the number of students failing in higher education by improving student orientation through various strategies. The portal replaced the Admission Post-bac (APB, 2008) (Ministère de l'Enseignement Supérieur de la Recherche et de l'Innovation, 2017[236]). The APB had been created to simplify the admissions process for higher education by grouping all relevant information related to programmes and institutions on one website. A new feature

of the platform was the inclusion of expected outcomes for each of the bachelor's diplomas (National information reported to the OECD).

Progress or impact: In 2018, Parcoursup made it possible to apply for 13 000 higher education courses. The results of the Parcoursup 2018 campaign showed an increase in enrolment rates in higher education (with an increase by 26 730 of positive responses in 2018), especially for students having benefited from scholarships during upper secondary education (increased by 21%), or coming from the vocational upper secondary school strand (increased by 28%). Similarly, an additional 650 establishments offered individualised support schemes to new students to help with initial orientation. Furthermore, in 2018, France invested EUR 35 million to create an additional 30 000 student places. In 2019, around 14 000 courses were listed on Parcoursup (National information reported to the OECD).

Funding

- By 2017, after reforming its national bursary system (2013-16), France had invested EUR 550 million in financial aid for higher education students (Ministère de l'Enseignement Supérieur de la Recherche et de l'Innovation, 2017[236]). The reform aimed to improve the conditions of success for students from less affluent families, who may choose to take on paid employment for an excessive number of hours in order to pay tuition fees.

Progress or impact: According to a recent report from France's Ministère de l'Enseignement supérieur, de la Recherche et de l'Innovation, more scholarships for higher education have been awarded since the start of the reform. During 2016/17, some 700 303 students were scholarship holders, or 37% of the total number of students that year. This represented an 11% increase in the number of scholarship recipients since 2012, prior to the implementation of the reform. Also, during 2016/17, around 260 000 students benefited from an increase in their scholarship amounts, representing a total of EUR 216 million in the budget for direct student aid since 2013. The number of students enrolled in higher education continues to increase (142 000 additional students in 2016 compared to 2013) (Ministère de l'Enseignement Supérieur de la Recherche et de l'Innovation, 2017[237]).

According to the European Commission, France anticipates a 14% increase in the number of higher education students between 2015 and 2025, and a subsequent increase of grant requests (European Commission, 2018[238]). In addition to creating additional places in higher education (17 000 in universities and 4 000 in short-cycle institutions) by September 2018, the government committed to guaranteeing minimum percentages for needs-based grant holders (European Union, 2018[200]).

- Final implementation of France's Priority Education Plan (2014) took place in 2017. According to the European Commission, the primary objective of the plan was to reduce by 10% the differences in basic skills between students attending

priority education schools and those attending schools outside priority education (European Commission, 2015[239]). The 2014 plan focuses on three key aspects: 1) updating the map of priority networks; 2) providing additional support to improve student-learning; and 3) reforming teaching practices to include collaborative teaching (European Commission, 2015[239]). France's Minister of Education and Youth classified priority education schools into two groups: 1) schools with more students from mixed social backgrounds than in schools outside of priority education, categorised as REP (Réseaux d'éducation prioritaire); and 2) schools in isolated neighbourhoods where the impact of social difficulties on school success is the highest, classified as REP+ (Réseaux d'éducation prioritaire renforcée) (Éduscol, 2018[240]).

Progress or impact: During 2018/19, some 1 093 schools had been identified according to the map of priority education in France: 731 middle schools with REP status, and 363 middle schools with REP+ status (Éduscol, 2018[240]). France aimed to reduce class size by 50% in first and second grades in Priority Education Networks (REP) and Enhanced Priority Education Networks (REP+), and the goal was reached at the start of the school year 2018/19. In total, nearly 190 000 first and second-grade students in REP and REP+ were in classes of about 12 students (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[234]).

The European Commission reported in 2017 that overall, between 2013 and 2017, some 54 000 additional teaching posts were created across primary and secondary education, and teachers in priority education were allocated extra time for collaborative teaching. France's initial 2017 budget included EUR 814 million to increase teachers' salaries between 2017 and 2020 to improve the attractiveness of the profession, in particular in priority education. Although the government later reduced this amount, it did announce plans to open 9 000 new teaching positions the same year in pre-schools and schools, particularly in priority education (European Commission, 2017[227]).

Additional evidence from the European Commission indicates that public funding for school education in 2018 increased by 2.6 percentage points compared to 2017. The government expects this will help raise teachers' salaries in schools classified as REP. As of the school year 2018/19, teachers assigned to REP+ received a salary increase of EUR 1 000 net per year (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[234]). The overall goal is to gradually increase the remuneration of staff assigned to REP+ schools and colleges until 2020 (National information reported to the OECD). However, while some teachers may benefit from increased salaries, gaps remain in teaching resources across different types of schools and regions in France (European Commission, 2018[238]).

At the beginning of 2019, the first results of the duplication of preparatory classes in REP+ areas were published, showing overall positive results (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[241]). The results showed that compared to a non-treatment group with similar socio-economic profile, there had been a significant decrease in students with great difficulties by 7.8% in French and 12.5% in mathematics

(60 000 students have benefited from the measure in the school year 2017/18).

Additional education policies of potential interest to other countries

Governance

- In 2015, the French government launched a new online learning portal as part of its efforts to modernise higher education through digital means (Ministère de l'Enseignement Supérieur, de la Recherche et de l'Innovation, 2015[242]). The previous portal, France Digital University (France Université Numérique, FUN, 2013), was part of the Numeracy Strategy for Higher Education (Stratégie numérique pour l'enseignement supérieur, 2013). For its 1.4 million registered learners, FUN offers more than 170 massive open online courses (MOOCs) provided by more than 60 French and French-speaking institutions. Along with the courses offered before, the new portal provides more than 30 000 digital educational resources, including, among others, case studies, tutorials, interactive lessons and conferences, videos and web documentaries. Data collected by the European Union indicates that most learners using the portal's new website in 2015 were graduates; participation among current students remained low (European Commission, 2015[239]).
- By 2017, 25 clusters of higher education institutions existed in France, and 20 had established "site contracts" to become university communities (Communautés d'universités et établissements, ComUE, 2013). The ComUE aim to structure and simplify national tertiary education by aligning the quality of training provision and equity within and between different parts of the country. The objective of "site contracts", signed by clusters in agreement with the Ministry of Higher Education and Research, is to improve the co-ordination of education offers and research strategies between public higher education institutions (universities and colleges). In 2018, the state adapted its legislative role to promote new forms of reconciliation, consolidation or mergers for university groupings. At the same time, strategic management dialogues were started for voluntary institutions to share priorities, constraints and visions for higher education institutions. Other measures have been introduced to increase the international visibility of highly-cited research, and to improve the international ranking of university groups (Ministère de l'Enseignement Supérieur, de la Recherche et de l'Innovation, n.d.[243]).
- From 2019, within general and technological upper secondary education, the reform of the Baccalaureate (2017) provides for the introduction of a revised examination, which will be organised around common and specialised courses selected by each student (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[241]). The revision aims to simplify the examination, take better account of students' work throughout the school year, and enable the exam to function better in its role as a springboard to higher education. This revised Baccalaureate also introduces some continuous monitoring for certain subjects such as history/geography and modern languages (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[241]). Upper secondary education students will be able to choose three specialisation courses in the first grade of upper secondary and two in the final grade, with an increased number of hours to give them time to deepen and progress

in the subjects of the specialisation courses. Furthermore, the baccalaureate reform aims to better take into account and assess the digital skills needed for the 21st century society by implementing courses on Digital Sciences and Technology (starting 2019) and Digital and Computer Sciences (starting 2019 and 2020 in the first and final grades, respectively) (Ministère de l'Éducation Nationale et de la Jeunesse, 2018[234]).

- In 2018, France launched the transformation of the vocational path, which aims to improve the quality and attractiveness of vocational education and training (VET) and align its focus with future skills needed for the digital age. Collaboration between regions, the business sector and the new generation of "Campuses for Trades and Qualifications" (Campus des métiers et qualifications, CMQ) is envisaged as part of the reform efforts (Ministère de l'Éducation Nationale et de la Jeunesse, 2019[241]). Furthermore, regional authorities will increase collaboration with training institutions, companies, start-ups, apprenticeship centres, research laboratories and universities. Changes to content and pedagogy are also planned in order to strengthen VET programmes and increase enrolment rates (National information reported to the OECD).
- The secondary school reform (La réforme du collège, 2016) aims to improve the success of all students by reinforcing language learning, creating personalised learning time and interdisciplinary practical leaning, as well as giving some autonomy to the teaching teams (three additional hours starting as of the school year 2017/18). The school time (l'Organisation du temps scolaire) has been reorganised to better reflect the rhythm of life and learning of students. In addition, the government has promoted new teaching methods *(les nouvelles modalités d'enseignement*), which make up 20% of teachers' time. These include interdisciplinary practical lessons, personalised support and work in small groups. It is the teachers' responsibility to organise it (as part of a *conseil pédagogique*), based on their assessment of their students' needs. The new methods of the constitution of the pedagogical council favour the implementation duties of: dialogue, reflection and pedagogic discussion.

Funding

- France introduced a new secondary school scholarship scheme (2016) to simplify the application process for families and overall consistency of award procedures (European Commission, 2016[245]). The amount of social funds in schools increased by 85% since 2012, representing a total of EUR 65 million in 2017. France also reported that at the beginning of the 2016 academic year, the scholarships awarded to high school students were upgraded by 10% (on average EUR 697 per high school student each year). Scholarships awarded to middle school students increased by 25% from the start of the 2017/18 academic year (a total investment of EUR 45 million).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Germany

Context

Schools in Germany have more favourable disciplinary climates in science lessons than in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.05 (the OECD average index value was 0.00). Student truancy in 2015 was also lower than the OECD average: 8.9% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Germany were less likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.22 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was also lower than the OECD average (-0.02 compared to 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in Germany in 2016 aged 50 or over was 46.6%, compared to the OECD average of 35.4%. In 2017, teachers in Germany had more net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 801 hours at primary level and 747 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Germany have higher levels of autonomy over curriculum than on average: 79.5% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]). In 2016, lower secondary teachers in Germany earned 99% of the average salary of a full-time, full-year worker with tertiary education, compared to the OECD average of 91% (OECD, 2018[2]).

According to school leaders' reports in PISA 2015, school leaders in Germany are less likely than average to conduct self-evaluations of their schools (88.4% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and also less likely to undergo external evaluations of their schools (72.4% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 13%, which was below the OECD average of 31% (OECD, 2016[1]).

In 2017, state autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were held mainly at state to sub-regional levels, with no decisions taken at the central, local or school level: 50% of decisions in Germany were taken only at the state level, compared to 9% on average among OECD countries. Annual expenditure per student at primary level in 2015 was USD 8 619, which was similar to the OECD average of USD 8 631. At secondary level, Germany spent USD 11 791 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Germany spent USD 17 036 per student compared to USD 15 656. In 2015, expenditure on primary to tertiary education in Germany as a proportion of gross domestic product (GDP) was 4.2%, compared to the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was below the OECD average (13.6% compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education decreased by 0.8 percentage points,

compared to an OECD average decline of 1.3 percentage points. During this same period, private expenditure increased by 4.8 percentage points, which was less than the OECD average change of an increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Germany's key education policy priorities have evolved in the following ways over the last decade (Table 8.11).

Table 8.11. Evolution of key education policy priorities, Germany (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD had identified a need for teachers and trainers in Fachschulen need to maintain and update their skills due to rapid changes in technology and the labour market affect, recommending more flexibility in their employment and to encourage full-time teachers and trainers to spend some time in industry. [2013] More recently, also in a context of rapid technological evolution, the OECD recommended Germany to expand information and communication technology (ICT) equipment at schools, improve teachers' digital teaching skills and the offer of digital courses at schools. [2018]	Germany reported the ongoing priority of developing new initiatives in teacher training to tackle the challenge posed by having a high proportion of older teachers and the potential impact when they retire. [2013] More recently, Germany reported the priority to improve ICT education with measures being taken. [2019]
Evaluation and assessment	According to OECD evidence, the lack of a national monitoring system for early childhood education and care (ECEC) and autonomy in designing and implementing monitoring systems has been identified as a significant challenge as it results in great diversity in the monitoring of quality across the *Länder.* [2016a] Monitoring children's views, in particular, was found to not yet be common practice, while being crucial in helping both ECEC staff and parents to gather information and knowledge on children's skills and development. [2016a] The OECD has previously identified challenges in the VET systems' exam quality and occupational licensing. [2013]	More recently, Germany reported the priority to monitor the ECE as well C system with measures being taken to support the implementation and the regular national monitoring processes obligatory for all *Länder* receiving subsidies to improve ECEC quality. Germany has undertaken as well measures to address shortcomings in VET examination quality and occupational licensing. [2019]
Governance	According to previous OECD evidence, Fachschulen faced challenges due to changes on the German labour market both in terms of job content and the mix of jobs offered. [2013] Fachschulen's governance arrangements were also found to be diverse and sometimes poorly equipped for managing change. The OECD had also identified signs of under- as well as over-provision, at Fachschulen. [2013] The OECD has also previously identified the need to make tertiary education more attractive and responsive to labour-market requirements by increasing Fachschulen's input flexibility with measures taken later by Germany. [2010; 2016b]. Further reforming the VET system and strengthening continuous learning were other needs identified. [2016b; 2018]	An ongoing challenge reported in Germany is setting national priorities while responding to the different *Länder* needs. [2013; 2019]
Funding	The OECD has previously identified the challenge of weak government investments, especially in	Germany reported an ongoing need to ensure investment in education and to focus on policies that

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	poor municipalities, and the existence of constitutional barriers to federal co-funding for full-day primary education. [2016b]	help bring greater equity to the system. More recently, Germany reconfirmed this priority with measures being taken since 2018 to promote and support schools in socially disadvantaged neighbourhoods and with integration related tasks, for example. [2013, 2019]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In Germany, the Standing Conference of Ministers of Education and Cultural Affairs (Kultusministerkonferenz, KMK) (2013) provided recommendations for students' suitability to become teachers, including information, advice and feedback at all stages of training and after graduation. The KMK also agreed on common guidelines to meet the demand for teachers (2009). In 2013, it published a calculation model combining an estimate of the future demand for teachers with a forecast of students completing the Second State Examination.

> **Progress or impact:** An update of the calculation model took place in 2018, and some *Länder* have implemented teacher orientation tests. For example, the university state law of Baden-Württemberg, (*Landeshochschulgesetz*), obliges prospective student teachers to pass an online self-assessment called Career Counselling for Teachers (CCT) to enrol in teacher training courses (MWK, 2018[246]). The results of the tests are only visible to the teacher candidate (MWK, 2018[246]). According to national information reported to the OECD, the main focus of the tests is on self-assessment or consultation, while the tests are not used for admission.

- In 2012, Germany's Standing Conference of Ministers of Education and Cultural Affairs adopted common requirements of the *Länder* for the preparatory service (the practical placement at schools, Referendariat) and the concluding state examination in teacher training (Ländergemeinsame Anforderungen für die Ausgestaltung des Vorbereitungsdienstes und die abschließende Staatsprüfung). The resolution took into account recent developments in the school sector and further enhanced comparability and mobility in the education system. Furthermore, in 2013, the regulations and procedures to increase the mobility and quality of teachers (Regelungen und Verfahren zur Erhöhung der Mobilität und Qualität von Lehrkräften) passed.

Progress or impact: The 2017 report of the Standing Conference of Ministers of Education and Cultural Affairs found that all *Länder* guaranteed mobility according to the 2013 implemented regulations and procedures (KMK, 2018[247]). The 2018 report put forward that, nevertheless, the school and training structures differ between the *Länder*. Hence, several alleged mobility barriers can be explained by state-specific organisational frameworks, such as a combination of school subjects and subject-specific offers. In such cases, restrictions of mobility in access to preparatory service are no violation of the regulations and procedures. The same accounts for access to school service after completion of demand-oriented special measures. The KMK recommended to the *Länder* and universities, among others, to support the mobility of students during their teaching-oriented studies with the consistent implementation of the Lisbon Convention (KMK, 2018[247]). In addition, the *Länder* have passed common decisions on preparing teachers for increasingly diverse classrooms, including courses to teach German as a second language, and support high-achieving students during the initial preparation as well as providing professional development opportunities (KMK, 2019[248]; KMK, 2019[249]).

Evaluation and assessment

- In 2006, Germany's Standing Conference of the Ministers of Education and Cultural Affairs adopted a comprehensive strategy for education monitoring. The strategy, which was revised in 2015, covers four interconnected areas: 1) international comparative studies of student achievement; 2) central assessment of the achievement of educational standards (the basis for comparison between the *Länder*); 3) comparative studies to review the efficiency of individual schools within the *Länder*; and 4) joint education reporting of the Federation and the *Länder*. As part of this strategy, in 2012, Germany implemented educational standards for the general higher education entrance qualification (Allgemeine Hochschulreife) in German, mathematics, English and French. For its modifications in 2015, the KMK aimed, among others, to not only describe developments in the education sector but to improve the quality of conclusions drawn from empirical data, and implement changes accordingly (KMK, 2015[250]).

Progress or impact: Thanks to the strategy for education monitoring, the different education monitoring instruments were arranged more systematically, allowing for comparisons and conclusions drawn from a wider and more complex range of data. In addition, the national assessment of the achievement of educational standards entered its second phase, which means that trends and developments can now be described. To further measure student performance, Germany participates in international comparative studies of student achievement (e.g. the Trends in International Mathematics and Science Study [TIMSS], the Progress in International Reading Literacy Study [PIRLS] and PISA) (National information provided to the OECD).

Additional education policies of potential interest to other countries

Evaluation and assessment

- In Germany, the national programme, Local Learning (Lernen vor Ort, 2009-14) brought together education experts from districts and cities, and more than 180 foundations to develop local-level, integrated, data-based education management. The Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung,* BMBF) and the European Social Fund (ESF) funded the programme. The implementation of the transfer initiative for municipal education management (Transferinitiative Kommunales Bildungsmanagement, 2014) aims to extend the results of the programme to the municipality level with nine transfer agencies, support counties and cities all over Germany in implementing the data-based models, developed as part of the Local Learning programme since 2014/15 (Transferinitiative, 2018[251]).
    - With the goal of structurally implementing Education for Sustainable Development (ESD) at all levels of the German education system, the Federal Ministry of Education and Research (BMBF) has taken the lead on the national implementation of UNESCO's Global Action Programme on ESD (GAP; 2015-2019). In June 2017, the National Platform has adopted the National Action Plan on ESD (BMBF, 2017[252]).

Systems

Selected education policy responses

Governance

- Germany's Quality Pact for Teaching in Higher Education (Qualitätspakt Lehre, 2010) aims to improve study conditions and teaching quality in public higher education institutions. It is part of the Higher Education Pact 2020 (2007-20). It is a joint measure between the federal government and the *Länder*. The federal government provides EUR 2 billion between 2011 and 2020 (BMBF, 2019[253]). More specifically, the measures target training for university staff with special incentives for teaching commitment, conferences and workshops on best practices and networking (BMWi, 2017[254]).

Progress or impact: Out of the 186 higher education institutions that received funding in the first round, 156 received further funding in the second round (BMBF, 2017[255]). The evaluation report of the first funding period (2011-16) revealed that a shift in attitudes and culture on higher education had been achieved (Schmidt et al., 2016[256]). This subsequently placed the question of what constitutes good higher education teaching at the centre of the discussion. In addition, the perception of the overall application, selection and approval procedure for the first funding period was positive. Most projects target higher education didactic, further education, improvement of the situation of personnel, and measures for competence-oriented teaching and learning.

A key success factor identified during the implementation of the project was the close co-ordination between centralised steering and decentralised

employees, as well as support from university management and transparency on decisions. The results further show manifold exchanges and networking within and between programmes and funded universities. The cost-benefit of the process was also perceived as positive overall. In conjunction with other funding programmes and initiatives, the programme made a positive contribution to improving staffing. Additionally, more staff participated in further education programmes and the overall level stabilised at an advanced level. Finally, the value and appreciation of good teaching had noticeably increased (Schmidt et al., 2016[256]).

In mid-2019, the federal government and the *Länder* decided to set up a new organisational entity on innovation in higher education teaching with an annual budget allocation of EUR 150 million, financed solely by the federal government and as of 2024 will be partially funded (EUR 40 million) by the *Länder* (BMBF, 2019[257])

- Germany's Higher Education Pact 2020 (2007-20), a joint measure between the federal government and the *Länder*, includes a pledge to guarantee a sufficient number of university places, even in times of increasing numbers of university entrants. The aim of the third funding phase from 2016 to 2020 is to provide and finance up to 760 000 additional higher education entrants in response to increasing study demand, according to data reported to the OECD. Between 2007 and 2020, the Higher Education Pact is funded with EUR 20.2 billion by the federal government and EUR 18.3 billion by the *Länder* (National information reported to the OECD).

Progress or impact: A 2017 impact assessment focused on the first two funding periods (2007-10 and 2011-15). The third funding phase covers 2016-20. Since other measures were also carried out during this period, it would be difficult to pinpoint the individual impact of the pact; thus, the analysis only suggests tendencies (Winterhager, N. et al., 2017[258]).

Until 2017, the following overall goals were reached: additional university entrants; investment of EUR 14.7 billion by the federal government and the *Länder*; creation of new course offers; and reduction of barriers to education. In addition, a larger number of overall tertiary graduates then increased the graduates' potential to pursue a career in research. From 2005 to 2015, the number of research staff increased. There was a strong focus on teaching, and an increase in the number of lectures, but the overall research qualifications for staff were found to be unclear.

The assessment found that for the following areas, the results did not show clear tendencies. The faculty-student ratio increased, but only partially at the applied science universities. Measures taken on the maintenance of the quality of teaching and studies by the *Länder* and tertiary institutions were also found to show unclear results. With regard to the distribution of financial means by the *Länder*, the assessment found that the goals of employing additional personnel, increasing the places of new student entrants at applied science universities and increasing the proportion of women appointed as professors and other positions was reached. At the

same time, the goal to increase the number of new students enrolling in science, technology, engineering and mathematics (STEM) subjects was only partially reached (Winterhager, N. et al., 2017[258]). According to government data, the number of new students enrolling in STEM increased from 177 362 in 2007 to 350 968 in 2016.

As a follow up after 2020, in mid-2019, the federal government and the *Länder* signed an agreement to strengthen education and teaching in higher education (Zukunftsvertrag "Studium und Lehre stärken") that moves the focus beyond the target of increasing enrolment numbers (BMBF, 2019[257]). The federal government and the *Länder* each provide an annual EUR 2 billion (National information reported to the OECD).

- In the context of the European Qualifications Framework (EQF), Germany established the German Qualifications Framework (Deutscher Qualifikationsrahmen für lebenslanges Lernen, DQR, 2013), an eight-level national qualifications framework (NQF) based on learning outcomes with the primary aim to promote transparency and comparability of qualifications. The DQR came into being through a joint resolution of the Standing Conference of the Ministers for Education and Cultural Affairs, the Federal Ministry of Education and Research, the Conference of Ministers for Economics of the *Länder* and the Federal Ministry of Economics and Energy. At the time of writing of this report, qualifications from general, vocational education and training, and higher education had been allocated to the levels of the DQR. A complete list of allocated qualifications to DQR levels and the DQR manual can be found on line (DQR, 2019[259]).

Progress or impact: Developing and implementing the German Qualifications Framework (DQR) was intended to engage stakeholders from the education sector and the labour market, which the government held would contribute to improving understanding and trust among education sectors. There were also efforts to improve the equality of status between VET and higher education by allocating qualifications on DQR levels 6 and 7 (National information reported to the OECD).

A 2016 study on the potential use of the DQR found that although DQR users were at the time often implementing it individually in their organisations, respondents expected that awareness and dissemination would increase significantly within the next ten years (FHAM, 2016[260]). Overall, 34 potential uses of the DQR could be identified as well. DQR was also found useful for all target groups, especially in the context of human resource work (including, among others, recruitment and employee development). It was found that small and medium-sized enterprises (SMEs), which do not have their own competency model and few resources in human resources, benefit most from the DQR.

Regarding the content, it was found the DQR offers two advantages. In the education context, it places personal competences on the same level as professional competences. The emphasis of the DQR on competence areas and levels was found to be valuable as it allows, for example, for

assessments of the status of employees, learners and tertiary students, and then to target individual support (FHAM, 2016[260]).

Funding

- In Germany, the Pact for Research and Innovation (2005, and renewed in 2014 until 2020) is a joint effort by the federal government and the *Länder*. It increases research and development (R&D) funding of major public research institutes in Germany, including the German Research Foundation, Fraunhofer Gesellschaft, the Helmholtz Association, the Max Planck Society and the Leibniz Scientific Association. Its objective is to enable these organisations to continue and improve strategic measures, enhance the quality and quantity of existing instruments, and develop, test and establish new instruments to achieve defined research policy goals (Federal Ministry of Education and Research of Germany, 2019[261]). Based on annual monitoring reports conducted by the Joint Science Conference, the federal government, the *Länder* and the research institutions found that the pact and the Excellence Initiative had initiated a structural change that required support through longer-term measures (GWK, 2016[262]). In 2014, it was decided to renew the pact with an increase of 3% of the annual budget (equal to EUR 3.9 billion additional funding for R&D) from 2016 and 2020 for the major public research institutions (BMBF, 2019[263]). Funding is fully covered by the federal government for this round (BMBF, 2019[263]). The main goals for this period are improving the overall development of the research sector, strengthening networking, strengthening international and European co-operation, improving collaboration between the research sector and industry and society, attracting talent, ensuring adequate and family-friendly structures and processes (BMBF, 2018[264])

Progress or impact: The Joint Science Conference has monitored the Pact for Research and Innovation since 2007, including annual publications of monitoring reports (BMBF, 2019[263]). Since the pact was established, it was found, among others, that co-operation between the research institutes and higher education institutions has improved, measured by the increase in joint scientific publications (BMBF, 2019[263]; GWK, 2018[265]). It was also found that the research institutions strengthened co-operation on the international and European levels due to their contribution to funding projects received through the EU Horizon 2020 project, and securing almost one-third of all funding granted to Germany for outstanding research projects by the European Research Council (BMBF, 2019[263]; GWK, 2018[265]). With regard to collaboration with the industry sector, in 2017, more than EUR 795 million in funding was secured by the research institutions from the industry sector (GWK, 2018[265]). In a joint effort with the universities, the research institutes supervised a growing number of PhD students, and in 2017, EUR 310 million was spent on young researchers' research projects (BMBF, 2019[263]; GWK, 2018[265]). The number of female staff in leadership positions in the research sector has been comparatively low in Germany, while it has increased with further measures being taken (BMBF, 2019[263]; GWK, 2018[265]).

- Since 2008, Germany has launched four investment programmes to support the expansion (investment and operating costs) of ECEC services throughout the country. The federal government provided EUR 3.28 billion in the first three investment programmes for the expansion of ECEC places for under 3-year-olds (BMFSFJ, 2019[266]). The fourth investment programme (2017-20) aims to support the increase of up to 100 000 additional ECEC places for 3-year-olds with an allocation of EUR 1 126 billion (BMFSFJ, 2017[267]). The federal government supports the *Länder* by granting them tax releases (valued-added tax [VAT]) to subsidise the operating costs of services for children under the age of three. In addition, in 2019, a new law on ECEC quality (Gutes-Kita-Gesetz) took effect with a total budget allocation of EUR 5.5 billion from 2019 to 2022 (BMFSFJ, 2019[268]).

> **Progress or impact:** Within the first three investment programmes, from 2008 to 2018, 400 000 additional places for children under three were created (BMFSFJ, 2019[266]). As of 2018, it was put forward that in early childhood education and care, unsatisfied demand and demographic changes necessitate more than 600 000 additional places until 2025 for children up to school age (European Commission, 2018[269]). Issues persist around service quality and flexibility (European Commission, 2018[269]). The federal and *Länder* governments have taken further initiatives to improve access to and quality of early childhood education and childcare, such as with the programme "Entry into ECEC – Building bridges to early education" (KitaEinstieg – Brücken bauen in Frühe Bildung), the programme "KitaPlus" or "child care centres with a focus on language education and development" (Sprach-Kitas). The government has also supported improving the qualifications of daycare staff. The federal government and the *Länder* have also taken stock of progress in improving quality and identified further steps to be taken (OECD, 2018[270]).

- Germany implemented the Quality Initiative for Enhancing the Quality of Teacher Education (Qualitätsoffensive Lehrerbildung, 2013-23) to improve the quality of teacher preparation. This funding scheme focuses on strengthening initial teacher education and raising the attractiveness of the teaching profession, particularly for young people. This also includes improving the structure of initial teacher education at universities, better bridging the theory-practice divide, targeting support during studies, dealing with heterogeneity and inclusion in the classroom and improving the connection between pedagogical elements and subject knowledge (BMBF, 2019[271]). In the funding period from 2015 to 2023, a total budget of EUR 500 million is made available (BMBF, 2019[271]).

> **Progress or impact:** In the first funding phase (2015-18), 49 projects received funding with the participation of 59 universities (BMBF, 2018[272]). For the second funding phase (2019-23), an interim review took place in 2018, and 48 projects from 58 universities passed the review, receiving further project funding for 2019-23 (BMBF, 2018[272]). The 2018 mid-term evaluation report found, among others, that the design of the programme as a funding competition has helped universities critically reflect on the situation of teacher education programmes at their institutions, as well as

establish organisation and co-operation structures during the application phase (Ramboll Management Consulting GmbH, 2019[273]). The objectives of the programme allow universities a certain leeway to adopt the measures to their specific contexts. Some areas had so far not been sufficiently addressed, such as digitalisation, vocational schools, teacher shortage and internationalisation. Further results showed that the programme allows for the unique possibility to optimise governance structures in teacher education. Also, the programme increased the variety of knowledge on practical relevance and led to the establishment of, for example, more functional structures and co-operation at the university level. The programme has also triggered the development of new formats and approaches to professional guidance and consultation for students in teacher education. Teacher education has also been improved in regard to heterogeneity and inclusion (Ramboll Management Consulting GmbH, 2019[273]). In response, the federal government and the *Länder* decided to introduce a new funding stream for projects on digitalisation of and VET teacher education (BMBF, 2019[274]). As of 2020, 43 projkects will be funded in this area.

- Germany allocated a total of EUR 250 million for the federal funding programme, Advancement through Education: Open Universities (Aufstieg durch Bildung: offene Hochschulen, 2011) from 2011 to 2020. This programme from the federal government and the *Länder* is part of the qualification initiative, Getting Ahead through Education (Aufstieg durch Bildung, 2011). The programme seeks to encourage higher education institutions to put forward innovative, demand-based and sustainable qualities to qualify individuals further, secure the long-term supply of highly skilled staff, improve transfer opportunities between VET and academic education, and accelerate the transfer of new knowledge into practical applications. The aim is also to strengthen the international competitiveness of the science system through sustainable profile development in lifelong academic learning. The programme is made up of two funding rounds.

Progress or impact: A total of 50 higher education institutions participated in the first funding round (2011-17) (BMBF, 2019[275]). The number of institutions in the second funding round (2014) rose to 77 funded projects. In the funding round until 2020, 40 projects are funded at 61 universities and 1 non-university research institution. In addition, as of the time of writing this report, 295 new study courses had been implemented at funded higher education institutions across Germany (BMBF, 2019[275]).

Additional education policies of potential interest to other countries

Governance

- The Excellence Strategy (2018) is a joint measure between the federal government and the *Länder* that aims to promote cutting-edge research at German universities along two funding lines: the Excellence Clusters and the Universities of Excellence. The strategy is based on the previous Excellence Initiative programme (2007-17) (BMBF, 2019[276]). The total annual budget is set at EUR 533 million

with 75% covered by the federal government and 25% by the Land that is home to the Excellence Cluster or University of Excellence (BMBF, 2019[276]). After a two-year selection process, 57 Excellence Clusters had been selected by the end of 2018, with funding made available as of 2019 (BMBF, 2019[276]).

Funding

- Another co-operation project between the federal government and the *Länder* is the "Innovative University" funding initiative (2016-27). It aims to promote the transfer of ideas, knowledge and technologies at universities of applied sciences and small and medium-sized universities. The measure intends to help expedite the translation of innovative ideas into new products. The total financial allocation is EUR 550 million (BMBF, 2018[277]). The first selection round took place from 2016 to 2017, with funding provided from 2018 to 2022 (BMBF, 2019[278]). The second selection is scheduled for 2021 to 2022, with funding provided from 2023 to 2024 (BMBF, 2019[278]). By 2017, 29 projects were selected supporting 48 universities of applied sciences and small and medium-sized universities with funding as of 2018 (BMBF, 2017[279]). The universities collaborate with 26 direct and 260 associated partners from industry, culture and society (Innovative University, 2019[280]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Greece

Context

Schools in Greece have less favourable disciplinary climates in science lessons than in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.23 (the OECD average index value was 0.00). Student truancy was close to the OECD average: 19.6% of 15-year-olds in Greece reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Greece were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.06 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was a lot higher than the OECD average (0.24 compared to 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 46.8%, which was among the highest in OECD countries (the OECD average was 35.4%). In 2017, teachers in Greece had fewer net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 660 hours at primary level and 609 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively.[1] Lower secondary teachers earned 115% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was more than the OECD average of 91% (OECD, 2018[2]).

According to school leaders' reports in PISA 2015, school leaders in Greece are less likely than their OECD peers to conduct self-evaluations of their schools (80.7% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and also much less likely than average to undergo external evaluations of their schools (20.8% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]).

In 2017, 50% of decisions relating to resource management (allocation and use of resources for teaching staff and principals) in Greece were taken at the central level, and 50% were taken across multiple levels, compared to OECD averages of 21% and 14%, respectively. According to school principals' self-reports in PISA 2015, schools in Greece have some of the lowest levels of autonomy over curriculum compared to other OECD countries: 3.5% of principals reported that the school has primary autonomy over curriculum, compared to an OECD average of 73.4% (OECD, 2016[1]). Annual expenditure per student at primary level in 2015 was USD 5 810, lower than the OECD average of USD 8 631). At secondary level, Greece spent USD 6 786 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development) Greece spent USD 4 095 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in Greece as a proportion of gross

[1]. *Note by Greece:*

This is directly related to the fact that, according to Greek legislation (L.4152/2013 art.1), teachers' net teaching hours decrease with age. So, teachers aged above 50 have fewer teaching hours than newly recruited staff. Furthermore, no recruitment has taken place for the last ten years due to the economic crisis.

domestic product (GDP), at 3.8%, was one of the lowest rates in the OECD (OECD average of 5%). The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (8% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

Greece's key education policy priorities have evolved in the following ways over the last decade (Table 8.12).

Table 8.12. Evolution of key education policy priorities, Greece (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified a highly centralised education system in Greece, where schools and teachers have little autonomy. Other challenges include improving teaching quality and educational leadership, cultivating a culture of accountability and increasing the overall attractiveness of the teaching profession. Furthermore, there is a high number of substitute adjunct teachers, and many qualified teachers are employed by the substantial shadow education sector. [2017, 2018]	Greece had initially reported the need to increase education quality and improve the criteria for teachers' selection, as well as further develop the management of qualifications and mobility. [2013] More recently, Greece reported priority action areas during 2017-19 to strengthen teacher quality (such as through improved training opportunities), school leadership and all-day school provision. They also reported prioritising reducing the number of substitute adjunct teachers by hiring permanent staff. [2018]
Evaluation and assessment	The OECD identified an overall need to strengthen the evaluation and assessment system, including: school leader appraisal; developing a long-term plan for an overall evaluation and assessment framework focused on student learning and well-being; and strengthening school evaluation. [2018]	Another priority is to improve the role of teachers and establish meritocracy rules in education. There is also the need to assure quality and assessment of educational outcomes in primary and secondary education. [2016-17]
Governance	The OECD highlighted the importance of strengthening competencies and skills in order to improve employment and income and ensure well-being in Greece. [2013, 2016, 2018]	Greece had originally reported the need to improve the overall governance in higher education institutions. [2013] More recently, and particularly during 2017-19, a key priority reported was the need for education policies across all education levels to take into account the geographical specificities of Greece (e.g. islands, isolated mountainous areas, and sparsely populated villages across the country) [2019].
Funding	On the funding side, decisions are highly centralised, and in the recent past, lower capacity and financial constraints have delayed the execution in funds providing for national co-financing. In addition, the school units were found to have fragmented and diffused responsibilities and finances. Also, the lack of comparable educational funding data was found to hinder the making of clear policy choices about the potential underfunding of the system or to unlock the challenges raised by the short-term recruitment and allocation of substitute teachers, which can lead to inefficiencies. [2013, 2016, 2018]	A challenge, according to Greece, was maintaining education funding given that the education budget had declined approximately 10% for all levels of education due to the economic crisis. [2013] More recently, Greece's priority has been to increase education funding. [2016-17 and 2019]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- All-day primary schools operate since 2002 in Greece, a type of school where students can stay after school to do homework and undertake creative activities or rest. The "classic" all-day school model allows children to stay after 2:00 pm at school. A "new" all-day school model began rollout in 2010, implementing five key principles in schools: offer extended all-day schooling (children may arrive from 7:00 am, with delivery of some education services until 4:00 p.m.) as well as be inclusive, digital, sustainable and innovative. The curriculum is extended to classes in, for example, art, drama, foreign languages or physical education. As of 2016, all-day pre-primary schools were extended for children to attend from as early as 7:00 a.m. and as late as 4:00 p.m. In 2016, the government made new proposals to combine the two all-day school types into a single "uniform" all-day school model. The aim was to ensure equality of provision across the country, offer provision as early as 7:00a.m. until 4:00 p.m. and include a compulsory curriculum with classes in English language teaching, information and communication technology (ICT), art, drama, and physical education in the afternoon classes (OECD, 2018[281]). The all-day school policy is complemented by the implementation of the Digital School strategy (2013, and updated in 2016). The strategy aims to ensure access to high-speed Internet connections and digital learning tools and platforms for all students to improve education results. The reform also aims to enhance the use of ICT to increase the efficiency of administration. In addition, as of 2017, a law change meant that any school, including kindergartens, could become an all-day school (OECD, 2018[281]).

Progress or impact: According to 2016 data, out of all primary schools in Greece, 61% were "classic" all-day schools, 29% were "new" all-day schools with a revised cohesive programme, and 10% were not all-day schools. For the "new" all-day schooling, evidence shows positive feedback from students and parents as the enriched curriculum was found helpful, especially for students from low-income families. At the same time, OECD analysis of available evidence identified implementation challenges, such as a need to better integrate the afternoon service delivery, in particular for "classic" all-day schools; to ensure adequate infrastructure to support the new activities; to recruit teachers; and to avoid student truancy and dropout (OECD, 2018[281]).

With regard to the "uniform" all-day school model, the new enriched curriculum means less time for more conventional subjects, and therefore a shift in the teaching load from primary teachers to specialist secondary teachers (OECD, 2018[281]). The model was rolled out from 2016 to all pre-schools and primary schools with four or more classes (13 373 schools) with full expansion to all remaining primary schools planned from September 2018.

The digital school was piloted in 800 primary schools and 1 250 gymnasiums. For 2014-20, 7 350 primary and secondary schools in

total are expected to benefit from the continuation of the digital equipment provision programme for schools, which is co-financed by the European Social Fund (ESF) and national sources.

In 2017, a further amendment to the all-day school law took place, and all-day schools were expanded to special education primary schools. In early 2019, actions already available on line included interactive digital textbooks, digital interactive materials, educational videos and educational software (National information reported to the OECD).

Additional education policies of potential interest to other countries

School improvement

- The In-Service Education and Training of Teachers (INSET, 2016) was implemented by the Institute of Educational Policy and aims to provide training opportunities for teachers in, for example, the new curricula, new learning tools with the use of ICT, refugees' education, descriptive evaluation, vocational education and training (VET) apprenticeship and differentiated teaching. As reported to the OECD, the majority of these training programmes are co-funded by the European Social Fund. INSET also includes teacher training opportunities for the induction of newly appointed and substitute teachers (Institute of Educational Policy, 2019[282]).
- Furthermore, a recent 2019 law established a National Centre for Teacher Training (EKEPE) within the Hellenic Open University. According to national information reported to the OECD, to accomplish its role, this national centre will work in close co-operation with the Institute of Educational Policy and the Hellenic Ministry of Education, Research and Religious Affairs.

Evaluation and assessment

- In 2019, Greece established procedures for planning and evaluation of schools' educational work (Law 4547/2018, Ministerial Decision 1816/ΓΔ4/7-1-2019) (Gov. Gazette B΄ 16). The Decision covers the three thematic pillars of school and school life; school operation and educational procedures; and educational results (Eurydice, 2019[283]). The previous absence of evaluations meant that schools lacked data to know about strengths and opportunities for improvement (OECD, 2018[281]). It was also found that the "lack of transparency of school and student performance has also likely contributed to low levels of public satisfaction with and trust in the system" (OECD, 2018[281]).
- A new information system (MySchool - Diofantos, 2013) was put in place for all primary and secondary schools to tackle early school leaving and low levels of basic skills (Government of Greece, 2019[284]). It consists of a student, teachers and schools database. Data from the database is provided to the Observatory of Student Dropout operating in the Institute of Educational Policy (IEP) to produce indicators on early school leaving. The first report on student drop out using data from the database was published in 2017, while more recent reports have been published in 2019 (National information reported to the OECD).

Systems

Selected education policy responses

Governance

- To improve education policy, the Greek government established, among others, a Committee for National Social Dialogue for Education (2015). The committee involved key stakeholders in the system, with a mandate to begin developing a new national action plan for education (National information reported to the OECD). Several subcommittees and working groups were formed to discuss and form proposals on various thematic areas of the system (such as digital education, improving the quality of VET, teacher training and the reform of compulsory education).

Progress or impact: The 2016 final report of the Committee for National Social Dialogue for Education proposed a new national action plan on education with a greater focus on equity. The 2016 report from the former president of the Standing Committee on Cultural and Educational Affairs of the Hellenic Parliament provided evidence and directions for the strategic planning of the Ministry of Education (National and Social Dialogue for Education, 2016[285]; National and Social Dialogue for Education, 2016[286]).

A three-year education plan (2017-19) was issued in 2017 with guidelines and proposals; it aimed to provide a more holistic approach to quality assurance in Greek education. The three-year plan includes guidelines and proposals in several policy priority areas, e.g. improve the quality of teachers, school leadership and schools through self-evaluations; update the curriculum; ensure all-day school provision; and develop further policy actions addressing the specific education levels of early childhood education to tertiary education (OECD, 2018[281]). The plan also underlined the importance of education policies to consider geographical specificities of Greece, including islands, isolated mountainous areas, and sparsely populated villages across the country.

In 2018, the following measures and legislation were approved: selection criteria for school leadership; the criteria for Education Priority Zones (ZEP); and a redefinition of the school network aimed at restructuring the functions and responsibilities of primary and secondary schools, to improve the effectiveness and quality of educational work. In addition, a 2017 tertiary education reform (Law 4485/2017) centralised decision making within the Ministry of Education, Research and Religious Affairs (MofERRA), regulated fees and reviewed the status of universities. An OECD review pointed out that the plans may be further strengthened through strong links to an overall vision for education focused on student learning and well-being. It was also found that the initiatives included in the plans will also require that benchmarks are established and school-level capacity supported (OECD, 2018[281]).

Additional education policies of potential interest to other countries

Governance

- As part of the three-year plan for education (2017-19), Greece has been working on a law to reform its national school curricula; this was an opportunity to focus on the future of education and improve equity (OECD, 2018[281]). By the end of 2018, the curriculum included many objectives; changes to the religious education curriculum were under discussion; and it was found that digital education was still insufficiently integrated into the curriculum (European Commission, 2018[287]). According to a 2019 law, changes in curricula of the third year of upper secondary school apply starting from school-year 2019/20. As of the time of writing this report, the curriculum reform was in progress for the remaining school grades, and a significant update and upgrade of Curricula for Vocational Education and the Apprenticeship year was in process (2018-21) with co-funding provided by the European Social Fund (National information reported to the OECD).

Funding

- In 2011, the Ministry of Education presented a strategy to map schools across the country in order to enable mergers and consolidation of the school network. By 2011, more than 1 933 schools were consolidated to form 877 schools, despite the particular geomorphology of the country (remote islands and villages), which resulted in the reduction of around 2 000 teaching positions. Changes in the way school boards at the municipal level operate were also implemented, leading to approximately 24% less in human resources and operational costs (National information reported to the OECD).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Hungary

Context

Schools in Hungary have less favourable disciplinary climates in science lessons than in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.08 (the OECD average index value was 0.00). However, student truancy was lower than the OECD average in 2015: 8.4% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the 19.7% on average. That being said, students in Hungary were less likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.11 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was close to the OECD average (-0.01 compared to 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 42.4%, which was higher than the OECD average of 35.4%. In 2017, teachers in Hungary had fewer net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 655 hours at primary level and 655 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Hungary have lower levels of autonomy over curriculum than on average across the OECD: 69.9% of principals reported that the school has primary autonomy over curriculum compared to the OECD average of 73.4% (OECD, 2016[1]).

In Hungary, lower secondary teachers earned 70% of the average salary of a full-time, full-year worker with tertiary education in 2016; this was less than the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 72% of teachers in Hungary said that if they could choose again, they would still become a teacher; this was close to the OECD average of 75.6%. (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Hungary are slightly less likely than their OECD peers to conduct self-evaluations of their schools (90.4% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and about equally likely to undergo external evaluations of their school (74.8% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 17%, which was less than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) in Hungary were lower than the OECD average: 25% of decisions in Hungary were taken at the school level, compared to the OECD average of 29%. Annual expenditure per student at primary level in 2015 was USD 5 089, which was among the lowest in OECD countries (the OECD average was USD 8 631). At secondary level, Hungary spent USD 5 870 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Hungary spent USD 8 761 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in Hungary as a proportion of gross

domestic product (GDP) was 3.8%, which was below the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) in Hungary was lower than the OECD average (14.2% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

Hungary's key education policy priorities have evolved in the following ways over the last decade (Table 8.13).

Table 8.13. Evolution of key education policy priorities, Hungary (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, there is a need to make the teaching profession more effective. [2012]	Hungary reported the ongoing challenge of an ageing teaching workforce, putting a focus on lowering the age composition of teachers while improving pedagogical practices and teacher education. The reform of teacher education in 2013 was also highlighted as a priority area for the government. Another ongoing priority is to change learning content, teaching methods and pedagogy in response to digitalisation [2013; 2016-17].
Evaluation and assessment	In 2008, the OECD reported a narrow range of regular, nationwide data on outcomes for students enrolled in vocational education and training (VET) programmes. At this time, the OECD identified a need for more information on the labour-market outcomes of VET to be collected and published at both school and programme level. [2008]	Improving the structure of the upper secondary final examination and the general quality of higher education is an ongoing priority. Another persisting priority is interlinking the systems of external school assessment and teacher appraisal. [2013]
Governance	The OECD found that, as of 2008, the rules governing the training levy were complicated and difficult to understand for many stakeholders. As of 2012, there remained scope for further school mergers. Recently reported challenges include the fact that few participants in Public Works schemes find jobs on the primary labour market; women with younger children have low labour market participation; and changing technologies are increasingly making workers' skills obsolete. [2008; 2012; 2016]	Hungary reported the ongoing challenge of labour shortage with policy measures taken to build a qualified workforce with useful and practical skills. Hungary reported aiming to meet economic demands by putting more emphasis on continuing to develop the quality of VET based on the European Quality Assurance in Vocational Education and Training (EQAVET). A new priority is to guarantee a greater level of autonomy to VET schools in terms of financial and governance decision making. [2013; 2016-17]
Funding	According to OECD evidence, relatively few financial resources are devoted to tertiary education. However, both public and private returns to tertiary education are among the highest in the OECD, providing strong incentives for investing in tertiary education. [2016]	Hungary reported the ongoing priority of implementing new financial regulations for public education and reforming the public funding system to introduce quality-based differentiated state support for higher education institutions [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- The Klebelsberg Institution Maintenance Centre (KLIK, 2013) aims, among others, to reduce teacher shortages and attract gifted students to the teaching profession. To this end, a key programme for the KLIK (renamed the Klebelsberg Centre [KK] in 2016) is the Klebelsberg Scholarship Programme (2013). Through this, KK awards scholarships to students enrolled in initial teacher education (ITE) programmes for high-need students who perform particularly well in the entrance examinations. On completion of their ITE studies, scholarship recipients must accept a teaching position offered by KK and then remain in the profession for the same number of years as they spent in the scholarship programme (Klebelsberg Centre, 2019[288]).

Progress or impact: In the academic year 2017/18, 2 498 students had valid scholarship contracts with the KK during their ITE studies (National information reported to the OECD). From this point, the KK predicted that the total number of recipients would increase by 400-500 students each year. Concurrently, Hungary has seen an increase in the total number of students enrolled in ITE programmes from 13 000 in 2012 to 20 000 in 2017 (Klebelsberg Centre, 2017[289]). In 2017, the scholarship programme was extended to include students enrolling in initial training programmes for special educational needs teachers (Eurydice, 2017[290]).

- Hungary's Decree on the Teacher Education System (2012) reformed several aspects of initial teacher education for general, vocational and special education teachers. The decree reintroduced a single cycle, two-part teacher education programme. The single-cycle system ensures that all student teachers pursue a general school education teaching programme and then two specialised programmes of choice. Specialisations may be by teaching subject or education level but also cover teaching for children with special educational needs or children from disadvantaged backgrounds (Government of Hungary, 2012[291]). Student-teachers' choices are guided and informed by the needs of the public education system (National information reported to the OECD). The decree also strengthened the practical training component. The duration of in-school teaching practice required for qualification increased from half a year to one year. In terms of credits, this practical module became the most important (Eurydice, 2019[292]).

Progress or impact: Single-cycle initial teacher education programmes were reintroduced in Hungary from 2013, replacing the Bologna system, which had been in place from the academic year 2004/5. The Bologna system proved unpopular in ITE and there was a reduction in the number of applicants from 10 795 in 2004 to 5 995 in 2008 (Oktatási Hivatal, 2019[293]). By the academic year 2017/18 all of Hungary's ITE programmes followed the single-cycle model (Eurydice, 2019[292]). In 2018, 17 800 students applied to ITE programmes (Oktatási Hivatal, 2019[293]).

Additional education policies of potential interest to other countries

School improvement

- In response to a decline in teacher salaries between 2005 and 2013, Hungary introduced a teacher career management system and salary scale (2013). This consists of five career steps linked to salary grades (European Commission, 2015[294]). This resulted in a 35% initial basic salary increase in 2013 with the aim of continuing to increase salaries annually by 7% up to 2017. Since 2016, the system has also covered early childhood education and care (ECEC) staff who have a tertiary level qualification (European Commission, 2017[295]). Nevertheless, as of 2017, lower secondary teachers' salaries in Hungary were equivalent to 70% of the average earnings of tertiary-educated workers, although this represents an increase of 17 percentage points on equivalent data from 2012 (OECD, 2018[2]) (OECD, 2014[296]).

Evaluation and assessment

- In 2015, Hungary implemented significant reforms to school evaluation. There are now two types of external evaluations. Legal compliance checks (Hatósági ellenőrzés) aim to ensure that schools operate according to legislation. Pedagogical/professional inspections (Pedagógia-szakmai ellenőrzés) cover the evaluation of teachers, school heads and schools and are carried out on a five-year cycle. Based on the evaluation report, schools develop a five-year action plan to guide their progress and development until the next external evaluation. The legal compliance checks may lead to disciplinary measures and remain confidential, while the pedagogical/professional evaluations provide remedial actions and are public. External evaluations are organised by the Educational Authority and carried out by experienced, specially trained expert teachers. In addition, school maintainers may also conduct evaluations of their institutions. Teacher appraisal is also conducted through the external evaluations of schools and may impact career and salary progression (OECD, 2015[297]).
- Since 2008, all students have a personal assessment identifier, which helps track academic development over time and to better understand the impact of schools on student development. When students transfer to another school, the information follows them.

Systems

Selected education policy responses

Governance

- In Hungary, the national government took over the maintenance of schools and pedagogical institutions from local governments through the National Public Education Act (2011) (Government of Hungary, 2011[298]). This was in response to challenges identified by the government in the operation of the former decentralised model where municipalities maintained public schools. The government then established the Klebelsberg Institution Maintenance Centre (renamed the Klebelsberg Centre [KK] in 2016) to manage public funding of schools and allocate grants. KK's funding responsibilities included salaries for teachers, teaching

support staff and maintenance staff as well as expenditure on transportation and school construction, extension and renovation. Private institutions received school funding directly from the MoHC. The Government Decree on Measures relating to the Maintenance of Public Education Institutions in the Field of Vocational Training (2015) transferred responsibility for VET institutions from KK to regional VET centres across the country.

Progress or impact: According to the experiences and challenges emerging from the first years of implementation of the new model, the school governance structures introduced by the National Education Act were amended via a new Government Decree in 2016. The national government proposed the establishment of 59 KILK Educational District Centres (EDCs). The responsibilities of the EDCs include maintaining public schools (primary, general secondary and some VET in arts), evaluating the effectiveness of the pedagogical work of schools, employing teachers, supplying teaching materials and co-ordinating professional training. As independent budgetary institutions, EDCs are responsible for both maintenance and operation of public education institutions.

At the same time, the KLIK was transformed into the Klebelsberg Centre. In contrast to its predecessor, from 2016 onwards, the KK no longer has responsibility for either the maintenance or operation tasks of schools but instead provides professional and strategic co-ordination for the EDCs. This was intended to help ensure a more stable and uniform system (National information reported to the OECD).

Through this system, the national government bears all responsibility for providing public education institutions with infrastructure, qualified staff and the budget necessary for quality education, although institutions' leadership teams maintain some wider authority in local decision making according to local needs (OECD, 2015[297]).

- Hungary's Lifelong Learning Strategy (Az egész életen át tartó tanulás keretstratégiája, 2014) involved the restructuring of VET schools. This process started with the renewal of the institutional system and governance structures for vocational training. In 2016, the Implementation Plan for the Lifelong Learning Strategy (Government decree 1705/2016. XII. 5) was adopted, and its implementation is currently being monitored with annual reviews conducted by the Ministry of Education (Government of Hungary, 2016[299]).

Progress or impact: In 2015, the governance responsibilities for 300 vocational education and training schools were transferred from the KK central governance body for public education schools to 44 regional VET centres (Szakképzési Centrum). From the same year, VET schools and centres received funding from the Ministry for National Economy as opposed to from the Klebelsberg Centre. From 2018, the Ministry for Innovation and Technology took over funding responsibilities for VET centres with the National Office for VET and Adult Learning, responsible

for co-ordinating and monitoring budget planning. A minority of VET centres have to allocate some of their own funding (OECD, 2015[297]).

VET centres co-ordinate the local individual VET schools and monitor local demand for VET graduates in the community, receiving concrete skills' needs reports from local companies. According to government evidence, this has increased the effectiveness of the institutions and located financial decisions closer to institutions (OECD, 2015[297]).

The content of the school-based vocational training programmes undergoes continuous renewal. The primary aim has been to help students attain basic competencies and the literacy skills needed for lifelong learning through widening the vocational offer. For example, the upper age limit of participation in full-time vocational training was extended from 21 to 25.

As of 2016, vocational secondary school programmes extended to five years, and students can now automatically continue their studies in the preparation year for the school leaving exam. Also, as part of the framework for adult education, adults can obtain a second vocational qualification free of charge (*ingyenes második szakképesítés*, 2015).

According to government evidence, the interoperability between vocational training and adult education is further increased by the increased focus on practical training in vocational training programmes, and by the new possibility for specialised training modules worth 50 credits to be included in Bachelor's programmes (National data reported to the OECD).

- With the Higher Education Strategy (2016), Hungary set a new agenda for the development of the higher education system for the upcoming 15 years. The new strategy aims to better align higher education programmes with labour market needs. Key actions include the introduction of dual higher education programmes, the establishment of community-based study centres in disadvantaged regions, and the implementation of a chancellery system in state-maintained higher education institutions through an appointee nominated by the government to take strategic and financial decisions. According to the strategy, the government aims to achieve a 35% tertiary attainment rate by 2023 (European Commission, 2015[294]).

Progress or impact: The tertiary educational attainment rate for 30-34 year-olds increased in 2018 to 33.7%, but remained below the EU average of 40.7% in 2018 (Eurostat, 2019[300]). In 2018, the number of students admitted into tertiary programmes increased for the first time in two years (European Union, 2018[200]). However, the number of applicants to tertiary education has still not fully recovered from the drop following the reduction of state-funded student places and the introduction of study contracts in 2012 (European Union, 2018[200]). In 2011, there were 140 954 applicants to tertiary level programmes; in 2018 there were 107 700 (Oktatási Hivatal, 2019[293]). As a result of the efforts to restructure higher education institutions, state-maintained higher education institutions' aggregate outstanding debt had decreased by more than two-thirds, from

USD 61.3 million in 2014 to USD 16.8 million by 2018 (National data reported to the OECD).

Funding

- The National Higher Education Act (2011) introduced a comprehensive reform of Hungary's higher education system to raise standards. In terms of funding, the act signalled a move away from reliance on direct public funding from the state budget to a two-tier model with base funding covering the basic cost of educational provision and special funding related to each higher education institution's projects or investments (Government of Hungary, 2011[301]). Further moves were made towards a performance- and excellence-based funding system with the Higher Education Strategy (2016). The Decree on the Financing of the Basic Activities of Higher Education Institutions (2016) established a new performance-based approach to base funding. The amount directed to each HEI is now adjusted annually according to the employment rate of the institutions' previous graduate cohort in comparison to national averages (Government of Hungary, 2016[302]). If the employment rate is 25% below the national average, funds are reduced by 10%, and if it is 25% above the national average, funds are increased by 10% (Eurydice, 2019[303]).

Progress or impact: For the European Commission, a potential challenge of the performance-based system could be that it favours outstanding student achievement rather than trying to increase the proportion of students who complete their studies (European Commission, 2015[304]). At 30%, the tertiary attainment rate in Hungary in 2017 was 14 percentage points below that of the OECD average and, between 2007 and 2017, it had increased more slowly than the average rate of increase seen across OECD countries (OECD, 2018[2]). Furthermore, the European Commission's narrow range of criteria are not directly linked to the education process and are impacted by labour market conditions, which are matters beyond the control of HEIs (European Commission, 2017[295]).

Additional education policies of potential interest to other countries

Governance

- In 2016, Hungary launched a process to reform the National Core Curriculum (NCC, 2012) in accordance with the five-year curricular cycles imposed by the Public Education Act (2011). This latest NCC revision marks an effort from the MoHC to create more opportunity for pedagogical innovation in the classroom. Following a Public Education Roundtable (2016), the government appointed Education 2030, a Hungarian scientific research group to lead the revisions of the NCC based on the roundtable's recommendations. The draft revisions were published towards the end of 2018, and key stakeholders were invited to comment (Eurydice, 2019[305]). The reform aims to lower the burden and workload on students and teachers by reducing the obligatory number of lessons per week, streamlining the content of the NCC and rationalising teaching materials. It also emphasises a student-centred, competency-based approach, which promotes

active learning and problem solving in classroom contexts (Education 2030, 2018[306]). The new National Core Curriculum and the frame curricula will be completed by the summer of 2019 and are expected to be implemented gradually from September 2020 (National data reported to the OECD).

- In 2016, Hungary adopted the Digital Education Strategy (DES) that aims to support the development of digital competencies among the population to then improve employability, living standards and the social welfare of workers, as well as having a positive impact on the digital ecosystem (Government of Hungary, 2016[307]). In preparing the strategy, the government published the Digital Success Programme (DSP, Government Decision No 2012/2015 of 29 December 2015) that included the task, under Section 3(a), for the Prime Ministerial Commissioner in charge of co-ordination and implementation of governmental tasks related to DSP to set up the DES (Government of Hungary, 2016[307]). The DJP Nonprofit Ltd is in charge of the co-ordination of the implementation of the DES (DJP Nonprofit Ltd, 2019[308]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Iceland

Context

Schools in Iceland have similar disciplinary climates in science lessons compared to those in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.01 (the average index value was 0.00). At the same time, Iceland's student truancy was among the lowest across OECD countries: 4.5% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to 19.7% on average. Students in Iceland were also more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.07 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was close to the OECD average (-0.01 compared to 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 39.1%, compared to an OECD average of 35.4%. In 2017, teachers in Iceland had fewer net teaching hours for general programmes than their OECD peers. Teachers annually taught 624 hours at both primary and lower secondary levels, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Iceland have higher levels of autonomy over curriculum than the OECD average: 82% of principals reported that the school has primary autonomy over curriculum, compared to 73.4% on average (OECD, 2016[1]).

According to the OECD Teaching and Learning International Survey (TALIS) 2018, 62.5% of teachers in Iceland said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, only 10.1% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Iceland are more likely than average to conduct self-evaluations of their schools (99.9% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and more likely than average to undergo external evaluations of their schools (93% of students were in schools whose principal reported this, compared to 74.6% on average) (OECD, 2016[1]). However, teacher appraisal levels as reported in the earlier cycle of TALIS 2013, were below average: 53.1% of teachers had reported then having received an appraisal in the previous 12 months, compared to a 66.1% on average (OECD, 2014[4]). At 9%, the share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was well below the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) in Iceland were higher than the OECD average: 75% of decisions were taken at the school level, compared to 29% on average.

Annual expenditure per student at primary level in 2015 was USD 11 215, compared to the OECD average of USD 8 631. At secondary level, Iceland spent USD 11 149 per student, compared to an average of USD 10 010, while at tertiary level (including spending on research and development), Iceland spent USD 12 671 per student, compared to USD 15 656. In 2015, expenditure on primary to tertiary education as a proportion of gross

domestic product (GDP) was 5.8%; the OECD average was 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (4.8% compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education fell by 0.5 percentage points; the average fall across the OECD was 1.3 percentage points. Private expenditure decreased by 0.8 percentage points, whereas the average change for the OECD was an increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Iceland's key education policy priorities have evolved in the following ways over the last decade (Table 8.14).

Table 8.14. Evolution of key education policy priorities, Iceland (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD found that although reforms have addressed teacher quality by, for example, requiring all teachers to earn a minimum of a master's degree, obstacles remain. In-service teacher training seemed to be ad hoc and not systemically planned, which could be a critical challenge, especially as the teaching profession was ageing. [2012]	Iceland reported the key priorities of improving teacher education and professional development. A newly identified challenge is the ageing teacher population and thus, a foreseeable shortage of teachers in pre-primary, primary and lower secondary schools. Focus is put on the need to recruit young people into teacher education, increase enrolment rates and tackle attrition within the profession. [2013; 2016-17]
Evaluation and assessment	Another challenge previously identified by the OECD for Iceland related to strengthening an integrated assessment and evaluation framework aligned with efficient teacher appraisals. [2016]	Iceland reported the priority of implementing a new system of student assessment, as well as strengthening and financing external evaluation at all school levels. Recent policy measures have been taken. [2013; 2016-17]
Governance	According to OECD evidence, Iceland's decentralised governance system was not providing support or accountability for schools. The lack of redistribution strategies within and between schools, and a weaker capacity to hold actors accountable could inhibit meeting the needs of students and providing equal access. [2012]	Previously, Iceland had reported considering merging universities and increasing co-operation among municipalities. As of 2016-17, a priority is to encourage collaboration in the tertiary sector, although mergers are not on the agenda at this stage. [2013; 2016-17]
Funding	The OECD recognised the need to improve spending efficiency, reduce costs and increase returns to education. More recent OECD evidence shows that technological change has shifted skill demand, predominantly towards high-level skills. [2009; 2013; 2015; 2017]	Iceland reported that it continues to face challenges in providing funding to respond to a large increase in the student population tertiary level and an expansion of postmenntamgraduate programmes, while budget cuts have adversely affected the implementation of new legislation and national curriculum guidelines. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- The Ministry of Education, Science and Culture established the Council of Continuous Professional Development of Teachers (2013), which is led by the ministry with representatives from the Icelandic Association of Local Authorities, the Icelandic Teachers Union and teacher education institutions.

> **Progress or impact:** The Ministry of Education, Science and Culture commissioned systemic and thematic studies on teaching practices and the implementation of national curriculum guidelines in compulsory and upper secondary schools. The study on the implementation of the new national curriculum guidelines in the compulsory school sector is still ongoing, and results are due. Apart from TALIS, considerable research has been conducted on teaching practices and attitudes on behalf of the University of Iceland. A new Council of Continuous Professional Development of Teachers was established in 2016 with a renewed mandate. The council is also in charge of following up on the policy recommendations of the former council and published reports in 2018 on professional development and recent changes to the profession of teachers in pre-primary and upper secondary schools, as well as music schools (Starfsþróun Kennara (Council of Continuous Professional Development of Teachers), 2019[309]).

Additional education policies of potential interest to other countries

School improvement

- The Act on the Education and Recruitment of Teachers and Head Teachers (2008) in Pre-School, Compulsory School and Upper Secondary School, fully effective since 2012, sets minimum requirements for teachers at the different education levels (including professional titles and recruitment processes). In 2019, Iceland introduced a reform of the law on teacher education and the professional certification of teachers in Iceland. The reform was consulted on with all the professional teachers' associations and unions, as well as the teacher training institutes. The reform proposes a single teacher certificate for all school levels, with clear guidelines for teacher education and hiring of teachers. It also emphasises the role of a teacher competency framework and proposes a teaching council to oversee the development of teacher quality in line with the competency framework. In a separate development, initial teacher education is being reformed by introducing a fifth-year, salaried induction programme for teacher trainees. These changes are expected to increase the quality and the attractiveness of the teaching profession, encourage teacher trainees to be better prepared for the profession and increase admissions to teacher education programmes.

Evaluation and assessment

- The Association of Municipalities and the Ministry of Education, Science and Culture set a formal co-operation agreement on financing and execution of external evaluation in compulsory education (2011). All schools or specific aspects of school activities may be externally evaluated, as organised by the ministry (Government Offices of Iceland, 2018[310]). The Directorate of Education oversees and performs external evaluations for pre-primary schools and compulsory schools and as of 2014, also for upper secondary schools. A new co-operation agreement was made with the Association of Municipalities in 2017 on the external evaluation of compulsory schools. In the agreement, it is stated that the Directorate of Education is to perform more frequent external evaluation of compulsory schools, which means that every compulsory school will be subject to external evaluation every five years.
- Iceland made changes in 2016 and 2017 to their standardised tests. This included making the standardised tests electronic in 2016, and extending the test into new grades (4 and 7). An expert group was appointed in 2016 to advise the Directorate of Education on the administering of standardised tests. The assessments introduced in 2016-18 have been able to highlight students and schools that need extra attention, while also supporting the drive towards a national goal of 90% of compulsory school students in each municipality meeting the minimum reading standards. This goal, set by the Ministry of Education, Science and Culture and the Directorate of Education, receives support from consultation, literacy screening, stakeholder engagement and parents. By early 2019, a committee established by the minister will be providing proposals for alternatives to standardised tests in compulsory education (National information reported to the OECD).

Systems

Selected education policy responses

Governance

- In 2010, the Ministry of Education, Science and Culture established the Quality Board for Icelandic Higher Education to administer the development of a Quality Enhancement Framework for Higher Education (QEF). In undertaking this work, since 2010, the board has collaborated closely with the Icelandic Quality Council for Higher Education, also established by the ministry. The board published the Quality Enhancement Handbook for Icelandic Higher Education in 2011, which aimed to support higher education institutions to enhance the quality of student learning experiences and award high standards of degrees. The Higher Education Act (2006) lays down the provisions for quality control of teaching and research.

> **Progress or impact:** As part of the Quality Enhancement Framework for Higher Education, the Quality Board for Icelandic Higher Education leads institutional reviews. According to the first-cycle QEF review (2011-14), respondents viewed the main principles of the QEF and the emphasis on students during the first cycle as positive (Clever Data, 2015[311]). The 2015-16 review aimed to cover reflections and preparations for the next cycle (Rannís, 2018[312]). Regulation 1386/2018 contains the legal basis of

the Quality Board. This regulation codifies, for example, the board's full control over the QEF, including control over the board's budget and human resources.

The second cycle of QEF reviews started in 2019 in accordance with a new handbook for the second cycle. The board has adopted a Board Constitution, as well as a strategy and action plan based on the board's mission statement. The board and its secretariat meet regularly with external stakeholders, including students and industry professionals.

In addition to the reviews, board representatives meet annually with the individual leadership teams of the universities and twice per year with the Quality Council, which is a stakeholder group comprised of Directors of Quality Management from the seven Icelandic universities, as well as two representatives of the National Union for Icelandic Students. Finally, the Board also hosts QEF annual conferences, covering, for example, the topic of "Integrating research into undergraduate learning: International and Icelandic examples" in 2018 (Rannís, 2018[312]). Further information can be found in the Quality Enhancement Handbook (Quality Board for Icelandic Higher Education, 2017[313]).

- The Quality Council for Higher Education (QC, 2012) is a component of the Quality Enhancement Framework for Higher Education in Iceland. The QC is comprised of senior representatives of all higher education institutions and two student representatives. The overall aim is to oversee and improve the quality of student experience and the institutional standards in higher education establishments. The QC is also a focal point for the exchange of practices, mutual support and advice in the higher education sector. It works together with the Quality Board for Iceland Higher Education (2010), which has the role of administering the development of the QEF (Rannís, 2018[312]).

Progress or impact: Examples of activities and initiatives carried out by the Quality Council for Higher Education are: the organisation of workshops and conferences; setting up guidelines; doing shared research and development activities; and undertaking joint activities across institutions (Clever Data, 2015[311]). According to the first-cycle review, it was found that the QC has been generally regarded as an important venue for discussing quality matters, exchanging information and sharing experiences, as well as being a link between different stakeholders within the higher education system. Insufficient funding and excessive member workload were identified as potential future challenges (Clever Data, 2015[311]).

- In 2015, the Directorate of Education (*Menntamálastofnun*, 2015) was established to co-ordinate initiatives by various stakeholders to improve students' literacy and reading skills. Its principal responsibilities include national assessment of students in compulsory school, national testing and screening tests, PISA research and school evaluation at all levels. In addition, the Directorate is in charge of providing students with learning material in compulsory schools. The Ministry of Education

tasks the Directorate with systematically developing improved learner assessments, such as by producing and conducting different screening tests for all levels, on reading and risk of dropout (Government of Iceland, 2016[314]).

Since 2015, the Directorate of Education has carried out screening tests on the risk of dropout among first-year students in upper secondary schools in Iceland. The results from this three-year, nationwide project are now being analysed, and the final report is expected to be published in 2019. The Directorate also assumed responsibility for new projects, such as the implementation of the National Agreement on Literacy (Menntamálastofnun, 2016[315]). In addition, the Directorate is implicated in the promotion of Education for Democratic Citizenship and Human Rights Education (EDC/HRE) in Iceland. As of 2015, the Directorate has worked on the development of indicators to assess the implementation of the fundamental pillars of the national curriculum, including EDC/HRE (Council of Europe, 2018[316]).

Progress or impact: According to an external audit of Iceland's education system, published by the Government of Iceland, the Directorate of Education set up a temporary department with experts on reading and literacy. The experts are expected to act as a temporary resource centre to assist schools in building capacity to improve reading. The report also highlights a recommendation made to the Directorate to support upper-secondary schools to develop programmes to prevent dropout (Government of Iceland, 2016[314]). Results from literacy tests for 2017 and 2018 indicate limited progress. However, the tests are now administered to 90% of the student population in compulsory schools.

School reforms can expect to take 8-14 years (according to PISA 2015), and the Directorate is still in the process of implementing measures to achieve the objectives set out in the National Convention on Literacy. Teachers' education and professional development in literacy teaching need to improve; the support systems of schools and municipalities need to be strengthened and made more effective; schoolmasters need to be more effective in providing professional support and show more leadership; and publication of teaching materials and school books needs to improve. In addition, schools face challenges in integrating a growing population of immigrant children and children who speak Icelandic as a second language.

- As part of the updated National Curriculum Guides for Compulsory Schools (2015), the number of Icelandic classes in the reference timetable was increased. The aim is to regularly measure reading skills from pre-school to the end of primary school according to the set targets in reading skills outlined in the Ministry of Education, Science and Culture's White Paper. The Education Directorate's literacy advisory task force carries out the assessment.

Progress or impact: In 2017, the relative time dedicated to Icelandic in the curriculum had not changed, but schools were given more flexibility in allocating time to individual subjects (National information reported to the OECD). The Directorate of Education has developed tools for literacy assessment for students aged 3-16 years. These include: fluency assessment

for 6-16 year-olds; spelling and writing rubrics; reading comprehension for compulsory school levels; and phonological awareness for 5-year-olds. Schools have adopted these tools, and approximately 90% of compulsory school level students participated in the fluency assessment in January 2019. The results from the fluency tests will provide information on how well the Convention on Literacy is progressing. An assessment report is expected in 2019. In conjunction with the assessment tools, the Directorate has published benchmarks that describe the students' competence in various factors of literacy or in comparison with their peers. The results are used by schools to adapt teaching practices to the students' abilities and to provide necessary support tailored to each student. The directorate has recently issued new test instruments for literacy and vocabulary as an online service. This will help schools organise teaching more effectively and monitor students' progress in more detail.

Additional education policies of potential interest to other countries

Funding

- The Education and Training Service Centre (ETSC, 2003) is owned by social partners and offers learning services to adults who have not graduated from upper secondary education (estimated at 22% of the adult population in Iceland). The ETSC collaborates with the Lifelong Learning Centres in Iceland in two ways: 1) by distributing funds for courses, guidance services and recognition of prior learning projects (RPL); and 2) by providing professional and innovative support. The Act on Adult Education (2010) describes its role and its funding is determined by the parliament. It is comprised of all major stakeholders in the field of adult education (e.g. three ministries, Federation of Employers, federations of trade unions and representatives from the municipalities and the formal school system). The ETSC developed a recognition of prior learning methodology based on pilot projects (Musset and Castañeda Valle, 2013[317]). The main target group are adults with low formal education who can then return to upper secondary school and can complete a fast track of the programme through RPL. A total of 12 lifelong learning centres and two centres for certified trades co-operate in pursuing RPL projects. On average, participants complete 28 units of credit recognised through RPL; for example, the carpentry programme includes a total of 100 units (Musset and Castañeda Valle, 2013[317]). Two overall customer surveys were undertaken by the University of Iceland (2018) on the impact on individuals and their progression routes resulting from RPL projects and The Guidance Services for adults. Additionally, the ETSC has a service contract with the Ministry of Education, Science and Culture, which stipulates overall assessment of the adult education system before 2020, with the last survey carried out in 2014.
- Iceland's framework providing incentives for companies to train and support students in the workplace (2011) was a consequence of the 2008 crisis and the inability of many firms to offer training places. Under the framework, 54 companies were allocated ISK 54.4 million (around EUR 470 000) to train 182 students. In 2012-14, an additional ISK 450 million (EUR 2.8 million) was allocated to the workplace training fund. The result of this initiative is now being

evaluated in order to see how successful these apprenticeship placements were and if graduation increased from the vocational education and training system.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Ireland

Context

Schools in Ireland have more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.09 (the OECD average index value was 0.00). However, student truancy was higher than the OECD average: 24.4% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. Students in Ireland were more likely to report that their science teachers adapt their instructions slightly less frequently than the OECD average, with an index of adaptive instruction of -0.02 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction), as reported by school leaders, was higher than the OECD average at 0.06 (the OECD average was 0.01) (OECD, 2016[1]). In 2017, teachers in Ireland had more net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 910 hours at primary level and 722 hours at lower secondary level compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Ireland have higher levels of autonomy over curriculum compared to the OECD average: 84.7% of principals reported that the school has primary autonomy over curriculum compared to 73.4% on average (OECD, 2016[1]).

According to school leaders' reports in PISA 2015, all school leaders in Ireland are expected to conduct self-evaluations of their schools (100% of students were in schools whose principals reported this, compared to the OECD average of 93.2%). They are also much more likely than their OECD peers to undergo external evaluations of their schools (95.3% of students were in schools whose principals reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools whose principals reported that standardised tests are used to make decisions on students' promotion or retention was 54%, which was above the OECD average of 31%, as reported in PISA 2015 (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 50% of decisions in Ireland were taken at the school level compared to the OECD average of 29%.

Annual expenditure per student at primary level in Ireland in 2015 was USD 8 288, which was lower than the OECD average of USD 8 631. At secondary level, Ireland spent USD 10 111 per student compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Ireland spent USD 13 229 per student compared to the OECD average of USD 15 656. In 2015, the proportion of expenditure on education (from primary to tertiary) coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average at 10.3% of overall spending compared to 16.1% on average. Between 2005 and 2015, the relative proportion of public expenditure on primary to tertiary education in Ireland decreased by 2.8 percentage points compared to an OECD average decline of 1.3 percentage points. During the same period, private expenditure

increased by 34.2 percentage points, compared to an OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Ireland's key education policy priorities have evolved in the following ways over the last decade (Table 8.15).

Table 8.15. Evolution of key education policy priorities, Ireland (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	N/A	For Ireland, challenges remain related to ensuring quality education systems to support school leaders and teachers in small schools, and improving schools' capacity to raise performance and deliver quality education for all students, with a focus on diversity and students from the most disadvantaged backgrounds. [2013] Most recently, Ireland reported growing challenges regarding teacher supply. [2019]
Evaluation and assessment	The OECD identified a need to improve performance indicators and include historical data. The OECD also recommended that Ireland establish a systematic and rigorous evaluation of all policies and schemes and use results to inform policy decision making. [2013]	Ireland reported the ongoing challenge of strengthening and integrating school self-evaluations, teacher appraisals and assessments in the interest of improving teaching and student outcomes. [2013]
Governance	OECD evidence underlines the need to improve the quality of higher education institutions (HEIs). [2013]	An ongoing priority is to ensure that those working at the local and school level can respond to national education objectives. [2013]
Funding	The OECD identified increased spending efficiency and improving the quality of HEIs as main policies to be addressed. More recently, the challenge of ensuring that skills gained in tertiary education can be efficiently transferred to the labour market has emerged. [2009; 2013; 2015]	As previously reported by Ireland, a challenge has been to deal with significant budget cuts in education due to the economic crisis. Ireland prioritised maximising resources to ensure budget cuts do not affect the quality and equity of education. [2013]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- DEIS Plan 2017 (Delivering Equality of Opportunity in Schools) is the Department of Education and Skills (DES) main policy initiative aimed at tackling educational disadvantage. It sets out five goals with associated targets and actions for education to become a proven pathway to create better opportunities for children and young people at the greatest risk of not reaching their potential by virtue of their socio-economic circumstances. This plan replaces the DEIS Plan for Educational Inclusion, which was launched in 2005, and focuses on addressing and prioritising the educational needs of children and young people from disadvantaged communities. DEIS Plan 2017 establishes a series of actions and provides support to assist in continuing to close the gap between DEIS and non-DEIS schools. It also includes initiatives to improve adult and family literacy. Furthermore, the home-

school-community liaison scheme targets vulnerable groups and aims to improve educational outcomes by empowering a key adult in these children's lives. As of 2019, a total of 896 schools (698 primary and 198 secondary) are involved in the initiative. The total annual spend from the Department of Education and Skills on DEIS is approximately EUR 125 million (National information reported to the OECD).

Progress or impact: The DEIS Plan 2017 allocated more funding in order to add 79 new schools to the DEIS programme from 2017 and introduced a series of pilot projects aimed at improving results for disadvantaged students. This is supported by the School Excellence Fund for DEIS. This fund enables DEIS schools to apply for funding to implement innovative, collaborative programmes that are context-specific and aim to improve learning outcomes. DEIS Plan 2017 set specific targets to increase the levels of student retention and progression. It also ensures other policy measures have a DEIS dimension, such as prioritising DEIS school staff in certain professional development initiatives (Department of Education and Skills, 2017[320]).

The latest evaluations of the DEIS programme have found that although achievement and attainment gaps between DEIS and non-DEIS schools have generally narrowed at both primary and post-primary levels, these gaps remain significant (Weir and Kavanagh, 2018[321]) (Kavanagh, Weir and Moran, 2017[322]). At the same time, schools participating in the DEIS scheme have seen their Leaving Certificate retention rates at the post-primary level rise to 85% for those who enrolled in 2011, from a level of 68.2% for the 2001 cohort. Although the retention rate for non-DEIS schools is higher at 93.5%, the gap has narrowed from 16.8% for the 2001 cohort to 8.5% for the 2011 cohort. Rates of student absenteeism in DEIS schools have also decreased (National information reported to the OECD).

- The Irish Teaching Council's Initial Teacher Education (ITE) Criteria and Guidelines for Programme Providers (2011) aimed to clarify the inputs (or characteristics) of initial training programmes, the processes that student teachers should follow and the expected outputs. As of 2012/13, both a Bachelor of Education (B.Ed) and a Professional Masters in Education (PME) were introduced as routes to qualification for both secondary and primary level teachers. The B.Ed (primary/post-primary) is a four-year full-time course for school leavers and mature students. Students must meet the minimum entry grade requirements in Irish, English and mathematics. The PME (primary/post-primary) is a two-year course open to candidates with at least a 2.2 award at Honours Bachelor degree level 8. The Teaching Council is responsible for the review and accreditation of ITE programmes, as well as for the registration of teachers. The Minister of Education determines the number of teacher candidates for primary level only, according to teacher supply, demand issues and available resources. Following a Review of the Structure of ITE Provision in Ireland (2012), there has been significant progress in restructuring ITE through mergers of institutions and improved collaboration.

Progress or impact: Following a 2017 review, new priorities for the development of initial teacher education were agreed upon, including better preparation for 21st-century challenges, lifelong learning and embedding innovation, integration and improvement at every step of teacher training. Revised requirements for new post-primary teachers came into effect in 2017, to set out individual subject requirements in terms of the European Credit Transfer System (ECTS) credits and to provide greater clarity for students, registration applicants and teacher-training providers (National information reported to the OECD). However, a recent study suggests that extending the number of years of study through the B.Ed and PME has increased the costs incurred by participants and, in turn, has reduced the number of candidates (Hyland, 2018[323]).

- In 2013, Ireland's Teaching Council (2006) published a revised proposal on induction and probation. Based on this, the Council piloted a new, integrated professional induction framework for newly qualified teachers (NQTs) in primary and post-primary education: Droichead (2013). It has been gradually introduced since 2016 and aims to reach universal coverage by 2020/21. The programme is non-evaluative and aims to provide comprehensive support for NQTs' professional learning during their induction year. It includes both school-based and additional professional learning activities.

Progress or impact: A 2016 review of Droichead found a high level of satisfaction regarding the effectiveness of the programme's structured approach to mentoring, professional support and performance assessment, among the full range of actors involved (ESRI, 2016[324]). Furthermore, the programme helped to bring about a greater collaborative culture within schools and among staff (ESRI, 2016[324]). Following extensive consultation, a revised Droichead was introduced in 2017. The programme continues to be annually updated through the Droichead Quality Assurance process. An implementation plan intends to ensure that all NQTs in primary and post-primary schools pass induction based on the framework by 2020/21 (The Teaching Council, 2018[325]). The Department of Education and Skills has also committed to making the following resources available to support successful implementation: 1) four days' release time with paid substitution to allow professional support team members to attend training; 2) a minimum of four days' release time to facilitate schools in supporting NQTs as part of Droichead; 3) for schools with multiple NQTs, a sliding scale of school release time based on the number of NQTs; and 4) follow-up professional development opportunities (The Teaching Council, 2018[326]).

Evaluation and assessment

- Ireland's School Self Evaluation Guidelines for Primary Schools (2012) and the School Self Evaluation Guidelines for Post-Primary Schools (2012) introduced obligatory school self-evaluation to improve the quality of learning. The process calls for a collaborative, reflective process that focuses on teaching and learning.

Based on school and education partners' feedback, the updated School Self-Evaluation Guidelines 2016-20 advise schools to continue to: 1) focus on teaching and learning; 2) use the process to implement national initiatives; and 3) identify and work on aspects of their teaching and learning practices that require development and improvement (The Inspectorate, 2016[327]).

Progress or impact: The first cycle of school self-evaluation was intended to explicitly support the implementation of the National Literacy and Numeracy Strategy. The second cycle and its revised guidelines offer schools a more systematic approach to understanding how they can improve outcomes for learners. The School Inspectorate anticipates that most primary and post-primary schools will employ the process between 2016-20 in a manner that continues to focus on quality teaching and learning for literacy and numeracy and helps schools to introduce and embed curriculum reform initiatives (The Inspectorate, 2016[327]). The Department for Education and Skills is currently processing survey feedback from school leaders, teachers, parents and boards of management on the role of self-evaluation in school improvement.

- Ireland's Survey on Life Skills in Primary and Post-Primary Schools (2009) gathers information on school policies and practices relating to nutrition, exercise, health, growing up, bullying and other aspects of the social, personal and health education programme. The survey is administered every three years, with subsequent rounds that took place in 2012, 2015 and 2018.

Progress or impact: As in previous cycles, findings from the 2015 Life Skills Survey suggest schools work positively to equip students with a range of essential life skills, by integrating physical activity and healthy eating, social, personal and health education (SPHE), relationships and sexuality education (RSE), and addressing anti-bullying and substance use (Department of Education and Skills, 2017[328]). The survey design was recently reviewed, and a more streamlined survey was issued to schools at the end of 2018. In addition, the title has changed to the *Well-being and Life Skills Survey 2018*, given the increased emphasis on student well-being. The Department is also exploring ways in which the survey findings may support the implementation of the Well-being Policy for Schools (2018) (Department of Education and Skills, 2018[329]).

- In 2015, a broader-based assessment framework for Junior Cycle (lower secondary education) introduced both school-based and shorter exams administered by the State Exams Commission to replace the Junior Certificate examination (1992). The new framework aims to offer schools more curricular autonomy, foster innovation and independent active learning and guarantee the acquisition of key skills (literacy, numeracy, "managing myself", staying well, communicating, being creative, working with others, and managing information and thinking) (European Commission, 2015[330]).

Progress or impact: Implementation of the framework takes place on a subject-by-subject basis, with full implementation expected by 2019/20 (National information reported to the OECD). The first revised Junior Cycle in English started in 2014 for students completing lower secondary in 2017. In order for schools to combat curriculum overload and allocate more time for in-depth learning and key skills, schools are advised to guarantee that students do not take too many subjects (European Commission, 2015[330]). Teachers' unions voiced opposition to the reform, yet by 2016, progress had been made following negotiations (European Commission, 2015[330]).

Additional education policies of potential interest to other countries

School improvement

- Ireland developed a new continuous professional development framework for teachers: *Cosán* (2016). The Teaching Council consulted more than 3 300 teachers on the content, language and structure of an initial draft published in 2015 (The Teaching Council, 2018[331]). A second round of consultation included programme providers and other stakeholders, including 1 600 teachers. The framework, adopted in 2016, aims to promote rich and flexible learning opportunities for teachers throughout their careers.
- Established in 2015, the Centre for School Leadership (CSL) was created as a partnership arrangement with the Irish Primary Principals Network and the National Association Principals and Deputy Principals. In the first phase (2015-18), the focus was on launching a coaching service for school principals, providing mentoring for newly appointed principals and launching a postgraduate qualification for aspiring school leaders (Fitzpatrick Associates, 2018[332]).
- The Teacher Supply Action Plan (2018) aims, among other things, to increase the number of teacher graduates entering the profession. In relation to this, it outlines priority measures within the areas of data collection and analysis, promotion of the teaching profession, higher education policy and school-level policies. The plan is informed by a series of regional focus groups allowing principals, teachers, parents, school students and student teachers to contribute (Department of Education and Skills, 2018[333]). Associated actions for 2019 include the development of a Teacher Recruitment Portal to ease school-level recruitment and the introduction of a teacher-sharing scheme for shortage subjects such as mathematics, science and languages (Department of Education and Skills, 2019[334]). From 2019/20, two schools will be able to work together to recruit a teacher and employ the teacher for more hours than if the teacher were working in just one school. The scheme will be reviewed after the first year. A Teacher Workforce Data Model is also being developed to help facilitate future planning.

Systems

Selected education policy responses

Governance

- Ireland's Innovation 2020 Strategy (2015-20) aims to establish a well-functioning public research base for skills development to foster a sustainable and resilient society, promote employment and establish innovative companies for international success. A key goal is to increase total investment in research and development, led by the private sector, to 2.5% of the gross national product (GNP) (OECD/EU, 2017[335]). The strategy sets out Ireland's vision to be a Global Innovation Leader by 2020 through prioritising public and private investment in research, development and innovation (RDI), enhancing the impact of RDI for enterprise and addressing human capital challenges (Department of Business, Enterprise and Innovation, 2018[336]).

> **Progress or impact**: The third Innovation 2020 Progress Report, prepared by the Innovation 2020 Implementation Group, outlines the advances made on delivering the 140 strategic actions for 2017. Many of these actions will be delivered throughout the Innovation 2020 Strategy and beyond. Some 108 actions have been initiated or are ongoing, 18 actions have now been completed, 9 actions are experiencing delays, and just 3 actions are yet to be initiated (Department of Business, Enterprise and Innovation, 2018[336]).

- The National Access Plan (2015-19) aims to improve access to higher education and participation among students with disabilities, mature students, students from socio-economically disadvantaged backgrounds, students progressing from further education, part-time students and members of the Irish traveller community. The plan builds on the work of the 2008-13 Plan (Higher Education Authority, 2018[337]).

> **Progress or impact**: A recent review of access to higher education by the Department of Education and Skills found that overall access has improved from 22% to 26% for disadvantaged groups. The number of students with disabilities increased from 7% to 11% from 2012 to 2015. From 2017 to 2020, the government will make an additional investment of EUR 16.5 million for new initiatives in this area (Department of Education and Skills, 2017[338]).

- Ireland's Action Plan for Education (2016-19) aims to reduce the gap in system performance between Ireland and the top European performers, while also further developing literacy outcomes (Department of Education and Skills, 2017[339]). The plan sets new targets for improving student performance in basic skills. A 2016 consultation process gathered feedback to inform the development of a specific action plan for 2017. Consultation activity included an online call for submissions, input from other departments, regional fora, thematic workshops and other meetings with key stakeholders (Department of Education and Skills, 2017[340]).

The Action Plan for Education (2017) set goals and targets covering all areas of the education system with regular progress reports planned. It contained over 400 actions and sub-actions to be achieved by the end of the year. This process is indicative of the strategic reform programme under way in education that emphasises the importance of critical business functions to ensure continuity and quality service for all stakeholders. A new document, the Statement of Strategy 2019-21 (*Cumasú – Empowering through Learning)* sets five new strategic goals: 1) shape a responsive system that meets the needs of all learners; 2) advance the progress of disadvantaged learners and those with special education needs; 3) build skills among education and training providers; 4) intensify relationships between education and the wider community; and 5) deliver strategic direction in partnership with key stakeholders (Department of Education and Skills, 2019[341]).

Progress or impact: For the 2016 plan, the action completion rate was 82%. This included a major increase in the number of inspections in early years settings; publication of the Education (Admission to Schools) Bill 2016; commencement of the Fitness to Teach provisions of the Teaching Council Act; launch of the new Junior Cycle Business Studies and Science subject specifications; publication of the Policy on Gaeltacht Education 2017-22; allocation of funding for an additional 430 resource teachers; funding and launch of the Programme for Access to Higher Education (PATH); and the launch of the International Education Strategy (Department of Education and Skills, 2017[340]). The actions completion rate for 2017 was 86% (Department of Education and Skills, 2018[342]). However, according to further evidence, concerns have been raised about a lack of implementation mechanisms (European Union, 2017[343]).

Funding

- Ireland's Higher Education Authority (HEA) has been introducing performance budgeting since 2013. The first System Performance Framework (2014), which was part of the National Strategy for Higher Education, introduced a strategic dialogue process between HEIs and the HEA by which a performance compact is produced. This ensures that HEIs engage with national strategic objectives while maintaining institutional autonomy. Accountability has also been strengthened: the HEA has a monitoring role across the system, HEIs must produce annual compliance statements and progress is ongoing through strategic dialogue. (Higher Education Authority, 2017[344]). The 2017 OECD and EU Country Review of Entrepreneurship in Higher Education fed into the development of a new System Performance Framework for higher education (2017-21) with a stronger focus on research, development and innovation.

Progress or impact: By 2017, the Higher Education Authority finished the compact-agreement phase and two reviews of progress cycles. Though the HEA had expected resistance, a great number of HEIs had set very ambitious goals by 2017, despite a decline in funding and growing student numbers. However, it was found that some HEIs did not have clear strategic planning processes to meet the new expectations. Furthermore, many HEIs under-performed in priority setting. A major challenge lay in having specific

priorities set at the system level, while at the same time ensuring that multiple sets of responses could be taken to implement these priorities. Despite these ongoing challenges, only three institutions did not fulfil the goals and so had their funding held back. All three then secured funding after revising and resubmitting the compact (Higher Education Authority, 2017[344]).

- In 2011, Ireland introduced reforms that aimed to ensure more adequate funding of higher education. This included a gradual increase in students' tuition fees between 2011 and 2015. A means-tested grant and a new scholarship scheme were also introduced to temper the effect of tuition fee increases on disadvantaged students. Following cuts to tertiary-level funding during the economic downturn, Ireland has aimed to re-invest in higher education, for example, through a close to 25% increase in current spending (EUR 350 million) since 2015. Under the Human Capital Initiative (2019), the Government of Ireland has committed to a five-year programme of increased investment amounting to EUR 300 million, starting in 2020.

Progress or impact: In 2011/12, a new student contribution of EUR 2 000 replaced the previous Student Services Charge of EUR 1 500 at tertiary level. This increased by EUR 250 each subsequent year, until 2015 when it reached the current level (EUR 3 000). As of 2013, students were eligible for a full grant to meet this cost depending on the level of their income (OECD, 2013[345]).

- Through Ireland's Third-Level Bursary Scheme (2012) the highest-performing students in the School Leaving Certificate who come from DEIS schools are entitled to student grants towards the cost of maintenance and tuition fees (if applicable). Bursary payments occur annually throughout the undergraduate course and for up to four years of postgraduate study (Department of Education and Skills, 2018[346]). The total annual financial allocation for each student is EUR 2 000.

Progress or impact: Some 101 students obtained bursaries under the Third-Level Bursary Scheme in 2016/17 (European Commission, 2016[347]). As of 2018, a subsidiary scheme, the Ernest Walton STEM Bursary provides at least eight scholarships at the regional level to students from DEIS schools who pursue tertiary science, technology, engineering and mathematics (STEM) courses.

- In Ireland, an Expert Group on Future Funding (2014) investigated options for a more sustainable funding model for higher education. In 2016, the group published recommendations, which are currently being considered by a Committee of Parliament. Also in 2016, the government published an options paper on a strategy for funding higher education. The report is now before the Parliament's Committee on Education and Skills. Additionally, an independent expert panel reviewed the funding allocation model to ensure that the model is fit for purpose, supports institutional sustainability and aligns with government priorities, while respecting

institutional autonomy. A consultation is also underway with employers on an Exchequer–Employer Investment Mechanism and proposals considered as part of the 2018 budget.

Progress or impact: In order to build political consensus regarding a future approach to funding higher education, the Expert Group on Future Funding's report was sent to the *Oireachtas* Committee on Education and Skills for consideration. The committee requested that the Department of Education and Skills undertake an economic examination of the three policy options proposed by the expert group to assist the committee in forming its decision. At the end of 2018, DES applied to the European Commission Structural Reform Support Programme (SRSP) to carry out the economic analysis. Future funding for higher education is on the agenda, and a new higher education reform was tabled at the start of 2018. The DES published both the Review of the Allocation Model for Funding Higher Education Institutions and the Higher Education System Performance Framework for 2018-20, paving the way for a new agenda and more efficient and transparent use of funding (European Commission, 2018[348]). As part of the modernisation and reform of higher education funding, a new Innovation and Transformation Fund (2018) rewards institutions that collaborate and innovate using flexible approaches to learning and attracting new students. Following the first round, 22 projects across 23 institutions have been awarded a total of EUR 23 million to carry out their proposals, which vary from digital learning initiatives to supporting student mental health and better preparing students for the transition to employment (Department of Education and Skills, 2019[349]).

- In Ireland, the School Building Programme (2016-21) provides EUR 2.8 billion for 310 separate school-building projects that will cater to over 60 000 additional students in the system. This is the follow-up to the Capital Investment Programme (2012-17), which provided 275 new major building projects. The government offered financial aid to over a third of all schools that rent prefabricated buildings (almost 200 schools) to build permanent accommodations.

Progress or impact: In response to rapidly changing demographics and skills availability, the Department of Education and Skills has committed to significant increases in capital spending. The focus is on large-scale projects and additional accommodations, but funding is also being sought for an expanded summer works scheme and an annual minor works grant. To deliver an integrated system of education and training and address the skills deficit, DES has proposed establishing a dedicated capital budget for further education. Regarding the research sector, DES identified priorities that recognise the importance of supporting the full continuum of research, from frontier research to the creation and development of research-informed products, processes and services. An infrastructure capacity and demand analysis on education found that investment in education infrastructure was at EUR 700 million in 2017, which is 71% above 2012 investments. The

Capital Plan (2016-21) allocates EUR 3.8 billion to the education sector (IGEES, 2017[350]).

Additional education policies of potential interest to other countries

Governance

- In 2018, Ireland launched First 5, the Whole-of-Government Strategy for Babies, Young Children and their Families, the first ever cross-departmental strategy for the youngest members of society. The strategy adopts a genuinely holistic approach, attending to all domains of young children's worlds and the connections between them, including families, communities, health services, and early learning and care (ELC), among others (Government of Ireland, 2019[351]). These reforms are to be underpinned by a governance structure at national and local level and at least a doubling in public investment in ELC by 2028.
- In Ireland, a new area of learning dedicated to well-being launched in 2017 across the full lower secondary cycle. The programme initially has a total allocated teaching time of 300 hours with the aim to extend to 400 hours by 2020 (NCCA, 2015[352]).

Funding

- The Childcare Support Act (2018) provides the legislative framework for the launch of the new Affordable Childcare Scheme (2019). This scheme aims to integrate all existing programmes offering financial support for childcare into one streamlined service, in order to increase affordability and accessibility to childcare. The scheme also increased the maximum net income threshold to EUR 60 000 per annum, which is expected to result in an extra 7 500 children benefitting from support. A further 40 000 children will see an increase in the subsidies they receive. Under the 2019 budget, childcare providers were set to benefit from an increase by nearly 8% in their Programme Support Payment in recognition of the administrative support they provide in delivering this scheme (Department of Children and Youth Affairs, 2018[353]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Japan

Context

Schools in Japan have more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.83 (the OECD average index value was 0.00). Student truancy in 2015 was the lowest in the OECD: 1.8% of 15-year-olds in Japan reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7% (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was the lowest in the OECD at -1.26 (the OECD average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in Japan aged 50 or over in 2016 was 30.7%, compared to the OECD average of 35.4%. In 2017, lower secondary teachers in Japan had fewer net teaching hours for general programmes than their peers in other OECD countries. Teachers annually taught 742 hours at primary level and 610 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Japan have high levels of autonomy over curriculum: 92.7% of principals reported that their school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

According to the OECD Teaching and Learning International Survey (TALIS) 2018, 54.9% of teachers in Japan said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, 34.4% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Japan are more likely to conduct self-evaluations of their schools than on average across the OECD (98.2% of students were in schools whose principal reported this, compared to an average of 93.2%). The likelihood of undergoing external evaluations of their school is similar to the OECD average (75.6% of students were in schools whose principal reported this, compared to an average of 74.6%). Teacher appraisal levels, as reported in in the earlier cycle of TALIS 2013, were higher in Japan than on average: 93.2% of teachers had reported then having received an appraisal in the previous 12 months, compared to the TALIS average of 66.1% (OECD, 2014[4])

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were lower than the OECD average: 0% of decisions in Japan were taken at the school level compared to the OECD average of 29%.

Annual expenditure per student at primary level in 2015 was USD 9 105, which was above the OECD average of USD 8 631. At secondary level, Japan spent USD 11 147 per student compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Japan spent USD 19 289 per student, compared to USD 15 656.

In 2015, expenditure on primary to tertiary education in Japan as a proportion of gross domestic product (GDP) was 4.1%, which was below the OECD average of 5%. The proportion of expenditure on education (from primary to tertiary) coming from private

sources (including household expenditure, expenditure from other private entities and international sources) in 2015, was higher than the OECD average at 28.1% of overall spending, compared to 16.1%. Between 2005 and 2015, the relative proportion of public expenditure on primary to tertiary education in Japan decreased by 1.6 percentage points compared to an average fall across the OECD of 1.3 percentage points. During the same period, private expenditure increased by 4.3 percentage points while the average change across OECD countries was an increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Japan's key education policy priorities have evolved in the following ways over the last decade (Table 8.16).

Table 8.16. Evolution of key education policy priorities, Japan (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD had identified a need to balance teaching time and the different demands facing teachers as part of their working hours in schools. There was also a need identified to strengthen staff competencies, for example, by setting minimum standards for teacher education or reviewing initial education qualifications, skills and competencies for early childhood education and care (ECEC) staff. A more recently identified need is to improve collaboration and information exchange between schools and social services regarding at-risk youth. [2011; 2012; 2017; 2018]	Japan reported the ongoing priority of securing talented, motivated and resourceful teachers, capable of improving education quality and equipping students with the skills needed to face the globalised labour market. Another ongoing priority is to provide support and feedback on the process of increasing school autonomy and to improve communication about school activities with parents and local communities. [2013; 2016-17]
Evaluation and assessment	The OECD found that coherence and co-ordination of monitoring staff performance in ECEC posed challenges, as it was often unknown how to monitor staff performance or what exactly should or could be monitored. [2012]	Japan reported the ongoing priority of developing school management and evaluation of the education system. [2013]
Governance	According to OECD evidence, there was a need to develop human resources through tertiary education due to demographic pressures, as well as increase quality to strengthen the global competitiveness of Japan's higher education institutions. Further challenges include continued promotion of internationalisation in the tertiary education system by accepting more students from overseas. Another need is to increase the role of the education system in innovation and promote entrepreneurship. [2011; 2017]	Japan had previously reported the priority to engage local communities in children's education. The government has also been working on ensuring equal opportunities and standards of compulsory education for all, regardless of the financial situation of local governments. [2013]
Funding	A challenge identified earlier for Japan was related to *juku* [2011]. Compared to other OECD countries, Japanese public institutions charge high fees, while students have access to a lower level of public financial support, and also have comparatively lower internal rates of return on tertiary education. At the same time, first-time tertiary entry rates are well above the OECD average. [2011; 2017; 2018]	Japan reported securing funds to achieve the targets and carry out the measures introduced by the Basic Plan for the Promotion of Education (2013) as an ongoing policy priority. More recently, Japan reported that with low public investment in higher education compared to the OECD average, there is a need to increase transparency on the necessary costs and benefits of higher education, in order to increase social understanding of the importance of investing in this education level. [2013; 2016-17; 2019]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Following the earthquake in Japan in 2011, the set-up of the OECD Tohoku School Project aimed to support local innovations to foster resilience, creativity and 21st-century skills for 100 students from the affected region. Fukushima University manages the project with support from the OECD. According to national information provided to the OECD, the project aimed to transform education using project-based learning on real-life issues, with bottom-up initiatives, leadership and ownership. The project aimed to scale up and explore how local innovations can be developed globally to find solutions for challenges in the world of 2030.

> **Progress or impact:** In 2014, the OECD Tohoku School Project held an event in Paris to show the reconstruction and attractiveness of the Tohoku region. The event entitled, "The Rebirth of Tohoku-WA in Paris", was planned by junior and senior high school students in the three disaster-hit prefectures of Iwate, Fukushima and Miyagi. Approximately 150 000 people visited the two-day event. The event concluded at the OECD headquarters, where the students presented their recommendations on "Schooling for 2030", and held discussions with representatives from various countries.
>
> As a follow-up to the OECD Tohoku School Project, the Innovative Schools Network (ISN) 2030 (2015) was launched with the co-operation of students from around the world and the Ministry of Education, Culture, Sports, Science and Technology (MEXT). It emphasises project-based learning and aims to solve regional problems toward 2030. The ISN is managed by the OECD-Japan ISN (National information provided to the OECD).

- In Japan, the National Centre for Teachers' Development (NCTD) (2015) works on developing new teacher training programmes to help strengthen problem solving and collaborative work among teachers. NCTD offers in-service leadership training at different levels, with emphasis on school administration training for specific positions and experiences (such as principal, vice principal and mid-level teachers) and training for future trainers on school organisational management (NCTD, 2015[356]). In addition, the NCTD in co-operation with the Ministry of Education, Culture, Sports, Science and Technology (MEXT) offers training programmes for selected school leaders, who are expected to play a central role in their region, nominated by the Boards of Education of local governments (NCTD, 2015[356]; Yamamoto, Enomoto and Yamaguchi, 2016[357]).

> **Progress or impact:** A partial revision of the Act on NCTD took place in 2017. The revisions took effect in two further steps in 2018 and 2019. The NCTD was renamed to the National Institute for School Teachers and Staff Development (OECD, 2018[358]). It is now in charge of additional tasks, of which some are partial transfers from the Ministry of Education, Culture,

Sports, Science and Technology. Tasks include conducting surveys and research on teacher quality (on qualities/capabilities necessary for teachers and other school personnel) and disseminating the results of the research; providing advice when appointing authorities are setting performance indicators and certifying training for renewal of teaching licenses; and conducting teacher certification exams and certification courses for education personnel certification (OECD, 2018[358]).

Systems

Selected education policy responses

Governance

- Japan established Compulsory Education Schools (2016) as a new type of school. These schools integrate elementary and lower secondary education with the aim of achieving coherence of education providers, education activities and school management. For the implementation process, the Ministry of Education, Culture, Sports, Science and Technology has worked to disseminate information and create curricula that can be of reference in implementing integrated elementary and lower secondary school education, so as to facilitate transitions between each phase of education.

Progress or impact: Forty-eight compulsory education schools were set up as of 2017 (National information reported to the OECD). Respondents to a Ministry of Education, Culture, Sports, Science and Technology (MEXT) poll (aimed at all prefectures, municipalities, national universities and incorporated schools, garnering responses from all 1 749 municipalities), during that year provided positive initial comments. Results suggested that integration led to reduced anxiety among students advancing to lower secondary school; there was an increase in joint practical efforts between elementary and lower secondary schools; and there were stronger collaborative ties with local communities. According to the National Center on Education and the Economy (NCEE), Japan has had success in providing students from low-income families with equal educational opportunities due to the compulsory education system (NCEE, 2018[359]). The OECD reports that students' socio-economic backgrounds explained only 10% of the variation in student science performance between schools in Japan (OECD, 2016[360]).

- Japan's Third Basic Plan for the Promotion of Education (2018-22) includes the priorities of ensuring the universal mission of education and providing better opportunities for all people through education. The current plan implements principles from the Second Basic Plan (2013-17), while also aiming to solve issues based on its progress and concerns in anticipation of social changes beyond 2030. It established targets and set measures to help students develop the necessary skills to achieve their potential as well as lead sustainable development of society; promote lifelong learning and activities for all learners; build a learning safety net

by which anyone can play an active role in supporting society; and build the foundation to carry out these education policies (OECD, 2018[358]).

Progress or impact: In 2017, prior to the launch of the Third Basic Plan in 2018, the Japanese Business Federation presented an outline of opinions concerning the evolution of the Basic Plan for the Promotion of Education since 2008 and the formulation of the Third Basic Plan, highlighting three main points for improvement. First, the government could reduce confusion concerning the link between the numerous achievement targets and achievement indicators by narrowing them down to key points that would be easier to understand. Second, the plan could propose evaluations as a benchmark for achievement indicators and implement annual updates on progress to achieve the target and required measures and systems for implementing them. Finally, the plan could strengthen the responsibility of the government and educational institutions in gathering best practices, which could serve as references when evaluating programmes that cannot be measured quantitatively.

The Japanese Business Federation also suggested ways the plan could improve investment in education: ensuring "in-depth learning through an active/interactive approach" and active student participation through research activities and group discussions; expanding English education; improving international mobility of Japanese and foreign students choosing to study abroad; expanding the use of information and communications technology (ICT) in classrooms across the country; recruiting and retaining teachers able to adapt to these new challenges (active learning, ICT, communication in English); reducing inequality due to students' socio-economic backgrounds; and increasing public expenditure on education (Keidanren (Japanese Business Federation), 2017[361]).

Funding

- MEXT is expanding interest-free scholarship loans. After fiscal year 2017, all students who fulfil the requirements are allowed to receive the scholarships. MEXT is also expanding the use of interest-free scholarships from interest scholarships. Also, to avoid delinquent payments, MEXT has enhanced the bailout plans for those who have financial difficulties following graduation, such as introducing an "income-based repayment system", which decides the amount of monthly repayments based on previous annual income in 2017.

Progress or impact: Following the implementation of the interest-free scholarship loan programme, public loans increased: from JPY 277 billion in 2012-13 to JPY 307 billion in 2014-15, covering almost all students who qualified, and again from JPY 307 billion to JPY 326 billion over 2014-16 (OECD, 2017[362]).

Japan's 2017 budget plan included earmarked allocations to provide loans to all qualifying applicants and the introduction of a new version of an income-contingent repayment system for scholarship loans (National information reported to the OECD). The budget included resources to

establish a grant scholarship scheme and to improve public access to information about scholarship programmes. Loans and repayment options are managed by the independent agency, Japan Student Services Organization (JASSO) (OECD, 2018[358]).

In addition to scholarship loans and grants, private and public universities offer reduced tuition fees for students from low-income families, through subsidies from the government (OECD, 2015[363]). Eligibility requirements for the tuition fee scholarship, under JASSO, is dependent on high school scholastic achievement (3.5 equivalent or higher) and "high motivation" and/or "outstanding ability". The scholarship amount for national universities is JPY 7.42 million. (for students still living at home) and JPY 8 million (for students living elsewhere during their studies). The scholarship amount for private universities has the same eligibility criteria but rises to JPY 8 million (for students still living at home) and JPY 8.47 million (for students living elsewhere during their studies) (National information reported to the OECD, 2019). Still, Japan ranks second among OECD countries for the share of private expenditure on tertiary education (65%, compared to the OECD average of 30%) (OECD, 2018[358]).

National information reported to the OECD reveals that due to budget constraints, some students have been unable to receive scholarship loans despite meeting the requirements. Some scholarship recipients also had difficulty repaying their loans due to financial reasons after graduation. As for the scholarship system, the government reports a general lack of sufficient understanding among citizens about available programmes.

- Under Japan's Second Basic Plan for the Promotion of Education (2013-17), access to free and universal early childhood education and care for all children (2014) became a priority to ensure that all children, regardless of their family's financial situation, are able to receive high-quality pre-school education. The policy's objectives included the elimination of tuition fees and incremental provision of free early childhood education to 5-year-olds as of 2014. Also, the plan aimed to provide free early childhood education at kindergarten for children whose parents are welfare recipients, alleviate financial obligations for large families starting in 2014, and increase financial support for children whose parents qualify for municipal tax exemption starting in 2015 (OECD, 2015[363]).

Progress or impact: As of 2014-15, Japan eliminated childcare costs for families who receive social benefits (approximately JPY 6 600 per month) as well as those under an annual income limit (approximately JPY 6.8 million) for the tax breaks of half-price fees for a second-born child and free tuition for any children after the second one. In 2015-16, the cost of childcare for families exempt from their municipality' residence tax decreased from JPY 9 100 to 3 000. In 2016-17, families with a total annual income below JPY 3.6 million began paying half-price for childcare for the second child and received free childcare for three or more children. During the same year, tuition was no longer required for children with single parents

exempt from residence tax. In addition, single-parent families with income under JPY 3.6 million began paying half-price for their first child and received free childcare for all future children. Finally, in 2017, the government planned to eliminate tuition for second-born children and any additional children of families exempt from residence tax. Single-parent households with annual income below JPY 3.6 million would benefit from reduced monthly costs for the first child from JPY 7 550 to JPY 3 000. Similarly, the costs for the first child would be reduced from JPY 16 100 to JPY 14 000 for two-parent households with a similar income (OECD, 2018[358]).

Additional education policies of potential interest to other countries

Governance

- Japan made amendments to the Act on the Organisation and Operation of Local Educational Administration (2014) that regulates the boards of education in each local government. A revision of the law passed in 1956, aiming to increase the representation of local stakeholders' views in the design of local education policies. The amendments include that with the agreement of the local assembly, the local government head can designate a superintendent to lead the board of education, as well as is responsible for organising education meetings with the board of education members to discuss basic education policies to improve their local education system.

Funding

- Japan passed the Act on Free Tuition Fees at Public High Schools and High School Tuition Support Fund (2010) to ease family educational expenses and contribute to equal opportunity in upper secondary education. Low-income families still faced some degree of educational costs, including private upper secondary school fees. Therefore, the government decided to make further amendments to promote support for low-income families and correct the gap in educational costs between public and private schools. The 2014 revised system includes an increase of allowances to improve financial support to students from low-income families in private upper secondary schools. It also introduced new scholarship programmes for students from low-income families to alleviate some financial obligations other than tuition costs, such as school trips and textbooks. The rate of students who leave high school halfway due to financial problems has steadily decreased from 2.9% in 2009 to 1.1% in 2017 (National information reported to the OECD).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Kazakhstan

Context

Schools in Kazakhstan have more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.93 (the OECD average index value was 0.00). The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was also above the OECD average at 0.55 (the OECD average was 0.01) (OECD, 2016[1]).

National data collected in 2018 indicated that 90.5% of teachers teaching in general secondary education in Kazakhstan have a higher education degree. In 2018, the OECD's *Education Policy Outlook Country Profile for Kazakhstan* reported that the average student-teacher ratio across primary and secondary education is 10, although this varies significantly within the country (OECD, 2018[364]). This is below the OECD average of 15 at primary level and 13 at secondary level (OECD, 2018[2]).

According to national data from 2011, teachers with a higher-education qualification and 15 years of experience earned between 25% and 30% of the average salary of a worker in another sector with comparable academic credentials. Similar data from across a range of OECD countries indicates that on average teachers in OECD countries earn 91% of the average salary of a full-time, full-year worker with tertiary education. However, in 2016 Kazakhstan introduced a new model of civil servant remuneration that led to salary increases of 19.3% for secondary teachers and 17.2% for primary school teachers (OECD, 2018[364]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 67.3% of teachers in Kazakhstan said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, 63.4% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

Schools in Kazakhstan are currently undergoing reform processes for external evaluation. In 2017, 60.6% of the schools that underwent the accreditation process received a favourable decision (OECD, 2018[364]). Every five years, teachers in Kazakhstan are also required to undergo an accreditation process based on professional standards. This takes into account teachers' results in a national qualification test and a self-prepared teacher portfolio.

The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 76.8%, which was above the OECD average of 31.3% (OECD, 2016[1]).

In 2014, 70% of Kazakhstan's total expenditure on higher education came from private rather than public sources (OECD, 2018[364]). By way of comparison, across all OECD countries, 30% of funding came from private sources in the same year (OECD, 2018[2]).

Evolution of key education policy priorities

Kazakhstan's key education policy priorities have evolved in the following ways over the last decade (Table 8.17).

Table 8.17. Evolution of key education policy priorities, Kazakhstan (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified as a priority the need to strengthen the teaching profession by making it more attractive and raising qualification standards. [2014; 2015]	Kazakhstan reported efforts to improve clarity for the teaching profession on expectations of the profession. [2016-17]
Evaluation and assessment	The OECD also found that Kazakhstan could benefit from ensuring the quality and validity of its data, strengthening transparency, and ensuring that assessment results inform teaching and policy. [2017]	Challenges exist in ensuring the quality and validity of education data and using it more consistently to inform teaching. [2016-17]
Governance	According to OECD evidence, Kazakhstan needs to allocate more autonomy to schools and improve the dissemination of information about activities at the school and local levels. Limiting opportunities for misuse of resources and corruption should be an urgent priority. For higher education, there is a need to reinforce linkages between institutions and employers, as well as to adopt a whole-of-government approach to international higher education with a robust policy framework and a national strategy that aligns with goals for human capital development. There is a need to improve the transparency of governance in public and private higher education institutions. [2015; 2017]	There is a need to address the high degree of centralisation within a hierarchically organised system of government. [2016-17]
Funding	The OECD identified the need to invest in infrastructure and ensure that expenditure allocation is equitable. Public spending on education as a share of GDP is comparatively low. Most spending went to teachers' salaries and less than needed to infrastructure or investment. Expenditure allocation is also not equitable. Despite progress, the system remains highly centralised, which leaves little political, administrative and fiscal authority to lower levels. [2014; 2015; 2017]	Challenges include the efficiency and transparency of funding in education, including a comparatively low allocation of funding to education.

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Kazakhstan established several measures to improve teacher quality. Since 2011, teachers can participate in professional development courses at the National Skills Upgrading Centre (ORLEU). The centre offers teachers the opportunity to improve their professional qualifications and thereby become eligible for promotion and financial compensation. Every five years, teachers are expected to take seminars and workshops, according to their rank. Teachers are also eligible for other professional development opportunities. The Ministry of Education and Science (MoES) finances these mandatory professional development activities. Principals are in charge of administering the activities of the teachers in their schools.

Teachers can receive financial compensation if they have: 1) completed a three-level qualification course; 2) received a positive teacher appraisal that is expected to lead to a higher qualification degree; 3) obtained English-language certificates above B1 level (for teachers in physics, chemistry, biology and information technology). According to national information reported to the OECD, in response to OECD recommendations on teachers (OECD, 2014[366]; OECD/The World Bank, 2015[367]; OECD, 2017[368]), Kazakhstan introduced the Atameken professional standards for teachers (2017), including a revision of the qualification requirements. This also led to the introduction of an additional teacher category, now listing five in total. At present, there are five categories of teachers (previously four): teacher, teacher-moderator, teacher-expert, teacher-researcher and teacher-master). Teachers who want to upgrade their category must pass the national qualification test and undergo a stocktaking process. Teachers can apply up to two times per year to upgrade their category. Category upgrades are associated with some increases in salaries (OECD, 2017[368]).

Progress or impact: According to a 2017 survey conducted by the National Skills Upgrading Centre on the practical application of the courses attended in 2016, nearly half of participating teachers reported observing changes in their teaching methods, and 40% stated that students are more motivated to learn. Concerning professional standards for teachers, an OECD report stresses the importance for Kazakhstan to continuously monitor the implementation process to ensure that it supports the teaching workforce to improve its practice (Nazarbayev Intellectual Schools, 2018[369]; OECD, 2018[364]). According to national information reported to the OECD, in response to further OECD recommendations on improving monitoring and implementation processes to ensure that they support the teaching workforce and improve practices (OECD, 2014[366]), Kazakhstan introduced a new model of accreditation that intends to increase teacher status. Teachers who successfully pass the national qualification test may receive financial surcharges (Government of Kazakhstan, 2019[370]). The model pays a surcharge of 30-50% of the official salary for each increase in teacher categories. For example, a teacher-master receives a surcharge of 50% of the official salary; a teacher-researcher receives 40%; a teacher-expert receives 35%; and a teacher-moderator receives 30%.

- Kazakhstan has been moving towards a more competency-based pedagogical approach since 2016. Some private schools and the Nazarbayev Intellectual Schools (NIS) have started to teach their students high-order skills. Also, in 2017, Kazakhstan updated the State Compulsory Standard (SCS) of Primary Education and SCS for General and Secondary Education. It also established assessment criteria for student knowledge and curricula and programmes for primary and general secondary education. The new standards are no longer based on a fundamentally subject-based approach. They include social and emotional skills, such as critical thinking and creativity, and a focus on competencies rather than rote memorisation is being integrated into updated textbooks since 2016. As part of the reform, Kazakhstan intends to place greater emphasis on English as a foreign language and language of instruction in subjects related to science, technology and engineering from kindergarten to upper secondary education.

Progress or impact: With regard to the Nazarbayev Intellectual Schools, an OECD study pointed out that teaching methods that work for gifted pupils in NIS schools may not work as well for children with a disadvantaged background or in village schools (OECD, 2014[366]). Therefore, the OECD stressed the importance of designing curricula and programmes (including teacher training programmes) that serve the needs of all ability levels (OECD, 2014[366]).

In 2017, around 153 pilot schools began to instruct classes in physics, chemistry, biology and information technology in 10th and 11th grades in English (National information reported to the OECD). Since 2016/17, teachers in these fields receive English language courses as part of their professional development. Additionally, since 2017, teachers in these fields who have obtained a language certificate above B1 level receive a 200% compensation of their base salary. Another 357 schools are offering additional classes in English, such as extracurricular activities and vocabulary lessons. Since 2016, English is taught in pre-primary education, for children over five years old (National information reported to the OECD).

Additional education policies of potential interest to other countries

School improvement

- In Kazakhstan, a national pilot was initiated in 2012 to introduce resource centres to support small-class schools (also known as ungraded schools), by integrating all available resources and compensating for missing resources. It only targets students in grades 8, 9, 10 and 11 (12). The number of resource centres opening up has continuously increased (National information reported to the OECD). From 2011 to 2018, 177 resource centres (52 of them are boarding schools) were established for 589 ungraded schools. The plan is to extend to 200 resource centres. The regional distribution of research centres in 2016 was: 28 in the Karaganda region; 19 in Pavlodar oblast; 18 in Akmola oblast; 17 in Kostanay oblast; 17 in North Kazakhstan oblast; 14 in West Kazakhstan oblast; 12 in Aktobe oblast; 10 in Zhambyl oblast; 9 in Almaty oblast; 9 in South Kazakhstan oblast; and 8 in East Kazakhstan oblast (JSC Information Analytic-Center, 2017[371]).

Evaluation and assessment

- In Kazakhstan, the Unified National Testing (Единое национальное тестирование, UNT) was divided into two separate tests in 2017: 1) a final exam for end-of-school certification, which includes five subjects, of which four are compulsory, and one is elective; 2) a test for university admission and state grant distribution, which includes five subjects, two of which are elective.

Systems

Selected education policy responses

Governance

- In Kazakhstan, at the school level, the creation of boards of trustees (2007) opens up avenues for improved transparency and reporting procedures at the school level. Comprised of parents, community representatives and other local leaders, these bodies have important formal functions, including participating in the design of school development strategies, appointing key personnel and overseeing the financial performance of schools.

Progress or impact: According to OECD evidence from 2015, only about half of the schools in Kazakhstan had an established board of trustees. Further, in most, their responsibilities were not yet fully realised, and their role was unclear, with activities at that time consisting of assisting in the organisation of social and cultural events, similar to parent committees (OECD/The World Bank, 2015[367]). In 2017, guidelines were established concerning the organisation of the work of the boards of trustees. These guidelines aimed to increase the scope of decisions taken by the boards, especially regarding strategic, financial and personnel decisions, and to clarify their assigned roles. To date, 6 910 schools (or 98%) have established boards of trustees (NEBD, n.d.[372]).

- In Kazakhstan, governing boards (also known as boards of trustees, supervisory boards or boards of directors) (2007) aim to support higher education institutions. Initially, these bodies had no formal governance authority but represented a first step towards building a non-governmental body to advise higher education institutions (HEIs). Additional guidelines established in 2012, 2015 and 2016 granted boards of trustees responsibility over the allocation of sponsorships, charitable assistance, and funds received from non-government sources, including the allocation of any net income the state permits an institution to retain, as well as more authority over the appointment of university rectors (during 2016-19, a total of 22 rectors of state universities were elected by boards of trustees on the basis of competitive selection), according to national information reported to the OECD. Boards of trustees may make proposals to the ministry on the participation of the state-owned institutions in other legal entities and on "other substantive matters". According to Ministry of Education and Science of the Republic of Kazakhstan (MESRK) guidelines, boards are to be composed of education institution stakeholders, employers and social partners, representatives of public organisations and foundations and sponsors.

Progress or impact: In 2018, over half of the universities in Kazakhstan (70 of 131) had established governing boards, and 28 state-owned universities had boards of trustees, according to information reported to the OECD. Further national information puts forward that the boards induced the following changes: 24 authorities were transferred from the Ministry of Education and Science to universities, and mechanisms for rector selection were introduced (National information reported to the OECD).

Additional education policies of potential interest to other countries

Governance

- In 2018, the law on increasing HEIs' academic and organisational autonomy came into force in Kazakhstan. The law considers providing academic, organisational, and financial autonomy to higher education institutions. According to national information reported to the OECD, academic autonomy (defined as the higher education institution's authority to independently determine the content of its study programmes) has extended to up to 80% at the undergraduate level, 85% at the master's level and 95% at the doctoral level. The reform allows universities to create endowment funds, open international campuses and create startup companies that work in HEIs. By early 2019, 28 state universities had established governing boards that introduced a mechanism for the selection of rectors, according to national information reported to the OECD.
- The Committee of Control in the Field of Education and Science (2011) and the regional offices (in the oblasts, or regions, Almaty and Astana) were created to introduce an external school evaluation system in Kazakhstan. The committee has since become instrumental in identifying mismanagement in the system and promoting compliance with operational norms. Kazakhstan established advisory councils in 2012 at different levels (national, sectoral and regional), where employers were meant to play a central role in the development and establishment of good practices in vocational education and training (OECD, 2018[364]). The advisory councils were replaced by the General Assembly of WorldSkills Kazakhstan in 2018 (National information reported to the OECD). Placed under the authority of the Minister of Education and Science, it includes strategic, technical, industrial and organisational committees. The Assembly is responsible for developing professional standards, assessing specialists' qualifications, devising economic strategies and preparing for the WorldSkills competition.

Funding

- In Kazakhstan, the new funding model (2018, envisaged for full implementation by 2020) aims to reduce staff costs, provide funds for school development and enhance transparency in the distribution of funds. It combines a per-student formula with incremental costs through two main components related to education processes (salary costs, instructional materials and performance bonuses for staff) and education environments (utilities, maintenance costs, student meals, transportation and other expenses). Under this new funding scheme, the bulk of expenditures (funds for education processes) will be determined at the central level and transferred from the ministry to schools, via the respective *oblast* and *rayon*, which implies a partial recentralisation of school finances. As of mid-2019, the model was being piloted in 73 schools across Kazakhstan with anticipated full implementation in an additional 85 public and private schools by 2020. Once introduced, the new model will be applied to all schools, except small-class schools and specialised schools. While the new model represents a positive step towards improving the efficiency, transparency and equity of the funding system, challenges identified include that it will limit flexibility to adjust allocations to the diversity of conditions in which schools operate. Also, the model does not include a mechanism to address the differences between schools' theoretical and actual needs. To support the

implementation of the new funding model in schools, Kazakhstan has introduced other changes, such as the creation of boards of trustees (as mentioned above).

- Since 2006, the annual National Report on the State and Development of the Education System of the Republic of Kazakhstan provides information on the state and development of the whole education system from pre-school education up to higher and postgraduate education (IAC, 2019[373]). According to further national information, the findings of the reports are used to develop strategic education goals, address emerging or persisting challenges and to determine the priorities for further development in each level of education (from primary to tertiary).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Korea

Context

Schools in Korea have very positive disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.63 (the average index value was 0.00). Student truancy in 2015 was among the lowest in the OECD: 1.9% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Korea were more likely to report that their science teachers adapt their instructions less frequently than the OECD average, with an index of adaptive instruction of -0.05 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was lower than the OECD average at -0.2 (the average index value was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 28%, which was below the OECD average of 35.4%. In 2017, teachers in Korea had fewer net teaching hours for general programmes than the OECD average. Teachers annually taught 671 hours at primary level and 533 hours at lower secondary level, compared to averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Korea have one of the highest levels of autonomy over curriculum: 95.2% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

According to the OECD Teaching and Learning International Survey (TALIS) 2018, 67% of teachers in Korea said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, 67% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Korea are more likely than average to conduct self-evaluations of their schools (99.5% of students were in schools whose principal reported this, compared to the OECD average of 93.2%). They are also more likely than average to undergo external evaluations of their schools (86.3% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels, as reported in in the earlier cycle of TALIS 2013, were the highest among TALIS 2013 participants: 96.8% of all teachers had reported then having received an appraisal in the previous 12 months, compared to an average of 66.1% (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 28%, which was less than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were slightly lower than the OECD average: 25% of decisions in Korea were taken at the school level, compared to the OECD average of 29%.

Annual expenditure per student at primary level in 2015 was USD 11 047 in Korea, which was higher than the OECD average of USD 8 631. At secondary level, Korea spent

USD 12 202 per student compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Korea spent USD 10 109 per student compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in Korea as a proportion of gross domestic product (GDP) was 5.8%, which was higher than the OECD average of 5%. The proportion of expenditure on education (from primary to tertiary) coming from private sources (including household expenditure, expenditure from other private entities and international sources) in 2015 was higher than the OECD average at 28.9% of overall spending, compared to 16.1% (OECD, 2018[2]).

Evolution of key education policy priorities

Korea's key education policy priorities have evolved in the following ways over the last decade (Table 8.18).

Table 8.18. Evolution of key education policy priorities, Korea (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD found that Korea needs to better define its goals and content for early childhood education and care (ECEC). [2012]	An ongoing priority identified by Korea is ensuring less stressful learning environments for students, which cater to the individual students' needs and motivations. Korea also identified an ongoing need to ensure that teachers' and principals' knowledge and professional skills are up-to-date and help them meet emerging needs in today's knowledge society and digital age. [2013; 2016-17]
Evaluation and assessment	According to OECD evidence, the lack of a unified, integrated national monitoring system between childcare centres and kindergartens in the ECEC system often results in different quality standards and quality levels, and less unification. There is a need for a balanced and consistent monitoring system as well as assurance that monitoring results have a substantial effect on improving service quality and overall system performance. Monitoring results can be used to influence policy that can further strengthen quality and result in higher efficiency. [2016]	Korea reported that providing a coherent and well-aligned overall evaluation system is an ongoing challenge. [2013]
Governance	The OECD identified a need to better define goals and content for ECEC. Another challenge is the falling share of high school graduates advancing to tertiary education, which is predicted to fall below admission quotas for tertiary institutions by 2020. Korea has few world-class universities and produces few high-impact publications by OECD standards. While universities employ around three-quarters of PhD holders in Korea, they performed only 9.2% of the overall work on research and development (R&D) in 2014 in Korea, about half of the OECD average. A greater university role in R&D would enhance basic research: only about 20% of basic research takes place in universities compared to 50-75% in other countries. [2012; 2016]	N/A
Funding	According to OECD evidence, there is a high number of tertiary institutions, and those outside of Seoul struggle to fill their student quotas. Most institutions run operating deficits. [2016]	Korea had previously reported the need to better co-ordinate overall education spending and budget plans, now distributed at different government levels, to increase resource-use efficiency. Another ongoing priority is to ease financial

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
		burdens for students from disadvantaged backgrounds to ensure access to tertiary education. [2013]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

Evaluation and assessment

- Korea selected 42 schools for the introduction of the test-free semester programme in 2013 (National information reported to the OECD). The aim was to reduce students' stress from tests and help them engage in various activities, including researching careers and acquiring life values. In 2014/15, the programme opened up to any school that wanted to adopt the policy. Middle schools only have three national test subjects (Korean/literature, English, mathematics), and elementary schools no longer apply achievement tests. Local education offices aim to create simpler academic evaluations. Student assessments are based on preparation, choice of courses, curriculum organisation, participation and predictions of the outcomes of their courses.

Progress or impact: The programme covers an increasing number of middle schools from 25% in 2014 to 79% in 2015 (MoE and KEDI, 2017[374]). A 2014 survey found that student, parent and teacher satisfaction had increased. As of 2016, all middle schools had to adopt the programme with 100% coverage. The government also introduced the programme for lower secondary students in 2016 (Ministry of Education, 2018[375]). As of 2017, the programme extended to a test-free year for 7th graders. Also, pilot programmes started for 8th and 9th grade.

Additional education policies of potential interest to other countries

School improvement

- In Korea, the Master Teacher initiative (2011) intends to improve the quality of education by granting suitable roles to teachers with specialities and further enhance teacher capacity. Master teachers mainly serve as teaching consultants for new teachers. Teachers with 15 or more years of work experience can apply for the programme based on recommendations by schools. Selection and appointment are based on document screening, peer evaluation, in-depth capacity evaluation and training. Every four years, an evaluation of the selected teachers takes place with the possibility of reappointment. Master teachers teach a reduced number of hours of classes and can access research funds in addition to their salaries.

- The Ministry of Education in Korea introduced a Leave of Absence for Self-training System (2016) to boost teachers' morale, which gives teachers who have worked for more than ten years in primary and secondary schools a chance to take a once-off leave for no longer than a year to undergo training, self-improvement or to prepare for retirement. Also, Teacher Education Emotion (TEE) centres have been set up and run TEE centres at the level of metropolitan and provincial offices of education. Their objective is to comprehensively protect teachers' work performance by preventing infringement on their activities, or assisting and providing follow-up management for those who have been harmed in the school environment.

Evaluation and assessment

- Korea extended its evaluation and assessment framework (2010) to encompass the whole education system (student assessment and teacher appraisal, and evaluations of schools, principals, local education authorities, research institutes and educational policies). The School Information Disclosure System and statistical surveys of education provide data collection and management. Specific measures aim to link the systems to allow policy makers to better understand school developments rather than looking at the outcomes of educational administrative bodies. They also address linking data collection and management systems with the evaluation systems (National information reported to the OECD).

Systems

Selected education policy responses

Funding

- Since 2012, all higher education students in Korea can apply for funding from the National Scholarship System (2012) regardless of their financial conditions. The national scholarship project aims to reduce the financial burden of high tuition for low-income families. National data show that the government scholarship budget subsequently increased by 480% between 2011 and 2013 (OECD, 2017[376]). According to information reported to the OECD, although all students are eligible to apply for and receive funding, the system only awards full scholarships to students from low-income families. Students from middle or middle-high income families could expect to receive less than half of the amount of a full scholarship, according to data reported to the OECD. To further reduce the financial burden of higher education tuition fees, the government introduced the Income-linked Half Tuition (2012) policy in collaboration with universities.

Progress or impact: The first-year budget of KRW 1.75 trillion for the National Scholarship System (NSS) doubled to KRW 3.65 trillion, and the government has reportedly strengthened the support for university students from lower socio-economic backgrounds (MoE, 2016[377]). Results from the 2013 evaluation of university tuition support indicate that the NSS lacks a long-term plan that would allow the government to secure financial resources, organise the budget of other institutions related to the scholarship system and raise the predictability for scholarship recipients. The National

Assembly Budget Office (NABO) suggests that the government should determine the amount of aid students need before deciding on a budget that corresponds to this demand. Further challenges include the difficulty scholarship recipients from low-income families may have maintaining their scholarships while working to supplement their aid. Increased working hours may lead to poor grades, which might disqualify some students from scholarships. In some cases, the scholarship system pays the difference for reduction of tuition fees, but this decision depends on the universities. Consequently, scholarship amounts vary between schools and students, meaning students with similar, if not the same, economic conditions risk receiving different financial aid amounts (National Assembly Budget Office, 2013[378]).

Additional education policies of potential interest to other countries

Governance

- In 2015, Korea introduced the Revised National Curriculum with the aim to teach students 21st-century skills. These include self-management competency, knowledge-information processing skills, creative thinking skills, aesthetic-emotional competency, communication skills and civic competency (Ministry of Education, 2018[375]). Also, liberal arts and national science tracks are now integrated into one curriculum. Previously, these were delivered through two separate curricula. A further part of the curriculum is software (SW) education, which aims to equip students with the skills to guide the future creativity-based society (Ministry of Education, 2018[375]). According to national information provided to the OECD, Korea aims to perform assessments that are more focused on the learning process, including encouraging students to review their learning and using the outcomes of the assessments to improve teaching.
- Korea implemented a range of measures promoting school autonomy in 2008. As part of these measures, the Korean Education Development Institute (KEDI) reports that the Ministry of Education began transferring decision-making authority over administrative and budget decisions to regional Offices of Education. By 2017, the government counted 17 metropolitan and provincial Offices of Education and 176 district Offices of Education (KEDI, 2018[379]). These regional offices were established for the management and support of education policy implementation in local schools. Although some critics view the policy as an attempt to control schools rather than liberalise them and decentralise education, others view the policy as supportive of the development of curricula that meet the needs of local communities and/or schools, including offers of extracurricular activities (Chung, 2017[380]).
- A university assessment system (2014) in Korea aims to manage enrolment capacity in higher education in the face of demographic decline and ensure quality in the higher education system. Three assessments will take place between 2014 and 2022 (one every three years). The best performing universities will be allowed to maintain higher enrolment capacity. Low-performing universities will receive lower funding and will be expected to restructure their bachelors' programmes. They will receive guidance to support them in this restructuring process. However, if the outcomes of the consulting process show that the university still performs at

a marginal level, the university will need to change to a non-profit foundation or become a vocational education institution (Ministry of Education, 2018[375]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Latvia

Context

Schools in Latvia have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.17 (the OECD average index value was 0.00). Student truancy was higher in Latvia than the OECD average: 24.7% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to an average of 19.7%. However, students in Latvia were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.18 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) at 0.22, was higher than the OECD average of 0.01 (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was among the highest among OECD countries, at 50.7% compared to an average of 35.4%.

In 2017, teachers in Latvia had more net teaching hours for general programmes than the OECD average. Teachers annually taught 1 020 hours at both primary and lower secondary levels, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Latvia have slightly lower levels of autonomy over curriculum than the OECD average: 71.4% of principals reported that the school has primary autonomy over curriculum, compared to an average of 73.4% (OECD, 2016[1]).

Lower secondary teachers earned 97% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was above the OECD average of 91%. According to the OECD Teaching and Learning International Survey (TALIS) 2018, 65.4% of teachers in Latvia said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, 23.3% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, all school leaders in Latvia are expected to conduct self-evaluations of their schools (100% of students were in schools whose principal reported this, compared to the OECD average of 93.2%). They are also much more likely than average to undergo external evaluations of their schools (95.9% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools whose principal reported that standardised tests are used to make decisions on students' promotion or retention was 59%, which was higher than the OECD average of 31%, as reported in PISA 2015 (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher in Latvia than the OECD average: all of these decisions are taken at the school level, compared to an average of 29%.

Annual expenditure per student at primary level in Latvia was USD 6 672 in 2015, which was lower than the OECD average of USD 8 631. At secondary level, Latvia spent USD 6 930 per student compared to the OECD average of USD 10 010 while at tertiary

level (including spending on research and development) Latvia spent USD 10 137 per student compared to the OECD average of USD 15 656. The proportion of expenditure on education (from primary to tertiary) coming from private sources (including household expenditure, expenditure from other private entities and international sources) in 2015 was below average at 8.6% of overall spending, compared to the average of 16.1%. Between 2005 and 2015, the relative proportion of public expenditure on primary to tertiary education increased by 7.5 percentage points in Latvia, which was one of the largest increases among OECD countries, where the average change was a decline of 1.3 percentage points. During the same period, private expenditure in Latvia fell by 28.4 percentage points while across OECD countries the average change was an increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Latvia's key education policy priorities have evolved in the following ways over the last decade (Table 8.19).

Table 8.19. Evolution of key education policy priorities, Latvia (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	OECD evidence found that despite recent efforts to improve working conditions and quality, the human resource development of early childhood education and care (ECEC) staff remains a fragmented and under-developed area of policy shared between the central government and municipalities. Although less so than other levels of education, the ECEC workforce is ageing and together with a decline in the numbers of children, these conditions call for a more strategic approach to human resource development. Quality education needs to be ensured to attract the best candidates. Latvia has worked to improve the attractiveness of teaching and academic work, but more coherence is needed between the initiatives. [2016]	Latvia reported the need for further measures to develop and implement its competency-based general education content and provide students with the necessary knowledge for their further professional and personal development. Latvia had reported prioritising raising the attractiveness of the teaching profession and improving teachers' professional competencies as part of a comprehensive strategy to improve teacher quality. More recently, Latvia reported the challenge of low salaries in the teaching profession compared to other public sector professionals and the OECD average, as well as the fact that that many teachers do not consider their profession highly valued. [2013; 2016-17]
Evaluation and assessment	According to OECD evidence, Latvia has taken steps to establish and strengthen each of the key components that make up a comprehensive assessment and evaluation system, with partial success as the elements were still not equally well developed and lacked synergy. Further progress was needed to enhance the quality of the data collected. Some data suggest that establishing an external quality assurance system that meets international standards must be among the highest priorities. [2015; 2016]	In 2013, Latvia had reported prioritising the development of an education quality monitoring system. More recently, Latvia reported that while evaluation instruments had been put in place, the challenge of achieving a systemic approach remained. Latvia also stated that to promote evidence-based policy planning and implementation, it is necessary to acquire comprehensive data, using different instruments and promoting the comparability and sustainability of data. [2013; 2016-17]
Governance	The OECD identified that Latvia lacked national professional standards for ECEC staff. The OECD also highlighted the demands for curriculum reform and the development of teaching and leadership standards, as well as improvement in education outcomes. Latvia has embarked on several ambitious reforms of which the success will depend on the national-level capacity to lead and sustain change, and on the strategic leadership and management capacity at the institutional level to implement the desired changes. Institutional autonomy needs to be better matched with public accountability. There is also a need to engage	Latvia reported persisting challenges to reduce the fragmentation of general education institutions, although policy measures have been taken. Latvia has 119 municipalities with shared responsibility for providing ECEC, primary, secondary, extracurricular activities and non-formal education, serving a declining population. Municipalities vary significantly in size, socio-economic composition and capacity, and evidence suggests the need to rebalance the high level of autonomy of municipalities with greater public accountability. Challenges remain in

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	stakeholders in designing and implementing policy. [2015; 2016]	improving the effectiveness of higher education governance and reducing a highly fragmented higher education system. [2013; 2016-17]
Funding	Despite decentralised social services and reforming its administrative structure with the aim of ensuring high-quality provision of services, among others, some municipalities still lacked the capacity and resources to deliver on this aim. According to OECD evidence, the amount of public funding provided for research and development (R&D) is the lowest of any EU member state, and the lack of public funding is identified as a major factor inhibiting national scientific progress. Also, there is a need to continue efforts to realign system capacity with demographic decline, fiscal reality and labour market needs as the current approach is fragmented. [2015; 2016]	Latvia had previously reported the need to revise funding to meet challenges of remuneration, efficiency and demography. A new challenge identified was the drop of investment for education at all levels, due to the 2008 financial crisis, to 4.5% of gross domestic product (GDP) in 2013, below the OECD average of 5.2%. As funding levels had already been low, the considerable budget cuts following the crisis imposed challenges in terms of efficiency, co-ordination, policy implementation and optimisation of provision, although there has been an increase of funding in recent years. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In Latvia, the Education Development Guidelines (2014-20), which define the goals and sub-goals for Latvia's education system, include planned actions to enhance teachers' professional competencies in order to raise the quality of learning processes. Specific measures include: 1) developing teachers' professional competence, particularly in teaching the new competency-based general education content and inclusive education; 2) improving the professional skills of vocational education teachers and apprenticeship leaders with a particular emphasis on co-operation with employers; 3) developing competence among administrative, pedagogical and academic staff in vocational and higher education to improve the organisation of learning processes and use of information and communication technology (ICT) as well as other areas; and 4) promoting international co-operation between teachers (MoES, 2013[383]).

Progress or impact: The government began by developing a competency-based curriculum for initial teacher education (ITE) programmes and approving the conceptual framework for a new model of competency-based teacher education (European Union, 2018[384]). It also plans to rationalise ITE provision to make it less fragmented. As part of a project supported by the European Social Fund (ESF), Latvia is developing new ITE programmes in six higher education institutions, and certain elements of some older ITE programmes will be discontinued. The project plans to have a total of 23 new ITE programmes in place by 2023 (European Union, 2018[384]).

Also with the support of the ESF, the National Centre for Education has launched several professional development programmes to prepare teachers for the implementation of the new competency-based curriculum. The

programmes target different audiences based on their roles in relation to the curriculum. Some 1 650 school leaders, teachers, general education and vocational education and training (VET) leadership teams had participated in the programmes by the end of 2018.

Latvia has also allocated extra funding to allow an additional 2 450 teachers to be trained, including 50 teachers who will be trained as future trainers. Free e-learning materials are also available; by the end of 2018, 444 pre-school educators had accessed them. Also, the Ministry of Education and Science (IZM) has allocated additional funding to train regional consultants and professional development experts to support the implementation of competency frameworks (National information reported to the OECD).

Evaluation and assessment

- In 2011-15, the State Education Development Agency (SEDA) implemented the ESF project, "Supporting education studies". The project sought to ensure Latvia's participation in three international education research initiatives: the OECD's PISA tests (2012 and basic data collection in 2015), the OECD's TALIS survey (2013), and the ASEM Lifelong Learning Hub studies. SEDA co-ordinated the implementation of the project with the University of Latvia (LU) as the main project partner (SEDA, 2015[385]). The project was fully funded by the ESF with a budget of EUR 1.3 million (SEDA, 2018[386]).

Progress or impact: By the end of the project, Latvia had participated in each international study as planned. According to national information reported to the OECD, the results fed into policy planning and analysis, as well as helped to assess education quality in Latvia and compare it to other countries. In 2016, to promote sustainability of these practices, the Ministry of Education and Science (IZM) began a follow-up project, "Participation in international education studies" (Projekts "Dalība starptautiskos izglītības pētījumos", 2016-23). Again supported by the ESF, this project consolidated processes launched in the previous cycle and expanded the range of studies to include PISA, TALIS, the Progress in International Reading Literacy Study (PIRLS), the Trends in International Mathematics and Science Study (TIMSS), the Survey on the Careers of Doctorate Holders (SCDH), the Indicators of Education Systems (INES) programme, the Survey of Adult Skills (PIAAC) and a study on the governance of higher education institutions in co-operation with the World Bank. The total funding for the project is EUR 6.25 million: EUR 5 312 500 from the ESF and EUR 937 500 from the state budget (MoES, 2016[387]). The IZM co-ordinates the implementation of this project with the University of Latvia (LU) and the Central Statistical Bureau as co-operation partners. This helps ensure continuity across the two projects as LU maintains its key role. The World Bank is a contractor for research on the governance of higher education. Participation in these studies will provide Latvia with internationally comparable data, which is necessary for evidence-based policy planning and implementation and can contribute to the development of an education-quality monitoring system (MoES, 2016[387]).

- In 2017, Latvia started working on establishing national-level education studies to promote the development of an education-quality monitoring system. The ESF provides support. The aim is to establish a system based on the collection and analysis of a range of indicators including statistical information, comparative education research, system-level student outcomes, institutional performance, programme accreditation and staff appraisal. This will support those responsible for the development and implementation of educational policy. The project will be implemented from 2018-22. The total funding for the project is EUR 4.8 million, of which around EUR 4 million comes from ESF and EUR 722 154 from the state budget (Cabinet of Ministers, 2017[388]). Planned measures include: 1) developing a description of the monitoring system and designing and validating prototypes of education-quality monitoring tools; 2) establishing a national research programme in education and running in-depth analyses of the different challenges regarding quality of education and their causation; and 3) conducting strategic communication and training activities to educate, inform and strengthen the analytical capacity of education experts in the ministry as well as other stakeholders (National information reported to the OECD).

Progress or impact: As of mid-2019, the Ministry of Education and Science (IZM) had made progress on several measures, including the approval of an implementation plan that also sets out the themes selected and approved for specific surveys and studies. The IZM has also conducted consultations with a wide range of stakeholders to formulate a common agreement on a conceptual framework of quality education in Latvia. International experts have led training seminars for stakeholders, and Latvia's 2018 conference of education leaders included discussions on the monitoring of quality education (National information reported to the OECD).

Additional education policies of potential interest to other countries

Evaluation and assessment

- From 2017, the list of indicators for school performance in Latvia has expanded to include eight additional performance indexes (further education pathways, employment status of graduates, number of students taking interest-related [extracurricular] education or vocationally oriented education programmes) (National information reported to the OECD).
- Latvia's Cabinet of Ministers approved Regulation No. 831 (2016) on the procedure for evaluating educational institutions, the accreditation of educational programmes and the evaluation of leadership. The regulation harmonises the accreditation processes for general and vocational education. It also establishes a new evaluation framework consisting of 7 key areas with 17 criteria ranging from curriculum and teaching to resources and quality assurance. The State Education Quality Service (SEQS) undertakes the quality assessment of education institutions (except pre-schools, higher education institutions and colleges) and educational programmes and may refuse to accredit them if any of the criteria is judged "insufficient". The regulation also introduced a new methodology for evaluation in which education institutions are accredited for six years and programmes for either

two or six years (Cabinet of Ministers, 2016[389]). Following the regulation, the SEQS also carries out school leader appraisals using an updated methodology and evaluation framework. New criteria include the fulfilment of goals and objectives, relationships with staff, student safety, support for students with special educational needs and staff professional development. Under the new methodology, leaders are evaluated via the accreditation procedures for their institution every six years, and by the school founder (usually the municipality) every two years (Cabinet of Ministers, 2016[389]). This aims to ensure that leadership roles align with persisting and emerging goals, qualifications, and accreditation requirements. The SEQS began implementing the new framework in 2017.

Systems

Selected education policy responses

Governance

- Since 2009, Latvia has been carrying out a comprehensive programme of reforms that touches upon the overall operation and content of vocational education. It aims to improve the attractiveness and quality of VET pathways, increase relevance through greater engagement with social partners, modularise programmes and occupational standards and increase work-based learning.

> **Progress or impact:** During 2010-15, the number of VET schools under the Ministry of Education and Science's responsibility were rearranged from 60 to 24. Following procedures established in 2013, 17 of those had been granted the status of vocational education competence centre (VECC) by the end of 2016 (OECD, 2017[390]). This status is awarded to centres that surpass specific benchmarks related to the quality of provision and the development of partnerships (Cabinet of Ministers, 2013[391]). In terms of curriculum, Latvia managed to update 230 of 242 occupational standards by the end of 2018, despite a slow start. However, modularisation has been slower, and 172 of 242 modular programmes remained to be developed as of the end of 2018. Latvia now expects to finalise the reform by the end of 2021 instead of 2020 (European Union, 2019[392]). Changes related to embedding work-based learning (WBL) approaches have made positive progress. A WBL pilot programme launched in 2013/14 included six vocational schools covering 148 students and 29 companies, and in 2016, Latvia developed and adopted new regulations to implement WBL (OECD, 2017[390]). In the academic year 2017/18, some 1 000 students were enrolled in WBL programmes and over 4 000 students in work practice. A total of 18 professional education institutions now offer WBL for second- and third-level professional qualifications. Also, up to 230 vocational programmes covering 85 professional qualifications now include embedded WBL components (European Union, 2019[392]).

- Since 2009, Latvia has been reforming the general education institutions network, from ECEC through to tertiary education, in preparation for a "demographic shock". The IZM has sought to reorganise education networks and programmes at

all levels to align institutions to anticipated changes and create more efficiency (National information reported to the OECD). This reform has also granted municipalities the autonomy to implement locally administered consolidation plans for their communities. Latvia's Education Development Guidelines 2014-20 reinforce the goal of restructuring the general education institutions network as well as introducing measures regarding the minimum number of students per class and the optimisation of small schools (OECD, 2017[390]).

Progress or impact: Several municipalities have merged pre-school institutions with general education institutions as part of their education system's administrative consolidation (National information reported to the OECD). However, some municipalities have resisted closing or merging small secondary schools, preventing further efficiency gains (OECD, 2016[393]). Latvia has temporarily delayed efforts to consolidate schools based on the minimum number of students, although work on implementing this arrangement is still ongoing. In 2018, Latvia approved regulations that specify quality criteria to deliver services in general secondary education institutions (e.g. maximum and minimum number of students, or participation of the state in the financing of the remuneration of teachers). These will come into force in 2020. The Government's 2018 Progress Report on the implementation of the National Reform Programme led to the creation of a reimagined school map appropriate for current conditions. This serves not only as a model of an optimal school network development tool but also as a daily tool for decision makers in municipalities (MoES, 2019[394]). Latvia has also launched discussions among municipalities and other institutions to analyse further potential solutions for the development of an efficient and sustainable network (Government of Latvia, 2018[395]).

- In 2015, a regulation passed to transfer the function of accreditation and licensing in higher education to the Academic Information Centre (AIC) in Latvia. This measure aims to further strengthen the quality assurance of the higher education system (Cabinet of Ministers, 2015[396]). The AIC subsequently established the Quality Agency for Higher Education (*Augstākās izglītības kvalitātes aģentūra*, AIKA) to carry out these functions. One of the main goals of AIKA is to comply with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and become a member of the European Association for Quality Assurance in Higher Education (ENQA) before the comprehensive accreditation round in 2019 (AIKA, 2018[397]).

Progress or impact: In 2016, the Academic Information Centre (AIC) approved and implemented an ESF project to work on meeting the requirements for the European Association for Quality Assurance in Higher Education (ENQA). Simultaneously, it developed a revised concept of higher education quality monitoring. This fed into the definition of concrete goals and mechanisms for improvements to the monitoring system, with short- and medium-term indicators. Also in 2016, the AIC started a pilot accreditation process for 12 higher education institutions, organised informative seminars, set up a draft development strategy for the

accreditation agency and developed proposals for amendments to normative acts (National information reported to the OECD) (AIC, 2016[398]).

In 2018, the Quality Agency for Higher Education (AIKA) was granted full membership to the ENQA for five years. Also, as part of an external international review, the AIC asked the European Association for Quality Assurance in Higher Education (EQAR), the umbrella organisation of quality assurance organisations in the European higher education area, to conduct an institutional review of AIKA. The review assessed the degree to which AIKA complied with the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) and was to be completed by the end of 2018. The ENQA Board also provided support for the inclusion of AIC in EQAR, which was finalised in 2018 and marks the first time that a Latvian higher education agency has been included (Forst, 2019[399]).

- In 2016, Latvia's IZM and the World Bank signed an agreement to improve the governance of Latvia's higher education institutions (HEIs). The World Bank's experts agreed to develop models to strengthen HEIs' managerial and financial autonomy, financial stability, strategic specialisation and co-operation with industries. The organisation also provided input on policy planning and further investments targeting the development of internal governance among Latvia's HEIs and the development of their academic staff. The project was due for completion by April 2018 at a total cost of USD 370 000 financed with the support of the ESF (OECD, 2017[390]).

Progress or impact: The World Bank's collaboration with Latvian authorities spanned two advisory projects over four phases. The first advisory project, implemented during 2013-14, focused on the development of a performance-based funding model for the higher education system. The second project included two phases from 2016 to 2018: 1) improving funding mechanisms and governance within higher education institutions; and 2) improving academic careers (World Bank, 2017[400]). Following completion of Phase 2, the Ministry of Education and Science and the World Bank agreed a third phase focused on building capacity among stakeholders to foster the longevity of the changes. This included preparing and delivering peer-learning workshops on higher education internal funding and governance and academic careers (National information reported to the OECD). In 2017, the World Bank published a report on the internal funding and governance of Latvian higher education, showing some initial progress. All institutions had developed strategy documents and selected instruments for their implementation; some institutions had already begun to engage in streamlining internal governance structures and processes. The report identified a collaborative and "democratic culture" within institutions' internal governance structures but noted an imbalance between the responsibility of leaders and that of collegial bodies, which could pose threats to strategic development (World Bank, 2017[400]).

According to a recent progress report from the government, new governance measures for higher education are being put in place to reduce the fragmentation of study programmes. Also, new regulations aim to reinforce the use of ESF funds to improve alignment between study programme curricula and labour market needs and, in particular, to develop the competencies of management personnel and introduce e-solutions (Government of Latvia, 2018[395]). In 2018, based on the experts' recommendations received during the second advisory project, Latvia developed two further programmes with ESF: one to ensure better governance of HEIs and another to strengthen the academic personnel of HEIs in strategic specialisation areas. Both programmes, along with another ESF programme to reduce the fragmentation of study programmes and strengthen resource sharing, will operate from 2018-23 (National information reported to the OECD).

Funding

- During 2013-15, Latvia granted state financial support to private pre-school institutions and childcare providers under the condition that by the end of 2015, municipalities would find satisfactory solutions to the shortage of pre-school education provision. Although the number of ECEC institutions increased from 550 to 617 between 2003-14, Latvia continued to face shortages of ECEC places, largely due to rural to urban migration (OECD, 2017[390]).

Progress or impact: Municipalities had not solved the issue by the end of 2015, and the government continued to provide financial support until 2016. In 2016, at least 89% of three-year-olds in Latvia were enrolled in pre-primary education, compared to an OECD average of 76%, and an increase of 23 percentage points from 2005 (OECD, 2018[2]). In 2016, municipalities and the private sector collaborated to open several child development and play centres. At that time, local governments assumed responsibility for providing financial aid to parents with children between 18 months of age and the start of primary education who were not able to enrol in public childcare in municipal kindergartens due to lack of space (National information reported to the OECD). Since 2016, the assessment of the costs to municipalities for this measure has been calculated via a single method in order to improve transparency and consistency. In 2017, municipalities provided EUR 213 per month, on average, for each child between the ages of one and a half and four years old who was unable to access state-provided ECEC, and EUR 155 per month for those aged five or six who did not receive a place in state-provided, mandatory pre-primary education (Government of Latvia, 2017[402]).

- Latvia's new funding model for tertiary education, proposed by the World Bank, was endorsed in 2015 by the Cabinet of Ministers. The previous funding model had been criticised for its sole focus on an input-oriented approach, leading to low salaries, high workloads, misalignment of teaching and research, bureaucracy and a lack of incentives for institutions to diversify, innovate and collaborate (Cabinet

of Ministers, 2015[403]). The new model aims to increase quality, internationalisation and labour market relevance within tertiary education, using an approach that balances three key pillars: stability, performance and innovation (OECD, 2017[390]). It intends to provide more balance to the higher education system by focusing on three funding pillars. The core funding pillar is based on the number of academic staff and study places within an institution in an effort to increase funding for research and further align teaching and research funding. The performance-oriented pillar is based on performance indicators derived partly from national strategies and partly from institution-specific indicators related to an institution's profile and strategic development plan. The innovation-oriented pillar provides funding for targets set by each university or by performance agreements, as well as allocating funding for research centres of excellence. Innovation-oriented funding combines funds from EU investment and structural funds that are allocated based on performance agreements (Cabinet of Ministers, 2015[403]).

Progress or impact: In 2016, a regulation introduced additional public funding criteria for HEIs based on their renewal of human resources, industry relevance and the international competitiveness of their research (OECD, 2016[69]). The World Bank's 2017 report on the internal funding and governance of Latvia's HEIs noted that all institutions had either already begun to adjust to the new requirements of the internal funding model or were on their way to doing so. Additionally, the internal funding model had become more transparent. According to the report, remaining challenges include the lack of a stable funding stream for research available to all units and the risks posed by instability in the core funding pillar if allocation mechanisms for study places change at the system level. The report also recommends improving alignment between funding models and institutional objectives (World Bank, 2017[76]). In 2017, 14 HEIs received performance-based funding, having successfully included students in research and development initiatives (Government of Latvia, 2017[77]).

- In Latvia, the government approved a revised teacher remuneration scheme (2016) for pre-primary, primary, lower secondary and upper secondary education (Cabinet of Ministers, 2016[79]). This scheme is part of a new funding model that aims to recognise the additional workload of teachers outside instruction hours. It is based on a 30-hour work-week schedule in contrast to the previous model, which was based on a 21-hour teaching workload (OECD, 2017[66]). The new remuneration scheme also introduced a 13.3% increase in teachers' minimum statutory salaries from EUR 420 per month in 2013 to EUR 710 per month in 2018. This led to an initial increase of EUR 9 million in the central budget for teachers' salaries in 2016. The government has also maintained quality-related bonuses linked to teachers' performance, and school principals can provide extra salary bonuses (European Union, 2016[80]; Government of Latvia, 2016[81]). Going forward, the issue of teacher salaries will be evaluated within the budget-planning process (European Union, 2017[82]).

Progress or impact: Teachers' remuneration has always been a sensitive topic in Latvia and generally attracts significant public attention. Therefore,

the government actively involved all relevant stakeholders in the consultation process, ensuring in-depth discussions (National information reported to the OECD). In 2018, the Cabinet of Ministers approved the plan to increase teachers' salaries. The government announced a schedule of increases for 2018-22 by the end of which the minimum monthly salary is set to have reached EUR 900. Accordingly, the government has scheduled additional budget investments of EUR 26.9 million in 2019, EUR 51.5 million in 2020, EUR 81.3 million in 2021 and EUR 111.1 million in 2022 (National information reported to the OECD). However, as student numbers decrease, maintaining investment in high-quality teaching is increasingly challenging, as a disproportionate share of resources is dedicated to maintaining the extensive school network as opposed to enhancing teaching and learning (European Union, 2019[68]). Improvements to the structure of the school network in order to better adapt to demographic changes are therefore crucial to overall policy success in Latvia's education system (European Union, 2017[82]). Latvia's former school funding model, where money follows the student, has remained in place under the new remuneration scheme despite having previously caused teacher salaries to diverge greatly (European Union, 2016[80]). Additionally, municipalities can still opt to assign top-ups to teachers' salaries, which can create similar challenges in consistency (European Union, 2016[80]).

Additional education policies of potential interest to other countries

Governance

- In Latvia, the National Centre for Education, in co-operation with municipalities and HEIs, has begun to implement an ESF project on the development and implementation of new competency-based general education curricula, covering pre-school to upper secondary school. This will replace the largely knowledge-based curriculum currently in place and includes competence development in entrepreneurship, healthy lifestyles, financial literacy and civic education (OECD, 2016[393]). As of the academic year 2017/18, 100 schools have been involved in a two-year pilot to test the new content. This includes the development and testing of a professional development programme and methodological tools to support embedding the changes in teaching practices. These materials will be accessible as e-learning modules and teacher-training providers, including universities, will integrate the professional development content into their programmes (Skola2030, 2018[408]). A digital learning site is being created to make all resources accessible in all schools. Implementation will occur gradually, starting with pre-school education in the academic year 2019/20, then lower basic education (grades 1-6) in 2020/21, upper basic education (grades 7-9) in 2021/22 and secondary education (grades 10-12) in 2022/23. As part of the development of the new curriculum, the Cabinet of Ministers adopted new pre-school education guidelines and state basic education standards in 2018 following a comprehensive consultation process that included online public consultation, various seminars with key stakeholder groups and discussion fora with opinion leaders (MoES, 2019[409]).

Funding

- In an ongoing effort to improve support for children with special education needs, the Latvian government promised additional support for the inclusion of special needs children in mainstream schools across the period 2014-20. As of 2016, the IZM had begun piloting a revised model for school funding that allocates additional funds for students with special needs (OECD, 2016[393]). Following a 2017 study conducted by the University of Latvia, a classification system has been developed to align types of special needs with the models of education, healthcare and social service that can be offered to the children with those needs (Government of Latvia, 2018[395]). In 2018, work continued on the development of financial models to support the integration of children with special needs into mainstream schools. Authorities also aim to identify children with special education needs earlier in primary and secondary education, develop adapted teaching practices and methodological tools, and invest in teachers' skills to better respond to students' special education needs (OECD, 2016[393]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Mexico

Context

Schools in Mexico have slightly more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.04 (the average index value was 0.00). However, student truancy was higher than the OECD average: 25.8% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. That being said, students in Mexico were more likely to report that their science teachers adapt their instructions much more frequently than the OECD average, with an index of adaptive instruction of 0.32, among the highest in OECD countries (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was lower than the OECD average at -0.23 (the OECD average was 0.01) (OECD, 2016[1]). In 2017, teachers in Mexico had more net teaching hours for general programmes than the OECD average: teachers annually taught 800 hours at primary level and 1 047 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Mexico have lower levels of autonomy over curriculum than the OECD average: 33.6% of principals reported that the school has primary autonomy over curriculum, compared to the average of 73.4% (OECD, 2016[1]).

According to the OECD Teaching and Learning International Survey (TALIS) 2018, 92.2% of teachers in Mexico said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6% and the highest rate across OECD countries. Furthermore, 41.7% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Mexico are less likely than average to conduct self-evaluations of their schools (86.1% of students were in schools whose principal reported this, compared to 93.2% on average) and slightly less likely to undergo external evaluations (73.9% of students were in schools whose principal reported this, compared to 74.6% on average) (OECD, 2016[1]). Teacher appraisal levels, as reported in the earlier cycle of TALIS 2013, were higher than average: 84.5% of all teachers had reported then having received an appraisal in the previous 12 months, compared to 66.1% on average (OECD, 2014[4]).

In PISA 2015, the share of students enrolled in secondary schools whose principal reported that standardised tests are used to make decisions on students' promotion or retention was 48%, compared to 31% on average (OECD, 2016[1]).

In 2017, all decisions on resource management (allocation and use of resources for teaching staff and principals) in Mexico were taken at the central and state levels, compared to only 30% for the OECD average. Annual expenditure per student at primary level in 2015 was USD 2 874, which was among the lowest in the OECD (the average was USD 8 631). At secondary level, Mexico spent USD 3 129 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Mexico spent USD 8 170 per student, compared to the OECD average of USD 15 656.

In 2015, expenditure on primary to tertiary education as a proportion of gross domestic product (GDP) in Mexico was 5.3%, compared to the OECD average of 5%. The proportion of expenditure on education (from primary to tertiary) coming from private sources (including household expenditure, expenditure from other private entities and international sources) in 2015 was relatively high at 20.2% of overall spending, compared to the OECD average of 16.1%. Between 2005 and 2015, the relative proportion of public expenditure on primary to tertiary education increased by 0.5 percentage points, compared to an average fall across OECD countries of 1.3 percentage points. During the same period, private expenditure decreased by 1.8 percentage points, compared to an OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Mexico's key education policy priorities have evolved in the following ways over the last decade (Table 8.20).

Table 8.20. Evolution of key education policy priorities, Mexico (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified a strong need to improve teaching quality through increased transparency and clarity in processes that have historically been shadowy and inequitable, as well as a need to improve teacher qualifications. [2010] The share of teachers whose school director reports a lack of qualified teachers as a factor hindering learning is almost twice the TALIS average. [2010] Another challenge identified was that most of the teaching vacancies were not yet open for competition and that a distinction should be made in this context between induction and probation. Another priority is to ensure that school directors have or develop the capacities to fulfil their roles. [2012] Finally, leadership and school-level collaboration, along with teacher professional development and career perspectives, need strengthening [2019].	Mexico previously reported a key challenge in improving teaching quality, professionalising school leaders, and ensuring governance and funding transparency across the system. This challenge prevails, while policy measures have been taken. [2013; 2016-17]
Evaluation and assessment	The OECD had identified a lack of an effective system for evaluating teachers, fairly rewarding outstanding teachers, or effectively supporting teachers whose practice needs to be improved. [2010] The OECD had also identified a need for Mexico to implement a system of school evaluations, and to adjust the evaluation and assessment framework. [2012] The OECD had also identified a need to review gaps within the current data collection system and develop a medium- and long-term strategy to improve data collection and measurement tools to respond to remaining information needs. [2012] Most recently, the OECD found that teachers' performance appraisals have not been fully applied and that evaluation and assessment must be focused on enhancing student learning. [2019]	Mexico reported prioritising the revision of evaluation and assessment practices, especially regarding student assessment and teacher appraisal. Since then, Mexico reported that they have adopted a series of evaluation and assessment policies. [2013; 2016-17]
Governance	According to the OECD, in 2010, Mexico did not yet have a clear national set of teaching standards and thus needed to define clear teacher standards to signal to the profession, and to society at large, the core knowledge, skills and values associated with effective teaching. There was a need identified to draw from system-level	Mexico had previously reported a policy priority of balancing central and regional governance and ensuring effective engagement of stakeholders. As of 2015, policy measures had been taken to address this. A recent priority is to strengthen system capacity and organisation by

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	information to develop strategies to improve education at the state and national levels, as well as have a basic reference for what good teaching means in practice. [2012] Further challenges identified include addressing skills and education gaps within a vast and highly diverse education system [2017] and supporting the implementation of large-scale reform through establishing a sense of ownership among stakeholders. The OECD also recommended clarifying the division of responsibilities within higher education while working towards a system of greater institutional autonomy. [2019]	improving the knowledge and skills of staff responsible for system administration and pedagogical practices and policies. [2013; 2016-17]
Funding	According to OECD evidence, Mexico needs to improve the equity and efficiency of education spending. [2005; 2007] Although public education spending is around OECD average, spending per student is only one-third of the OECD average at all levels; most of the spending goes to the salaries of teachers, without a performance element, and not enough goes to infrastructure. Education spending is four times higher for university students compared to pre-primary, primary and secondary students. Spending more on early pre-primary and primary sectors is more efficient as returns to education are higher at these levels. [2015]	More recent challenges reported by Mexico are that some budget allowances are being merged, reduced or eliminated due to the income reduction of the federal government. A more recent priority is to increase resources allocated to education, in particular in compulsory schooling. Mexico is also working on ensuring stability and equity in resource allocation to improve performance and reduce inequalities. An additional policy priority is to align the allocation of resources to system-level priorities and policies. [2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In Mexico, the goal of the School at the Centre strategy (2016) is to improve education delivery through six actions: 1) reducing schools' bureaucratic burden; 2) directly providing more resources to schools; 3) fostering the School Technical Councils by teachers and school leaders; 4) encouraging greater social engagement through the Social Participation Councils; 5) promoting organisational flexibility within the school calendar; and 6) supporting extracurricular learning during the summer, including cultural activities, sports and tutoring (OECD, 2018[412]).

Progress or impact: In 2017, the Technical School Councils became the space for planning, evaluation and decision making among teaching teams, and are tasked with systematically improving school functioning and student learning. Peer learning exchange sessions were held between different technical councils. More than 50 000 school communities received direct financial funding with priority given to indigenous schools and schools located in marginalised areas (Juárez Pineda, 2017[413]). The extra financial support allowed schools to improve overall equipment and training, among other areas. Overall pedagogical support was found to have improved through the provision of training (Juárez Pineda, 2017[413]). Yet,

OECD evidence shows that, in 2018, the direct budget allocation to schools was still in its infancy, and was limited, considering the size of the system. The OECD recommended that more effort should be made to strengthen leadership and school-level collaboration to enact the School at the Centre strategy (OECD, 2019[414]).

- Mexico introduced the National Certificates of Education Infrastructure for Schools (ECIEN, 2015). School assessment is based on key criteria, including, among others, safe learning environments, healthy learning environments and adequate supplies and equipment (OECD, 2018[412]). The programme follows three steps: surveying and qualifying the schools' infrastructure and resources, providing funds and guidance to help schools improve their infrastructure and certifying compliance with the criteria. The school community is in charge of maintenance. The overall goal is to improve conditions in 33 000 of the most disadvantaged primary, secondary (lower and upper) and tertiary schools reaching a total student population of over 6 million, of which one in three comes from an indigenous community. In 2016/17, ECIEN merged into the Education Reform of Mexico programme (Reforma Educativa en México, 2016) (OECD, 2018[412]).

Progress or impact: By 2018, ECIEN was implemented in 1 421 municipalities (of a total of 2 457 municipalities in Mexico) (OECD, 2018[412]). ECIEN had funded 21 682 school sites (affecting roughly 4.4 million students in basic and upper secondary education), with an investment of MXN 33 159 million (of the available MXN 39 691 million allocated for the project) (SEP, 2018[415]). Furthermore, the ECIEN programme also targeted schools in indigenous areas, by tending to the needs of an expected 16 935 schools. While ECIEN has the potential to enhance equity, and progress has been made on projects in indigenous pre-schools and primary schools, its impact is nuanced, in terms of equity, especially considering community schools. In 2016-17, the total of ECIEN projects effectively implemented in community schools was 1.2% of the total community pre-schools in the country, 0.3% of community primary schools and 0.4% of community lower secondary schools. The programme also benefited fewer of the highest-need municipalities: only 11.7% of the projects were in highly marginalised municipalities, compared to 38% in municipalities with a low degree of marginalisation (OECD, 2019[414]).

- Mexico's Teacher Professional Service (Servicio Profesional Docente, SPD, 2013) intended to integrate different policy aspects of the profession in a coherent manner, covering primary to upper secondary education (OECD, 2018[412]). It also aimed to improve education by training teachers and clarifying career paths. The SPD set out the basis for selection, promotion, incentives and tenure possibilities for teachers. Based on pre-established policies, the policy components included: 1) an induction process in the first two years of teachers' practice; 2) the establishment of the main stages of a universal teacher appraisal process; 3) the establishment of new horizontal incentive mechanisms to include or replace the different voluntary programmes that were available (for example, Carrera Magisterial and the Incentives Programme for Teacher Quality, 2008-09). Student teacher candidates

had to pass a public selection process (*Concurso*) to enter the profession with a mentor assigned to each student for the first two years (OECD, 2018[412]). Also, the SPD introduced a new Technical Support Service to Schools (Servicio de Asistencia Técnica a la Escuela, SATE) (OECD, 2019[414]).

Progress or impact: As of 2016, teaching candidates can come from higher education institutions other than teacher colleges (*escuelas normales*) (OECD, 2018[412]). The Technical Support Service to Schools (SATE) provides assistance, advice and accompaniment to teachers and school principals. The support service is carried out by school leaders, supervisors, pedagogical advisors (Asesores Técnico-Pedagógicos, ATP) and recognised support staff under the school improvement law. ATPs are also subject to selection and recruitment processes and can take part in the different promotion mechanisms. New teachers are required to follow a mandatory induction programme; although introduction was slow and geographically uneven, in 2017/18, access to mentoring reached 88.9% of teachers (OECD, 2019[414]).

Also part of the reform, the National Strategy for Continuous Training of Teachers of basic and upper secondary education (2016) aimed to improve the skills of teachers who show below average qualifications in teacher appraisals (OECD, 2018[412]).

Furthermore, the Local Education Authorities (AEL) conducted State Strategies for Continuing Education 2017. Between 2017 and 2018, the programme delivered 944 courses, 235 workshops and 183 diplomas (SEP, 2018[415]). The resource-intensive nature of face-to-face training is a challenge in Mexico, and so efforts have been made to expand online access to training. National targets aimed to have more than 1.5 million teachers using these resources in 2018 (OECD, 2019[414]).

In 2019, new education reform was approved by the Government of Mexico, which discontinued the Teacher Professional Service, and all contents derived from its secondary laws. The 2019 reform created in its place the National System for the Careers of Female and Male Teachers (Sistema Nacional para la Carrera de las Maestras y los Maestros). It declared suspended all teacher appraisal processes, although the Teacher Professional Service would continue to perform its processes and responsibilities until the new legislation for the New National System is in place (Government of Mexico, 2019[416])

Evaluation and assessment

- In 2015-16, Mexico's new approach to performance appraisal (Evaluación del Desempeño) for teachers in primary, lower secondary and upper secondary education, introduced as part of the comprehensive Education Reform (2013) held its first assessment round with the participation of 150 086 teachers and principals (National information reported to the OECD). At the beginning of the implementation, the assessment was a voluntary process that delivered promotions and economic incentives to those who had remarkable and good results. To evaluate competence and support development, the introduction of a new appraisal system

focused on school improvement for teachers, school leaders and supervisors. The law assigned the authorisation of the precise appraisal tools to the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educación, INEE). If a teacher did not pass the first or second appraisal, individual coaching was provided, but teachers were dismissed if they did not pass the third appraisal. According to the law, teachers had to pass an appraisal at least once every four years. During implementation, it was voluntary (except for those teachers who did not previously obtain favourable results) with almost 87% of teachers following an appraisal process in 2016.

Progress or impact: In 2015, more than 50% of teachers who underwent appraisal obtained insufficient or sufficient results, compared to good, outstanding and excellent (OECD, 2018[412]). Henceforth, it was found essential to advance the implementation of incentives for teachers with good job performance and grant support to teachers who did not reach a good performance level. In 2016, appraisal became mandatory only for those who had previously obtained insufficient results or those aiming to become certified evaluators. Teachers aiming to access salary increases could participate voluntarily; those not taking the evaluation were not penalised. The gradual appraisal of all teachers became mandatory in 2017 (OECD, 2018[412]). Another OECD report found that the appraisal mechanism required some precisions, including better matching appraisals with support for learning among teachers (OECD, 2019[414]).

Between 2015 and 2018, some 1.5 million appraisals were conducted as part of teacher qualification processes for the National Education System at compulsory education levels, for performance evaluation and promotion to School Leadership, Supervision and Technical Pedagogical Advisory (ATP) positions. In 2018, around 206 390 teachers entered the public education service or were promoted through the evaluation process of the Teachers' Professional Service (Servicio Profesional Docente) (SEP, 2018[415]). During the same year, the share of teachers who underwent appraisal and obtained insufficient or only sufficient results decreased to 43.4% (SEP, 2018[415]). With the new education reform approved by the Government of Mexico in 2019, all ongoing teacher appraisal processes were suspended, as well as all effects that could affect the teachers' permanence in the profession, or processes related to admission, promotion or recognition in the profession (Government of Mexico, 2019[416]).

- Mexico established a National Registry of Students, Teachers and Schools (Registro Nacional de Alumnos, Maestros y Escuelas, RNAME, 2011) to clarify available resources and facilitate better planning and improvement. It transformed into the National System for Education Information and Administration (Sistema de Información y Gestión Educativa, SIGED) in 2015 and covers four main domains: 1) student assessment data; 2) a teacher registry, including training and professional trajectory; 3) school data; and 4) documentation from other areas of the education system (OECD, 2019[414]).

Progress or impact: During the 2015/16 school year, some databases were integrated in the National System for Education Information and Administration (Sistema de Información y Gestión Educativa, SIGED). They included an assessment programme (Plan Nacional para la Evaluación de los Aprendizajes, PLANEA); an online interface to register school data (Sistema de Captura de Educación Inicial, Especial y Básica vía Internet, Formato 911) and the database of the infrastructure census (Diagnóstico de la infraestructura educativa) conducted by the National Institute of Physical Educational Infrastructure (INIFED) (National information reported to the OECD). An OECD report recently recognised the significant potential of the SIGED as a valuable tool in designing, implementing and monitoring education policy in Mexico. While implementation has progressed well, the SIGED can play a much more prominent role in the future (OECD, 2019[414]).

- The National Plan for Learning Assessment (PLANEA, 2015) replaced the previous school and student assessments (Evaluación Nacional del Logro Académico en Centros Escolares, ENLACE; and Examen para la Calidad y el Logro Educativo, EXCALE) in Mexico. It is a formative tool that provides information on how well students are advancing throughout the system (OECD, 2018[412]). PLANEA does not address school ranking or other formal consequences for students, teachers or schools. It combines three distinct standardised student assessments that monitor student learning outcomes at different levels of the education system, including national and sub-national data and information on schools and individual students. The sample-based standardised student assessment is used for the national (or sub-national) monitoring of student learning outcomes (Evaluación de Logro referida al Sistema Educativo Nacional, ELSEN). The results are made public at the national and sub-national levels. It covers the last year of pre-school and grades 6, 9 and 12. INEE undertakes the assessment every two years. The annual formative census-based standardised student assessment takes place in grade 4 (Evaluación Diagnóstica Censal, EDC). The results are used within schools, formatively, to inform subsequent teaching strategies. The standardised student assessment takes place in grades 6, 9 and 12. It covers all schools in the country – with results made public at the school level (Evaluación del Logro Referida a los Centros Escolares, ELCE) and is implemented by SEP, as monitored by INEE (OECD, 2018[412]).

Progress or impact: OECD evidence underlines Mexico's progress in establishing standardised student assessment mechanisms. Unlike preceding student assessments, all of PLANEA's tests are produced with items calibrated to a single measurement scale. The pedagogy is based on the same learning objectives, and the feature is found particularly significant as a contribution of the new mechanisms. Also, in 2018, the INEE issued new guidelines for PLANEA, which replace the 2015 guidelines. As of 2018, the evaluations of PLANEA SEN (PLANEA related to the Compulsory Education System) will alternately add Natural Sciences and Civic Education and Ethics. The government will continue developing the Diagnostic Census Assessment (EDC), which for 2019 is scheduled to be

applied to students who start the 3rd and 5th primary education grades of all schools in the country.

At the same time, PLANEA needs to ensure that the results of standardised student assessments are systematically used for learning and general education enhancement at the classroom level. The OECD recently commended PLANEA as a significant step towards reinforcing the role of standardised assessment to improve student learning but recommended that more resources be invested to ensure teachers use all the materials derived from PLANEA for formative purposes and are adapted to the needs of all students (OECD, 2019[414]).

Additional education policies of potential interest to other countries

School improvement

- Mexico has been undertaking efforts to restructure the yearly learning calendar. Mexico temporarily implemented the possibility for schools to choose between two calendars. Both calendars, of either 185 days or 195 days, were implemented in the 2017/18 and 2018/19 cycle. Schools could decide which calendar to follow, but the total number of hours delivered during the school year had to remain the same regardless of the calendar used. The government had established guidelines on the different mechanisms that could be used for this, depending on the schools' situation. A third calendar of 200 days existed for teacher-training schools (National information reported to the OECD). In 2019/20, a single calendar of 190 days was implemented for all public and private schools, with 13 additional days for teacher meetings as part of the school technical councils, after consultation with parents and schools. The number of days for teacher-training schools remained unchanged (SEP, 2019[417]).

Systems

Selected education policy responses

Governance

- In 2013, Mexico's federal government introduced the Educational Reform of Mexico (Reforma Educativa en México, 2013) to improve the quality and equity of its education system by focusing on several key areas: 1) strengthening equity and inclusion among students; 2) improving and empowering schools; 3) improving infrastructure and educational supplies; 4) providing professional development for teachers; 5) revising the educational model; 6) creating a stronger link between education and the labour market; and 7) improving the education system's administration and management for greater transparency and effectiveness. The reform built upon the Pact for Mexico (Pacto por México, 2012) and further changes to the Mexican Constitution during the same year. A broad range of actors contributed to the implementation of the Educational Reform of Mexico, including legislative powers and different levels of government, the National Institute for Education Evaluation, teachers and their unions, administrators, parents and civil society organisations. The reform resulted in new administration management as

well as new policies. For example, a new education model was developed (OECD, 2018[412]).

> **Progress or impact:** In 2019, Mexico's new education reform introduced significant changes to the education system. For example, the 2019 reform made higher education compulsory; created the National System for the Careers of Female and Male Teachers (Sistema Nacional para la Carrera de las Maestras y los Maestros) to replace the Teachers' Professional Service (Servicio Profesional Docente); and also created the National System of Continuous Education Improvement (Sistema Nacional de Mejora Continua de la Educación) to replace the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educación, INEE) (Government of Mexico, 2019[416]). At the time of writing of this report, this new reform was in its first implementation stages, pending approval of secondary regulation.

- Since 2009, Mexico has been working to reactivate Social Participation Councils (Consejos de Participación Social en la Educación). Having been formally established during 1992/93, they did not function in practice before 2009 (OECD, 2010[418]). Mexico has relaunched social participation councils at the schools, municipalities and states, and at national level to increase parental and societal engagement in education. They are composed of parents, school principals, teachers, union representatives, former students and community members. In many councils, the Secretariat of Public Education (Secretaría de Educación Pública, SEP) has trained members in education assessment and management (OECD, 2018[412]).

> **Progress or impact:** In 2016, a National Council (CONAPASE) was established to reflect and support the school councils across Mexico. It has quarterly national sessions and follows a formal and legal structure for consultation and operation (OECD, 2019[414]). Data indicates that the coverage of participation councils has continued to expand in recent years. In 2017, 94% of states and 65% of municipalities had their own council (National information reported to the OECD). A total of 1 597 Municipal Councils of Social Participation in Education were registered in the Public Registry of the Councils of Social Participation in Education (REPUCE) with the slowest development seen in the State of Mexico, Oaxaca and Mexico City. The expansion has been particularly significant at the school level: in 2017, there were around 200 000 School Councils of Social Participation in education with almost 2 million counsellors participating (National information provided to the OECD) (SEP, 2017[419])

- In 2015, the federal Secretariat of Public Education (Secretaría de Educación Pública, SEP) divided the country into five education regions (*regiones educativas*): Northwest, Northeast, West, Centre, and South-Southeast. SEP did this to improve regional management and enable greater interactions among states to support and monitor each other, so as to encourage progress towards goals. Mexico expects the education regions to facilitate improved state-state and state-

federation co-ordination, while also fostering co-operation between different education stakeholders and regional decision makers (OECD, 2018[412]).

Progress or impact: A mechanism for regional co-ordination in education (SEP-CONAGO) was created, dividing the country into five education regions. This mechanism aims to co-ordinate and monitor the progress of the School at the Centre strategy, Escuelas al CIEN, and the National Campaign for Literacy and Abatement of the Education Gap, among other current and future projects on national and regional levels. The mechanism also oversees the development of short- and medium-term goals (SEP, 2017[420]).

- In 2012, Mexico granted autonomy to the National Institute for Education Evaluation (Instituto Nacional para la Evaluación de la Educacion, INEE) as a technical standards-setting body. The INEE co-ordinated the National Educational Evaluation System (Sistema Nacional de Evaluación Educativa, SNEE, 2013). The law that established SNEE also gave INEE autonomy over the evaluation of the compulsory education system (OECD, 2018[412]). One of the tasks of the INEE at the SNEE was to chair the Conference of National Educational Assessment System. This collegial body was composed of the members of the INEE Governing Board; under-secretaries of the sub-secretaries of basic education, upper secondary, and Planning and Evaluation of Education Policy of SEP; the General Director of Evaluation Educational Policy of the Secretariat; and the education secretaries of all the states. In addition, INEE established the teacher evaluation processes (2014-17) and collaborated with the SEP and decentralised bodies to strengthen evaluation (OECD, 2019[414]).

Progress or impact: The OECD found that the collaboration between INEE, SEP and state authorities helped Mexico design a complex and powerful evaluation and assessment system for education – including an assessment for students, appraisal for teachers, as well as evaluations for the system's policies and processes (OECD, 2019[414]). In 2019, new legislation created the National System of Continuous Education Improvement (Sistema Nacional de Mejora Continua de la Educación), which will replace INEE (Government of Mexico, 2019[416]). At the writing of this report, the transition to the new national system was starting.

- Mexico updated its curriculum through the Educational Model for Compulsory Education: Educating for Freedom and Creativity (Modelo Educativo para la Educación Obligatoria: Educar para la Libertad y la Creatividad, 2017). The Educational Model was developed based on 18 forums organised between 2014 and 2016. The forums resulted in over 28 000 consultations with teachers and other specialists, and over 300 000 comments and suggestions from different stakeholders, including teachers, parents and entrepreneurs. Following this, the Secretariat of Public Education developed new curricula, new official textbooks, and teacher training (OECD, 2018[412]). The curriculum includes knowledge, skills, values and attitudes, taking into account well-being and socio-emotional education (OECD, 2019[414]).

Progress or impact: Participants in the national consultations highlighted the need for a set of guidelines to adapt the model, which resulted in the 2017 Roadmap for the Implementation of the Educational Model (*Ruta para la implementación del Modelo Educativo*) (OECD, 2018[421]). The main implementation phase of the new curriculum took place during 2017/18 and included some pilot projects, in curricular autonomy, for example (OECD, 2018[412]). An OECD report found that the efforts to consult with stakeholders from diverse corners of the education system to elaborate the curriculum were commendable, and resulted in a high-quality curriculum. The education authorities also proved extremely skilful at managing large-scale projects, such as the production of new instructional material, on a tight schedule. Shortcomings include a perceived lack of training and a lack of workforce support to take ownership and effectively translate the curriculum into better learning, particularly in the new areas of socio-emotional skills and education. Also, the short timeline for implementation made the need for professional flexibility and support mechanisms (that were not in place by mid-2018) all the more pressing (OECD, 2019[414]).

- Mexico established the commitment in 2012 to attain universal coverage of upper secondary education enrolment by 2022, as part of other goals defined in the Pact for Mexico (Pacto Por México, 2012) (OECD, 2018[412]). A related programme, the expansion of upper secondary and tertiary education (Expansión de la Educación Media Superior y Superior, 2013), aimed to increase coverage, inclusion and equity among all population groups by expanding the education infrastructure and diversifying the education offers of public tertiary education institutions (Government of Mexico, 2018[422]).

Progress or impact: Enrolment rates in upper secondary education increased from 65.9% (2012/13) to 78.5% (2017/18), according to national data (OECD, 2018[412]). Tertiary education coverage (excluding postgraduate degrees) reached 38.4% in 2017/18 (SEP, 2018[423]). A 2017 evaluation on the developments of the programme of upper secondary and higher education found that there was a need to update the diagnostic document to specify for each educational institution that receives funding, the type of authority it relies on and the total tuition fees (SEP, 2017[424]). It would also be helpful to develop a flowchart to explain the data collection by the education institutions. Another recommendation was to implement a scheme, which outlines the procedures through which the educational institutions have access to the programme benefits (SEP, 2017[424]).

Funding

- Mexico implemented the National Fund of Allocations for the Teachers' Payroll and Operative Expenditure (Fondo de Aportaciones para la Nómina Educativa y Gasto Operativo, FONE, 2015) so that funding would reach the most disadvantaged regions. Federal funding for education services and teacher colleges (*escuelas normales*) for these regions had been decreasing under the previous allocation formula. FONE relies on a data analysis system to monitor vacancies, recruitment,

staff and salary payments. Every two weeks, the system processes information from 1.8 million places in the country. It also uses information from other data-collection sources such as Statistics 911 to identify variations between places (SEP, 2017[419]). Since 2014, the national government also holds one single salary negotiation with the National Educational Workers Union (Sindicato Nacional de Trabajadores de la Educación, SNTE) (OECD, 2018[412]). Before this, negotiations were held between each federal state and SNTE.

Progress or impact: By centralising teacher salaries, the irregular status of over 40 000 teachers could be identified and rectified, according to recent OECD research. The fund's budget has increased every year since its implementation. In 2015, FONE spent over EUR 16 million on the payroll for 988 000 workers that hold 1 847 656 job positions in the basic education and teachers college systems. In 2016, the government established the same budget to cover the payment of 1 854 337 positions (OECD, 2018[412]). About EUR 15.5 million was allocated for the 2017 budget (SEP, 2017[419]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

New Zealand

Context

Schools in New Zealand have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.15 (the OECD average index value was 0.00). Student truancy was higher than the OECD average: 25% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. That being said, students in New Zealand were more likely to report that their science teachers adapt their instructions much more frequently than the OECD average, with an index of adaptive instruction of 0.25, among the highest in OECD countries (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was higher than the OECD average, at 0.38 (the OECD average was 0.01) (OECD, 2016[1]). In 2016, the proportion of lower secondary teachers in New Zealand aged 50 or over was 40.7%, which was higher than the OECD average of 35.4%. In 2017, teachers in New Zealand had more net teaching hours for general programmes than the OECD average. Teachers annually taught 922 hours at primary level and 840 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, New Zealand's schools have some of the highest levels of autonomy over curriculum: 95.8% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Teachers earned 87% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was below the OECD average of 91%. According to the OECD Teaching and Learning International Survey (TALIS) 2018, 73.7% of teachers in New Zealand said that if they could choose again, they would still become a teacher; this was similar to the OECD average of 75.6%. Furthermore, 33.6% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in New Zealand are more likely than average to conduct self-evaluations of their schools (99.3% of students were in schools whose principal reported this, compared to the OECD average of 93.2%). They are much more likely than average to undergo external evaluations of their schools (96.7% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools, as reported in PISA 2015, whose principal reported that standardised tests are used to make decisions on students' promotion or retention was 58%, which was more than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 33% of decisions in New Zealand were taken at the school level, compared to the OECD average of 29%.

Annual expenditure per student at primary level in 2015 was USD 7 849, which was lower than the OECD average of USD 8 631. At secondary level, New Zealand spent USD 10 383

per student compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), New Zealand spent USD 15 166 per student, compared to the OECD average of USD 15 656.

In 2015, expenditure on primary to tertiary education in New Zealand as a proportion of gross domestic product (GDP) was 6.3%, which was one of the highest rates in the OECD (the OECD average was 5%). The proportion of expenditure on education (from primary to tertiary) coming from private sources (including household expenditure, expenditure from other private entities and international sources) in 2016 was also higher than the OECD average, at 25.6% of overall spending, compared to an average of 16.1% (OECD, 2018[2]).

Evolution of key education policy priorities

New Zealand's key education policy priorities have evolved in the following ways over the last decade (Table 8.21).

Table 8.21. Evolution of key education policy priorities, New Zealand (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the challenge of individual schools being relatively isolated and with limited opportunities for collegial networking and peer learning, in the context of self-management. [2011]	New Zealand had previously reported the priority of raising the status of the teaching profession, strengthening teacher and principal appraisal and incentivising school co-operation and sharing of resources, where there is a clear educational benefit. New Zealand recently reconfirmed its commitment to improving the learning environment with policy measures taken. [2013; 2016-17] More recently, New Zealand identified the relatively fragmented and isolated nature of the school network as a key problem to be addressed. [2019]
Evaluation and assessment	According to OECD evidence, schools are required to conduct both annual planning and reporting and self-review processes, but these do not appear to be sufficiently exploited for system monitoring and evaluation purposes. There is also a need for further investment in professional development to ensure that evaluation and assessment practices are consistently effective, to optimise assessment practice for different student groups and to improve school processes to identify and respond to groups at risk of underperformance, including through strengthening the national information system regarding diverse groups of students. OECD evidence also identified the need for elements to be better integrated and aligned to form a coherent framework of assessment. [2011]	New Zealand reported a challenge in improving national standards and other achievement information to better inform student progress and teaching practice. More recently, new evaluation practices have provided insight into how progress differs among students of different backgrounds. [2013; 2016-17]
Governance	The OECD identified the need to further develop the National Standards to embed them within the primary school system. Since 2011, the co-existence of two sets of teaching standards and the lack of clarity about their respective use calls for their consolidation into a single set of standards, providing a clear, shared understanding of what counts as accomplished	Although recent policy measures have been implemented, New Zealand reported ensuring the capacity of the schools' boards of trustees to lead education policies and the effective governance of tertiary education institutions through having people with appropriate governance skills as ongoing policy priorities. [2013; 2016-17]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	teaching. For early childhood education and care (ECEC), there is a need to better define goals and content. Another recently identified challenge is the low collaboration between private companies, education and research institutions. Weaknesses in mathematics teaching undermine the acquisition of core mathematics skills at school, precluding access to some higher-skilled fields. [2011; 2012; 2017]	
Funding	N/A	New Zealand reported the priority of ensuring adequate targeted funding to students from low socio-economic backgrounds at all levels of education, with policy measures being taken. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- In 2014, New Zealand introduced Communities of Learning | Kāhui Ako (CoLs) as part of the Investing in Educational Success initiative, which aimed to raise educational achievement by improving the quality of leadership and teaching to spread best practice across the school network. This new structural approach to education in New Zealand adopted a networked approach, bringing schools at different levels of the education system together to establish a clearer learner pathway. This approach has aimed to help to overcome issues of school isolation and a lack of collegial networking, previously identified within the school system. The model also aimed to bring together schools to share challenges and goals and to enhance teaching practice and leadership through opportunities for collaborative enquiry and knowledge sharing. Three new professional roles have been introduced: Community Leader, Across-Community of Learning Teacher, and Within School Teacher. These new roles work across and within the community to support and share effective teaching and leadership practice. Since 2014, the Education Review Office has released a range of resources to support the establishment and progress of CoLs.

Progress or impact: As of 2018, New Zealand had implemented 214 Communities of Learning, which catered to 1 761 schools, 495 early learning services and 11 tertiary education providers. This constitutes the majority of New Zealand's schools and more than 610 000 students in total (Ministry of Education, 2018[427]). An initial progress report found growing momentum for the establishment of CoLs and high levels of shared purpose and commitment, as well as recognition for the importance of collaboration among professionals (Ministry of Education, 2016[428]). At the same time, a more recent comprehensive consultation process across the education system also collected feedback on a difficulty for schools to step away from

the former model that had them in competition with each other. Often, the success of a CoL is highly dependent on the level of skill and commitment among the leadership. As such, experiences are highly varied (Tomorrow's Schools Independent Taskforce, 2018[429]).

Evaluation and assessment

- In New Zealand, the Public Achievement Information (PAI, 2011) programme aims to improve public transparency of educational data and to promote the effective use of information at all levels of the system to support improved learning and student achievement. The Ministry of Education (MoE) closely monitors and modifies its PAI products (a collection of infographics) based on users' feedback and demand, aiming to reach a wide range of users (Ministry of Education, 2019[430]). MoE also works with several other government agencies to combine administrative data under the umbrella of establishing the Integrated Data Infrastructure (IDI), a research database holding anonymised microdata on people and households.

Progress or impact: The material published through the Public Achievement Information programme has developed considerably since 2011, according to government reports. In 2013, the Ministry of Education produced a range of PAI profiles, including a national picture and infographic for each Regional Council and Territorial Authority. The relevant profiles were then aggregated for *Iwi rohe* (regions). These have been reproduced since, with a focus on ensuring comparability across populations and years. An increasingly wide range of stakeholders appears to use PAI as part of the Communities of Learning | Kāhui Ako implementation. Until 2019 at least, PAI had been used to target mentoring and intervention for students requiring higher levels of learning support. The MoE has also produced a more targeted range of PAI products for the Māori population, such as education profiles by *iwi* (tribe) in the form of infographics that show a breakdown of key education data from ages 0-18 (National information reported to the OECD).

- In New Zealand, the annual National Monitoring Study of Student Achievement (NMSSA, 2012) aims to survey, assess and understand student achievement in Years 4 and 8 using the New Zealand Curriculum (NZC). It is the only study to assess primary school students' learning across all curriculum areas using both task-based and paper-based measures to provide a comprehensive measure of student performance. Selected learning areas are assessed each year, with the whole curriculum covered across five years. In addition to achievement data, the NMSSA also collects background information from students, teachers and principals. Each year, 200 schools are randomly selected with up to 25 students from each (NMSSA, 2018[431]).

Progress or impact: As the National Monitoring Study of Student Achievement progresses into its second five-year cycle, increasingly detailed analyses of student performance data are possible, including longitudinal analysis. For example, in 2017, NMSSA assessed science

achievement using a nationally representative sample of about 2 100 students at each year level. Results were reported on a measurement scale called the Science Capabilities (SC) scale. Most students (94%) in Year 4 were achieving at or above curriculum expectations (Developed Level 1 and 2), while in Year 8 a minority (20%) were achieving at or above curriculum expectations (3 and 4). The difference in average scores between Year 4 and Year8 indicates that students made about eight SC units of "progress" per year between Year 4 and Year 8. Differences in the overall average scores for Year 4 and Year 8 students between 2012 and 2017 were not statistically significant. Statistically significant increases in average achievement scores were recorded, however, for several population sub-groups including: Year 4 Asian students, Year 8 girls, Year 8 Māori students and Year 8 Pasifika students (Ministry of Education, 2018[432]).

Additional education policy responses

School improvement

- In 2017, New Zealand implemented a new Code of Professional Responsibility and Standards for the Teaching Profession (Our Code, Our Standards | Ngā Tikanga Matatika, Ngā Paerewa, 2017) to replace the former Practising Teacher Criteria. The new code outlines the standards of ethical behaviour and expectations of teaching practice from teachers (Education Council, 2018[433]). Whereas the previous standards covered all certified teachers, the new code has removed the standards for graduating teachers, who are now expected to meet the standards for teaching "with support", on graduating. New Zealand drafted the code in a process that included engagement with the profession during the second half of 2016 through a range of surveys, focus groups and face-to-face meetings, as well as a wider six-week consultation process that received 2 110 submissions in 2017. Following the publication of the code, New Zealand has also developed a range of supporting resources to assist schools and teachers with implementation (Teaching Council, 2017[434]).

Evaluation and assessment

- Since 2017, tertiary education providers must publish information on the employment status and earnings of their graduates. The aim is to inform students' decisions about what and where to study, support providers' self-improvement efforts and feed into performance monitoring and policy development. The standardised reporting focuses on young graduates aged 21-29, providing information by level and field of study. Indicators include graduate destinations (employed, studying, overseas, or on a benefit) and graduate earnings (median, lower quartile and upper quartile earnings of graduates employed or self-employed in New Zealand) (Tertiary Education Commission, 2019[435]). The results will be benchmarked against national data and form one of several datasets that feed into learner-facing websites such as the Occupation Outlook, a tool for exploring study and career options (National information reported to the OECD).

Systems

Selected education policy responses

Governance

- The Blueprint for Education System Stewardship (2016) is the result of a process that took place during 2015 and 2016, where various governmental education agencies came together with the New Zealand State Services Commission (SSC) to identify how best to collaborate on priority outcomes for the education system over four- and ten-year horizons. The process included the Ministry of Education, the Education Review Office, the New Zealand Qualifications Authority, the Tertiary Education Commission, Education New Zealand and the Teaching Council of Aotearoa New Zealand. The agency members collectively agreed on four priority areas of joint action: 1) learning and success among Māori and Pasifika students; 2) quality teaching, leadership and assessment; 3) empowering learners, parents, communities and employers to influence the quality and relevance of teaching and learning and raise achievement; and 4) information management and technology (SSC, 2016[436]).

Progress or impact: The Blueprint for Education System Stewardship replaced the previous Performance Improvement Framework (PIF, 2009), which aimed to inform ministers, stakeholders and the public about agency and system performance, and enhance progress. It also aimed to give central agencies a more coherent view of agency and system performance and better position them to prioritise and drive improvements (Te Kawa and Guerin, 2012[437]).

A report from the State Services Commission found that the Blueprint has allowed the agencies to work together more effectively and under a common vision (SSC, 2016[436]). As part of the Blueprint process, each of the agencies initially used the PIF as a tool for self-reflection to compare their own actions, those of the other agencies, and their collective goals. The SSC's report indicated the value of the self-reflection process in highlighting the work already underway across the agencies that could contribute towards excellence objectives in education. The process also enabled the agencies to harmonise planning for maximum learner benefit, minimise duplication and develop additional items in the priority work programme (SSC, 2016[436]).

Various operational components have been introduced to help implement the Blueprint. The Education System Digital Strategy (2016) addresses the priority for information management and technology. The strategy and its programmes are governed collectively by the various agencies. In 2016, a new division was established within the Ministry of Education to manage the priority of empowering learners, parents, communities and employers.

From 2018, the two remaining priorities have been addressed through the Education Portfolio Work Programme, which encompasses a wide range of changes in education policy and practice (National information reported to the OECD).

- New Zealand's Better Public Services (2012) programme included ten public sector targets to be achieved by 2017, including three for education. These were: 1) by 2016, increase participation in ECEC to 98%; 2) by 2017, raise the attainment rate of National Certificate of Educational Achievement (NCEA) Level 2, or equivalent (upper secondary) to 85% of 18-year-olds; and 3) by 2017, raise the attainment rate of NCEA Level 4 (post-secondary non-tertiary) or above to 55% of 25-34 year-olds. New Zealand also used education targets in budget and strategic planning processes, prioritising funding in the budget to ensure the achievement of the targets.

Progress or impact: In 2014, following an interim analysis of the results, the State Services Commission reported the government's decision to increase the third target from 55% of 25-34 year-olds to 60% (SSC, 2017[438]). Subsequently, with almost all education targets achieved by 2017, this policy was discontinued in 2018 (SSC, 2018[439]). The percentage of 18-year-olds achieving NCEA Level 2 increased every year from 2010 before reaching the target of 85% in 2017. Disaggregated data for Māori and Pasifika students show that, although the target of 85% was not reached, these minority student populations saw the highest increase in participation rates: a 14.7 percentage point increase from 2012 among Māori students and a 10.6 percentage point increase among Pacific students (Ministry of Education, 2018[440]). The same year, 55% of 25-34 year-olds qualified at Level 4 or above, largely as a result of efforts to develop the skills and qualifications of the population, retain domestic talent, and attract highly skilled and talented people to New Zealand's workforce (SSC, 2017[441]). Although the ECEC target was not achieved (96.7% by the end of 2016), the government reported that participation rates among Pasifika and Māori children had experienced the most significant growth since 2010, with respective increases of 6.2 and 5.2 percentage points. Among the general population, the percentage of children starting school with prior ECEC attendance increased by 2.1 percentage points between 2010 and 2016 (Education Counts, 2017[442]).

- In New Zealand's Student Achievement Function (SAF, 2011) initiative, SAF practitioners appointed by the Ministry of Education to the regional offices work with schools on raising student achievement with a focus on literacy and numeracy. The aim is to support schools in the implementation of the New Zealand Curriculum (2010) and the use of the National Standards (2010). A central team provides training and professional development. SAF practitioners accompany schools and *kura* through an intensive 26-week programme (Ministry of Education, 2014[443])

Progress or impact: An independent evaluation (2014) found that the Student Achievement Function initiative was well received by schools, contributes to positive outcomes in students' and schools' capabilities and was supporting positive change within the Ministry of Education. Six success factors that support the effective operation of the SAF include: enabling approach using robust tools; credible, skilled practitioners; strategic SAF practice leadership; willing schools and *kura*; quality ministry

interaction with schools; and transparent systems and processes (MartinJenkins & Associates Ltd., 2014[444]). By 2014, around 45 SAF practitioners were working with around 600 schools and *kura* per year (Ministry of Education, 2014[443]). The practitioners work alongside teachers and leaders in one of five key areas: cultural and linguistic intelligence, educationally powerful connections with parents and families; and instructional, organisational or evaluative capabilities (Ministry of Education, 2014[443]).

In 2019, the Ministry of Education found that SAF had improved its ability to work directly with schools to support their in-classroom practices by providing expert practitioners and positively engaging the wider school community. The same year, a total of 32 SAF practitioners were operating across the country (National information reported to the OECD).

- New Zealand's Tertiary Education Strategy (TES, 2014-19) focuses on developing relevant skills for entry into the labour market for at-risk youth, and on improving achievement rates of Māori and Pasifika youth. The strategy also seeks to improve literacy and numeracy among adults, improve the quality of research-based institutions, and build international relationships to improve teaching and expand access programmes and institutions abroad. Through these priorities, the government seeks to build strong links between the tertiary education system and the labour market, local communities and the global economy (Ministry of Education, 2018[444]).

Progress or impact: In 2015, the government allocated funding to increase the number of people enrolled in apprenticeships from 42 000 to 50 000 by 2020, with the intention of particularly benefitting participants in Māori and Pasifika Trades Training (Ministry of Education, 2017[445]). Three new information and communication technology (ICT) graduate schools provide industry-focused education and research, built on connections made with related high-tech firms. Following the approval of the Tertiary Education Strategy, the government anticipated the following demographic changes: a peak in 2018 of 18-22 year-olds in New Zealand, followed by a decline; and an increasing share of young people identifying as Māori, Asian and Pasifika, increasing until 2031. This changing context poses challenges to support achievement and transitions into the labour market for all students (Ministry of Education, 2017[445]).

Between 2014 and 2015, the proportion of individuals aged 15-24 who were not in employment, education or training (NEET) remained stable at 14%, while 83.3% of 18-year-olds achieved NCEA Level 2 (ISCED 3) or equivalent, an increase of 9 percentage points since 2011. Māori and Pasifika youth (aged 18-24) continue to have lower participation rates in tertiary education; however, Māori and Pasifika degree-level graduates had smaller employment gaps with their peers immediately after graduation, compared to graduates with lower level qualifications.

Between 2005 and 2015, the number of international doctoral students increased from 704 to 4 066, which was reported as a success due to the

government's policy of domestic fees for international PhD students. In 2016, the government announced the development of a new International Education Strategy that will develop objectives to broaden the scope of international education through to 2025 (Ministry of Education, 2017[445]). Work is currently underway on developing a new TES for release in mid-2019.

- New Zealand's Education (Update) Amendment Act (2017), was a significant reform to the Education Act (1989), New Zealand's cornerstone of education legislation (Ministry of Education, 2011[446]). The amendment introduced new objectives to guide the education system in the ECEC and schooling sectors. These objectives inform each subsequent government's Statement of National Education and Learning Priorities. The amendment also aims to modernise legislation, also addressing omissions or inconsistencies between law and practice. The act set out a new strategic planning and reporting framework for schools, and clarified roles and responsibilities for the school boards of trustees. It also provided for an organised range of interventions and increased flexibility in enrolment and attendance requirements, enabling more flexibility in school opening hours and allowing home-based ECEC services to offer out-of-school care. The act also intended to enable school principals to manage more than one institution.

Progress or impact: The 2018 Education Amendment Act passed amendments to the 1989 and 2017 Acts (Ministry of Education, 2018[447]). The 2018 Act dismisses the provisions relating to the partnership school model and the mandatory use of National Standards. The commencement of the new strategic planning and reporting provisions were delayed by a year. The 2018 Act also introduced changes to the governance of tertiary institutions, including making the falsification of information provided in an application for fees-free tertiary education an offence, and reinstating staff and student positions on higher education institution governing councils (Ministry of Education, 2018[447]). The 2017 changes to ECEC endure, as do those to school boards of trustees, although they are currently under review.

- The New Zealand Curriculum (2007, NZC) and the Te Marautanga o Aotearoa (2008) establish learning objectives and expectations for students in the school system. National Standards (2010) and Ngā Whanaketanga Rumaki Māori were also put in place to support the successful implementation of the curriculum by setting expectations for students' learning across primary schooling (Ministry of Education, 2018[448]).

Progress or impact: New Zealand removed the National Standards in 2018 and formed a Ministerial Advisory Group and a Reference Group to strengthen the design and use of local curricula so that all children progress and achieve across the full New Zealand Curriculum, and to ensure a wider representation of stakeholders (Ministry of Education, 2018[449]). In 2018, the Reference Group members consulted with their networks and launched

an online survey to gather feedback regarding curriculum, progress and achievement at school. Some 2 053 responses were received (National information reported to the OECD). Further discussions on both the findings and the emerging ideas of the Ministerial Advisory Group took place in 2018, with more discussions scheduled for 2019. In 2016, the government also began a review of the digital technologies component of the national curriculum, including consultation with a range of stakeholders and curriculum experts. From 2018, the ministry has invested in a broad professional support programme for schools and *kura* to implement the new learning into their local curriculum. As of 2020, digital technologies is to be fully integrated as a strand of the Technology and Hangarau Learning Areas of the New Zealand Curriculum and Te Marautanga o Aotearoa (Ministry of Education NZ, 2018[450]).

Funding

- Since 2010, New Zealand's tertiary education organisations (universities, institutes of technology, wānanga and private training establishments, TEOs) must report and publish tertiary education performance indicators (EPIs) measuring their students' rates of course and qualification completion, student retention and progression to higher-level study in New Zealand. The Tertiary Education Commission publishes tables of all funded TEOs, and based on these performance measures, determines the number of students for which providers will receive government tuition subsidies in subsequent years.

Progress or impact: New Zealand introduced the Performance Linked Funding (PLF) system to incentivise providers to improve programmes with poor educational performance and enrol students in higher performing programmes. From 2012 until 2018, up to 5% of tuition subsidy funding could be recovered from poorly performing providers under the PLF mechanism. In 2018, the government decided that PLF had, alongside other system levers, served its original purpose of reducing provision with low completion rates and so discontinued this approach. The Tertiary Education Commission continues to report on the education performance indicators to inform future allocation decisions. New Zealand introduced new level groupings to represent cohort-based EPIs, and full-time and part-time provision are now computed individually (TEC, 2018[451]). The new reports also provide information on the education performance of individual tertiary education organisations (TEC, 2018[452]). Relevant performance information for industry training organisations includes first-year retention, cohort-based completion and credit achievement rates. Several of these indicators are calculated using new methodologies (TEC, 2018[452]).

- New Zealand's Performance-Based Research Fund (PBRF, 2003) encourages and rewards excellent research in New Zealand's degree-granting organisations. It does not directly fund research but supports it through assessing the research performance of organisations, as well as funding them based on the assessment results. The PBRF is the primary form of government funding for general research capability in higher education institutions and contributes to the government's

wider science, research and innovation objectives by supporting research activities that provide social, economic, cultural and environmental benefits to the country, including the advancement of mātauranga Māori.

Progress or impact: A 2012 review indicated that the Performance-Based Research Fund has contributed to an increase in the research performance and productivity of tertiary education organisations (TEOs) and has gained positive recognition internationally. Following this, New Zealand introduced changes to increase its efficiency and effectiveness. The 2013 PBRF assessment analysed survey responses from current students and recent graduates about teaching and supervision practices during 2003-11 and found that the introduction of the PBRF did not hurt teaching quality (Smart, 2013[453]). Between 2015 and 2018, the government committed to adopting further changes to make fund objectives clearer, simplify the quality evaluations, improve reporting on research performance and place more value on user perspectives of research quality and user-oriented research.

An independent review of the PBRF will commence in 2019 to refresh the programme so that it better supports the evolving environment of research and tertiary education. Interim results for the most recent quality evaluation show that the number of researchers awarded with a funded Quality Category has increased by 66.2% between 2003 and 2018. The number of awards given by the Pacific Research Panel to the top two categories is in line with the national average and, for the Māori Knowledge and Development Panel, it is well above the national average (Tertiary Education Commission, 2019[454]).

- In 2015, New Zealand implemented a reform to expand national industry training and improve value for money. The reform addressed challenges identified in the 2011 government review of national industry training, as well as OECD recommendations to improve skills development (OECD, 2013[455]). Formal workplace-based training is mainly arranged by industry training organisations (ITOs) funded by the government and employers. The reform integrated responsibility for the arrangement of training and pastoral care of trainees, removed the age limit for apprenticeships and granted employers the option of managing industry training funds directly, instead of working with ITOs (OECD, 2015[456]). Furthermore, the Qualifications Authority gained a larger role in managing quality assurance in ITOs. Operational measures encouraged improved performance among ITOs, as well as consolidation within the ITO network. A new funding model increasing the public contribution to apprenticeships was introduced, moving from a 70:30 split between government and businesses respectively, to an 80:20 split (OECD, 2013[455]). Developments in Māori and Pasifika Trades Training further support improved participation in vocational education (OECD, 2015[456]).

Progress or impact: Funding for many "inactive" trainees was stopped when the reform was implemented. Mergers of industry training organisations led to a reduction from 40 organisations in 2009 to 11 in 2016. Furthermore, participation in workplace-based training had increased by

2015, although this was at least partly due to the recovery of the construction industry following the global financial crisis (National information reported to the OECD). The rate of completion for five-year programmes increased from 37% in 2010 to 53% in 2015. This takes into consideration the lagged effect of past poor performance: the three-year completion rate was 64%. The five-year completion rate for apprentices was 57% in 2015, up from 42% (OECD, 2013[455]).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Norway

Context

Schools in Norway have more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.14 (the average index value was 0.00). Student truancy also was lower than the OECD average: 13.5% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to 19.7%, on average. Students in Norway were also more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.08 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was higher than the OECD average, at 0.06 (compared to 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 29.5%, compared to the OECD average of 35.4%. In 2017, teachers in Norway annually taught 741 hours at primary level and 663 hours at lower secondary level, which was less than the OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Norway have similar levels of autonomy over curriculum to the OECD average: 75% of principals reported that the school has primary autonomy over curriculum, compared to 73.4% on average (OECD, 2016[1]).

Lower secondary teachers in Norway earned 75% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was below the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 75% of teachers in Norway said that if they could choose again, they would still become a teacher; this was around the OECD average of 75.6%. Furthermore, 34.8% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Norway are more likely than average to conduct self-evaluations of their schools (98.5% of students were in schools whose principal reported this, compared to the OECD average of 93.2%). However, they are less likely to undergo external evaluations of their schools (63.9% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels, as reported in the earlier cycle of TALIS 2013, were higher than the average: 77.7% of teachers had reported then having received a teacher appraisal in the previous 12 months, compared to 66.1%, on average (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported that standardised tests are used to make decisions on students' promotion or retention was only 5%, well below the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were lower in Norway than on average across the OECD: 25% of decisions were taken at the school level, compared to the OECD average of 29%.

Norway's annual expenditure per student at primary level in 2015 was USD 13 275, which was among the highest across OECD countries (the OECD average was USD 8 631). At

secondary level, Norway spent USD 15 401 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Norway spent USD 20 973 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in Norway as a proportion of gross domestic product (GDP) was 6.4%, which was the highest among OECD countries (the OECD average was 5%). The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (1.5% compared to 16.1%). Between 2010 and 2015, the relative proportion of private expenditure on primary to tertiary education in Norway increased by 47 percentage points, which was one of the most significant increases among OECD countries, where the average change was an increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Norway's key education policy priorities have evolved in the following ways over the last decade (Table 8.22).

Table 8.22. Evolution of key education policy priorities, Norway (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD had previously identified the need to strengthen the conditions that nurture excellent teachers and better prepare lower secondary teachers in their subjects, pedagogy and adolescent development. It was also found that teachers received little guidance or support from the school or school owners and had a relatively low salary, combined with low teaching hours. More recently, the OECD acknowledged Norway's ongoing efforts to strengthen teacher professionalism with in-service professional development. It made recommendations for the implementation of the teachers' competence development model, which referred to: clarifying objectives; reviewing policy tools; assigning roles and responsibilities; gathering data for monitoring; designing a communication strategy; and securing resources with a clear calendar. [2010; 2019]	Norway reported the ongoing priority of improving learning conditions for students by enhancing pedagogical support. More recently, Norway reported its intention to make broad policy efforts to strengthen teacher professional development. [2013; 2019]
Evaluation and assessment	Previously, the OECD had identified the need to develop a clear set of reference points for common orientation to help local actors evaluate the quality of processes and outcomes. The OECD also signalled the need to embed an evaluation culture in schools and municipalities. In addition, the early childhood education and care (ECEC) framework was found to lack indication of specific outcomes for children to reach or develop at a certain age, which limits staff ability to identify or map children's developmental needs. The flexibility for staff in curriculum implementation was also found to possibly lead to large differences in the quality of centre-level curricula. A more recently identified need is to monitor quality in the tertiary education sector and expand data collection and exchange. [2011; 2012; 2016; 2018]	Norway reported the ongoing priority of strengthening assessment practices. [2013; 2016-17]
Governance	The OECD had previously identified the challenge of imbalanced governance and inefficient use of resources, making implementation challenging. A	Norway had previously reported the aim of ensuring capacity building and consistent implementation across all municipalities.

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	need was found to define goals and content for ECEC. More recently, the OECD found that there is a need to promote efficiency and quality in higher education; help institutions adjust and develop business within a reorganised higher education sector; address social differences in higher education and strengthen comparative advantage, quality, and interactions with business and community. Another challenge found was blurring the divides between universities and university colleges, following the introduction of institutional accreditation in 2002. The OECD had also identified the need to improve the effectiveness of labour market measures. [2010; 2012; 2016; 2018]	Optimising resources and policy implementation strategies within the context of decentralised decision-making is also a key, ongoing priority. [2013; 2016-17]
Funding	The OECD had previously identified a need to improve cost-effectiveness in higher education. Substantial financial assistance to students had not encouraged timely completions of study despite the conversion of loans to grants being conditional on progress in studies. The partially performance-based funding system for higher education providers was found not to have delivered the expected efficiency and quality gains, and to overly incentivised institutions to focus on producing study credit points rather than degree completions. [2016]	N/A

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Norway has introduced modifications to its initial teacher education (ITE). As part of the Promotion of the Status and Quality of Teachers (2014) strategy, in 2017 Norway reformed its differentiated four-year teacher education programmes for Years 1-7 and Years 5-10 by introducing a five-year integrated master's programme. A report prepared by Norway for an OECD TALIS Initial Teacher Preparation study identified a deficit of ITE 1-7 teachers as especially alarming, as they are the only teachers directly qualified to teach all subjects in Years 1-4. For teaching in Years 5-10, several categories of teachers are qualified. Furthermore, a significant gender gap exists in ITE, with ITE 1-7 attracting 82-84% females. Before the introduction of the 2017 reforms, approximately 50% of students completed on time, the dropout rate was approximately 30%, and about 20% were delayed but were still in the programme after four years. The new 2017 model aims to improve the quality of the teaching workforce while also improving research and development (R&D) qualifications and raising qualification standards in ITE. The five-year model supports future teachers by providing them with relevant work experience in schools, a professionally oriented thesis that supports R&D initiatives and more in-depth academic work in fewer subjects. Norway's ongoing challenges lie in trying to ensure that there is an equal distribution of qualified teachers in the

necessary education levels, higher status for educators, and in recruiting attractive applicants into teaching (Fiva, 2017[457]).

Progress or impact: As part of the Promotion of the Status and Quality of Teachers strategy, several measures, such as on further and continuing education and school-based development, were implemented by the government to enhance "a modern school of knowledge". The government expressed that besides having well qualified individual teachers, it is also important to have school leaders who can promote knowledge sharing and collaboration as well as municipalities and counties that strive for good quality in schools – and these actors should interact (Norwegian Ministry of Education and Research, 2017[458]).

- In Norway, the Advisory Team Programme (2009) was incorporated into the Follow Up Scheme in 2017 as part of the new competence development model for schools. The programme provides support to schools and school owners that face special challenges in core areas such as quality, literacy and numeracy, and need guidance for school improvement. The programme recruits experienced school leaders and administrators from local governments to support schools and municipalities. It is led by the Directorate of Education and Training, and national partners include the Norwegian Association of Local and Regional Authorities (KS), county governors (who manage national education offices at the county level), the higher education sector, consulting groups and practitioners. School owners manage school development. Others, including principals and local support groups, may also participate depending on the subject.

Progress or impact: After an initial pilot in 2009-10, the first regular portfolio of the Advisory Team started in 2011. By 2014, the programme's activities covered 429 municipalities in 18 counties (the whole country except for Oslo). As of 2013, almost 30 municipalities had 80-100 schools in each portfolio, receiving guidance for 18 months. By the end of 2013, the Advisory Team had offered guidance to all municipalities in the country (OECD, 2013[459]).

Initially, many in the education sector viewed the initiative as controversial and resisted the measure: this included school owners, universities and colleges, and public administration. Prior to the Advisory Team, the Directorate of Education and Training and local authorities reportedly did not rely on national guidance as a tool for local development work. Reducing the risk of resistance subsequently required a constant emphasis on the voluntary nature of the initiative. School owners seeking counselling were reminded that their intentions were courageous and beneficial for local education. From the point of view of public administrators, the Advisory Team represented an unnecessary interference of state authorities at the local level. In the higher education sector, the initiative came across as professional competition.

Support grew mainly due to its centralised, tight management and the government's efforts to familiarise all actors and stakeholders with the strategy's different aspects. Only advisors who achieved all competency

requirements following an obligatory training programme were engaged for the initiative's consultations.

By 2013, resistance had almost disappeared at all levels. Support from public administration and the higher education sector increased, and both sectors integrated the initiative into their professional and organisational activities. School owners having received counselling report satisfaction. Advisors also reported satisfaction in seeing the guided municipalities making progress and earning valuable experience and development competence in their own municipalities and schools (UDIR, 2013[460]).

Since the incorporation of the Advisory Team Programme into the Follow-up Scheme, in 2017 and 2018, 66 municipalities were selected based on criteria, including standardised tests in literacy and numeracy, final grades after secondary school and results from the Pupil Survey concerning well-being, bullying and motivation. In response, half of the municipalities decided to receive guidance from the Advisory Team Programme, while the other half chose to receive support from other measures. The next selection of municipalities is planned for 2020 (National information reported to the OECD).

Evaluation and assessment

- Norway has made efforts to strengthen assessment since the launch of its Knowledge Promotion Reform (Kunnskapsløftet, 2006), which is a curriculum complementing the National Quality Assessment System (NKVS, 2004). It aims to support effective evaluation and assessment practices in schools. Also, the Assessment for Learning (2010-14) intended to improve formative assessments and support systematic reflection about schools, development of their assessment practices, networking of schools, and professional development. This programme built on a similar initiative that ran from 2007 to 2009.

Progress or impact: The Knowledge Promotion Reform is currently under review (UDIR, 2018[461]). Until 2020, the following curricula development plan is set out. The core elements that students need to learn in each subject were developed in 2017/18. As of 2018/19, the new curriculum is under development. For example, in 2018, teacher groups worked to develop curricula for individual subjects and requested input on the first draft during an open consultation process. In 2019/20, schools will prepare for the new curriculum to be applied from 2020 onwards. The new curricula will be rolled out step by step from 2020 to 2023.

Regarding the Assessment for Learning programme, just over 40% of the municipalities (184 out of 428) have participated in the programme to date. A preliminary study for an OECD review found that success in implementation was often due to clearly set objectives, good communication, and trust among those actors involved, as well as capacity building for smaller municipalities. Further recommendations have been developed (UDIR, 2018[461]).

Additional education policies of potential interest to other countries

Evaluation and assessment

- In 2015, a new regulation was added to the Education Act in Norway to clarify the relationship between formative and final assessment, and to underline the impact of the overall learning progression on the final assessment (CEDEFOP, 2016[462]). A more transparent framework on formative assessment intends to enhance education quality and learning outcomes through promoting learning and competence development, as well as provide feedback for modifying training programmes. Furthermore, learning done abroad is considered an integral part of the education pathway and is also included in the final assessment, with the changes in regulation aiming to guarantee better formative assessment of learning abroad. In addition, the Norwegian Centre for International Cooperation in Education was in the process of setting up a framework for continuous assessment in vocational education and training (VET) mobility in co-operation with the Norwegian Directorate for Education and Training (CEDEFOP, 2016[462]). In 2009, a modification of the Education Act aimed to include requirements for schools and municipalities to create a quality report based on data from the national quality assessment system (National information reported to the OECD).

Systems

Selected education policy responses

Governance

- In 2006, Norway introduced the Knowledge Promotion (Kunnskapsløftet) reform (discussed as well in Chapter 6). While results from international studies (such as PISA 2015; PIRLS [Progress in International Reading Literacy Study] 2016; TIMMS [Trends In International Mathematics and Science Study] 2015; ICICLS 2013 and ICCS [International Civic and Citizenship Education Study] 2016) show an overall positive development in results from Norwegian schools after its introduction, some challenges persist related to low student performance and dropout. There are ongoing efforts that aim to renew the reform. In a white paper presented in 2016, the Ministry of Education highlighted the need to update subject curricula with fewer and more clearly articulated competence objectives; to integrate topics on democracy and citizenship, sustainable development, and public health and well-being for students' social development; and to revise the core curriculum for primary and secondary education (Norwegian Ministry of Education and Research, 2016[463]). The new subject curricula will come into force by autumn 2020.

> **Progress or impact:** A 2017 white paper (Meld. St. 21 [2016-17] Lærelyst – tidlig innsats og kvalitet i skolen) highlights that between 15-20% of students who leave primary school do not have the necessary competencies to cope with further education and working life. This figure is equivalent to roughly 10 000 students every year. Along with subject curricula as a main lever, Norway is continuing to support ECEC initiatives that can better prepare students for primary school. The Ministry of Education and

Research has also proposed and approved a new model for competence development, Prop. 1 S (2016-17) that differentiates measures based on municipalities' needs and developmental capacity as part of a decentralised municipality-level scheme. This measure puts municipalities and local governing bodies in more control of competency-related initiatives, allowing local context to play a more central role in decision making.

Funding

- Early childhood care and education in Norway has been financed through the block grant distributed to municipalities since 2011. Non-municipal (private) kindergartens are ensured equal treatment with public kindergartens regarding public grants.

Progress or impact: Both public and private kindergarten providers receive public funding from the government via the municipalities. Private kindergartens receive public funding based on the average expenditure in the public kindergartens in the municipality; the amount may, therefore, vary from one municipality to another. The parental fees make up for approximately 15% of the costs and has a maximum limit, which is NOK 2 990 in 2019. In addition, there are subsidy schemes for low-income families.

Additional education policies of potential interest to other countries

Governance

- Norway's Ministry of Education and Research adopted the Regulation of National Qualifications Framework for Lifelong Learning (NQF, 2011) and the European Qualifications Framework for Lifelong Learning (EQF) in 2017 (NOKUT, 2018[464]). The NQF provides an overview of the Norwegian education and training system and the levels of qualifications for all levels of education and training. It contains seven levels. An initial report on aligning the NQF to the EQF was prepared in 2012. The overall aim is to allow the NQF to be a "transparency tool", which can be used for comparing Norwegian qualifications with other countries, based on the EQF, as well as the European Qualifications Framework for Higher Education (QF-EHEA). The aim is to enhance cross-border mobility. Prior to the above-mentioned developments, the National Qualifications Framework for Higher Education (2009) had been implemented in all higher education institutions. The Ministry of Education and Research is currently evaluating the NQF.

Funding

- The Ministry of Education and Research introduced new changes and adjustments to the performance-based component in the 2017 national budget for higher education. Alongside adjustments to education spending, two new indicators were introduced. The first indicator focused on the number of graduates, targeting higher completion rates in higher education institutions. The second indicator evaluates public and private revenue, targeting increased co-operation between external

actors and institutions in the public and private sectors. An adjustment to an existing indicator increased the rate for student exchange, with the aim of enhancing international mobility. Furthermore, the ministry and ten pilot higher education institutions have made new performance agreements, and are aiming to have the remaining institutions agree to the new measures on performance regulation by 2019.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Portugal

Context

Schools in Portugal have more favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.07 (the OECD average index value was 0.00). Student truancy was close to the OECD average: 20.8% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7. However, students in Portugal were the most likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.53 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was lower than the OECD average at -0.07 (the average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 40.5%, which was higher than the OECD average of 35.4%. In 2017, teachers in Portugal had fewer net teaching hours for general programmes than the OECD average: 779 hours at primary level and 616 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, Portuguese schools have lower levels of autonomy over curriculum compared to the OECD average: 67.5% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Lower secondary teachers in Portugal earned 135% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was more than the OECD average of 91%. According to the OECD Teaching and Learning International Survey (TALIS) 2018, 64.8% of teachers in Portugal said that if they could choose again, compared to an OECD average of 75.6%. Furthermore, 9.1% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Portugal are more likely than average to conduct self-evaluations of their schools (99.7% of students were in schools whose principal reported this compared to the OECD average of 93.2%). They are also much more likely than average to undergo external evaluations of their schools (97.4% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels as reported in in the earlier cycle of TALIS 2013 were below average, however: 26.6% of all teachers had reported then having received a teacher appraisal in the previous 12 months, compared to 66.1%, on average (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported that standardised tests are used to make decisions on students' promotion or retention was 56%, compared to an OECD average of 31% (OECD, 2016[1]).

In 2017, the central government was responsible for all decisions related to resource management (allocation and use of resources for teaching staff and principals) whereas, on average across OECD countries, responsibility was shared across various levels with central government taking 21% of decisions.

Annual expenditure per student at primary level in 2015 was USD 7 380, which was less than the OECD average of USD 8 631. At secondary level, Portugal spent USD 9 518 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), Portugal spent USD 11 766 per student, compared to USD 15 656. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was close to the OECD average (16.3% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

Portugal's key education policy priorities have evolved in the following ways over the last decade (Table 8.23).

Table 8.23. Evolution of key education policy priorities, Portugal (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the need to make approaches to student learning more systematic across schools and classrooms, and to ensure that the national curriculum does not constrain pedagogical autonomy and innovation. It was found that there was little guidance provided for pre-school teachers on leadership and management in their classrooms. The exposure of teachers to international best practices could be improved, as could participation rates in professional development. New teachers could also receive stronger support from schools; Portugal has the lowest rate of access to formal induction. [2012; 2017; 2018]	Portugal previously reported the priority to clearly define professional pathways for teachers and school principals to enable reform within the teacher-training system. Portugal reconfirmed the priority, while also emphasising the organisation of teacher training and its role in developing teacher quality and enhancing the professional outcomes of teachers and school administrators. Portugal has also recognised improving learning conditions to support all students as a priority through making teachers, schools and curricula more responsive to the needs of students. At the ECEC level, curricular guidance has been an area of government action. [2013; 2016-17]
Evaluation and assessment	The OECD identified a need to effectively implement an assessment system and strengthen the evaluation framework including at policy level. Another priority is to reinforce the improvement function of evaluation and assessment. Several components are still under-developed in the current evaluation and assessment framework. Teacher appraisal requires further adjustments, securing consensus for it to be meaningfully implemented. A need was identified for systematic evaluation and assessment in early childhood education and care (ECEC), and improved quality assurance in vocational education and training (VET). [2012; 2018]	Portugal previously reported a need to develop an integrated evaluation and assessment framework that places students' learning at the centre and provides clearer information on how schools, principals and teachers can improve in the classroom. More recently, Portugal confirmed that this need had been reinforced due to the primacy of the national exam in student assessment and school evaluation, and higher rates of student retention. Improving internal and external school assessment tools remains a focus. Portugal's policy efforts at the ECEC level have been ongoing as well to develop more systematic evaluation of ECEC. [2013; 2016-17]
Governance	According to the OECD, the education system remains fairly centralised. Teachers are centrally deployed via a ranking system that does not reflect the specific needs of rural schools or those with a high share of disadvantaged students, which often have a high turnover and employ early-career teachers on temporary contracts. Although all VET pathways and programmes follow a common framework (catálogo nacional de qualificações), ruled by a single public agency (ANQEP), their provision and management are carried out by different institutions, creating a risk of overlap. At tertiary level, the strategic policy framework is crowded and fragmented, and co-ordination mechanisms lack coherence. [2012; 2017; 2018; 2019]	In Portugal, the challenge to increase schools' autonomy and sub-national levels of governance remains. This includes a focus on clarifying the distribution of roles and responsibilities between national and local authorities and schools. [2013; 2016-17]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
Funding	Current mechanisms for allocating funding to schools have been found to be inefficient, opaque and insufficiently tackle equity issues. In higher education, funding should be better aligned with national priorities, regional needs and policy goals. The funding of both VET and adult learning relies heavily on EU funding. [2018; 2019]	In Portugal, the policy priority of optimising the use of financial resources remains. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- The National Programme for the Promotion of School Success (Programa Nacional de Promoção do Sucesso Escolar, PNPSE, 2016-19) aims to ensure quality education for all of Portugal's students and reduce early school leaving through focusing on early intervention at the classroom level, driven by collaboration among teachers (OECD, 2018[465]). The PNPSE centres on the principle that local actors within educational communities are best placed to find solutions to the obstacles to school success in their own contexts. Besides the general provision of resources and monitoring impact, the Ministry of Education's primary role in the implementation of the PNPSE is to co-ordinate and ensure the provision of professional development to build capacity among local actors and support the development of school-level, strategic action plans (Conselho de Ministros, 2016[466]).

Progress or impact: The National Programme for the Promotion of School Success (PNPSE) has a total approved budget of EUR 32 million (EUR 29 million from European funds and EUR 3 million from national funds) for the programme period (2016-19) (Liebowitz et al., 2018[467]). The schools taking part in PNPSE must develop strategic action plans that both identify issues specific to their local contexts and design appropriate interventions.

A review following the first year of implementation found that an average of 92% of these actions had been implemented nationally (Ministry of Education, 2018[468]). By 2017, 663 schools had submitted such plans, covering 637 000 students, and a total of 2 913 planned actions (Ministry of Education, 2017[469]).

The reform has played a significant role in the reinvigoration of the 91 Schools Association Training Centres (Centros de Formação de Associação de Escolas, CFAE) across Portugal, which is responsible for providing locally responsive professional development for teachers and school leaders.

The training plan accompanying the implementation of the PNPSE is structured in three phases. Phase 1 (completed in April 2016) focused on training future trainers to support strategic action planning in schools. This took place across 3 locations and covered 160 trainers (Verdasca, 2017[470]). Phase 2 (completed in May-June 2016) saw the CFAE run a total of 156 workshops with 2 811 school leaders and their management teams to help them prepare their schools' strategic plans (Eurydice, 2018[471]). These workshops were further intended to form the basis of the collaborative networks, which school leaders continue to draw on across the project. Phase 3 (ongoing) involves the CFAE running tailored training programmes for teachers and other educational professionals informed by the strategic action plans for schools in their geographical area (Verdasca, 2017[470]). In 2018, 14 regional seminars also took place, bringing together around 2 800 local actors to discuss strategic actions. An annual national seminar has also been established (Eurydice, 2018[471]).

The OECD has commended the reach of the PNPSE and its design approach. At the same time, concerns persist about the adequacy of funding levels and about the tendency of evaluations to focus on inputs and outputs as opposed to impact (Liebowitz et al., 2018[467]).

- Portugal has implemented several measures to strengthen the teaching profession. In 2014, the government introduced more stringent admission conditions for Teacher Education Programmes, reinforced the scientific curricula within Teacher Education Programmes and established a lifelong training framework for teachers that aims to improve the quality of teaching through updating teachers' pedagogical and scientific knowledge. The framework links continuing professional development to career progression by requiring teachers to engage in 50 hours of training across the four-year career programme and 25 hours of training in the two-year career programme in order to advance.

  Much of the ongoing teacher professional development in Portugal is carried out by the 91 School Association Training Centres (Centros de Formação de Associação de Escolas, CFAE) in place across the country. In 2014 and 2015, decrees were passed to clarify the role of these centres as formal institutions in order to support the implementation of the new framework. This included giving the CFAE greater autonomy in working with local schools and school clusters to determine training needs. These are then integrated into annual or multi-annual training plans for the centres, which are accredited by the Scientific-Pedagogical Council of Continuing Professional Development.

Progress or impact: The impact of the new lifelong learning framework for teachers was severely inhibited by a freeze on public sector career progression (2011-17) as part of austerity measures following the economic recession (Liebowitz et al., 2018[467]). In 2018, measures were introduced to ensure a full-time skeleton staff within each CFAE and to better align their work with the main pedagogical and curricular reforms and initiatives being rolled out across the system.

A recent OECD report praised the locally responsive nature of the CFAE but found that the potential of the training centres is still not being sufficiently realised. Too few teachers take advantage of the training provided by the CFAE, and the offerings need to be more aligned to the priorities of schools and teachers. One reason for this may be insufficient resources within CFAE, which prevents the programme from hiring external training providers to target specific needs, for example. Instead, the CFAE recruits a cohort of volunteer teacher-trainers from local schools and tertiary institutions (Liebowitz et al., 2018[467]).

- Prior to 2008, pedagogical leadership within Portuguese schools was uncommon. The School Leadership Reform (Decree-Law 75/2008, 2008) created the position of school director (leader) (Santiago et al., 2012[472]). This reform modified selection processes and responsibilities for principals, from a *primus inter pares* system where teachers were elected to the positions by their peers and functioned mainly as administrators. Leaders thus became responsible for the pedagogical, cultural, administrative and financial management of the school or school cluster. School management now consists of four main bodies: the school leader; the General Council (with representatives of school staff, teachers, parents and local authorities), which is in charge of operational and strategic planning; the Pedagogical Council, which supervises and co-ordinates pedagogical activities; and the Administrative Council, which is responsible for administrative and financial matters. Specialised mandatory training for school leaders was reinforced through an amendment to the law (2012). Leaders are now appointed on a four-year basis by the school or school cluster's General Council, composed of teachers, non-teaching staff, parents, secondary students and representatives from the municipality. Their performance is evaluated internally by the General Council, based on the successful accomplishment of the goals outlined in their proposed educational project (70%), as well as a qualitative assessment of their leadership, strategy and external communication skills (30%).

Progress or impact: A 2012 OECD review found that the exercise of pedagogical leadership remained under-developed (Santiago et al., 2012[472]). More recently, the OECD found that while Portugal has made progress and there are formal structures in place that aim to strengthen leadership in schools, adequate and sufficient levels of instructional leadership practices still need to be strengthened at the school level (Liebowitz et al., 2018[467]).

New postgraduate programmes and qualifications for school leaders, intended as pre-service training, have been introduced by several universities across Portugal. In any school-principal appointment process where one or more candidates has such a qualification, all candidates who have not participated in the training must step down. This, according to national information, has acted as a strong incentive for incumbent and prospective principals to enrol in the postgraduate programme (National information reported to the OECD). However, the OECD found that the school leader role needs a professional pathway separate from that of teachers, and by remaining an elected office, leaders are still potentially

ultimately responsible to fellow teachers rather than student interests (Liebowitz et al., 2018[467]).

Evaluation and assessment

- Portugal's Comprehensive Model for External Student Assessments - Basic Education (Modelo Integrado de Avaliação Externa das Aprendizagens no Ensino Básico, 2015-16), introduced national assessments in Grades 2, 5 and 8, and a national examination in Grade 9, at the end of basic education (primary and lower secondary). The model is based on a clear set of premises: 1) the aim is to improve student learning and academic success; 2) continuous assessment should be the main instrument of internal school evaluation with external evaluation used to enhance approaches to assessment applied within the school; 3) external assessment focused on only a few disciplines leads to an impression of curricular narrowing among teachers and families; and 4) there should be a strong commitment to the quality and pertinence of the information returned to schools, families and other stakeholders in order to create opportunity for more concerted action and build trust in the system (National information reported to the OECD).

Progress or impact: The introduction of the Comprehensive Model for External Student Assessments signalled a move away from high-stakes testing in basic education in Portugal. Previously, Portugal had national examinations for Grades 4 and 6 of basic education (2011/12). These provided the basis for assessing and monitoring learning progress and replaced the National Monitoring Educational Progress Test (2001). The tests for Grades 4 and 6 were discontinued as this type of early examination was found to be dissonant with practice in the majority of European countries.

The first implementation round of the Comprehensive Model took place in a number of schools in 2016 (European Commission, 2016[473]). Results of the assessments have no impact on final grades; instead, schools and families use them to improve understanding of the students' learning processes and to target teaching and support to reduce school failure. Oral communication skills are also assessed (European Commission, 2016[473]).

- In 2016, Portugal created a working group of external experts, staff from the Inspectorate-General of Education and Science (IGEC), representatives of other educational administration services, and government advisors to continue to improve the External School Evaluation (Avaliação Externa de Escolas, AEE) programme. In 2016/17, following two evaluation cycles with the current framework, the group focused on revising the evaluation model and enhancing its formative character (IGEC, 2018[474]).

  The first evaluation cycle started in 2006 when 24 school clusters across the country were evaluated under the guidance of a newly-established group of academic experts and inspection representatives. The evaluation system was then extended to all public schools (except those in the overseas autonomous regions of the Azores and Madeira), with external evaluations to be carried out on a five-year basis. The

first cycle (2006-11) used a five-dimension analysis (school outcomes, processes, organisation, leadership and self-development), then reduced to three dimensions (school outcomes, education service, leadership and management) for the second cycle (2011-17) (Ministry of Education, 2010[475]; IGEC, 2016[476]).

Implementation is under the responsibility of the IGEC, which prepares an annual report with the main results, and provides targeted feedback to schools and evaluators (IGEC, 2018[474]) The National Education Council (CNE) has been following this process and holding commission meetings, working groups and seminars to enhance the analysis, discussion and use of evaluation data (CNE, 2015[477]).

Progress or impact: Evidence available to the Ministry of Education suggests some improvement in school development, teaching and learning and student outcomes. School self-evaluation has also helped promote professionalism in schools and enhance public knowledge of schools' work. Furthermore, having a qualitative and comprehensive evaluation process was considered beneficial in supporting schools to improve their internal organisation and self-evaluation. Portugal reported greater trust in schools, their institutional mechanisms and their leaders.

One implementation challenge lies in establishing a system that is objective and produces substantive results, while at the same time recognising and promoting the specificities of schools and their autonomy and empowering them. Another is to avoid an excessively administrative focus, putting more emphasis on the work in the classroom. Across evaluation cycles, ensuring the involvement of a wide range of participants (teachers, parents, students, experts and institutions) was also a challenge (National information reported to the OECD).

Given the diverse backgrounds of its members, the working group is a positive example of increased alignment among system-level administration services. In 2018, following their review, the working group of external experts presented a proposal to improve the AEE programme and the third evaluation cycle launched in 2019 with a revised model widening the programme's goals and the scope of its action, as well as extending the process to private schools (IGEC, 2019[479]). This is intended to deepen the information garnered from evaluations and provide greater support to schools, enhancing their capacity to ensure quality learning for all students and across all the competencies defined within the new Profile of Students at the End of Compulsory Schooling.

Systems

Selected education policy responses

Governance

- The Educational Evaluation Institute (Instituto de Avaliação Educativa, IAVE, 2013), a fully autonomous body specialising in external evaluation, replaced Portugal's Office for Educational Evaluation (Gabinete de Avaliação Educacional,

GAVE, 1997). IAVE aims to generalise the use of external evaluation in primary and secondary education and evaluate the impact of school clusters on learning outcomes and their surrounding communities. IAVE mainly focuses on the development of the national assessment programme in the context of present policies. Evaluation and monitoring guidelines for pre-school education were established in 2011, and an external evaluation of pre-school education in 2013 led to curriculum revision.

Progress or impact: Quality assurance depends on direct relationships between school cluster leaders and the Ministry of Education, and on the school councils for clusters, where stakeholders give their views and input regarding school development plans. In addition, to ensure that schools have a clear understanding of what has to be done, external and internal evaluation standards for each grade have been established.

However, a significant obstacle remains in enhancing awareness and ownership of quality assurance indicators. This entails clear definitions and shared understanding of "quality" as well as a guarantee that quality assurance is focussed on improvement (European Commission, 2017[478]).

- Portugal's Legal Regime of Higher Education Institutions (Regime jurídico das instituições de ensino superior, RJIES, 2007) defined the aims and scope of autonomy for tertiary education institutions (TEIs) (OECD, 2018[479]). The RJIES allows the government to provide TEIs with autonomous status and to increase the autonomy of all tertiary institutions to make decisions on curricular, research and financial administration. TEIs can also become public foundations governed by private law. This gives greater autonomy in staff recruitment and dismissal, financial management including procurement, asset and property management, borrowing and carrying forward unspent funds (OECD, 2018[479]). Foundation status is awarded by the Council of Ministers on the recommendation of the Ministry of Science, Technology and Higher Education (MCTES) (National information reported to the OECD).

Progress or impact: OECD research indicates that, as of 2018, only 5 (out of 15) public research universities and university institutes had adopted foundation status and, so far, no polytechnic institutions have. At the start of 2018, foundation institutions employed fewer than 29% of the public higher education faculty workforce. Few institutions with foundation status have made full use of the flexibility their status offers. By 2016, in the three institutions that adopted foundation status first, in 2009, only 12% of the instructional faculty held private law employment contracts. This is likely due to persisting legal ambiguity concerning key aspects of foundation status, including the management of human and financial resources (OECD, 2018[479]). Recommendations to improve uptake include placing TEIs outside the state budget perimeter, permitting multi-annual management of budgets, and exempting foundation institutions from public procurement procedures up to EU limits (OECD, 2019[480]).

- Portugal issued a law in 2015 giving municipalities (Concelhos) more autonomy over education policies, school administration, curriculum management and development, administrative and pedagogical organisation, resource management and relationships between schools and the local community (Republic Diary, 2015[481]). This follows an extended period of increasing decision making at the sub-national level, in Portugal, as part of broader efforts to improve the efficiency of public services. In 2008, the government decided to expand municipalities' funding responsibilities to include lower secondary schools (municipalities have managed funding for pre-primary and primary schools since 1999). Responsibilities of school governing bodies were also reinforced, especially with regard to the selection and evaluation of the school principal. Additionally, a growing number of voluntary autonomy contracts have afforded some schools and school clusters greater autonomy for pedagogical and curriculum organisation, human resources, school social support and financial management. Conditions for granting an autonomy contract include approval of school self-evaluation reports and positive external school evaluations (OECD, 2014[482]).

  Progress or impact: Following the 2015 law, 14 municipalities have been taking part in a four-year pilot programme assessing their capacity to manage the funds provided. Monitoring commissions have been appointed for each contract, and a final evaluation at the end of the pilot will determine the potential to scale up this system of localised control (Liebowitz et al., 2018[467]). However, given the ongoing decentralisation processes within the school system, conditions of the contracts with municipalities may change to the point of becoming redundant.

  In terms of school autonomy, a first group of 24 autonomy contracts were granted in 2006 among school clusters, and schools already evaluated through the external evaluation system. This increased to almost 30 schools in 2010 (National information reported to the OECD).

  In 2012, legislation was published to define procedures to follow and evaluate these autonomy contracts, and legislation in 2014 allowed school clusters with autonomy contracts to manage some parts of their curriculum organisation. By 2014, at least 212 school clusters and schools had autonomy contracts (OECD, 2014[482]).

  More recently, important national reforms such as the Profile of Students at the end of Compulsory Schooling (2017) and the PNPSE (2016) have adopted implementation models, which centre on stimulating innovation at the school level through supporting greater school autonomy.

  Nevertheless, within the Portuguese education system, several key areas remain under central authority, including teacher recruitment, placement and pay, as well as curriculum and the planning of the school network. Furthermore, OECD research indicates that a lower share of decisions was taken at the school level for lower secondary education in Portugal (15%) than on average across OECD countries (34%) in 2017 (OECD, 2018[2]).

- As part of broader efforts to rationalise public services (through the Plano de Redução e Melhoria da Administração Central, PREMAC, 2011), in 2013, Portugal

reduced the resources and competences attributed to the Regional Directorates for Education, which until then had been responsible for co-ordinating policy implementation within their respective regions. These Regional Directorates for Education were then converted into Regional Delegations within the Directorate General for Schools (Direcção-Geral dos Estabelecimentos Escolares, DGEstE). Concurrently, school networks were granted more autonomy through autonomy contracts. According to national information, other services merged to create a more cohesive governance system. For example, the Directorate General for Education also took over the responsibilities of the Directorate General for Innovation and Curricular Development (OECD, 2014[482]).

Progress or impact: According to the final report on the implementation of the Plano de Redução e Melhoria da Administração Central (PREMAC), within two months of implementation, the plan had reduced the number of management positions by 27% (Government of Portugal, 2012[483]). In addition, upper-level structures in central administration decreased by at least 40%. Over the same period, 168 entities were discontinued or merged with others, and 26 new entities were created. PREMAC formed part of the austerity measures following the 2008 economic crisis and was discontinued under the XXI Constitutional Government of Portugal, which took office in 2015.

- As of 2016, Portugal's InfoESCOLAS Portal (2015) provides data for all public and government-dependent schools and students from Grades 5-12 (end of primary education through secondary education, excluding students in vocational training) (Liebowitz et al., 2018[467]). It also provides access to the results of internal and external assessments. In addition, students have access to information about school partnerships and student involvement, as well as links between schools and the community (European Commission, 2018[484]). InfoESCOLAS replaced the previous education web portal, which provided statistics including data on education participation and completion (National information reported to the OECD). All information is publicly available and provided via graphical dashboards.

Progress or impact: In 2018, the OECD recognised InfoESCOLAS as a valuable practice for education. It recommended that Portugal employ a similar tool providing publicly accessible information concerning adult learning. This could improve the collection, use and dissemination of information on skills performance and the returns to skills investments related to adult education (OECD, 2018[485]).

Additional education policies of potential interest to other countries

Governance

- A 2018 OECD report found that at least 235 Portuguese primary and secondary schools voluntarily joined the pilot for the Project for Autonomy and Curriculum Flexibility (PACF, 2017) at the start of the 2017/18 school year following the

adoption of Legislative Order No. 5908/2017 (OECD, 2018[465]). PACF provides schools with support and guidance for curriculum development and management for better teaching and learning practices. The project's framework centres on autonomy and trust within schools and their responsibility for providing quality education to students. It also acknowledges schools and teachers as agents of curriculum development, enhancing the depth of all students' learning through greater flexibility and autonomy. Components that reinforce curriculum development include autonomy and flexibility in curriculum management (the Ministry of Education has encouraged schools to use 0-25% of their total curriculum time to introduce innovative curriculum design); inclusive learning environments to integrate the diverse personal needs of all students; and improving alignment between primary and secondary education. The OECD has identified some ongoing tensions between the flexibility offered by the project and the national curricular expectations (Liebowitz et al., 2018[467]; OECD, 2018[465]).

- In 2017, Portugal – in co-operation with the OECD Education 2030 project – developed a new encompassing framework for teaching, learning and assessment, as part of its efforts related to the PACF. Based on evidence about 21st-century conditions, the Profile of Students at the End of Compulsory Schooling (Perfil dos Alunos à Saída da Escolaridade Obrigatória) articulates the broad set of skills, and knowledge students should have acquired by the age of 18, establishing Essential Learning Objectives for each education level. The profile embraces the idea of transversality: each curriculum area helps develop all competencies. The profile also acts as a strategic reference document for the organisation of the entire education system and aims to define strategies, methodologies and pedagogical-didactic procedures to be used in teaching. The new framework was tested in the 2017/18 school year in the 235 public and private schools participating in the PACF pilot. Implementation is monitored and supported by higher education institutions, in collaboration with the OECD. It is being extended alongside PACF, nationally in 2018/19. An OECD review of the implementation of the Profile of Students at the End of Compulsory Schooling and PACF reform identified strengths such as the consensus-building efforts during the development and pilot phases, the breadth of the project's aims and the ministry's openness to feedback and reflection. There are concerns among some stakeholders about balancing the profile's competencies and the demands of national examinations (OECD, 2018[465]).

Funding

- As part of Portugal's Schools Participatory Budget (2016) all public schools providing lower and upper secondary education receive an additional amount from the state budget to be used according to the democratic will of students. Groups of students develop proposals for school improvement, secure a minimum number of signatures from their peers and then submit to the school principal. Once approved, these proposals are voted on by all students. This aims to reinforce students' engagement with the community and their civic values.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Slovak Republic

Context

Schools in the Slovak Republic have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.13 (the OECD average index value was 0.00). Student truancy in 2015 was also among the highest among OECD countries: 51.1% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. Students in the Slovak Republic were also less likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of -0.24 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was higher than the OECD average, at 0.17 (the average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 37.7%, compared to the OECD average of 35.4%. In 2017, teachers in the Slovak Republic had similar net teaching hours for general programmes to their OECD peers. Teachers annually taught 794 hours at primary level and 652 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in the Slovak Republic have higher levels of autonomy over curriculum than the OECD average: 84% of principals reported that the school has primary autonomy over curriculum, compared to 73.4% on average (OECD, 2016[1]).

Lower secondary teachers earned 64% of the average salary of a full-time, full-year worker with tertiary education in 2016, compared to the OECD average ratio of 91%. According to the OECD Teaching and Learning International Survey (TALIS) 2018, 76.3% of teachers in the Slovak Republic said that if they could choose again, they would still become a teacher; this was around the OECD average of 75.6%. Furthermore, only 4.5% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in the Slovak Republic are more likely than average to conduct self-evaluations of their schools (97% of students were in schools whose principal reported this, compared to the OECD average of 93.2%), but less likely than average to undergo external evaluations of their schools (62.4% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels, as reported in the previous cycle of TALIS 2013, were above average: 93% of all teachers had reported then having received an appraisal in the previous 12 months, compared to the average of 66.1% (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 23%, which was less than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 50% of decisions in the Slovak Republic were taken at the school level, compared to the OECD average of 29%.

The Slovak Republic's annual expenditure per student at primary level in 2015 was USD 6 877, which was lower than the OECD average of USD 8 631. At secondary level, the Slovak Republic spent USD 6 660 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development), the Slovak Republic spent USD 15 874 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in the Slovak Republic as a proportion of gross domestic product (GDP) was 4.4%, which was lower than the OECD average of 5% (OECD, 2018[2]).

Evolution of key education policy priorities

The Slovak Republic's key education policy priorities have evolved in the following ways over the last decade (Table 8.24).

Table 8.24. Evolution of key education policy priorities, Slovak Republic (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, an ageing staff population in early childhood education and care (ECEC) may signal a need to increase the attractiveness of working in the sector, where pay is often low and development opportunities not always available. It might also indicate a high staff turnover rate, where young people work for a short period in ECEC. Another need is to adapt the network of schools to demographic and skills developments. A more recent need is to simplify the teacher certification process and establish professional development as a more regular practice. There is a need to both ensure the ongoing entry of new talent into the teaching profession and to constantly motivate in-service teachers. There is a clear need to make the position of school leader more attractive, which requires re-thinking the school leader's career. [2012; 2014; 2015; 2017]	The Slovak Republic previously reported challenges in improving the quality of internal and external monitoring and assessment in regional education. Another associated challenge was to implement an internationally accepted method of quality assurance in higher education. These challenges prevail, while policy measures are being taken on quality assurance in higher education. [2013; 2016-17; 2019]
Evaluation and assessment	The OECD identified the need to generate synergies across different evaluation and assessment activities, avoid duplication of procedures, and prevent inconsistency of objectives, as well as to ensure an adequate provision of guidelines, tools and specific training. There is also a need to support teachers in implementing curriculum and assessment and for valid and reliable, ongoing assessment for students. Especially for teachers, the OECD found that career advancement procedures, currently achieved through appraisal processes at the end of induction, credit evaluation, certification processes and appraisal for specialisation, needed to be a more coherent single process of teacher appraisal for career progression. It is important to consolidate a single set of teaching standards that build on the strengths of already existing appraisal forms and criteria. The OECD highlighted the need to support efforts by national agencies to improve the credibility and timeliness of national statistics and suggested greater attention be paid to the interpretation of statistical reporting. There is a need to establish a more coherent approach to school leader appraisal for consistency of practice. [2012; 2014; 2015]	The Slovak Republic reported the importance of increasing teacher salaries to a competitive level to improve the attractiveness of the teaching profession. It also identified the need to consider changes in the current model of higher education institutions' self-governance and internal organisation. More recently, the Slovak Republic reconfirmed the need to tackle these same institutional challenges. [2013; 2016-17]
Governance	According to OECD evidence, there is a need to develop a knowledge economy, increase the education system's overall efficiency, and encourage school consolidation. There is scope to raise the quality of university research. There is also a need to improve labour force skills and	The Slovak Republic reported the ongoing priority to increase the effectiveness of the education system through fronts, such as improving regional education administration

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	competencies. Tertiary education does not properly prepare students for the labour market. [2010; 2012; 2015; 2017]	and simplifying legislation for higher education. [2013; 2016-17]
Funding	According to OECD evidence, public investment in research and development (R&D) is low by OECD standards. Over time, investment in domestic company-level research has declined while technology imports have risen, via branches of multi-national companies. Otherwise, the state of the knowledge economy could be strengthened, and small and medium-sized enterprises (SMEs) and the few large domestic-owned companies typically have low productivity levels and low R&D intensity. The OECD also identified the need to establish efficiency and a high level of transparency in education funding. [2014; 2015]	The Slovak Republic had reported the need to increase education funding to the OECD average level by 2020 and adjust the funds' allocation system for higher education institutions to provide adequate incentives for improvement. More recently, it reported the goal of increasing public education funding to the EU average level by 2020. [2013; 2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

Evaluation and assessment

- National standardised assessments (2005-15) in the Slovak Republic have gradually been introduced at all education levels, at primary level as of 2015, and lower secondary and upper secondary (Maturita, or graduation) as of 2005. The tests focus on the assessment of students' knowledge in mathematics, the Slovak language, and languages of national minorities, as well as, in the case of the Maturita, foreign languages. The national tests at different educational levels are also used as a means of gathering evidence and feedback on the performance of individual schools (European Commission, 2015[486]). From 2014, at upper secondary level, the National Institute for Certified Educational Measurements (NÚCEM) has calculated the added value of a school's impact on student outcomes in both Slovak language and literature based on standardised assessments. The results are sent to school directors, and a list of schools with higher than expected added value is published (MINEDU, 2018[487]).

Progress or impact: From 2013 to 2015, the European Social Fund (ESF) co-funded the project, "Increasing the quality of primary and secondary education with the use of electronic testing" to prepare the conditions for electronic assessment, with a total budget allocation of EUR 28 220 000 (NÚCEM, 2018[488]). The National Institute for Certified Educational Measurements (NÚCEM) set four main objectives: 1) improving the quality of education in primary and secondary schools using e-testing; 2) developing a nationwide electronic database of tasks and tests; 3) developing a more effective comparison of schools' results in the regions; and 4) supporting the expert potential of teachers (NÚCEM, 2015[489]).

The NÚCEM started to implement a national project for electronic testing in the areas of Language and Communication, Humans and Nature, Humans and Society, Mathematics and Information Work in 2013. The e-test reports provide information on the students' results in each test subject and thematic area, as well as offer insight on how students perform compared to their peers at other schools (NÚCEM, 2018[490]). The school leader receives the reports through the online portal (www.etest.sk). Overall, 1 656 schools participated (1 100 elementary schools and 556 secondary schools), 4 000 teachers were trained in the development of testing tools, and 3 210 teachers were trained to work with the e-test system (NÚCEM, 2015[489]).

Additional education policies of potential interest to other countries

School improvement

- The Slovak Republic has made a number of efforts to reduce the unnecessary administrative workload for education professionals in recent years. In 2015, the Ministry of Education, Science, Research and Sport (MINEDU) established a working group composed of ministry officials, teachers and school leaders tasked with identifying a list of actions to reduce unnecessary administrative workload. Several processes were eliminated or simplified, and in some cases, authorisation was given to automate processes. The commitment to addressing workload issues is anchored in the current Government Manifesto (2016-20) and in the first action plan of the National Reform Programme for Education (2018-19), which is the first implementation stage of the key strategic document for education until 2027 (Ministry of Agriculture and Rural Development of the Slovak Republic, 2016[491]; Ministry of Finance, 2018[492]). MINEDU is also developing a new information system to replace the various statistical collections within the system by a single electronic application. The first trial data collections took place in 2016, and the new information system was used for funding purposes for the first time in 2019/20 (National information reported to the OECD).
- The government of the Slovak Republic passed decrees between 2011 and 2015 to increase teacher salaries, resulting in recent years, in teacher salaries growing faster than in other public sector professions. As part of the current Government Manifesto (Programové vyhlásenie vlády Slovenskej republiky, 2016-20), the government committed to further increasing salaries by 6% in 2016, another 6% in 2017 and by 10% in 2019. A further increase of 10% is planned for 2020. Early-career teachers in compulsory and higher education will also receive a 9.5% increase in salaries from 2019 (Ministry of Finance, 2018[493]; Ministry of Agriculture and Rural Development of the Slovak Republic, 2016[491]). It is estimated that teacher salaries will be equivalent to 68% of the average salary of the tertiary educated workforce in 2020, compared to 64% in 2016 (National information reported to the OECD).
- To tackle teacher shortages, student teachers in certain subjects (for example science, technology, engineering and mathematics) may apply for scholarships. In 2017, annual payments of around EUR 1 000 were received by approximately 15% of students in each targeted subject. Individual higher education institutions receive a subsidy from the government for these incentive scholarships and can set the level

of per-student support. The breakdown of subsidies to public higher education institutions from the state budget for 2017 is based on the provisions of Act No. 131/2002 Coll. on Higher Education Institutions and on Amendments to Certain Acts and the Methodology of the Grant Schedule for Higher Education Institutions for 2016 (MINEDU, 2018[494]). MINEDU submitted a proposal for a breakdown of subsidies to the representative bodies in 2016 (National information reported to the OECD).

- In 2015, MINEDU took steps to prevent the dismissal of teachers during the summer vacation months (July and August). Previously, in many cases, schools dismissed teachers at the end of the school year to spare the resources assigned to wages. Schools then recruited teachers again for the next school year in September. Teacher representatives have put forward numerous requests to stop this practice in recent years. In 2015, an amendment to the labour code was passed, legislating that teachers' temporary contracts can only be terminated on 31 August.

Systems

Selected education policy responses

Governance

- In 2015, the Slovak Parliament adopted a new Act on Vocational Education and Training (VET) that established a dual VET system, including apprenticeships, and sought to reinforce the link between education and employers. The act also proposed to regulate funding allocations for VET programmes according to labour market needs. From 2015, the funding allocations per student in VET increased by 10% for students enrolled in programmes identified by the Ministry of Education, Science, Research and Sport as being in high demand with respect to labour market needs. For students in fields identified as being in oversupply, per-student allocations decreased by 10%. The list of programmes is updated annually (European Commission, 2017[495]). The act also imposed new regulations through which self-governing regions must define the number of students in different fields of study in individual upper secondary schools.

Progress or impact: In 2015/16, the first students enrolled in the new dual VET system. At that point, 89 contracts between companies and VET schools had been established, and 1 438 training places were offered by companies. However, this was much higher than the number of students who took part, with some sectors in particular (media, agriculture and textiles), receiving little interest (Vantúch and Jelínková, 2016[496]).

An amendment of the 2015 Act on VET entered into force in 2018, which sought to improve co-operation between education institutions and employers. The amendment, for example, ended funding cuts to schools resulting from the shift of practical education to companies, and companies no longer have to prove their readiness to offer practical education. In the same way, the amendment allowed the curricula for dual and non-dual programmes to be unified to enable companies to adjust the provision of practical skills to their needs. (European Commission, 2018[497]).

The number of students enrolled within the dual VET system has increased significantly from 1 869 in 2017, to 2 789 in 2018 (National information reported to the OECD).

In 2017, an analysis of the first years of the new funding mechanisms and new regulation showed mixed findings: in some cases, the number of students enrolled in training for employment fields with an excessive supply of graduates decreased, while the number of students in fields with labour shortages increased only in a few cases. (Martinák and Zápražná, 2017[498]) The report also identified a lack of consistency across regions and sectors. It, therefore, recommended introducing funding mechanisms and regulations with a more regional focus to enable the VET system to better respond to local trends and needs.

In 2018, MINEDU implemented clearer indicators and weights for student allocation mechanisms that are to be applied consistently in every region; the region then has the right to apply its own criteria with a total weight of 20% (Martinák and Zápražná, 2017[498]). MINEDU will also issue study fields for financial regulation once every three years for each region individually, to reflect economic cycles and differences in regional labour markets. The analysis also recommended applying other methods for assessing labour market demand and supply (e.g. graduate and employer surveys), strengthening the current database and reducing information asymmetry (e.g. through better career counselling) (National information reported to the OECD).

- The Slovak Republic's Ministry of Education, Science, Research and Sport introduced a new state curriculum for pre-primary schools (optional from 2015; mandatory from 2016), as well as for primary, lower secondary and general upper secondary schools/gymnasiums (mandatory from 2015). MINEDU identified a need to strengthen instruction of natural sciences, due to low performance on PISA, and English as a first foreign language from Grade 3 (National information reported to the OECD). Stakeholders involved in the process included teachers, experts, the State Pedagogical Institute and MINEDU officials. Various discussion sessions were organised with special subject committees, as well as consultations with stakeholders. The new curriculum defines education areas, focuses on the development of logical thinking and working with texts and increases the number of compulsory hours of instruction in mathematics and natural sciences.

Progress or impact: MINEDU identified a number of valuable lessons learned from the development and implementation of the new state curriculum: 1) active incorporation of relevant stakeholders leads to a wider acceptance of new measures and raises their quality (pre-primary schools); and 2) supporting relevant stakeholders through instruction seminars and methodological support materials is crucial for the implementation stage (pre-primary schools). The new curriculum continues to be implemented gradually under the direction of the National Institute for Education (Štátny pedagogický ústav) (National information reported to the OECD).

Funding

- Optimising funding allocations for ECEC and primary and secondary schools has become a priority for the Slovak Republic in recent years, driven by demographic changes and fragmentation within the school funding system. According to OECD research, the number of births per year in the Slovak Republic decreased from 80 000 to 55 000 between 1990 and 2000 respectively. This has led to a steady decline of the school-age population. During 2005-12, there was a 21% reduction in the number of students across all education levels, and therefore a fall in the number of schools and teachers needed. The decline in student numbers was particularly acute in the secondary vocational sector, where the share of students decreased by 27% compared to close to 20% of students in basic schools and general secondary schools (Santiago et al., 2016[499]). The government intends to re-invest the costs saved by optimising school funding in future salary increases for the education workforce (European Commission, 2016[500]). The funding optimisation process was informed by an OECD review on the effectiveness of resource use in schools (Santiago et al., 2016[499]).

Progress or impact: The Ministry of Education, Research and Sport has revised the funding model to reflect individual schools' resource needs more accurately, by, for example, taking into account the experience levels of the teacher workforce within a particular school, bearing in mind that years of experience determine teacher salaries (National information reported to the OECD).

Concurrently, in response to demographic decline among primary education cohorts, a 2017 review announced efforts to rationalise the primary school network and called for more specific and transparent criteria to inform the allocation of additional funds to schools or teachers (Ministry of Education, Science, Research and Sport; Ministry of Finance, 2017[501]).

Increased funding has so far targeted supporting students educated in a minority language and to improve access to ECEC for pupils from low-income backgrounds (Ministry of Finance, 2018[502]). Other reform efforts have included linking VET funding to labour market relevance and employability. Additional investments from EU funds target increasing ECEC capacity, where returns to education are highest, and there is a growing demand for places.

Additional education policies of potential interest to other countries

Governance

- The Slovak Republic's Educational Policy Institute (Inštitút vzdelávacej politiky, IVP, 2013) aims to support a drive towards more evidence-based policy making. Its mission is to provide expert advice on strategic policy decisions, based on analyses and forecasts using data from national and international sources and best practices from other countries. It also aims to stimulate and improve debates concerning education, science and research. In 2019, the team consists of six analysts and a director; this will grow to eight in 2020 (National information reported to the OECD). The IVP has also co-ordinated with international

organisations, for example working with the OECD on the *OECD Economic Survey: Slovak Republic* (2017; 2019). In 2017, IVP participated in the education spending review along with MINEDU and the Ministry of Finance on the project "Value for Money" (see below). IVP has also contributed to a cross-sectoral spending review on specific groups at risk of poverty and social exclusion (Government of the Slovak Republic, 2019[503]).

- The Slovak Republic's Effective, Reliable and Open State Administration (ESO, 2013) reform set out to streamline, reduce and modernise the state administration (MINV, 2018[504]). Information reported to the OECD indicates that the reform shifted responsibility for the departments of education within regional states (which mainly established schools for special educational needs) from MINEDU to the Ministry of Interior. Since then, all schools (except those established by self-governing regions) are financed by the Ministry of Interior's budget.
- In 2018, the Parliament of the Slovak Republic passed an amendment to the Act on Higher Education and approved a new Act on Quality Assurance in Higher Education, both of which came into force in November 2018. The amendment opens up professor and associate professor positions to applicants from abroad, or to those who have been professionally active within an industry relevant to the field of study (OECD, 2018[421]). The Act on Quality Assurance in Higher Education proposes the creation a new accreditation agency for higher education in a bid to separate the accreditation of tertiary programmes and institutions from any evaluation of the scientific performance of higher education institutions (Ministry of Finance, 2018[502]). These processes will now be carried out by two different bodies: the new agency will conduct accreditation, and a panel of mostly foreign experts will evaluate scientific performance, which will then feed into funding allocations from 2021. New accreditation standards will be presented by 2019, and the new agency will come into operation from January 2020. There are also provisions supporting the agency to become a member of the European Association for Quality Assurance in Higher Education (ENQA). Although there is consensus on the need to fulfil European guidelines on accreditation, stakeholders have divergent perspectives on how to approach it (OECD, 2018[421]).

Funding

- In 2017, the Slovak Republic changed the methodology used for the allocation of public subsidies to public universities for research performance. The funding now uses a scientometric indicator (JCR) to better distinguish the quality of research publications. The OECD defines the field of scientometrics as the quantitative study of science, communication in science, and science policy (Hess, 1997[505]). Over time, this field has evolved from the study of indices for information retrieval from peer-reviewed scientific publications to include other types of documents and information sources relating to science and technology (i.e. datasets, web pages or social media).
- The Slovak Republic works towards increasing public spending efficiency and effectiveness in all sectors through the "Value for Money" initiative. A review of education spending, carried out as part of the project in 2017, focused on further optimising the primary and lower secondary school network, increasing the attractiveness of the teaching profession and improving remuneration for teachers. For higher education, the review paid particular attention to the accreditation

process, as well as funding and the evaluation of university research results (Ministry of Finance, 2018[502]). Two key recommendations identified in the education review to improve the quality of the system were: to provide further support for teachers, especially beginner teachers; and to better recognise the link between adequate remuneration and quality of teaching and learning. The review also estimated that further rationalising the regional education network, cancelling bonuses for continuous education credits and redressing the very high proportion of tertiary students advancing from undergraduate to master and doctoral studies compared to the total number of students in tertiary education, could potentially save costs amounting to EUR 88 million per year. The intention would be to then reallocate the savings within the overall education sector to redress underfunding (MoF, 2018[506]). The Ministry of Education, Science, Research and Sport began implementing some of these measures in 2018 and 2019.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Slovenia

Context

Schools in Slovenia have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.07 (the OECD average index value was 0.00). Student truancy was lower than the OECD average, however: 12.4% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the average of 19.7% (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the highest in the OECD at 0.62 (the OECD average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 36.3%, which was higher than the OECD average of 35.4%. In 2017, teachers in Slovenia had fewer net teaching hours for general programmes than the OECD average. Teachers annually taught 627 hours at both primary and lower secondary levels, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in Slovenia have lower levels of autonomy over curriculum than on average across OECD countries: 63.8% of principals reported that the school has primary autonomy over curriculum, compared to the average of 73.4%.

Lower secondary teachers in Slovenia earned 89% of the average salary of a full-time, full-year worker with tertiary education in 2016, which is similar to the OECD average ratio of 91% (OECD, 2016[1]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 77.9% of teachers in Slovenia said that if they could choose again, they would still become a teacher; this was slightly higher than the OECD average of 75.6% (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Slovenia are more likely than average to conduct self-evaluations of their schools (98.2% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) but are much less likely than average to undergo external evaluations of their schools (46.7% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 21%, which was less than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 50% of decisions in Slovenia were taken at the school level, compared to the OECD average of 29%.

Slovenia's annual expenditure per student at primary level in 2015 was USD 8 542, which was close to the OECD average of USD 8 631. At secondary level, Slovenia spent USD 8 290 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development) Slovenia spent USD 10 208 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education as a proportion of gross domestic product (GDP) was 4.3% in Slovenia, which was lower than the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (10.5% compared to 16.1%).

Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education in Slovenia decreased by 1.3 percentage points, which equalled the average level of decrease seen across OECD countries. During the same period, private expenditure increased by 2.1 percentage points in Slovenia, compared to an OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Slovenia's key education policy priorities have evolved in the following ways over the last decade (Table 8.25).

Table 8.25. Evolution of key education policy priorities, Slovenia (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	The OECD identified the need to retrain vocational education and training (VET) teachers so as to contribute to improving vocational students' general skills. [2017]	Slovenia had reported that it prioritises the efficiency of school leadership and governance by introducing, for instance, more flexibility in the organisation of pedagogical work and in the implementation of curricula. This priority prevails. Recently, Slovenia reported prioritising teachers' professional development and emerging teacher competencies in an increasingly complex and global society that go beyond subject knowledge and their related pedagogical abilities. [2013; 2016-17]
Evaluation and assessment	N/A	Achieving a comprehensive framework for evaluation and assessment to improve student outcomes is an ongoing priority reported by Slovenia. [2013]
Governance	The OECD has previously recommended that Slovenia reform its universities by enhancing their autonomy, leadership and accountability as well as promoting international co-operation. The OECD also recognises that Slovenia has taken measures to respond to these recommendations since the 2015 Economic Surveys. The OECD further recommended removing the restriction that tertiary-level courses taught in a foreign language must also be taught in Slovenian. This was also recommended to expand the pool of academics that Slovenia could tap, raising the quality of faculties, fostering new research and academic development, and equipping students with knowledge that can help move production closer to the global frontier. [2013; 2015; 2017]	Slovenia reported an ongoing priority of ensuring an effective system of quality assurance in education and further improving evidence-based policies and implementation processes. More recently, Slovenia reported taking measures to ensure greater openness to an international environment, flexibility of study programmes and autonomy of higher education institutions. [2013; 2016-17]
Funding	The OECD advised that increasing the share of funding dependent on graduates' labour market performance would help to better align the supply and quality of education with the needs of society. Given the data indicating that fewer children with lower-skilled parents move to tertiary education than the OECD average, the OECD also identified the need for the Slovenian government to address the issue through an appropriate funding system. The OECD also advised Slovenia to improve co-operation on funding adult learning effectively and efficiently by developing a high-level, cross-sectoral funding agreement, and better targeting the funding of each sector. [2017; 2018]	Slovenia reported taking measures to address the stability of financing and adopting a funding formula for higher education. [2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

Evaluation and assessment

- In Slovenia, the Central Register of Participants in Education Institutions (*Centralna evidenca udeležencev vzgoje in izobraževanja*, CEUVIZ, 2011) stores individual, school and education outcome data on students in pre-primary, primary and secondary education, and short-cycle higher vocational education. It is connected to other databases, including the Ministry's Register of Institutions and Programmes, the Central Population Register, the Register of Social Rights and the Register of Spatial Units. CEUVIZ is used to follow up on key education goals and objectives, make decisions regarding the allocation of public funding, and provide evidence for scientific research and statistical work.

  The Records and Analytical Information System for Higher Education in the Republic of Slovenia (Evidenčni in analitski informacijski system visokega šolstva v Sloveniji, eVŠ, 2012) is an analytical tool linked to the CEUVIZ. It includes data on higher education institutions, publicly verified study programmes, students and graduates. The eVŠ facilitates regular monitoring of the system's operations and the development and streamlining of higher education policies. In addition, the eVŠ helps verify students' rights to public subsidies and different forms of financial aid instruments by serving as a main data source on student status (OECD, 2016[507]). It also includes an online application system for enrolment in study programmes and subsidised student accommodation (European Commission, 2015[486]).

Progress or impact: In 2014, the Records and Analytical Information System for Higher Education (eVŠ) registered almost 1.5 million views of the student data (OECD, 2016[507]). In 2014, 48 595 online applications were completed, as part of the online application system for enrolment into study programmes and subsidised student accommodation places (European Commission, 2015[486]). It was found that the data collection helped reduce fictitious enrolments in tertiary education, in some cases, by deterring ineligible students from enrolling (European Commission, 2018[508]).

In addition, as of 2016, the Modernising the Organisation of Management and Governance of Data in Innovative Learning Environments project (2016-20), co-financed by the European Social Fund (ESF), aims to support the process of upgrading and interlinking the Ministry of Education, Science and Sport's existing education records and data collection (from ECEC to upper secondary). The focus is mainly on the Central Register of Participants in Education Institutions (CEUVIZ) and KPIS (a data collection system on school staff and salaries).

According to national information reported to the OECD, at the beginning of 2019, the eVŠ was updated with new administrative data to help monitor tertiary graduates' employability in Slovenia. This will contribute to evidence-based policy development at the national (ministerial) level and provide higher education institutions with quality data on graduates' labour market status. This should then support the design and update of study

programme curricula, improve the acquisition of relevant skills and strengthen career guidance for students and graduates.

- The amendment to the Basic School Act (2012) made national student assessments at the end of Grade 6 compulsory for all students. National assessments in Grade 9 continued to be mandatory. A mandatory external assessment, carried out by the National Examinations Centre, includes assessment in the student's mother tongue, mathematics and a foreign language (European Commission, 2015[486]). Students receive their individual results, and school principals and teachers can access anonymised aggregated results. The main goal of the assessments is to inform school self-evaluation and improvement. As such, results can only be compared with national averages, and not between individual schools (European Commission, 2015[486]). Furthermore, the results of examinations in Grades 6 and 9 have no impact on the overall marks or the further educational progression of students (Eurydice, 2018[509]). In addition, numerical grades were introduced, replacing descriptive grades for students, starting in Grade 3 from 2013 (National information reported to the OECD).

Progress or impact: As of the academic year 2018/19, the foreign language component of the Grade 9 assessments has been replaced by a rotation of subjects determined annually by the Minister of Education, Science and Sports (MIZS, 2019[510]). According to Art. 64 of the Basic School Act, the minister decides upon the specific subject to be tested at the individual schools each year in September (PIS, 2019[511]). The selection is based on up to four compulsory subjects that are studied in Grades 8 and 9 (PIS, 2019[511]).

Additional education policies of potential interest to other countries

School improvement

- In addition to the mandatory Headship Licence Programme (1996), Slovenia introduced a new non-mandatory Headship Certificate Programme (HCP, 2012). It aims to enhance and promote professional development for school leaders and improve their leadership practices. The National School for Leadership in Education (NSLE) is in charge of the implementation of the HCP. The HCP was temporarily suspended in 2016 as NSLE gained EU funding for a three-year project, Managing and Leading Innovative Learning Environments (2016-19) (NSLE, 2019[512]). The overall goal of the project is to design a comprehensive model to support head teachers' instructional leadership and management while providing the conditions for creating innovative learning environments. Findings from this project will also inform the improvement of the HCP (NSLE, 2019[512]). The development of the model includes the areas of consultancy, distributed leadership and career development competences (NSLE, 2019[512]). According to further national information reported to the OECD, while evaluations and reviews by different stakeholders have shown that the proposed model supports the developmental needs of the system, schools and school leaders, a broader consensus will be required if system-wide implementation is to be considered.

- A one-year Middle Leadership Programme intended for middle leaders (especially subject heads) was developed in 2014 by the NSLE. The programme has received significant attention, mostly because it brings together middle leaders from different types of schools and kindergartens, enables sharing of good practices, is based on compulsory and partly structured schools/kindergarten visits with reflections, and on a variety of experiential methods and techniques that are carried out (e.g. roleplaying, coaching techniques). Yearly evaluations and reviews rate the programme highly, and school principals and schools report on changes that have been successfully implemented. However, one of the biggest challenges reported by participants during evaluations and reviews of the programme is the need to develop incentive mechanisms to reward participation and performance in these teams (leadership and/or development teams) (NSLE, 2019[513]).

Systems

Selected education policy responses

Governance

- Slovenia's National Higher Education Programme (NHEP, 2011-20), based on the NHEP resolution (MIZS, 2011[514]), is one of the country's targeted strategies designed to achieve the Vision of Slovenia 2050: the creation of a society that provides a high quality of life for inhabitants who trust one another, are innovative, and embrace their local identity and culture. According to recent OECD research on Slovenia, the NHEP seeks to bridge the shortcomings of Slovenia's higher education system and the projected needs of a knowledge-intensive economy and society (OECD, 2017[515]). The programme defines key goals for the future of higher education, such as quality and excellence, diversity and accessibility, internationalisation, diversification of study structures, and financing of higher education (OECD, 2016[507]). Internationalisation and improved collaboration between higher education institutions are among the top components. For example, the NHEP seeks to increase: the number of foreign-language study programmes offered in all higher education institutions by 2020, with priority given to postgraduate study programmes; the proportion of foreign students to at least 10% of the overall student population; and the proportion of foreign teachers, staff and researchers in higher education to 10% (OECD, 2017[515]).

Progress or impact: An international review of innovation in Slovenia concluded in 2012 that the NHEP would help to ensure that Slovenia has the human resources required to become a high-performing, knowledge-intensive society. Review recommendations included specifying the means and ends and how various goals might be achieved in practice, as well as addressing the missing elements of formal or informal "bridges" between universities and industry (OECD, 2017[515]). According to national information reported to the OECD, in 2018/19, the share of foreign students was 8.4%. The number of foreign language study programmes was 32 in the first cycle, 79 in the second cycle and 70 in the third cycle.

Funding

- The Act on Occasional Student Work (2014) was incorporated into the Public Finance Balance Act to make student work less attractive to employers. As of 2015, the act required students to make a 15.15% contribution to the pension system, while employers paid 8.85% in pension contributions and 6.36% in healthcare insurance contributions (OECD, 2015[516]). Student workers began receiving a fixed minimum wage of EUR 4.50 per hour, which was 10% below the regular minimum wage at the time (OECD, 2015[516]). According to the European Commission, Slovenia planned to invest additional funding from the increased cost of student labour for employers into scholarships for students in need, with the aim of better fulfilling the original purpose of student work as a social corrective (European Commission, 2015[517]).

Progress or impact: In 2016, data collected by the European Commission revealed that the number of student jobs had increased while overall earnings of all students remained constant, possibly indicating that students had reduced their hours. As of 2016, temporary contracts for student workers remained the cheapest and most flexible form of employment in Slovenia (European Commission, 2016[518]). At the time of writing of this report, the Slovenian Student Union (SSU) worked for the Ministry of Labour, Family, Social Affairs and Equal Opportunities on the development of records on student work with the anticipation to have data available as of 2020 (National information reported to the OECD and (SSU, 2019[519])).

Additional education policies of potential interest to other countries

Governance

- The Opening up Slovenia Initiative (2014) aims to complement existing education practices with innovative, dynamic and open learning approaches. The aim is to make changes to education in seven key areas: 1) transform existing educational methods into innovative, dynamic and open learning tools; 2) restore an environment of co-operation between public, private and voluntary sectors of research; 3) develop and introduce a more open education; 4) build legal mechanisms in support of implementing open education; 5) construct an open platform of information technologies, contents, services, pedagogical concepts and approaches; 6) restore mechanisms for securing a high level of quality and evaluation of services; 7) develop digital competencies within the entire educational system, and carry out concrete, cross-dimensional open education projects (OUSlovenia, 2018[520]). To implement the initiative, the government developed an action programme to set up a blueprint on how a country should go about "opening up education" (OUSlovenia, 2018[520]). Five key areas on education were defined (OUSlovenia, 2018[521]). As of 2018, the work on the different exemplars covering the key areas was still in the first stage of work. For each exemplar, information on key achievements, challenges and focus can be accessed on the website (www.ouslovenia.net) (OUSlovenia, 2018[521]).
- The Slovenian Qualification Framework (SQF, 2016) was developed in reference to the European Qualification Framework (EQF) with the support of the European

Union. It is based on learning outcomes, covering all types and levels of qualifications (OECD, 2016[507]). The amendments to the Higher Education Act in 2016 abolished the procedure of programme re-accreditation, thus providing higher education institutions necessary flexibility for quick changes and constant updating of study programmes. Since the amendment, several universities have strengthened internal evaluation processes (National information reported to the OECD).

- In 2017, to work towards further strategic orientations in the digitalisation of the education sector, Slovenia implemented the "Strategic Guidelines for Further Implementation of ICT in Slovenian Education until 2020", based on the National Strategy for the Development of Information Society until 2020. This document defines the common vision, goals and principles for further information and communication technology (ICT) implementation in Slovenian educational institutions until 2020. The goals refer to didactics and e-material, platforms and co-operation, e-competencies, informatisation of institutions, e-education (higher education, adult education) and system evaluation (MIZS, 2016[522]).

Funding

- Through the Childminding of Preschool Children Programme (2008, amended in 2012), Slovenian families unable to get a spot in public kindergartens for their children are eligible for grants. The grant amounts to 20% of the cost of the programme in the kindergarten where children would have attended and is paid by the municipality where the child lives, the family or at least one of the parents (OECD, 2015[523]).
- As of 2008, the Kindergarten Act and the Exercise of Rights to Public Funds Act facilitate payment to parents with two or more children enrolled in pre-primary education, so as to improve access. Evidence collected suggests that the Kindergarten Act has allowed ECEC to be more affordable and has helped increase enrolment rates (OECD, 2018[421]). To further increase ECEC participation, 2017 amendments to the Kindergarten Act aim to enhance flexibility and transparency in public ECEC provision. As of 2018, a new type of short, state-funded programme (240 hours), organised by kindergartens for children not enrolled in pre-school education one year before entering primary school, aims to improve the transition to primary school (National information reported to the OECD).
- The 2016 Higher Education Act in Slovenia aims to ensure sustainability in financing, greater openness to the international environment, flexibility of study programmes and institutional autonomy. The funding formula was changed with at least 75% of basic funding as a fixed amount per institution. The variable part of basic funding is related to student enrolment and output indicators, such as scientific publications, employment prospects of graduates and industry collaboration. Development funding amounts up to a maximum 3% of all funding. According to the new legislation, funds take into account the macroeconomic environment until they reach 1% of GDP (Ministry of Education, 2017[524]). They include a safety net for maintaining the nominal growth of the previous year's funds. This measure aims to provide stability for at least the duration of the contract, which is four years. Since its implementation in 2016, the funds have risen on average 5% per year until 2019. The new development pillar has provided for intensive oral and written exchanges between the ministry and institutions. This pillar is also the instrument of additional profiling of institutions in relation to

their - and Slovenia's - strategic goals. The variable part was set to maintain activities considered as valuable and conducive to institutional improvement (Ministry of Education, 2017[524]). While the reform is still very recent, the Ministry of Education, Science and Sport considers that the variable part of the budget encourages universities to set not only short- and long-term goals, but also development goals, in their work plans (National information reported to the OECD).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Spain

Context

Schools in Spain have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.08 (the average index value was 0.00). Despite improvements since PISA 2012, student truancy as reported by students in PISA 2015, remained higher in Spain than the OECD average: 24.7% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Spain were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.15 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of professional development leadership in Spain (measuring the frequency with which principals report doing leadership activities specifically related to staff professional development) was 0.14 compared to an OECD average of -0.01. However, the index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the lowest in the OECD at -0.41 (the average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 36.7% in Spain, compared to the OECD average of 35.4%. In 2017, teachers in Spain had more net teaching hours for general programmes than the OECD average. Teachers annually taught 880 hours at primary level and 713 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools have lower levels of autonomy over curriculum in Spain than on average in the OECD: 63.6% of principals reported that the school has primary autonomy over curriculum, compared to 73.4% on average (OECD, 2016[1]).

According to the OECD Teaching and Learning International Survey (TALIS) 2018, 89.3% of teachers in Spain said that if they could choose again, they would still become a teacher; this was higher than the OECD average of 75.6% and one of the highest levels across participating OECD countries. Furthermore, 14.1% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Spain are less likely to conduct self-evaluations of their schools (87.7% of students were in schools whose principal reported this, compared to the OECD average of 93.2%), and are slightly less likely to undergo external evaluations of their schools (73.9% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels, as reported in the previous cycle of TALIS 2013, were lower than the average: 21.7% of teachers had reported then having received an appraisal in the previous 12 months, compared to the average of 66.1% (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 20%, compared to 31% on average (OECD, 2016[1]).

In 2017, state autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 63% of decisions in Spain were taken at the school level, compared to the OECD average of 9%.

Spain's annual expenditure per student at primary level in 2015 was USD 7 320, which was below the OECD average of USD 8 631. At secondary level, Spain spent USD 9 020 per student, compared to the average of USD 10 010, while at tertiary level (including spending on research and development), Spain spent USD 12 605 per student, compared to USD 15 656. In 2015, expenditure on primary to tertiary education as a proportion of gross domestic product (GDP) was 4.4% in Spain; the OECD average was 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was higher than the OECD average (18.9% compared to 16.1%). Between 2010 and 2015, the relative proportion of public expenditure on primary to tertiary education fell by 8.4 percentage points in Spain, compared to an average OECD decrease of 1.3 percentage points. During the same period, private expenditure increased by 56.2 percentage points, compared to the OECD average increase of 10.6 percentage points (OECD, 2018[2]).

Evolution of key education policy priorities

Spain's key education policy priorities have evolved in the following ways over the last decade (Table 8.26).

Table 8.26. Evolution of key education policy priorities, Spain (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	N/A	Spain reported the ongoing challenge of providing sustained support to schools with an increased share of immigrant students. Recently reported priorities include the improvement of school management autonomy to develop quality actions that will be accompanied by an increase in transparency and accountability, as well as establishing measures to improve overall education outcomes. [2013; 2016-17]
Evaluation and assessment	N/A	Spain reported the ongoing need to implement a balanced evaluation and assessment framework that sets national education goals and standards to help students and teachers improve, with measures being taken in recent years. Spain previously reported the challenge of providing school principals and directive teams (as well as regional school authorities, teachers, heads of school departments, other educational personnel and parents) with assessment information about their own school, allowing benchmarking in relation to international PISA results. More recently, Spain reported that the current main challenge is the implementation of the electronic version of the assessment as well as developing external evaluations at the end of each educational level. [2013; 2016-17]
Governance	According to OECD evidence, Spain faces two inter-related challenges: to continue to increase the capacity and quality of its research base and to improve the impact of innovation on the economy. [2014]	Recent priorities include the development of proceedings aimed at improving the flexibility and accessibility of the education system through the development of education laws within the different fields of competence. Another priority is to improve the co-ordination and co-operation among all educational administrations to correct educational inequalities among autonomous communities. [2016-17]
Funding	According to OECD evidence, total spending on research and development (R&D) remained significantly below the	Recently reported needs include holding schools funded with public money accountable for the use of those public funds, as well as increasing both budgetary efforts and efficacy when granting scholarships. A further

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	OECD average, due mainly to low business spending on R&D. [2014]	priority is put on adopting more initiatives to improve the management of economic resources, promoting responsibility and the improvement of efficacy and quality in the management of public resources. [2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Spain has introduced several initiatives in recent years to enhance the role of information and communication technology (ICT) within education. In 2018, Spain developed a new National Plan for Digital Education (Plan de Transformación Digital Educativa) to reinforce elements from the 2013 National Plan for Digital Culture in Schools (Plan de Cultura Digital en la Escuela).

  The initial plan (2013) established five principal lines of action, a committee of technology and education experts (comprised of delegates of all regional authorities, university experts, teachers and different education experts) and new digital competencies based on the EU framework (Fernández, 2015[525]).

  The new plan promotes five lines of action: 1) promoting methodological transformation in the classroom and collaboration in education; 2) improving the learning spaces and technological infrastructure in schools; 3) developing students' skills in science, technology, engineering and mathematics (STEM) subjects; 4) developing digital competences in the education system; and 5) leveraging teacher training as a means to improving practice (National information reported to the OECD). It maintains, keeps and reinforces some of the previous lines of action from the previous plan, such as those related to the Internet Broadband School Connection, the Digital Competence, or the Open Digital Resources (Procomún).

  Progress or impact: By 2018, 13 regions participated in the Internet Broadband School Connection line of action, implying coverage of about 11 577 schools and 4 million students (National information reported to the OECD). Also, Open Digital Resources hosted more than 92 000 resources and had over 31 000 users. Moreover, the Education, Digital, Innovation and Open (Educativo, Digital, Innovador y Abierto, EDIA) project and the newly launched projects, Inspiring Education Experiences (Experiencias Educativas Inspiradoras) and the Observatory of Technological Education Work (Observatorio de la Tecnología Educativa) intend to offer teachers further resources and information regarding best practices (INTEF, 2019[526]; INTEF, 2019[527]).

  The Development of the Digital Competence Framework for Teachers was ongoing from the first draft in 2013 to the publication of a more developed, and most recent, version in 2017. Spain's framework was used as one of the

bases for the European Mentoring Technology Enhanced Pedagogy project (MENTEP, 2015-18), in which the Ministry of Education and Vocational Training participated together with 13 other European countries. In Spain, 1 000 teachers, nominated from 49 centres across all regions, took part in this project.

In 2017, an Online Portfolio of Teachers' Digital Competence, an optional formative tool to guide teachers' self-reflection and self-evaluation and recognise competences, was piloted (INTEF, 2017[528]). It can be accessed through online training courses. Since 2014, about 40 000 teachers enrol every year in online teacher training courses. Teachers come from all regions, including Ceuta and Melilla. The project is now available throughout all educational regions (National information reported to the OECD).

Evaluation and assessment

- To improve student performance, Spain was one of ten participating countries in the pilot of the PISA-based Test for Schools programme (Prueba PISA para Centros Educativos, 2014). The assessment provides individual participating schools with student achievement data comparable to country-level PISA results.

Progress or impact: In 2013/14, Spain piloted the PISA-based Test for Schools in 225 schools. In 2015/16, 64 schools participated in the assessment, with an estimated 100 schools participating in 2016/17. All autonomous communities have now participated in the programme, which remains optional for schools. To provide joint school information to educators from districts and associations of schools, an additional school group report was developed in co-operation with the OECD Secretariat during 2015-16. According to national evidence, this resulted in better knowledge of the programme among the school community (National information reported to OECD).

Additional education policies of potential interest to other countries

Evaluation and assessment

- Spain's Organic Law for the Improvement of Education Quality (Ley Orgánica para la mejora de la calidad educativa, LOMCE, 2013) aimed to leverage assessment to improve the early identification of students at risk of grade repetition or early school leaving. To that end, the law introduced external, standardised assessments of student competencies at Years 3 and 6 of primary schooling, and in the last year of both compulsory (lower) secondary schooling and upper secondary. At primary level, these exams would seek to identify students whose competencies fell below the expected level for their grade and thus trigger increased support. Secondary level exams for general and vocational streams would be higher stakes academic exercises to inform students' entry into the next level of education. The government intended to implement these reforms gradually from 2014, with national coverage as standard by 2018. In 2016, the government agreed to redesign

the tests to make them diagnostic, as opposed to summative, and to introduce sampling at the end of primary, lower secondary and upper secondary education (Royal Decree 5/2016) (Ministerio de Educación y Formación Profesional, 2019[529]). With ongoing developments for a possible reform of the LOMCE, the high-stakes nature of examinations at lower and upper secondary level is largely revoked (Ministerio de Educación y Formación Profesional, 2019[529]). (OECD, 2018[530]).

Systems

Selected education policy responses

Governance

- Spain's National Reform Programme (Programa Nacional de Reformas, 2012) presents national objectives to meet the EU 2020 Strategy (2010). This is the main reference point for public policy on economic, social and labour matters; education is one of the five key focus areas. Spain set the following national objectives: reduce the early school leaving rate to below 15%; and increase the level of tertiary educational attainment among 30-34 year-olds to at least 44% (OECD, 2018[530]). Since 2012, the government has revised the programme annually, modifying the 2020 targets and analysing the various policy reforms introduced to address the recommendations within the EU framework.

Progress or impact: According to the 2019 report on the National Reform Programme, the rate of early school leaving in Spain has fallen substantially in recent years from 24.6% in 2013 to 18.3% in 2017 (European Commission, 2019[531]). National statistics show that the 2018 level fell even further to 17.9%. However, this remains one of the highest rates in Europe, and national figures mask important regional disparities (for example, early school leaving rates are as high as 29.5% in Melilla) (Ministerio de Educación y Formación Profesional, 2019[532]).

The percentage of those aged 30-34 years old who have completed tertiary education continues to improve, gradually reaching 42.4% in 2018; the government expects to exceed the EU objective of 44% in 2020. Among younger cohorts, attainment levels are higher: in 2018, 46.4% of 25-29 year-olds had completed tertiary education (Ministerio de Educación y Formación Profesional, 2019[532]). The government has implemented numerous reforms to support the drive towards these targets.

Financial aid to facilitate equitable access to higher education has been increasing: in 2018 an increase in funding for the scholarship and study aid system of EUR 1 620 million was agreed, bringing the total to 142% of the 2012 fund (Government of Spain, 2018[533]). The Observatory for Grants, Financial Assistance and Academic Performance has also been reinstated (2018) to oversee and analyse the efficacy, equity and transparency of the support system for tertiary students.

As of 2019, a new programme aimed at reducing early school leaving (Programa de Orientación y Refuerzo al Avance de la Educación) was

introduced, slightly modifying previous initiatives in this area (e.g. Proeducar). It aims to support educational institutions and students from vulnerable socio-economic environments and backgrounds (migrants, Roma, special educational needs) and to strengthen the competencies of teaching staff to address student diversity in the classroom. For 2019, the programme has a budget of over EUR 80 million, to be distributed among the Spanish regions according to the number of students, including the number of those with special educational needs, suitability rates and the rural/urban dispersion of the population (National information reported to the OECD).

The plan for the reduction of early school leaving (Plan para la Reducción del Abandono Educativo Temprano, 2014-20) continues to target early school leaving rates through various measures including specific programmes targeted at high-risk areas and student groups through co-operation and co-ordination with institutions and local and regional authorities (OECD, 2018[530]).

Funding

- According to recent information reported to the OECD, the economic crisis created restraints in different areas of spending in Spain that forced the government to suspend various policies or regulations related to learning environments and teachers' working conditions, in order to control expenditures. Spain sought better control and efficiency in spending by enacting the Royal Decree 14/2012, which increased teaching hours per teacher and relaxed class size restrictions, among others (Government of Spain, 2012[534]). The government also restricted salary increases for primary and secondary school teachers and limited replacement rates for retiring teachers to as low as 10%. Some of these measures were temporary and regional authorities could decide on their application (Government of Spain, 2019[535]). According to the OECD, the Ministry of Education, Culture and Sports (MECD) also terminated a series of funding programmes in 2012, including the Territorial Co-operation programmes. In addition, the student loan system, which had operated from 2009-11, was replaced with a scholarship system due to high levels of default on loan repayment as a result of growing youth unemployment (OECD, 2018[530]).

Progress or impact: A consolidated text of Royal Decree 14/2012 now includes subsequent legislation modifications so as to increase and improve the distribution of available and allocated resources (Government of Spain, 2016[536]). According to recent OECD research, many of the measures led to a fall in job satisfaction, and the government subsequently began easing restrictions (OECD, 2018[530]).

For example, teacher replacement rates were permitted to rise to 100% as of 2016 to create an additional 130 000 available teaching positions. The same year, the Territorial Co-operation Programmes were relaunched to support vulnerable students. At the same time, autonomous communities received a total of EUR 325 million from the MECD to implement new vocational education and training (VET) programmes and assist socio-economically

vulnerable families with the costs of school materials. Following this measure, in 2017, additional funds were allocated for the training, skill development and mobility of teaching staff across all education levels, as well as to improve school activities (OECD, 2018[530]). The policies to control expenditures related to teaching hours and class sizes have also been repealed by the new ministerial team (National information reported to the OECD).

Higher education also benefited from softer restrictions, including increases in university tuition fees, which mostly occurred in 2012-13 in certain regions, and fees have since, for the most part, been frozen. The law also allowed for the introduction of international differential fees to cover 100% of the cost of instruction, pursuant to policies established by autonomous communities. As of 2016-17, four autonomous communities have set international differential fees by decrees, five allowed universities to set their own differential fees, and eight did not permit differential fees (OECD, 2018[530]). The Royal Decree was repealed in in 2019 through Law 4/2019, which reduced teaching hours and derogated class size restrictions (Government of Spain, 2019[539]).

Additional education policies of potential interest to other countries

Governance

- A series of reforms have sought to improve the quality of higher education in Spain. In 2013, the Committee of Experts for the Reform of the Spanish University System published a report with some key recommendations: pursue greater specialisation and differentiation among higher education institutions; balance increased autonomy for institutions with stronger accountability within the system; and strengthen internationalisation and invest sufficient funds (Miras-Portugal et al., 2013[537]). Reforms were then introduced to increase institutional autonomy over decisions relating to human resources programme offers (OECD, 2018[530]). More recently, the Spanish Strategy for Higher Education (Estrategia Española para la Educación Superior, 2017) seeks to act as a framework enabling greater synergies and improved relations between all actors within the higher education system (ministerial departments, the autonomous communities and higher education institutions). The strategy has multiple objectives covering equity and quality, labour market relevance, internationalisation and better career pathways and opportunities for mobility and exchange among academics and researchers (Congreso de los Diputados, 2017[538]). Other measures within the sector include reinforcing the capacity to choose study programmes based on demand and adapting training offers to the needs of the productive system. In addition, students have access to an employability map (mapa de empleabilidad de las titulaciones universitarias), which provides information relating to the labour market insertion of tertiary graduates. This is produced using information collected within MECD's Integrated University Information System (Sistema Integrado de Información Universitaria, SIIU). There has also been ongoing revision of vocational training qualifications of the occupational standards recognised within the National Catalogue of Professional Qualifications (Catálogo Nacional de Cualificaciones

Profesionales, CNCP), with a particular focus on digital competencies (Government of Spain, 2018[539]).

- The Spanish National Agency for Quality Assessment and Accreditation (Agencia Nacional de Evaluación de la Calidad y Acreditación, ANECA, 2012) was established to improve the quality of tertiary education through evaluation, certification and accreditation of the institutions. As part of the Law 15/2014 for the rationalisation of the public sector and other administrative reforms, ANECA acquired a definitive status as an autonomous organisation, independent from the Ministry of Science, Innovation and Universities, and the central public administration.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Sweden

Context

Schools in Sweden have similar disciplinary climates in science lessons found in other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of 0.02 (the average index value was 0.00). Student truancy in 2015 was lower than the OECD average: 9% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to 19.7% on average. However, students in Sweden were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.13 (the average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was higher than the OECD average at 0.17 (the average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 37%, compared to the OECD average of 35.4% (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools have higher levels of autonomy over curriculum in Sweden than on average across the OECD: 76.8% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Lower secondary teachers in Sweden earned 89% of the average salary of a full-time, full-year worker with tertiary education in 2016, which was lower than the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 63.1% of teachers in Sweden said that if they could choose again, they would still become a teacher; this was lower than the OECD average of 75.6%. Furthermore, 10.7% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Sweden are more likely than average to conduct self-evaluations of their schools (98.2% of students were in schools whose principal reported this, compared to the OECD average of 93.2%), but less likely than average to undergo external evaluations of their schools (68.2% of students were in schools whose principal reported this, compared to the OECD average of 74.6%) (OECD, 2016[1]). Teacher appraisal levels as reported in the previous cycle of TALIS 2013 were higher than the average: 84.4% of all teachers had reported then having received an appraisal in the previous 12 months, compared to the TALIS 2013 average of 66.1% (OECD, 2014[4]).

The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 19%, which was less than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher than the OECD average: 50% of decisions in Sweden were taken at the school level, compared to the OECD average of 29%.

Sweden's annual expenditure per student at primary level in 2015 was USD 10 853, which was higher than the OECD average of USD 8 631. At secondary level, Sweden spent USD 11 402 per student, compared to the OECD average of USD 10 010, while at tertiary

level (including spending on research and development), Sweden spent USD 24 417 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on education (from primary to tertiary) in Sweden as a proportion of gross domestic product (GDP) was 5.3%, which is similar to the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was lower than the OECD average (3.5% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

Sweden's key education policy priorities have evolved in the following ways over the last decade (Table 8.27).

Table 8.27. Evolution of key education policy priorities, Sweden (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, for early childhood education and care (ECEC), there could be more guidance and support for staff with caring responsibilities and teaching positions on leadership and management. In addition, there has been some deterioration in the quality and status of the teaching profession as well as an emerging shortage of qualified practitioners, requiring immediate system-wide attention. [2013; 2015]	Sweden reported the provision of secure and peaceful learning environments in schools as an ongoing priority as well as making the teaching profession more attractive and attracting more skilled teachers into the profession. Another aim is to provide school leaders and teachers with adequate development and career progression opportunities to strengthen the profession and make it more attractive. The lack of continuous training for the teaching workforce remains a major challenge. [2013; 2016-17]
Evaluation and assessment	The OECD identified the ongoing need to provide a common national reference framework for educational evaluation and assessment. Improved summative and formative assessment skills among teachers are needed, as is a system of teacher appraisal for registration at key stages in the career to encourage meritocratic career advancement. The recruitment, training, appraisal and support of school leaders is crucial due to the central role of school leadership in a decentralised system. There is a general need to improve pedagogical leadership among school leaders. The major tools providing evidence on how the education system is performing do not offer reliable measures of performance differences between regions/municipalities. [2011; 2015]	Sweden reported the ongoing prioritisation of improving equity in assessment and grading. It also reported the continuous challenge of providing a coherent national framework for evaluation and assessment that offers a clear overview of performance across the system and ensures comparability of assessment results across schools. [2013; 2016-17]
Governance	The OECD identified wide variations in local authorities' capacity to provide the kind of recruitment, induction, mentoring, and continuing professional development necessary to support sustained improvements in teaching and leadership. Structural conditions and limited collaboration among schools and municipalities have resulted in a fragmented school system that does not provide optimal conditions for the professional development of teachers and school leaders. The OECD also identified the need to improve the system of institutions in charge of advising and supervising education policies. Key school reforms have been introduced in a piecemeal approach, are implemented by different actors, and risk limited or partial implementation. [2013; 2015]	Sweden reported an ongoing priority to strengthen the alignment and capacity to deliver reforms with a decentralised approach. Steering education policy through a clear national vision focused on raising the quality of Swedish education was also identified as a need. These priorities are ongoing. [2013; 2016-17; 2018-19]
Funding	According to OECD evidence, due to the increase in migration and a migrant population that includes a large	A reported priority is to improve the mechanisms for allocating and using resources

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
	share of refugees and family-reunion immigrants with relatively low skills, while low-skilled jobs make up a low proportion of the economy, important investments were needed to be targeted at the education and integration of refugees. [2017]	to increase effectiveness. A focus is put on identifying and implementing an effective resource allocation model to promote efficient resourcing across the system. [2016-17]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- Sweden introduced several reforms to improve the attractiveness of the teaching profession. The teacher education programmes, introduced in 2011, are structured as four main degrees: pre-school education, primary school education, subject education and vocational education (Bäst i klassen - en ny lärarutbildning, 2009). Admission requirements are consistent with other higher education courses, although some supplementary conditions exist, such as required reading for certain courses. Alternative routes into teaching carry other requirements, such as pathways that demand proven work experience, and the KPU (Kompletterande pedagogisk utbildning) pathway, which supports academics in moving into teaching, which requires a doctoral degree. Teaching practice during initial teacher training is carried out at specialised training schools (Övningsskolor, 2014).

  Through a career development reform (2013), the government created career advancement steps with salary increases for qualified teachers in compulsory and upper secondary schools. Two new career categories were introduced: first-class teachers (förstalärare), who excel in their teaching practice, receive the equivalent of EUR 530 (SEK 5 000) per month; senior lecturers (rektor), holders of a licentiate degree, receive the equivalent of EUR 1 000 (SEK 10 000) per month. Approximately, one in six teachers qualifies for one of these positions, mostly that of first-class teachers (National information reported to the OECD).

  Progress or impact: The University of Stockholm was the first to start special training schools with a focus on strengthening the practical training component (VFU) in selected pre-schools and schools (University of Stockholm, 2017[540]). The aim was to create the best possible conditions for teacher students, thereby raising the quality of teacher education and strengthening professional development (University of Stockholm, 2017[540]).

  A teaching profession coalition (2015) sustained consultations with social partners on potential alternatives for a teachers' wage progression scheme linked to professional growth (other objectives include revising teachers' administrative workload, improving induction and diversifying career pathways) (OECD, 2017[541]).

- Sweden has introduced pedagogical training initiatives structured as collaborative research-based learning. These "Boost" programmes, for teachers of mathematics, reading and science were launched with a budget of EUR 28 million. The Matematiklyftet programme (2012), for example, is available to all mathematics teachers, tutors and school principals. Materials are produced in collaboration with over 20 Swedish universities and colleges and published on line. Materials are organised according to year groups and school type, and all follow a four-part structure supporting teachers to: 1) prepare independently, using the materials provided to them; 2) meet colleagues to discuss what they have read and collaboratively plan a lesson; 3) teach the lessons in their own classrooms; and 4) reconvene to evaluate and discuss their experiences. Weekly discussion meetings focus on didactic questions and are moderated by mathematics tutors trained by national authorities. During the programme, teachers exchange learning materials, ideas and experiences and enter into professional dialogue. The programme fosters collaborative teaching and enhances teamwork. School principals are also involved (OECD, 2017[541]).

  Progress or impact: A final evaluation report (2016) from the Swedish National Agency for Education found that this collegial training model (Matematiklyftet) has had a positive impact. Over 35 000 teachers were found to have participated in the mathematics training, which corresponds to 75% of all mathematics teachers in compulsory and upper secondary education. The training is also available to tutors (1 668 had participated by 2016) and school principals (2 961 had also participated by 2015). Participants reported feeling more confident and secure in their classrooms, and their teaching was more varied and student-centred. In 2017, the total cost of the programme was estimated at EUR 56 million (European Commission, 2017[542]).

  The evaluation did not take into account the impact of the programme on students' learning outcomes, however (Skolverket, 2016[543]) (European Commission, 2017[542]).

  As of 2018, new mathematics modules are available on the Learning Portal, which aim to provide teachers, specialist teachers or specialist support teachers with tools to develop teaching for students with additional needs (Skolverket, 2018[547]). During 2018/19, supervisors can take part in a web-based supervisor training to acquire the skills to supervise participant teacher groups.

- In 2015, Boost for Reading (Läslyftet, 2015-19), was launched to provide teachers in Sweden with an in-service training programme in literacy. The programme is also now being offered to pre-school teachers as part of a broader effort to strengthen the educational mission of pre-schools and also to promote the teaching of Swedish at an early age for children whose mother tongue is not Swedish (European Commission, 2017[542]). The Swedish government allocated SEK 6 million (USD 677 600) per year to the Boost for Reading programme during 2017-19, with an anticipated participation rate of just under half of all public schools and about one-quarter of private schools over the first three years (OECD, 2017[541]).

Progress or impact: By 2017, the European Commission reported that 20 000 teachers and 1 600 schools had participated in Läslyftet. Funding grew from EUR 6.2 million in 2017 to EUR 9.5 million in 2019, including EUR 0.62 million for pre-schools (European Commission, 2017[542]). The 2018 annual evaluation of the Läslyftet found that two key goals have been met: developing skills for children's language development, and developing a collaborative teaching culture (Umeå Centre for Evaluation Research, 2018[545]).

- The Boost for Teachers (Lärarlyftet I, 2011-17; Lärarlyftet II, 2012-18) programmes offer university-based training for teachers who do not have a teaching qualification in the subject or age group they teach. The first phase of the programme saw 30 000 teachers enrol. The second phase was launched in 2012 with an additional pathway, open for applications from 2016, providing training courses leading to a qualification for those wishing to become special needs teachers (OECD, 2017[541]).

Progress or impact: Since 2011, all Swedish teachers have been legally required to have certification in the subjects they teach. However, national statistics show that about one in three teachers in compulsory schools, and about one in five teachers in upper secondary schools, were not certified in 2017/18. The criteria for eligibility for certification are based on the candidate's university degree and a points system, which differs by subject and grade. The government and the school authorities maintained their commitment to the implementation of Lärarlyftet II throughout 2019, with a total budget allocation of SEK 100 million. The government also committed an additional SEK 32 million to the implementation of the special educational needs teacher training pathway (Regeringen, 2018[546]).

- In 2015, the coalition for the teaching profession fostered discussions with social partners to explore how to improve teachers' wage progression in connection with their competences and development. In 2016, the government moved to address Sweden's low teacher salaries by launching the Teacher Salary Boost initiative (Lärarlönelyftet, 2016), designating an extra SEK 3 billion (USD 338 million) per year to the initiative (European Commission, 2016[547]). Principals and/or employers can request an extra SEK 3 000 (USD 338) on average in monthly funding per teacher, to be distributed at their discretion on a local level among the teaching force. The government also introduced targeted salary increases through the career development reform (2013) (see above).

Progress or impact: By 2017, at least 65 369 teachers had benefited from the Teacher Salary Boost initiative. On average, teachers received a monthly salary increase of SEK 2 600 (European Commission, 2017[542]). According to Sweden's National Agency for Education, 98% of municipalities applied for the Salary Boost grants. Despite this high level of uptake, the European Commission reported significant variation in the capacity of municipalities

to take full advantage of these grants, and to support continuous professional development among teachers (European Commission, 2016[548]).

The European Commission also recently reported that teacher recruitment and retention, particularly among early-career teachers, remain a challenge in Sweden (European Commission, 2017[542]). This is exacerbated by growing student numbers. Between 2010/11 and 2018/19, the number of students in compulsory education will have increased by 11% (from 886 000 students to 1 million students), and growth is expected to continue until at least 2030 (Cerna et al., 2019[549]). There is also an older teacher cohort where one in ten teachers in compulsory schooling is due to retire in the next five years (European Commission, 2019[550]).

According to forecasts from the Swedish National Agency for Education, 227 000 teachers must qualify for practice over the period 2017-31 to meet demand from the growing student population. However, estimates suggest that only 145 000 teachers will qualify in that period, leading to a prospective teacher shortage of more than 80 000 by 2031. Low recruitment is primarily due to the low perceived status of teachers, and salaries that fall below both the OECD and EU-22 averages later in the teaching career (OECD, 2016[551]; OECD, 2014[4]).

- Since 2016, teaching has been among the 30 professions selected for Sweden's Fast-Track initiative (2015). The initiative is an accelerated process to integrate newly arrived migrants with Swedish residence permits into a working environment that corresponds to their education and experience, within two years of their arrival. The government planned to allocate SEK 35 million per year from 2017 and 2019 (National information reported to the OECD). Newly arrived immigrants with teaching experience, including pre-school teachers, can have their qualifications validated quickly and enter a fast-track teacher training programme, partly run in Arabic, which is currently provided by six Swedish universities (OECD, 2017[541]). Participants complete work placements totalling 26 weeks in schools or pre-schools, in parallel with their studies. Participants are expected to complete the training and placements within one year instead of four, although this can vary depending on the person's previous education and work experience, as well as opportunities in the labour market (OECD, 2017[541]).

Progress or impact: In 2015, before the implementation of the Fast-Track initiative, it was estimated that almost 1 900 newly arrived adults had a teaching qualification from their home country and could benefit from the programme (European Commission, 2015[552]). The number of refugees registered in Sweden had increased significantly that year: from 80 000 registered refugees in 2014 to 163 000 (almost 1.7% of the population) in 2015 (European Commission, 2016[548]). As this number increases, so does the need to integrate people with a migrant background into the labour market.

In 2017, 720 newly arrived teachers entered the Fast-Track initiative, an increase from 420 the year before (OECD, 2017[541]). According to the Swedish Teachers Union, between 2016 (when the initiative was launched)

and 2018, 1 304 people had participated or were still participating in the Fast-Track programme for teachers (Lärarförbundet, 2018[553]). Although this number is small compared to the overall number of new arrivals entering the country each year, it represents a positive step towards integrating people with a migrant background into the labour market (Lärarförbundet, 2018[553]).

A 2019 study conducted by Sweden's Public Employment Service, which followed up on 50 participants from the first cohort of the teacher track, found that just over half were still in paid employment within the school system. The biggest obstacle to employment was identified as Swedish language proficiency (Vågen et al., 2019[554]).

Evaluation and assessment

- In Sweden, in 2016, the Inquiry on National Tests published a report (Likvärdigt, rättssäkert och effektivt – ett nytt nationellt system för kunskapsbedömning, 2016) proposing significant revisions and modifications to the national system for assessing knowledge in Sweden, consisting of three components: tests, assessment support materials and knowledge evaluation. According to the proposal, the National Agency for Education will be given an overall remit to develop the three components. This includes disseminating information about the new system and its various components and providing relevant training (National information reported to the OECD).

Progress or impact: National tests have been administered at the end of compulsory education and at upper secondary level for many years. In 2012, national tests at primary level were moved from Grade 5 to Grade 6. National tests were introduced for Grade 3 in 2009, covering mathematics, Swedish and Swedish as a second language, in order to identify those students requiring special support (European Commission, 2016[547]). As of 2016, it is compulsory to use the National Assessment support material made available for the teaching of Swedish, Swedish as a second language and mathematics in Grade 1.

In 2017, the government put forward a Proposal to the Swedish Parliament under the title National Test – Fair, Equal, Digital (Nationella prov – rättvisa, likvärdiga, digitala) (Regeringen, 2017[555]). This states that in accordance with assessment results, certain regulatory changes are necessary to increase the equitability and legal certainty of the national support for knowledge assessment and the grading. Proposed changes include: clarifying the purpose of national examinations and national assessment supports; assigning special significance to national test results in grading, when applicable; anonymising student responses; and ensuring responses are marked by someone other than the students' teacher. The proposition also called for national tests and national assessment supports to be digitised, in order to streamline the grading and support systems.

The parliament endorsed the government's proposal, and the new legislation came into force in mid-2018. The National Agency for Education has a

government mandate to digitise the national tests, a process that is to be completed by 2022 and to carry out a pilot project on the external assessment of student responses on national tests. The Read-Write-Count guarantee for early intervention (Läsa, skriva, räkna – en garanti för tidiga stödinsatser, 2019) introduces mandatory evaluations of pupils' reading, writing and mathematics skills at pre-school level, which are to be followed up with targeted intervention where needed.

Presently, mandatory national tests in mathematics and Swedish (including Swedish as a second language) are administered in Grades 3, 6 and 9 as well as tests for English in Grades 6 and 9 and both a science subject (biology, physics or chemistry) and a humanities subject (geography, history, religion or social sciences) in Grade 9. These tests support grading, except in Year 3, where the results support the assessment of achieved knowledge requirements. In upper secondary school, national tests are administered in different courses in mathematics, Swedish (including Swedish as a second language) and English, of which some are mandatory depending on which national programme the student is studying. The same tests are administered in adult education at the upper secondary level.

Additional education policies of potential interest to other countries

Evaluation and assessment

- The Swedish Schools Inspectorate (2008) can exert sanctions and can impose fines (through a strengthened role granted by the Education Act, 2011) to schools not complying with regulations and standards. In the new model (2011), the Inspectorate prioritises the schools in greatest need of support and supervision takes place more frequently. Inspection reports are publicly accessible on the website. During 2018, the Swedish Schools Inspectorate carried out regular supervision or quality auditing processes leading to judgements for 48% of school units (covering both compulsory and upper secondary school). Data collected and analysed by the Inspectorate is being used to better support schools. For example, The National Agency for Education has been given a mandate called "Cooperation for the Best School System" (Samverkan för bästa skola), which sees central government co-operating with and supporting the governing boards (i.e. municipalities or independent organisations) and leadership teams of under-performing schools where conditions are particularly difficult. Information from the Swedish Schools Inspectorate helps determine which schools should be given priority, and the most relevant areas for improvement (National information reported to the OECD).

Systems

Selected education policy responses

Governance

- Sweden's School Commission (Skolkommissionen, 2015) was an expert group established to support improved learning outcomes, high-quality teaching and learning and greater equity in Swedish schools (OECD, 2017[541]). The Commission

included teacher, school leader and student representatives, as well as academic researchers. The Commission delivered their final report in 2017 and has since been dissolved.

Progress or impact: The School Commission first published an interim report (2016) that set out proposals for national targets in the areas of learning outcomes and equity, as well as key areas for improvement.

The group's final report, the National Strategy for Improving Learning Outcomes and Equality (Nationell strategi för kunskap och likvärdighet, 2017), contains concrete proposals for improvement, a schedule for implementation and necessary amendments to statutes. The goals include: 1) strengthen education providers through central government support and collaboration; 2) improve the attractiveness of teaching while raising the skill levels of teachers and school leaders, and defining their core duties; 3) increase national responsibility for school funding; 4) ensure good environments for learning and development; 5) support active school choice and reduce school segregation; and 6) develop continuous curriculum development and evaluation systems (Regeringen, 2017[556]).

Actions are being taken on the proposals set out in the final report. For example, in response to Goal 3, the government launched an inquiry into the underlying causes of inequalities in allocated resources for teaching and student health within ECEC and compulsory schooling between municipalities. The inquiry will also analyse the extent to which current funding mechanisms take into account the needs of specific pupils and schools' abilities to pursue equitable outcomes.

The final report also recommended that close to EUR 560 million would support the goals of raising teacher quality and addressing inequities found in the interim and final reports. Statistics Sweden was tasked with creating an annual socio-economic index that will provide the central government with a funding allocation strategy for targeted grants and support for outlined goals and initiatives (Regeringen, 2017[556]).

- Vocational education and training (VET) providers, both private and public, and employers in Sweden, collaborate to organise higher vocational education (yrkeshögskolan, HVE), financed by the state. The duration of HVE programmes ranges from six months to three years, and most learners spend part of that time in the workplace. Since 2009, the Swedish National Agency for Higher Vocational Education (NAHVE, 2009) has been responsible for ensuring the quality and relevance of HVE. Recently, the OECD reported that in terms of funding, these include administering a common framework of publicly funded vocational education at the post-secondary education level, and deciding which programmes will receive public funding and be included in the framework. In terms of quality assurance, the NAHVE audits the quality and outcomes of the programmes. It also analyses and assesses the demand for qualified labour and trends in the labour market (OECD, 2018[421]).

Progress or impact: Findings from the Swedish National Agency for Higher Vocational Education (NAHVE) show that the number of applicants for HVE courses usually exceeds the supply and that this may be a contributing factor to the observed shortage of graduates with this type of education. Shortages, therefore, seem to be linked to insufficient supply of higher VET vacancies rather than excess in demand, with ample margin to enlarge the offer (OECD, 2016[557]).

According to recent statistics reported by the NAHVE, the number of eligible applications for HVE increased from 38 000 in 2014 to 40 100 in 2017. The number of graduates has also significantly increased, from 7 800 in 2007 to 12 700 in 2016. Within a year of their final exams, 93% of graduates from 2016 found employment, and 68% of these students were in a role that fully or largely corresponded to their education. At least 91% of students that year reported being satisfied with their education. At the start of 2017/18, more than 50 000 students were enrolled in 1 965 HVE training courses. At least 20 000 of those enrolled were first-time students (NAHVE, 2017[558]; NAHVE, 2018[559]).

In the 2018 budget bill, the Swedish government put forward a proposal for a significant expansion of HVE, entailing the most substantial investment in full-time study positions since the introduction of HVE. The parliament endorsed the government's proposal.

The number of students in HVET (higher vocational education and training) is expected to increase by about 45%, from about 30 000 full-time study positions per year to 44 000 by 2022. In terms of total number of students, this means that HVE is expected to grow from 50 000 in 2018 to 70 000 students in 2022.

Funding

- Tertiary education has always been free of charge in Sweden for all students who come from Sweden, the European Union, the European Economic Area (EEA) and Switzerland. However, for international students from outside the European Union and the EEA, a tuition fee was introduced in 2011. All students, including those from outside of the European Union and the EEA, who wish to enrol in Swedish universities, can apply for financial support (through study grants and study loans) to pay for living expenses, with eligibility determined according to a minimum performance level and the number of credits achieved. Non-Swedish residents, who moved to Sweden for a reason other than to study, are also eligible for financial support in most cases (OECD, 2018[421]).

Progress or impact: Following a dramatic fall in the number of foreign-born students with the introduction of tuition fees in 2011, international student numbers are now rising, including among those eligible for fees (European Commission, 2018[560]). The Swedish Higher Education Authority reports that for the last ten years, the number of first- and second-cycle foreign students in Swedish universities has surpassed the number of

Swedish students abroad (Regeringen, 2018[561]). During 2017/18, there were 2 740 new incoming students who paid tuition fees, an increase of 23% compared to the year before (Swedish Higher Education Authority, 2017[562]).

In 2017, the Swedish government launched an inquiry into measures to strengthen the internationalisation of Sweden's higher education system. A key proposal of the final report is to attract more international students by simplifying the application process and increasing scholarship funds. Higher education institutions must also increase transparency regarding tuition fees. The new measures are planned for implementation between 2020 and 2030 (Regeringen, 2018[561]).

Additional education policies of potential interest to other countries

Governance

- In response to a 2016 Swedish government assignment to develop and implement a new national system for quality assurance of higher education (2017), the Swedish Higher Education Authority consulted students and various stakeholders in the labour market. It also piloted studies to test both a new methodology for institutional reviews and a revised methodology for higher education programme evaluations (Eurydice, 2018[563]). The result is a new six-year model of quality assurance for higher education institutions (HEIs) that started in 2017 (OECD, 2017[541]). According to the model, university chancellors and the National Authority for Higher Education remain responsible for evaluating higher education institutions (OECD, 2017[541]). From 2017, HEIs have the right to develop their own internal policies and procedures for quality assurance.

Funding

- Following several targeted measures to tackle educational inequalities, in 2017, Sweden adopted additional educational measures to lower inequality and improve academic outcomes for all students. These include earmarked grants allocated to municipalities for targeted initiatives, such as interventions for newly arrived students, the Cooperation for the Best School System (Samverkan för bästa skola) programme and grants for equitable schools (SEK 3.5 billion for 2019) (National information reported to the OECD).

More information is available at http://www.oecd.org/education/policyoutlook.htm.

Turkey

Context

Schools in Turkey have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.12 (the OECD average index value was 0.00). Student truancy was among the highest among OECD countries: 47% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in Turkey were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.12 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the highest in the OECD at 0.54 (the OECD average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in Turkey in 2016 aged 50 or over was 5.4%, which was among the lowest in the OECD (the average was 35.4%). In 2017, teachers in Turkey had fewer net teaching hours for general programmes than the OECD average. Teachers annually taught 720 hours at primary level and 504 hours at lower secondary level, compared to OECD averages of 784 and 696 hours, respectively (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, Turkish schools have lower levels of autonomy over curriculum, compared to the OECD average: 21.8% of principals in Turkey reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]).

Lower secondary teachers earned 80% of the average salary of a full-time, full-year worker with tertiary education in 2016; this was less than the OECD average ratio of 91% (OECD, 2018[2]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 74.5% of teachers in Turkey said that if they could choose again, they would still become a teacher; this was similar to the OECD average of 75.6%. Furthermore, 26% of teachers felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, school leaders in Turkey are about as likely as the OECD average to conduct self-evaluations of their schools (93.5% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and more likely than average to undergo external evaluations of their schools (78.8% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). In Turkey, the share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests were used to make decisions on students' promotion or retention was 32%, which was close to the OECD average of 31% (OECD, 2016[1]).

In 2017, provincial/regional autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher in Turkey than the OECD average: 25% of decisions in Turkey were taken at this level, compared to the OECD average of 7%.

Turkey's annual expenditure per student at primary level in 2015 was USD 4 134, which was among the lowest among OECD countries (the average was USD 8 631). At secondary level, Turkey spent USD 3 511 per student, compared to the OECD average of

USD 10 010, while at tertiary level (including spending on research and development), Turkey spent USD 8 901 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education as a proportion of gross domestic product (GDP) was 4.8% in Turkey, which was lower than the OECD average of 5%. The proportion coming from private sources (including household expenditure, expenditure from other private entities and international sources) was higher than the OECD average (21% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

Turkey's key education policy priorities have evolved in the following ways over the last decade (Table 8.28).

Table 8.28. Evolution of key education policy priorities, Turkey (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	N/A	Turkey reported the ongoing priority of preparing quality teachers and school leaders through policy measures, including co-operation with universities and institutions. [2013; 2016-17]
Evaluation and assessment	N/A	To improve learning outcomes, an ongoing priority reported by Turkey is to enhance the evaluation and assessment tools within a comprehensive framework aligned with educational goals. Turkey recently reported prioritising the monitoring of education and training processes in a multi-directional way by creating a national monitoring system and at the same time, monitoring the educational situation of students individually. [2013; 2016-17]
Governance	According to OECD evidence, the business sector is vibrant, but low skills and high employment costs, amplified by the recent minimum wage hike, foster informality, as the burden of going formal is too high. Informality and semi-formality, in turn, slow down productivity growth. [2016]	Turkey reported the ongoing priority of granting provincial authorities and education institutions greater capacity to address local challenges, while at the same time ensuring alignment with national priorities. [2013]
Funding	According to OECD evidence, the upgrading of the quality of teachers, educational materials and school facilities will claim additional resources. The low level of spending on education, and its uneven quality and distribution across regions and school types is reflected in Turkey having one of the lowest overall employment rates, particularly for women, among OECD countries. The employment rate is strongly and positively correlated with the level of education attained, and since 2000, the employment rates for illiterate workers and those with less than high school education have been on a noticeable downward trend for both men and women. The OECD identified a need to increase spending efficiency. More recently, the OECD put forward that higher-quality education at all levels, including upskilling and lifelong learning, ought to be a top policy priority, which calls for a reallocation of fiscal resources. [2008; 2012]	Turkey previously reported a need to adequately fund the education system; this need is ongoing. [2013]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

Evaluation and assessment

- Turkey's Monitoring and Evaluation of Academic Abilities (ABİDE, 2016) project aims to assess the learning outcomes of the education system and provide feedback. The objective is to offer students test items other than multiple-choice assessments and to measure students' higher-order thinking skills (Eurydice, 2018[564]). ABİDE forms part of the "Data-Based Management with Learning Analytics Tools" goal of Turkey's Education Vision 2023 (Ministry of National Education, 2018[565]; Eurydice, 2018[564]).

Progress or impact: In 2015, a pilot for Grade 8, the last year of lower secondary school, was run with full implementation by 2018 (Ministry of National Education, 2019[566]) and national information reported to the OECD). In 2016, a pilot was conducted for Grade 4, with full implementation by 2018. The central organisation, the provincial administrators, as well as the school principals and teachers were informed of the outcomes through printed and visual materials before the implementation of the pilot (National information reported to the OECD). In 2018, 70 000 students could be reached through ABİDE (Eurydice, 2018[564]). The aim is to implement ABİDE in Grade 10 by 2020 (National information reported to the OECD), and to conduct ABİDE every two years.

Additional education policies of potential interest to other countries

School improvement

- The Ministry of National Education (MoNE) and the Scientific and Technical Research Council of Turkey (*Türkiye Bilimsel ve Teknolojik Araştırma Kurumu*, TUBITAK) signed a Cooperation Protocol for Teaching, Entrepreneurship and Leadership Trainings to improve technical and vocational education and training (TVET) quality, and to promote social awareness about innovation (2012) (Ministry of National Education, 2013[567]). From 2013-15, 15 000 managers and teachers were trained in professional skills, entrepreneurship and leadership (Durgun, 2016[568]). The aim is to carry out in-service training activities of workshop and laboratory teachers in real work environments. Between 2014 and 2017, approximately 2 000 teachers participated in 80 activities at work within the scope of the co-operation protocols (Data collected by Turkey's Ministry of Education in-service department of the Directorate General for VET). By 2018, 1 057 teachers received on-the-job training in 56 activities under the co-operation protocols. In 2019, 3 384 teachers were in charge of 92 activities in the scope of co-operation protocols, and 4 000 teachers received distance learning. More than 500 teachers were planned to receive on-the-job training, with 25 additional activities for newly signed protocols (Data collected by Turkey's Ministry of Education in-service department of the Directorate General for VET).

Evaluation and assessment

- Turkey's Standards for Primary Education Institutions (2010) became the Standards for Pre-school and Primary Education Institutions (Institution Standards) in 2013/14, which also cover religious and vocational secondary schools. The Institution Standards is a system for collecting, analysing and evaluating the results of educational services, based on minimum qualifications (standards and sub-standards) for educational services, to improve school quality based on outcomes. An e-school module supported by the MEBBIS (Ministry of National Education Information Systems) database can be accessed by all schools. School administrators, teachers, students and parents can annually feed data into the system through the self-evaluation design. After the data collection process, the analyses are presented to authorities at the school, district/provincial directorates of national education and ministerial levels. Based on the results, schools develop a self-improvement plan. The tool aims to aid in school empowerment and is part of the school decentralisation plans of the Ministry of National Education. MoNE has made updates to the Institution Standards in accordance with developments and changes in education and training. The data collection of the Pre-school Education and Primary Education Standards System for the 2017/18 academic year was completed, with the 2018/19 academic year currently in progress (Ministry of National Education, 2019[569]; Ministry of National Education, 2016[570]). The data will benefit the monitoring and evaluation reports that will be prepared by the data of the Agency Standards System (National information reported to the OECD) (Ministry of National Education, 2016[571]).
- Through the MoNE Strategic Plan Monitoring Module, the monitoring and evaluation of the plan are carried out to develop data-based education policies, identify areas for improvement, review the resource allocation in the fields of activity and make more rational priorities. In 2015-19, monitoring and evaluations of the plan took place in six-month intervals. Monitoring and evaluation reports are prepared periodically, and educational policies are discussed through meetings with stakeholders. The process of monitoring and evaluating the strategic plans of 81 provincial, national education directorates is ongoing (National information reported to the OECD).
- To contribute to the training of qualified human resources in vocational and technical education, in 2019, a quality assurance system was established in vocational and technical education. The Quality Assurance Directive of the Vocational and Technical Education Institutions (Mesleki ve Teknik Eğitim Kurumlarının Kalite Güvencesi Direktifi, 2019) determines the procedures and principles on quality assurance.

Systems

Selected education policy responses

Governance

- Turkey has set education goals in a series of development plans. The Strategic Plan for the Ministry of National Education (MEB Stratejik Planı, 2010-14) defines medium- and long-term objectives of public administration, along with principles and policies, objectives and priorities, or performance criteria plans, including

methods and allocation of resources (European Commission, 2018[572]). The Tenth Development Plan (Onuncu Kalkınma Planı, 2014-18) contains a section on education, which focuses, among others, on making lifelong learning more accessible and relevant to labour market needs. In addition, the Lifelong Learning Strategy Document and Action Plan (2014-18) aims to develop a lifelong learning system by prioritising six main points: 1) establishing a lifelong learning culture and awareness in the community; 2) increasing a lifelong learning presentation and opportunities; 3) increasing access to lifelong learning opportunities; 4) developing a lifelong guidance and counselling system; and 5) developing recognition of prior learning (RPL); 6) improving the system development of a lifelong learning monitoring and evaluation system (European Commission, 2018[572]).

Progress or impact: In addition to the key policy documents mentioned above, new education documents have been implemented.

In 2015, the new Ministry of National Education Strategic Plan (2015-19) was introduced based on previous policy documents. It sets the priorities on access to education, quality in education and training, and improving institutional capacity.

The Medium-Term Program (Orta Vadeli Program, OVP, 2017-19) sets further goals for education (MoD, 2016[573]).

The Teacher Strategy Document (2017-23) focuses on six components to address shortcomings, including initial teacher training, professional development and employment processes (Ministry of National Education, 2017[574]).

- In preparation for the 100th year of its establishment, the Government of the Republic of Turkey launched Turkey's Strategic Vision 2023 (TSV, 2008-23), which sets forth goals to achieve by 2023 in the areas of international relations, international security, domestic politics, economy, education, science and technology, and culture (TASAM, 2012[575]). The education goals include equipping classrooms, labs, teacher rooms and kindergartens with at least 450 000 interactive whiteboards and providing at least 11 million tablets to students under the Movement of Enhancing Opportunities and Improving Technology (FATIH, 2011) project (Trucano, 2013[576]). In addition, the goals promote the implementation of the reform of the Council of Higher Education (Yükseköğretim Kurulu, YÖK), also known as the Silent Revolution in Higher Education (2017), and measures to increase the number of private universities and the number of teachers in universities (YÖK, 2018[577]).

Progress or impact: According to the Ministry of National Education, by 2015, at least 200 000 interactive display boards had been installed in classrooms around the country, and more than 700 000 tablets had been distributed to students in 81 cities (FATIH, 2016[578]). According to national information reported to the OECD, by 2019, at least 432 288 interactive display boards had been installed in classrooms around the country, and more than 1 437 800 tablets had been distributed to students in 81 cities and 47 158 schools.

The higher education sector has also reported progress in the form of a set of measures referred to as the "Silent Revolution in Higher Education" that was published in 2017 as part of the Production Reform Package. Measures include the introduction of an Advisory Board for Higher Education Programs, a Coordination Board for Vocational Schools, and support for workplace-based training. According to the YÖK, these measures will lead Turkish universities to a more competitive environment at all levels; place quality at the centre of growth in higher education; ensure that the Council of Higher Education (CoHE) will take decisions more openly and collaboratively after transferring some of its authority; promote the process of producing knowledge and training researchers; and develop relations between Turkish universities and the business world (YÖK, 2018[577]).

Higher education statistics collected by the YÖK indicate Turkey's higher education system includes 186 institutions, of which 112 are public, and 74 are private (YÖK, 2018[579]). According to national information, by 2019, the number of higher education institutions increased to 207 institutions, of which 130 are public, 72 are private, and 5 are public foundations. The MoNE reported in early 2018 that the number of private institutions had increased from 51 at the end of 2012 to 74 (69 universities and 5 vocational schools) by the end of 2017 (Ministry of National Education, 2018[580]). Finally, national data provided by the YÖK indicate that the number of academicians increased from 142 437 in 2013/14 to 158 098 in 2017/18 (YÖK, 2018[581]; YÖK, 2018[582]).

Additional education policies of potential interest to other countries

Governance

- Since 2010, the Turkish Ministry of National Education has organised its education sector around many strategies and action plans to improve access and quality at all school levels. In 2015, the government reported that the MoNE's Strategic Plan (2015-19) manages the main strategies for Turkey's education system by setting the medium- and long-term education goals. The plan was first prepared and implemented in 2010-14. Following consultation with the central and provincial organisation units and related stakeholders, the plan was replaced by a new set of five-year targets and goals around three main themes: access to education and teaching; quality in education and instruction; and institutional capacity (MoNE, 2015[583]).
- Since 2016, representatives of different Turkish sectoral and professional organisations, as well as municipalities and other public and private institutions and organisations in the country have come together to form School Administrative Boards of Vocational and Technical Education (Mesleki ve Teknik Eğitim Okul Yönetim Kurulu, MTOYK) in all provinces and districts. According to recent OECD research on Turkey, the MTOYKs were formed to strengthen school-sector co-operation in vocational and technical education (OECD, 2018[584]). In 2016, the Ministry of Education established the Vocational and Technical Education School Board of Directors with the approval of Circular No. 2016/21 (Ministry of National Education, 2016[585]).

- The Turkey Maarif Foundation (Türkiye Maarif Vakfı, 2016), a public foundation, is the only organisation with authority to open direct educational institutions outside the Ministry of Education on behalf of Turkey abroad (Turkey Maarif Foundation, 2018[586]). The foundation provides scholarships to students at all education levels from pre-school education to post-secondary education. It has also opened schools, educational institutions and dormitories abroad; trained teachers qualified to serve both in Turkey and abroad; conducted scientific research and research and development studies; published articles; and carried out other educational activities in accordance with the legislation of the country where it operates. Since 2016, at least 105 schools have been established under the auspices of the Turkey Maarif Foundation: 29 new schools have been opened, and 76 existing schools have been transferred to the Foundation (Turkey Maarif Foundation, 2018[587]).

Funding

- Although students' families usually pay tuition fees for private schools in Turkey, the government requires that all private schools provide free tuition to at least 3% of their students (Eurydice, 2018[588]). Under the Private Teaching Institutions Law (n. 5580, Özel Öğretim Kurumları Kanunu, 2013), government grants have been provided to private vocational and technical schools in organised industrial zones, in addition to the funding available to private schools with students with special educational needs and disabilities (OECD, 2013[589]). This was an amendment to the original 2007 law (Legislation Information System of Turkey, 2007[590]). In 2016, the government made additional funding available to all students in vocational and technical schools founded outside of organised industrial zones. The state contributes to part of the salaries paid to VET students in order to support workplace-based learning in vocational and technical education (Ministry of National Education, 2017[591]). For students with skills training in business, the government pays between one- and two-thirds of their wages. Since 2014-15, the government has been implementing partial subsidies to families to reduce tuition fees for private institutions, ranging from early childhood education and care to higher education. The fee is calculated based on the type of school and the grade of the student.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

United Kingdom

Context

Schools in the United Kingdom have less favourable disciplinary climates in science lessons compared to other OECD countries, according to students' reports in the Programme for International Student Assessment (PISA) 2015, with an index of disciplinary climate of -0.08 (the OECD average index value was 0.00). Student truancy in 2015 was also higher than the OECD average: 25.5% of 15-year-olds reported skipping at least one day of school in the two weeks before the PISA 2015 test, compared to the OECD average of 19.7%. However, students in the United Kingdom were more likely to report that their science teachers adapt their instructions more frequently than the OECD average, with an index of adaptive instruction of 0.15 (the OECD average index value was 0.01) (OECD, 2016[1]).

The PISA 2015 index of instructional educational leadership (measuring the frequency with which principals report doing leadership activities specifically related to instruction) was among the highest in the OECD at 0.85 for the United Kingdom (the OECD average was 0.01) (OECD, 2016[1]). The proportion of lower secondary teachers in 2016 aged 50 or over was 17.5%, which was below the OECD average of 35.4% (OECD, 2018[2]). According to school principals' self-reports in PISA 2015, schools in the United Kingdom have higher levels of autonomy over curriculum than on average across the OECD: 94.8% of principals reported that the school has primary autonomy over curriculum, compared to the OECD average of 73.4% (OECD, 2016[1]). According to the OECD Teaching and Learning International Survey (TALIS) 2018, 28.8% of teachers in England (United Kingdom) felt that the teaching profession was valued in society, compared to an OECD average of 25.8% in 2018 (OECD, 2019[3]).

According to school leaders' reports in PISA 2015, all school leaders in the United Kingdom are expected to conduct self-evaluations of their schools (100% of students were in schools whose principal reported this, compared to the OECD average of 93.2%) and they are also much more likely than average to undergo external evaluations of their schools (96.9% of students were in schools whose principal reported this, compared to the OECD average of 74.6%). The share of students enrolled in secondary schools whose principal reported in PISA 2015 that standardised tests are used to make decisions on students' promotion or retention was 59%, which was higher than the OECD average of 31% (OECD, 2016[1]).

In 2017, school autonomy levels over resource management (allocation and use of resources for teaching staff and principals) were higher in the United Kingdom than on average across the OECD: for example, 75% of decisions in England and 50% of decisions in Scotland are taken at the school level, compared to the OECD average of 29%.

The United Kingdom's annual expenditure per student at primary level in 2015 was USD 11 630, which was among the highest among OECD countries (the OECD average was USD 8 631). At secondary level, the United Kingdom spent USD 10 569 per student, compared to the OECD average of USD 10 010, while at tertiary level (including spending on research and development) the United Kingdom spent USD 26 320 per student, compared to the OECD average of USD 15 656. In 2015, expenditure on primary to tertiary education in the United Kingdom as a proportion of gross domestic product (GDP) was 6.2%, which was one of the highest rates in the OECD (the average was 5%). The proportion coming from private sources (including household expenditure, expenditure

from other private entities and international sources) was higher in the United Kingdom than the OECD average (30.7% compared to 16.1%) (OECD, 2018[2]).

Evolution of key education policy priorities

The United Kingdom's key education policy priorities have evolved in the following ways over the last decade (Table 8.29).

Table 8.29. Evolution of key education policy priorities, United Kingdom (2008-19)

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
School improvement	According to OECD evidence, teacher preparation in **England** needs to find the right balance of pedagogical training and competence; formal teacher qualification requirements should not create obstacles to the recruitment of those with significant industry experience; and teacher preparation needs to reflect the particular needs of those who are going to teach vocational, rather than academic programmes. [2013] In **Scotland**, the OECD found there is a need for a stronger teaching profession, and the career structure is relatively flat. [2015] In **Wales**, the OECD found support staff do not have clear longer-term career opportunities, and many do not have good working conditions. Leadership capacity in schools and at other levels of the system remains under-developed. The conditions to nurture a high-quality teaching profession are not fully developed. [2014] In the **United Kingdom**, the OECD also identified that teacher shortages are high, and retention rates are low, mainly at the secondary level. Disadvantaged areas, in particular, struggle to attract and retain teachers, which can contribute to lower educational outcomes in these areas. [2017]	**England** reported ongoing challenges in attracting high-quality teachers and school leaders while providing them with the tools to manage their improvement. More recently, reducing teacher and school leader workload has been reported as a top priority. [2013; 2016-17; 2019]
Evaluation and assessment	The OECD identified that **England** should establish a more credible and robust system of apprenticeship qualifications coherent with the wider vocational system. [2018] In **Northern Ireland**, the OECD also identified difficulty in establishing quality indicators and measures across all the education system's objectives. There is a need to better align the national assessment approach with the knowledge and skills-based curriculum. There needs to be a regular review of the new moderation process to assess demands on capacity at the school level and centrally. In addition, parents lack a consultation platform to provide input for system evaluation and policy development. [2014] In **Scotland**, shared approaches to assessment by the local authorities would help avoid duplication and contribute to a strengthened "middle" between the centre, on the one hand, and schools, on the other. Large-scale research or evaluation projects by either the universities or non-governmental agencies on what is working well in Broad General Education and what areas should be addressed should be encouraged, as recommended by the OECD. [2015] In **Wales**, the leader and teacher standards on which appraisal is based have many elements making it difficult to define what should be national education priorities and to link them to an improvement agenda, as identified by the OECD. The school banding system does not set clear expectations for school quality, nor are the information and judgements always perceived to be fair. Assessment is frequently identified as a shortcoming. [2014]	**England** reported balancing accountability and improvement in schools as an ongoing priority. More recently, improving the quality of technical education standards to bring them in line with international systems through greater scrutiny was highlighted as a priority area. [2013; 2019]

Identified by	Selected OECD country-based work, 2008-19[1]	Evolution of responses collected by the Education Policy Outlook, 2013-19[2]
Governance	For **England**, the OECD identified the need to increase awareness and motivation and improve communication and outreach. A recently identified need is to develop work-based learning and promote special types of apprenticeships by securing a constructive use of degree apprenticeships and supporting small and medium-sized employers. There is a need to adopt strong quality assurance measures for apprenticeship training to ensure quality and that the apprenticeship levy incentives work constructively. [2012; 2018] In **Northern Ireland**, there is a need for a well-designed and effective accountability system to establish communication about the accountability system's results and limitations to schools, school providers and the public. [2014] In **Scotland**, the OECD identified the need to enhance the power and leadership of school leaders, teachers and the profession. [2015] In **Wales**, the OECD also found the presence of too many initiatives risks overstretching schools' capacity to implement them adequately. Many schools lack the capacity to independently move towards educational excellence, which calls for considerable additional external support to build the required skills and help generate the motivation among educators needed to drive the reforms forward. [2014]	**England** reconfirmed the need to ensure efficient co-ordination among actors by reducing bureaucratic procedures and guaranteeing that sufficient funding reaches the most disadvantaged schools. [2013]
Funding	According to OECD evidence, in **England**, a need is funding and support for an effective apprenticeship system. [2018] In the **United Kingdom**, the proposal to allow universities to increase tuition fees switches a significant share of the costs of funding higher education from taxpayers to graduates. [2011]	**England** reported reviewing the funding of higher education as a priority, with a particular focus on ensuring that the system promotes access and success across all forms of tertiary education. [2019]

Notes:
1. See Annex A (OECD publications consulted).
2. See Reader's Guide (years and methods of collection).

Institutions

Selected education policy responses

School improvement

- **Wales** has introduced numerous reforms to improve initial teacher education (ITE) in recent years. These aim to raise the quality of teaching, attract more candidates to the profession and bring the system further in line with international best practice. In 2014, the government raised the requirements for entering ITE: aspiring teachers must now have at least a General Certificate of Secondary Education (GCSE) grade B in both English and mathematics. In addition, aspiring primary teachers need at least a GCSE grade C in science (OECD, 2018[592]). In 2015, a major report was published identifying the challenges facing ITE in Wales and made some key recommendations. The report called for changes at the national level, institutional level and programme level. Specific recommendations included revising the Standards for Newly Qualified Teachers and the accreditation process for ITE providers, introducing accountability measures to encourage greater collaboration between schools and ITE providers, better monitoring of the impact of financial incentives on recruitment and establishing a network of five centres of pedagogical excellence across Wales (Furlong, 2015[593]).

Progress or impact: The Welsh government subsequently committed to implementing each of the recommendations. New ITE accreditation criteria were developed, consulted on and then published in 2018. The Teacher Education Accreditation Board was established within the Education Workforce Council in order to lead the accreditation process for individual ITE programmes.

The accreditation process requires programmes to identify a number of lead partnership schools that support the design, implementation and monitoring of the ITE programme. As of June 2018, seven ITE programmes for primary level candidates had been newly accredited (three undergraduate, four postgraduate) along with four postgraduate programmes for secondary level candidates.

The Welsh government also commissioned an independent review of the effectiveness of financial incentives for teacher training. In 2017, new incentives were announced for high-priority subjects including science, technology, engineering and mathematics (STEM), computer science, modern foreign languages and Welsh, with high-performing graduates with a postgraduate degree in one of those subjects receiving an incentive of between around EUR 17 400 and EUR 23 000. These were extended into 2019/20.

In 2018, Estyn, the Welsh education inspectorate, published a thematic report focused on ITE provision (Wales, 2018[594]). Also in 2018, the OECD praised the ongoing efforts to foster greater collaboration between schools and ITE providers, stating that the ITE reform has been the principal driver behind a nascent culture of collaboration between schools and higher education institutions (HEIs) (OECD, 2018[592]).

Most recently, the government published a report investigating the introduction of a national equivalency entry test for ITE candidates. The report reviewed the current initiatives in place at the institutional level for those candidates who do not hold the recognised grade B qualification at GCSE. The authors recommended that national guidance be introduced in 2019/20 to encourage more coherence across institutions in the administration of equivalency tests, followed by the introduction of a new National Equivalency Entry Test as of 2020/21 (Beadle, Thomas and Hannah, 2019[595]).

- **Wales** has made a concerted effort in recent years to promote collaborative working and learning across the school system. The establishment of the Pioneer Schools Network (2015) has placed school-to-school collaboration at the core of the design, development and implementation of a new curriculum for Wales. The regional consortia look to nominate schools that exhibit, among other things, excellent leadership, a passion for innovation and creativity and a commitment to professional development as Pioneer Schools. All Pioneer Schools are expected to work with each other, other schools, the consortia, the Welsh government and wider stakeholders as part of an all-Wales partnership (Government of Wales, 2015[596]). Pioneer Schools meet regularly at the national and regional level, both face to face and on line, to share experiences of innovation and learn from one another. The

first wave of Pioneer Schools focused on the development of the Digital Competence Framework. Curriculum Pioneers, who looked at content and assessment of learning and New Deal Pioneers, who focused on reforms related to practitioners' professional development, joined these Digital Pioneers from 2016 onwards. The Welsh government brings together quality assurance partners, including HEIs and other experts to review and provide regular feedback to the Pioneer Network (Government of Wales, 2015[596]).

Progress or impact: As of 2018, around 94 primary and secondary schools had been appointed Curriculum Pioneers, 83 as New Deal Pioneers and 13 as Digital Pioneers (OECD, 2018[592]). In 2017, the OECD found that Pioneer Schools played a pivotal role in driving the development of new curricula and student assessments (OECD, 2017[597]).

Furthermore, a 2018 evaluation found that the Pioneer School model is an innovative approach to reform in Wales, representing a new way of working for all partners and demonstrating a clear commitment to empowering and supporting teachers. This has helped establish an enthusiasm for reform and a clear sense of ownership among Pioneer School representatives.

However, this evaluation also emphasises that the complex change management model inevitably means that there are significant risks regarding coherence and consistency. Some of these risks have been mitigated across implementation phases by clarification of expectations, outputs and timescales and the strengthening of monitoring and accountability mechanisms.

Finally, Pioneer Schools are obliged to cascade learning and experiences to their assigned Partner Schools. However, the evaluation found that this activity has been relatively limited across the network. New mechanisms are being put in place to address this (Davies, 2018[598]).

Evaluation and assessment

- In **England**, Ofsted, the education inspectorate, makes regular updates to the schools' inspection framework. In 2012, Ofsted launched a new framework to ensure greater focus on those aspects of schools' work that have the greatest impact on raising achievement. This included reducing the scope of inspection, and the number of key judgements reported as well as enhancing the role of teaching observation and the collection of evidence on learning, progress and behaviour. These modifications also enabled schools to request inspections and authorised Ofsted to charge for the inspections (Ofsted, 2012[599]). In 2015, following a consultation process called Better Inspection For All, Ofsted launched far-reaching changes through introducing a new common inspection framework (CIF) for inspections in maintained schools, academies, non-association independent schools, further education and skills providers, and registered early years settings (Government of the UK, 2018[600]). The CIF focuses on four key areas: achievement, leadership, quality of teaching, and behaviour and safety. Short inspections for schools previously judged "good" were also introduced to reduce the burden on school staff (Ofsted, 2015[601]).

Progress or impact: The most recent 2017 and 2018 Ofsted school inspection updates covered information and guidance for inspectors and stakeholders on school inspections. As of 2018, inspectors have to use the education and skills inspection handbook, which outlines the main activities of inspectors as well as the main judgments inspectors report. (Government of the UK, 2018[602]).

During 2017/18, Ofsted conducted 6 130 full and short inspections across state-funded institutions from pre-primary to upper secondary level, 54% of which were judged to be "Outstanding" or "Good". Among early childhood education and care (ECEC) providers, the figure was 95%, compared to 74% in 2012 (Ofsted, 2018[603]).

In early 2019, Ofsted conducted a consultation on a new education inspection framework (EIF) which hopes to rebalance the focus of inspection onto the curriculum. For the first time, the consultation also covered the handbooks provided for each education level. The EIF will condense the two separate judgements for "teaching, learning and assessment" and "outcomes" into one integrated judgement. This "quality of education" judgement will consider a school's curriculum, how it is taught, and the standards students achieve. Alongside this, there will still be separate judgements on "behaviour and attitudes", "personal development" and "leadership and management" (National information reported to the OECD).

The EIF draws on a range of research including a review of international evidence, a programme of research on curriculum and studies looking into teacher well-being and managing challenging behaviour. It is being piloted in the school year 2018/19 and will be implemented nationally from September 2019, subject to the results of the consultation (Ofsted, 2018[603]).

- **England** has reformed accountability measures in primary and secondary education. The new national curriculum test at primary level (2016) aims to reflect the revised curriculum launched in 2014. These curricular reforms included changes to mathematics, English reading and grammar, punctuation and spelling (Government of the UK, 2017[604]). How primary school performance is measured at the end of students' primary cycle has also been reformed. To calculate progress at the school level, students' results in standardised assessments at age 10-11 are compared with the achievements of students across the country with similar starting points (prior attainment). Teacher assessment judgements in reading, writing and mathematics at age 7-8 inform the prior attainment indicator. In 2013, the government launched a consultation on reforming the accountability system for secondary schools (DfE, 2013[605]). Based on its outcomes, the government now publishes a greater range of information regarding the national standardised assessments administered at the end of lower secondary education (age 15-16). Alongside the headline EBacc measure, which reports the number of students entered for core subjects (English language and literature, mathematics science, geography or history, a foreign language) and their performance in these subjects, two new measures were introduced. Reported from 2016 onwards, these measures consider eight subjects (five core EBacc subjects plus any three other subjects, EBacc or otherwise). Progress 8 reports progress in these subjects based on

students' prior attainment, which is derived from standardised assessments at the end of primary level (DfE, 2014[606]). Attainment 8 reports students' performance in these subjects at the end of lower secondary education. This is complemented by reporting of the percentage of students achieving a grade 5 or above in both English and mathematics. Finally, student destination data is also published, giving the percentage of students staying in education or going into employment following completion of lower secondary (DfE, 2018[607]).

Progress or impact: The 2018 technical guides aim to clarify the performance measures used in primary and secondary schools. The technical guide for primary schools applies to maintained schools, academies and free schools. Updates include: 1) re-introduction of three-year averages for attainment measures for primary schools; 2) methodological adjustments to reduce the disproportionate effect that a small number of extremely negative scores can have on a school's average progress; and 3) a summary of the new statutory framework for teacher assessment with revisions set for the end of 2018 (DfE, 2018[608]).

Arrangements for testing students performing below the standard of national curriculum tests have also been reformed. In 2016, the Rochford Review published its final report, which covered children with special educational needs and disabilities (SEND), those coping with disadvantage or difficult home circumstances or those with English as an Additional Language (EAL). The review found that expectations related to age are not appropriate for a significant proportion of students working below the standard of the national curriculum tests. Nevertheless, those students must have the opportunity to demonstrate both attainment and progress through a method that accounts for potential differences in the way they learn (STA, 2016[609]). The DfE accepted the review's final recommendations introducing statutory assessment of either pre-key stage standards for students engaged in subject-specific study or seven aspects of engagement for those who are not. The former were introduced at the start of the 2018/19 academic year. The latter were piloted in 2018 and will be introduced as a statutory assessment from the academic year 2020/21 (National information reported to the OECD).

The 2018 technical guide for secondary schools provided updated information on the EBacc attainment measure, a refined methodology for the Progress 8 measure to reduce the disproportionate effect that a small number of extremely negative scores can have on a school's average progress and offered further clarification on the data used in Progress 8 and Attainment 8 measures. A further update in 2019 included clarification on support for under-performing schools and advice for schools on removing unnecessary workload associated with data management (DfE, 2018[607]).

- **England** has recently made changes to the General Certificate of Secondary Education (GCSE), A (Advanced) level and AS (Advanced Supplementary) level qualifications. GCSE qualifications are awarded following national examinations taken at the end of lower secondary education. A level (two year) and AS level (typically one year) qualifications are awarded following national examinations taken at upper secondary level. The Department for Education (DfE) began introducing significant reforms to the qualifications for first teaching in 2015, with

subjects being phased in over four years. The reforms include the following: a new grading scale of 9 to 1 replacing the old A* to G scale; the withdrawal of certain subjects (e.g. health and social care, expressive arts); the introduction of new and more challenging subject content; and the restriction of non-exam assessment to subjects where skills and knowledge cannot be assessed validly by examination only (e.g. art and design, drama).

The transition to new grading began with English and mathematics, which were first awarded in 2017, and will be complete by 2020. AS and A level reforms also introduce new subject content informed by input from universities. AS results will no longer count towards an A level, so students are not required to take an AS level to achieve an A level. Both qualifications will be linear, replacing the previous modular format; the grading scale remains the same.

Progress or impact: The first results for reformed GCSEs were issued in 2017 for the English language, English literature and mathematics. The following year, reformed qualifications in 20 other subjects were awarded for the first time, and about 90% of GCSE entries were for reformed GCSEs. Overall, GCSE outcomes have remained stable as has the variability in results within centres, which suggests that schools have responded well to the reforms (Ofqual, 2018[610]). Since 2003, the Office of Qualifications and Examinations Regulation (Ofqual) has been carrying out annual surveys of perceptions of GCSEs, AS and A Levels among a range of stakeholders that work with and use them. The survey reporting findings for 2018/19, found that the overall level of agreement that both GCSEs and A/AS Levels are well understood by people (59%) remains below the level reached before the reforms. For GCSEs, the level had decreased on the previous year among HEIs. However, results suggest that the perception of GCSEs as a trusted qualification has increased since prior to the reforms and has remained steady for AS/A levels (YouGov, 2019[611]).

- **Northern Ireland** introduced new assessment arrangements in 2012/13, to align with the knowledge- and skills-based curriculum (2006) and to promote greater coherence between assessment practices in primary and post-primary schools. The new approach works on the basis that teachers are best placed to assess and report on students' progress (National information reported to the OECD). To complement annual teacher assessment of learning, end of key stage (KS) assessment is now statutory at three key points in compulsory schooling: the end of KS 1 (age 8); the end of KS 2 (age 11); and the end of KS 3 (age 14). These statutory assessments are based upon teacher professional judgement and informed by Levels of Progression (LoPs). LoPs are written as "can do" statements for the cross-curricular skills of Communication, Using Mathematics and Using ICT, and covering seven levels (DENI, 2014[612]). Students are expected to make one level of progress per year. A system of internal and external moderation was also introduced under the authority of the Council for the Curriculum Examination and Assessment (CCEA) to ensure that the standards that schools applied in assessing students' work were appropriate. The new arrangements were designed to be both formative and summative and to be used for a range of different assessment and accountability purposes at pupil, school and system level. At the introduction of the new

arrangements, DENI instructed CCEA to provide support to schools including training, publishing guidance tools and providing substitution cover for teachers involved in assessment, as well as monitoring the initial months of implementation (DENI, 2013[613]).

Progress or impact: Stakeholders, notably the teaching unions, raised several concerns following the introduction of the current arrangements (National information reported to the OECD). These included the use of school data at the system level for accountability and performance management purposes, the fitness for purpose of Levels of Progression and the increased workload associated with moderation procedures (DENI, 2014[612]). This has led to ongoing industrial action despite efforts by DENI to engage stakeholders in constructive debate. Additionally, DENI has introduced several changes to the new assessment arrangements incorporating the views of stakeholders.

As of 2015, participation in moderation procedures is voluntary, and DENI has committed to not holding any assessment data identifiable at the school level. More training support for teachers and substitution cover have also been promised (DENI, 2016[614]). Although several unions have withdrawn or diminished their call to action, due to ongoing industrial action, only around one-sixth of all primary schools (17%), and one-third of post-primary schools (37%) submitted key stage assessment results in 2017/18 (DENI, 2019[615]).

- **Northern Ireland**'s Every School a Good School (ESaGS, 2009) policy has been at the centre of work on school improvement for a decade. The policy aims to promote a vision of schools as dynamic, well-governed and better-led communities of practice. School self-evaluation and supported self-improvement are at the core of the policy, along with a commitment to identifying and disseminating best practice (DENI, 2009[616]). Among other initiatives, ESaGS introduced the Formal Intervention Process (FIP) as a mechanism for school improvement. Schools deemed less than satisfactory following an inspection by the Education and Training Inspectorate (ETI) embark on the FIP, which requires them to complete a detailed action plan responding to the areas for improvement laid out in the inspection report. To support the implementation of the action plan, schools receive guidance from the Education Authority (EA) and monitoring visits from the ETI. The first follow-up inspection (FUI) occurs between 12 and 18 months after the first inspection, at which point a decision is reached on whether there has been sufficient improvement to allow schools to exit the process or remain in the FIP for another 12 months. On exiting the FIP, schools are supported to disseminate best practice and encourage peer learning (DENI, 2009[616]).

Progress or impact: Since its introduction, the Department of Education, Northern Ireland (DENI) has monitored the effectiveness of the Formal Intervention Process (FIP) and consulted on revisions to the process (National information reported to the OECD). Following consultation, Every School a Good School was revised in 2015, setting out several changes to the FIP. This included a reduction from two to one follow-up

inspection before any follow-up action is taken. This now occurs after 18-24 months after the initial inspection in all but some specific cases (DENI, 2015[617]).

In 2014, the OECD reported that primary schools involved in the FIP had responded well and demonstrated improvements. Of 21 primary schools entering the FIP from 2009-12, 13 exited the programme successfully, and only 1 closed (Shewbridge et al., 2014[618]). The FIP proved more challenging for post-primary schools: of the 13 that had entered the process in the same period, only 1 had exited, and 1 other had closed. The Education and Training Inspectorate (ETI) found that this was primarily a result of a need for the more robust use of data to identify and address trends as well as the larger school size and, in some cases, a need to regain community confidence (ETI, 2012[619]). A total of 52 schools took part in the FIP between 2009 and 2018 (National information reported to the OECD). The number of schools requiring the FIP has decreased significantly in recent years: 45 schools entered the FIP between 2009 and 2014 (ETI, 2012[620]).

Additional education policies of potential interest to other countries

School improvement

- **England** has committed to reducing teacher and school leader workload through several initiatives. In 2016, the DfE launched a large-scale, biennial survey of teacher workload in England's schools. Results from the first round reported that the average total self-reported working hours in the seven-day reference week for teachers and middle leaders was 54.4 hours. Over three-quarters of the 3 186 respondents were dissatisfied with the number of hours they usually worked (Higton et al., 2017[621]). The same year, the DfE published reports from three independent teacher workload review groups focused on marking policy, data management, and planning and teaching resources, respectively. These reports offered targeted recommendations to different actors across all levels of the education system. The DfE has also published a Workload Reduction toolkit (2018, updated 2019) that provides schools with support in reviewing and streamlining workload. This toolkit is the result of solution-focused collaborative discussions with school leaders, teachers, education technology advisors, teacher training providers and the DfE (DfE, 2018[622]). As of 2019, materials from the toolkit have collectively been downloaded over 135 000 times (National information reported to the OECD).
- In **Northern Ireland**, DENI published a Strategy for Teacher Professional Learning – "Learning Leaders" in 2016. The strategy sets out the Department's vision for teacher professional learning through to 2025, which positions teachers as leaders of learning who are adept at working collaboratively and able to meet the challenging needs of 21st-century children. Key focus areas include the development of a teacher professional learning framework, the development and dissemination of good practice, building professional learning communities, building leadership capacity and stakeholder engagement. These are supported by 15 policy commitments focused on collaborative work by all stakeholders. Various working groups have been established to develop these key areas (DENI, 2016[623]).

Evaluation and assessment

- In 2017, **Northern Ireland**'s Education and Training Inspectorate (ETI) published the Inspection and Self-Evaluation Framework (ISEF), a resource common to all education phases. It is designed to support schools with self-evaluation and to increase transparency in the inspection process (National information reported to the OECD). Alongside the ISEF, ETI has published phase-specific guides to effective practice and self-evaluation questions for school leaders and managers. Based on a holistic view of learning, the ISEF has three key areas of focus: quality of provision, outcomes for learners, and leadership and management. It also takes governance, safeguarding and care and welfare into account (ETI, 2017[624]).
- **Scotland**'s National Improvement Framework (2016) sets out a holistic view of the education system, bringing together evidence and information from all levels and on all aspects that impact performance. Among the six drivers of improvement, the Assessment of Children's Progress driver considers children's progress in its widest sense, recognising the primacy of health and well-being. A new national data collection system provides additional information at school, local and national level about children's progress in literacy and numeracy, based on teachers' assessment of progress (Government of Scotland, 2016[625]). To support teachers in making judgements, the government has introduced benchmarks for greater clarity on national standards - in each subject, and at each level - as well as expanding opportunities for professional dialogue around standards through the Regional Improvement Collaboratives.

  In 2019, local authorities reported that teachers feel increasingly confident when assessing progress (Government of Scotland, 2019[626]). From 2018, Scottish National Standardised Assessments provide an additional source of objective, nationally consistent evidence. These assessments occur in primary school (ages 5, 8 and 11) and lower secondary (age 14). Since 2016, attainment in the Achievement of Curriculum for Excellence (CfE) levels has been published annually to provide key data regarding children's literacy and numeracy progress.

Systems

Selected education policy responses

Governance

- **England** has been working to drive up standards through greater school choice and increased competition within the school system by diversifying provision and providers. The Academies Act (2010) enabled all maintained schools to convert to academy status and introduced free schools. Both school types are state-funded, non-fee paying institutions, independent of local authorities and therefore have more control over curriculum, budget and staffing. Academies are state-funded schools, which generally convert voluntarily, while a smaller proportion is legally mandated to become academies due to low performance; free schools are entirely new schools. The DfE appoints eight Regional Schools Commissioners to oversee academy and free-school performance and approve strategic and management decisions (Roberts and Danechi, 2019[627]).

Progress or impact: By 2017, there were 6 925 open academies, free schools, University Technical Colleges (UTCs) and studio schools; this

constitutes two-thirds of secondary schools and one-fifth of all primary schools in England. By the same point, 71% of those institutions had formed groups of more than one institution known as multi-academy trusts (MATs) (DfE, 2017[628]).

In 2019, DfE published an analysis of the performance of academies that suggested that, having often been low-performing schools prior to academisation, academies are typically able to narrow, and in some cases reverse a performance deficit between them and contextually comparable maintained schools. However, there is substantial variation in performance between academies and, at both primary and secondary level, some continue to perform significantly less well than their similar schools (Hatton, Hampson and Drake, 2019[629]).

It is difficult to draw robust conclusions on free schools given the relatively small number of institutions currently in existence. In 2017, the Education Policy Institute (EPI) reported that free schools help meet the demand for new school places, but have so far failed to target areas of low school quality effectively. Also, despite being more likely to be located in an area of disadvantage, the admissions numbers for disadvantaged students in free schools are lower than would be expected, particularly at primary level (Andrews and Johnes, 2017[630]).

Both the EPI study and a later report conducted by the National Foundation for Educational Research (NFER) tentatively conclude that students at secondary free schools, particularly disadvantaged students, perform slightly better than their peers in maintained schools (Garry et al., 2018[631]; Andrews and Johnes, 2017[630]). However, figures may be inflated by the fact that students whose first language is not English are over-represented in the free school student population, in comparison to maintained schools. At primary level, the impact on student outcomes is less positive, but the number of primary free schools remains too small to show conclusive results (Garry et al., 2018[631]).

- **England**'s Higher Education and Research Bill - Teaching Excellence Framework (TEF, 2016) aims to reward high-quality teaching as previously, it was found that teaching has been less valued than research by universities. As of 2016, the higher education institutions can request assessment and if found to provide high-quality teaching can subsequently increase tuition fees in accordance with inflation. The criteria for quality assessment were based on a previous report. In the second year (2017/18) assessment, performance was assessed against a number of quality measures including the Teaching Quality (TQ), Learning Environment (LE), and Student Outcomes/Learning Gain (SO). It was the trial year to test the framework and providers could participate on a voluntary basis. Three TEF levels were introduced including "Gold, Silver, Bronze". Awards were given for a three-year period. Financial incentives would not be differentiated according to the level of award and all providers who achieve at least "Meets Expectations" would receive the full inflationary uplift. As of year three (2018/19) and onwards, TEF will develop to allow differential fees and subject-level fees, and ultimately postgraduate courses may be included. Providers can then do another assessment in year three or later to get a new award. In addition, subject-level pilots are planned

to be done with full implementation as of year four (2019/20), including possibly also a postgraduate provision (Hubble, 2017[632]).

Progress or impact: No assessment criteria existed for teachers in higher education when the Teaching Excellence Framework (TEF) was first introduced. Most higher education institutions met the expectations of TEF by performing to national quality standards and were therefore allowed to increase tuition fees in line with inflation in 2017/18. The government then instituted the TEF assessment framework in the academic year 2016/17 and published the first institutional level TEF ratings in June 2017. There were further ratings in 2018, and the next round will be reported in June 2019.

As of 2018, 298 providers held a TEF rating: 72 Gold, 135 Silver, 62 Bronze and 29 provisional (National information reported to the OECD). The Office for Students (OfS), which is the regulator of higher education in England, is developing the TEF further and is in the second year of a two-year pilot for subject-level TEFs. Subject to the recommendations of an independent review of the TEF, which will report to ministers in summer 2019, full implementation of subject-level TEF is planned for 2019/20.

The OfS has formally adopted the TEF as its scheme for rating the quality of higher education, requiring all providers in England with more than 500 undergraduate students to participate in the TEF as a condition of registration with the OfS. Although this removes the financial incentive for participation, any relationship between the TEF and tuition fees will be considered within the Review of Post-18 Education and Finance (ongoing), as well as other student finance issues.

Participation in the TEF remains voluntary for higher education providers in Scotland, Wales and Northern Ireland. In 2017, the TEF took on a new name: the Teaching Excellence and Student Outcomes Framework.

- **Northern Ireland**'s Education Act (2014) provided for the establishment of the Education Authority (EA) to replace Northern Ireland's five Education and Library Boards (Northern Ireland Assembly, 2014[633]). This was the first major reorganisation of education administration since 1973. The EA took over all of the former boards' duties and powers and is also responsible for securing adequate provision for education services across all institution types. Furthermore, it took on new duties related to shared education, the community use of school premises and the suitability of provision for students with special educational needs. The EA also provides training, advice and support for schools, and supports the development of governors, school leaders, teachers and other staff. Ultimately, it is responsible for ensuring that schools achieve good outcomes for their students in return for the money invested (National information reported to the OECD).

Progress or impact: The Education Authority (EA) became operational from 2015 and published its first strategic plan in 2017 following extensive engagement with stakeholders and public consultation. This plan outlines the EA's work for the decade 2017-27 and identifies six strategic priorities: 1) improve the well-being of children and young people; 2) raise standards

for all; 3) close the performance gap, increasing access and equality; 4) develop the education workforce; 5) improve the learning environment; and 6) deliver high-quality education services. This is supported by a three-year Corporate Plan and annual business plans that respond to emerging priorities and challenges (EA, 2017[634]).

Due to the ongoing financial pressures facing the education sector in Northern Ireland, the first years have seen a focus on improving internal governance structures and efficiency. Within EA, there has been a 20% reduction in funding and a similar reduction in core staffing levels since 2011 (EA, 2019[635]). From 2017-18, the EA reports continuing a restructuring of management, which has helped reduce the number of senior staff inherited from the former structures by almost 50%. Additionally, a human resources model and reforms to the teaching appointment scheme have contributed to in-year savings of an estimated EUR 34 million. These savings have increased year on year from EUR 8 million in 2015-16 and EUR 29 million in 2016-17 (EA, 2019[635]).

Funding

- **England** has undertaken several reforms of school funding in recent years. The School Funding Reform (2013-14) (DfE, 2013[636]) aimed to simplify the funding system in primary and secondary schools and make it more student driven to ensure that resources reach the schools and students who need it most (DfE, 2012[637]). The reform established three blocks of funding to be allocated from the Dedicated Schools Grant (DSG): Early Years Block, Schools Block and High Needs Block (DfE, 2013[636]). Local education authorities, in consultation with their schools' forum, decide on the funding distribution between the blocks and set formulas for allocation to each school and early years provider (EC, 2017[638]). As such, by 2016, there existed 152 different formulae to determine funding allocation throughout the country. This, and the fact that funding allocated to local authorities was often based on historic characteristics, resulted in significant inter- and intra-regional variation in school funding. The system also lacked transparency. As a result, a major reform was proposed, establishing one single national funding formula (NFF) based on measures of student and school characteristics with a small provision for local variation (DfE, 2016[639]). Public consultations on the proposal took place during 2016-17.

Progress or impact: The DfE reported 25 222 submitted responses to the consultation process, most coming from parents (66%), followed by governors (9%), teachers (7%) and school leaders (7%). Many responses highlighted common themes such as calls to increase basic per-student funding, a need to balance fairness and stability to ensure schools do not lose funding, and the importance of supporting low-funded schools (DfE, 2017[640]). Following the consultations, the government introduced a new national funding formula (NFF) (2017) based on 14 factors across 4 key themes: basic per-student funding, additional school needs, school-led funding, and geographic funding. This was introduced, in the academic year 2018/19.

Although the DfE originally intended for the NFF to be allocated directly to schools, an adapted model that offers local flexibility by going through local authorities remains in place until at least 2021/22. This system sees schools' funding calculated centrally using the NFF, then distributed to local authorities who allocate funding to schools by setting a local formula that follows government guidelines. To support transparency, DfE publishes illustrative school-level allocations and schools, and local authorities have access to the underlying data with which their allocation is calculated (National information reported to the OECD).

Up to 73 out of 152 local authorities have made efforts to better align their funding models to the NFF, and the DfE has identified 41 local authorities who are now using funding settlements that are mirroring the national funding formula factor values almost exactly (DfE, 2018[641]).

As well as revising funding formulae, the government has committed to investing an additional GBP 1.3 billion for schools funding and high needs funding, across the two financial years 2018/19 and 2019/20. This increase has supported the government to raise the funding floor so that schools receive at least a 1% cash increase per student by 2019-20, compared to 2017-18 (DfE, 2017[640]).

Additional education policies of potential interest to other countries

Governance

- In 2017, **Scotland** introduced a new layer of educational governance by establishing six Regional Improvement Collaboratives (RICs) across the country to bring local authorities together alongside the central administration, and collaborate more effectively for greater equity and quality in education. RICs are responsible for developing regional improvement plans approved by the Chief Inspector of Education (COSLA, 2017[642]). An interim review, published six months after the RICs were established, found that, despite tight timescales and a lack of additional resources for Phase 1 of implementation, all local authorities had signed up to the RIC, and stakeholders felt positive about the initiatives and felt RICs were well aligned with national priorities. Some concerns were raised regarding a lack of clarity in roles and responsibilities and an overly top-down approach, which could inhibit the collaborative aims of the RICs. Further resources have been committed to Phase 2 (Government of Scotland, 2018[643]).
- In **Scotland**, in 2018, a Joint Agreement on Education Reform was reached between the Scottish government and local government. The agreement focuses on empowering actors across the system, in particular by enabling decisions that affect learning and teaching to be taken as close to the learner as possible, to ensure that needs are met and that impact on learners is high. Included within the agreement was a proposal for the Headteachers' Charter, committing local authorities to support headteachers as the drivers of school improvement and devolving greater responsibility in decision making and resource use to the school leaders. An agreement on parental and community engagement also committed both partners to ensure parents are actively involved in matters of school policy and improvement through the principle of co-production. Finally, an agreement on pupil participation

expressed a commitment to enabling children and young people to participate meaningfully in their own learning and the work of the school (Government of Scotland, 2018[644]). Although the project for a new Education Bill, which was intended to provide the legal foundation for these reforms, has been put on hold, concrete actions in each of these areas have already occurred.

Funding

- England announced a major Review of Post-18 Education and Funding in February 2018, due to conclude in 2019. The review covers four focus areas: 1) choice and competition across a joined-up post-18 education and training sector; 2) a system that is accessible to all; 3) delivering the skills the country needs; and 4) value for money for graduates and taxpayers. The review aims to establish a more overarching system that allows students to transition easily between further education (FE) and higher education (HE) and facilitates lifelong learning. Submissions to the review process have come from, among others, universities', students' and employers' representatives and academic research institutes (Hubble, Bolton and Foster, 2019[645]). Post-18 education funding has already seen substantial policy change since 2012, including a rise in tuition fees to around EUR 10 700 per year, the abolition of maintenance grants and an increase in maintenance loans and interest rate rises on loan repayments. Concurrently, there have been significant cuts to public expenditure on HE and FE. As a result, the cost to the individual has risen significantly, and this has stimulated increased debate about the value of higher education (Hubble, Bolton and Foster, 2019[645]). In 2018, the Education Committee of the UK Parliament published a report on value for money in HE to further inform the review of funding.

More information is available at http://www.oecd.org/education/policyoutlook.htm.

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Annex A. Coverage by topics, education systems and previous OECD country-based work

Table A A.1. Education Policy Outlook analytical framework

Policy Issue	Definition	Levers	Evidence for country analysis	
Students: Raising outcomes				
Equity and quality	Policies to ensure that personal or social circumstances do not hinder achieving educational potential (fairness) and that all individuals reach at least a basic minimum level of skills (inclusion)	Investing early on	Providing quality early childhood education and care	
		Tackling system-level policies	Avoiding grade repetition, early tracking and student selection; managing school choice; developing funding strategies to address the needs of students and schools; designing upper secondary pathways to ensure completion; fostering opportunities for all, including underrepresented population sub-groups; improving the inclusion of migrant communities	
		Supporting low-performing disadvantaged schools	Supporting school leadership; stimulating positive school climates; strengthening the quality of teachers; ensuring effective classroom learning strategies; linking schools with parents and community	
Preparing students for the future	Policies to help prepare students for further education or the labour market	Upper secondary	Offering flexible choices; ensuring quality across programmes; strengthening the specific needs of the profession at this level; engaging communities, parents and the private sector; ensuring effective transition into the labour market or further education; ensuring timely access to relevant labour market information	Ensuring lifelong learning through relevant and accessible training opportunities and timely access to relevant labour market information; tackling evolution of skills and labour market needs
		Vocational education and training (VET)	Matching skills offered by VET programmes with labour market needs; offering adequate career guidance; ensuring quality of teachers; providing workplace training; ensuring timely access to relevant labour market information; developing tools for stakeholder engagement	
		Tertiary education	Steering tertiary education; matching funding with priorities; assuring quality and equity; enhancing the role of tertiary education in research and innovation; strengthening links with the labour market; shaping internationalisation strategies; ensuring timely access to relevant labour market information	

Institutions: Enhancing quality			
School improvement	Policies to strengthen delivery of education in schools that can influence student achievement	High-quality teachers	Recruitment, selection and induction; salary and working conditions; initial training; professional development opportunities and career paths
		School leaders	Attracting, developing and retaining school principals in the profession; developing support mechanisms or actors to distribute leadership at schools
		Learning environments	Class size, instruction time, learning strategies and interactions in schools.
Evaluation and assessment	Policies to support the measurement and improvement of school systems' outcomes	Evaluation and assessment frameworks	Co-ordinated arrangements; governance, configuration/architecture; competencies and skills; use of results; implementation strategies and factors
		System evaluation	Evaluation of the system as a whole, of subnational education systems, programme and policy evaluation
		School evaluation	Internal school evaluation, external school evaluations, and school leadership
		Teacher appraisal	Probationary periods, developmental appraisal, performance management, appraisal for accountability and improvement purposes
		Student assessment	Formative assessments, summative assessments
Systems: Governing effectively			
Governance	Ensuring effective planning, implementation and delivery of policies	Formal structures	Type of government; organisation of education system; locus of decision making
		Setting objectives	Definitions of national education goals or priorities.
		Stakeholder process	Relevant institutions and engagement with stakeholders at all levels of education
Funding	Policies to ensure effective and efficient investment in education systems	Economic resources in the education system	Public expenditure, GDP and share by education level
		Use of resources at the school level	Time resources, human resources, material resources

Table A A.2. Overview of education systems included in the report and key sources[1]

	Coverage by education system				Primary sources		
	Institutions		Systems		EPO Survey 2016-17	Country profile	OECD country-based work
	Chapter 2 (School improvement)	Chapter 3 (Evaluation and assessment)	Chapter 4 (Governance)	Chapter 5 (Funding)			
Australia (AUS)	X	X	X	X	X		X
Austria (AUT)	X	X	X	X		X	X
Belgium (BEL)							
Flemish Community (Fl.)	X	X	X	X		X	X
French Community (Fr.)	X	X	X	X		X	X
German-speaking Community (De.)	X		X	X		X	X
Canada (CAN)							
Federal view	X	X	X	X	X		X
Alberta		X			X		
New Brunswick			X	X	X		
Nova Scotia	X						
Saskatchewan	X				X		
Ontario	X				X		
Chile (CHL)	X	X	X	X	X		X
Colombia (COL)	X	X	X	X			X
Costa Rica (CRI)		X	X	X			X
Czech Republic (CZE)	X	X	X	X	X		X
Denmark (DNK)	X	X	X	X	X		X
Estonia (EST)	X	X	X	X	X		X
Finland (FIN)	X	X	X	X	X		X
France (FRA)	X	X	X	X	X		X
Germany (DEU)	X	X	X	X	X		X
Greece (GRC)	X	X	X	X		X	X
Hungary (HUN)	X	X	X	X	X		X
Iceland (ISL)	X	X	X	X	X		X
Ireland (IRL)	X	X	X	X	X		X
Italy (ITA)	X	X	X	X		X	X
Japan (JPN)	X	X	X	X	X		X

Kazakhstan (KAZ)	X	X	X	X	X	X	X
Korea (KOR)	X	X	X	X	X		X
Latvia (LVA)	X	X	X	X	X		X
Lithuania (LTU)	X	X	X	X	X		X
Luxembourg (LUX)		X	X				
Mexico (MEX)	X	X	X	X	X	X	X
New Zealand (NZL)	X	X	X	X	X		X
Norway (NOR)	X	X	X	X	X		X
Poland (POL)	X		X	X			X
Portugal (PRT)	X	X	X	X	X		X
Slovak Republic (SVK)	X	X	X	X	X		X
Slovenia (SVN)	X	X	X	X			X
Spain (ESP)	X	X	X	X	X	X	X
Sweden (SWE)	X	X	X	X		X	X
Turkey (TUR)	X	X	X	X	X		X
United Kingdom (GBR)	X	X	X	X			
England (ENG)	X	X	X	X	X		X
Northern Ireland (NIRL)	X	X	X	X			X
Scotland (SCT)	X	X	X	X			X
Wales (WLS)	X	X	X	X			X
United States (USA)				X			X

Notes: Validation processes with participating education systems took place as well during 2019. During this process, education systems provided additional information/validation at the request of the OECD.

Table A A.3. List of OECD country-based publications consulted by education system, besides the Education Policy Outlook country profiles (last update March 2019)

Country	Publication
AUSTRALIA	OECD (2008), Reviews of Vocational Education and Training - Learning for Jobs, Australia OECD (2011), OECD Reviews of Evaluation and Assessment in Education: Australia OECD (2014), OECD Economic Surveys: Australia 2014 OECD (2016), Monitoring Quality in Early Childhood Education and Care Country Note, Australia OECD (2017), Building Skills for All in Australia
AUSTRIA	OECD (2010), Reviews of Vocational Education and Training - Learning for Jobs, Austria OECD (2016), OECD Reviews of School Resources: Austria
BELGIUM	OECD (2011), OECD Economic Surveys: Belgium 2011 OECD (2011), OECD Reviews of Evaluation and Assessment in Education: School Evaluation in the Flemish Community of Belgium OECD (2015), OECD Economic Surveys: Belgium OECD (2015), OECD Reviews of School Resources: Flemish Community of Belgium 2015 OECD (2017), OECD Economic Surveys: Belgium OECD (2019), OECD Skills Strategy Flanders: Assessment and Recommendations
CANADA	OECD (2012), OECD Economic Surveys: Canada 2012 OECD (2016), Overview of OECD Economic Surveys: Canada 2016 OECD (2017), Promising Practices in Supporting Success for Indigenous Students
CHILE	OECD (2013), OECD Reviews of Evaluation and Assessment in Education: Chile OECD (2015), "Better Policies" Series: Chile Policy Priorities for Stronger and more Equitable Growth OECD (2015), OECD Economic Surveys: Chile 2015 OECD (2017), Education in Chile OECD (2017), OECD Reviews of School Resources: Chile 2017 OECD (2018), OECD Economic Surveys: Chile
COLOMBIA	OECD (2013), OECD Economic Surveys: Colombia 2013 OECD (2015), OECD Economic Surveys: Colombia 2015 OECD (2016), Reviews of National Policies for Education in Colombia OECD (2017), OECD Economic Surveys: Colombia 2017 OECD (2018), Public spending in education and student's performance in Colombia
COSTA RICA	OECD (2016), The Economic Survey of Costa Rica OECD (2018), OECD Economic Surveys: Costa Rica 2018
CZECH REPUBLIC	OECD (2010), Reviews of Vocational Education and Training - Learning for Jobs, Czech Republic OECD (2012), OECD Reviews of Evaluation and Assessment in Education: Czech Republic OECD (2012), Quality Matters in Early Childhood and Care, Czech Republic OECD (2016), OECD Economic Surveys: the Czech Republic 2016 OECD (2016), OECD Reviews of School Resources: Czech Republic
DENMARK	OECD (2011), Reviews of Evaluation and Assessment in Education : Denmark OECD (2012), Reviews of Skills Beyond Schools, Denmark OECD (2016), OECD Economic Surveys: Denmark 2016 OECD (2015), Reviews of School Resources: Flemish Community of Belgium OECD (2016), OECD Reviews of School Resources: Denmark 2016
ESTONIA	OECD (2012), OECD Economic Surveys: Estonia 2012 OECD (2016), OECD Reviews of School Resources: Estonia OECD (2017), OECD Economic Surveys: Estonia 2017
FINLAND	OECD (2012), Quality Matters in Early Childhood and Care, Finland OECD (2016), Monitoring Quality in Early Childhood Education and Care Country Note, Finland OECD (2016), OECD Economic Surveys: Finland 2016
FRANCE	OECD (2011), OECD Economic Surveys: France 2011 OECD (2015), OECD Economic Surveys: France 2015 OECD (2016), Monitoring Quality in Early Childhood Education and Care Country Note, France OECD (2017), OECD Economic Surveys: France 2017
GERMANY	OECD (2010), OECD Economic Surveys: Germany 2010 OECD (2013), Reviews of Skills Beyond Schools, Germany OECD (2016a), Monitoring Quality in Early Childhood Education and Care Country Note, Germany

	OECD (2016b), OECD Economic Surveys: Germany 2016 OECD (2018), OECD Economic Surveys: Germany 2018
GREECE	OECD (2013), OECD Economic Surveys: Greece OECD (2016), OECD Economic Surveys: Greece OECD (2017), Education Policy in Greece: A Preliminary Assessment OECD (2017), Education Policy Review of Greece: Targeted Policy Recommendations on School and School Leader Evaluation for Improvement OECD (2018), OECD Economic Surveys: Greece 2018 OECD (2018), Reviews of National Policies for Education for a Bright Future in Greece
HUNGARY	OECD (2008), Reviews of Vocational Education and Training: A Learning for Jobs Review of Hungary 2008 OECD (2012), OECD Economic Surveys: Hungary 2012 OECD (2016), OECD Economic Surveys: Hungary 2016
ICELAND	OECD (2013), OECD Economic Surveys: Iceland 2013 OECD (2015), OECD Economic Surveys: Iceland 2015 OECD (2017), OECD Economic Surveys: Iceland 2017
IRELAND	OECD (2009), OECD Economic Surveys: Ireland 2009 OECD (2013), OECD Economic Surveys: Ireland 2013 OECD (2015), OECD Economic Surveys: Ireland 2015
ITALY	OECD (2009), OECD Economic Surveys: Italy 2009 OECD (2013), OECD Economic Surveys: Italy 2013 OECD (2015), OECD Economic Surveys: Italy 2015 OECD (2016), Monitoring Quality in Early Childhood Education and Care Country Note, Italy OECD (2017), OECD Economic Surveys: Italy
JAPAN	OECD (2008), OECD Economic Surveys: Japan 2008 OECD (2011), OECD Economic Surveys: Japan 2011 OECD (2012), Quality Matters in Early Childhood and Care, Japan OECD (2015), OECD Economic Surveys: Japan 2015 OECD (2017), OECD Economic Surveys: Japan 2017 OECD (2017), Investing in Youth: Japan OECD (2018), Education Policy in Japan: Building Bridges towards 2030, Reviews of National Policies for Education
KAZAKHSTAN	OECD (2014), Reviews of National Policies for Education: Secondary Education in Kazakhstan, Reviews of National Policies for Education OECD/The World Bank (2015), OECD Reviews of School Resources: Kazakhstan 2015 OECD (2017), Higher Education In Kazakhstan 2017, Reviews of National Policies for Education
KOREA	OECD (2008), OECD Economic Surveys: Korea 2008 OECD (2012), Quality Matters in Early Childhood and Care, Korea OECD (2016), Monitoring Quality in Early Childhood Education and Care Country Note, Korea OECD (2016), OECD Economic Surveys: Korea 2016
LATVIA	OECD (2015), OECD Economic Surveys: Latvia 2015 OECD (2016), Education in Latvia, Reviews of National Policies for Education OECD (2017), OECD Economic Surveys: Latvia 2017
LITHUANIA	OECD (2016), OECD Economic Surveys: Lithuania 2016 OECD (2016), OECD Reviews of School Resources: Lithuania 2016 OECD (2017), Education in Lithuania
LUXEMBOURG	OECD (2012), OECD Reviews of Evaluation and Assessment in Education: Luxembourg OECD (2015), The Economic Survey of Luxembourg OECD (2017), Monitoring Quality in Early Education and Care Country Note, Luxembourg
MEXICO	OECD (2010), OECD Mexico Improving Schools Review OECD (2012), OECD Reviews of Evaluation and Assessment in Education, Mexico OECD (2015), OECD Economic Surveys: Mexico 2015 OECD (2017), OECD Economic Surveys: Mexico 2017 OECD (2019), Strong Foundations for Quality and Equity in Mexican Schools, Implementing Education Policies OECD (2019), The Future of Mexican Higher Education: Promoting Quality and Equity
NEW ZEALAND	OECD (2011), OECD Reviews of Evaluation and Assessment in Education: New Zealand OECD (2012), Quality Matters in Early Childhood and Care, New Zealand OECD (2017), OECD Economic Surveys: New Zealand 2017
NORWAY	OECD (2010), OECD-Norway Improving Schools Review

	OECD (2011), OECD Reviews of Evaluation and Assessment in Education: Norway OECD (2012), Quality Matters in Early Childhood and Care, Norway OECD (2016), OECD Economic Surveys: Norway 2016 OECD (2016), OECD Economics Department Working Papers: Addressing the challenges in higher education in Norway OECD (2018), Investing in Youth: Norway OECD (2019), Improving School Quality in Norway: The New Competence Development Model
POLAND	OECD (2012), The Economic Survey of Poland OECD (2018), OECD Economic Surveys: Poland 2018
PORTUGAL	OECD (2012), OECD Reviews of Evaluation and Assessment in Education: Portugal OECD (2012), Quality Matters in Early Childhood and Care, Portugal OECD (2017), OECD Economic Surveys: Portugal 2017 OECD (2018), OECD Reviews of School Resources: Portugal 2018 OECD (2018), Skills Strategy Implementation Guidance for Portugal OECD (2019), OECD Review of Higher Education, Research and Innovation: Portugal (2019)
SLOVAK REPUBLIC	OECD (2010), OECD Economic Surveys: the Slovak Republic OECD (2012), Quality Matters in Early Childhood Education, Slovak Republic OECD (2012), OECD Economic Surveys: the Slovak Republic OECD (2014), OECD Economic Surveys: the Slovak Republic OECD (2014), OECD Reviews of Evaluation and Assessment in Education, Slovak Republic OECD (2015), OECD Reviews of School Resources: Slovak Republic OECD (2017), OECD Economic Surveys: Slovak Republic 2017
SLOVENIA	OECD (2011), OECD Economic Surveys: Slovenia 2011 OECD (2013), OECD Economic Surveys: Slovenia 2013 OECD (2015), OECD Economic Surveys: Slovenia 2015 OECD (2017), OECD Economic Surveys: Slovenia 2017
SPAIN	OECD (2014), OECD Economic Surveys: Spain 2014 OECD (2017), OECD Economic Surveys: Spain 2017
TURKEY	OECD (2008), OECD Economic Surveys: Turkey 2008 OECD (2012), OECD Economic Surveys: Turkey 2012 OECD (2016), OECD Economic Surveys: Turkey 2016
UNITED KINGDOM (ENGLAND & WALES)	OECD (2009), Reviews of Vocational Education and Training - Learning for Jobs, England and Wales
UNITED KINGDOM (ENGLAND)	OECD (2012), Quality Matters in Early Childhood Education, England OECD (2013), OECD Reviews of Skills Beyond Schools, England OECD (2018), Reviews of Vocational Education and Training: Apprenticeship in England, United Kingdom
UNITED KINGDOM (NORTHERN IRELAND)	OECD (2014), OECD Reviews of Evaluation and Assessment in Education, United Kingdom (Northern Ireland)
UNITED KINGDOM (SCOTLAND)	OECD (2015), OECD-Scotland Improving Schools Review
UNITED KINGDOM (WALES)	OECD (2014), Improving Schools in Wales: An OECD Perspective OECD (2018), Developing Schools as Learning Organisations in Wales, Implementing Education Policies
UNITED STATES	OECD (2010), OECD Economic Surveys: United States 2010 OECD (2016), OECD Economic Surveys: United States 2016

Annex B. Previous policies collected, but not included in this report

This annex includes policies from education systems participating in the 2016-18 policy collection exercise that had been collected by the Education Policy Outlook Team up to 2018, for which it was not possible to obtain sufficient information on their evolution up to 2018. They are listed by education system under the four policy levers covered in this report: 1) School improvement; 2) Evaluation and assessment; 3) Governance; and 4) Funding. For further information on these policies, see *Education Policy Outlook 2015: Making Reforms Happen* (OECD, 2015).

School improvement

Canada (Nova Scotia)

- Instructional Leadership Academy Program (NSILA, 2010)

Chile

- *Prueba INICIA (2008)*

Hungary

- Decree on the Teacher Training System (2012)
- National Public Education Act (2011)
- Decree on the National Core Curriculum (2012)

Ireland

- Project Maths (2010)

Korea

- National Teacher Professional Development and Evaluation System (NTPDES) (2010)

Portugal

Evaluation exam for teachers (2013)

Slovenia

- Special Criteria for the Accreditation of Study Programmes for Initial Education of Teachers (2008, amended in 2011)

Spain

- Recruitment processes for school leaders (2013)

Turkey

- New teacher programme (2011)
- Teacher Training Programmes of Education Faculties (2008)
- Vocational and Technical Education Strategy Document and Action Plan (2014-18)
- Transportable Schools and Mobile Teachers Projects (Taşınabilir Okul and Taşımalı Öğretmen)

Evaluation and assessment

Sweden

- Grading scale to improve quality assessment in primary and secondary schools (2011), National tests in grades 6 and 9 (2011)

Turkey

Follow-up Study of Graduates of Vocational and Technical Secondary Education Institutions (2007)

Funding

Czech Republic

- Amendment to Education Act (2011): School funding formulas

Germany

- Investing in the Future Act (2009)

Hungary

- Tied Students Loan (2012)

New Zealand

- Aspire Scholarship (2009)

Turkey

- Private Teaching Institutions Law: Support for VET (2013)

Annex C. Education policy priorities identified by the OECD and participating education systems

This annex includes the list of priorities identified by the OECD in its previous work with participating education systems from 2008 to 2018, as found in Annex A, which includes a list of all OECD publications consulted for this analysis. Priorities according to participating education systems are based on consultation and validation processes conducted with participating education systems as part of the Education Policy Outlook activities (see the Reader's Guide).

To compare previous OECD analysis and country responses: Education systems displayed in bold are those where the policy priority was identified by both the OECD and the education system during consultation and validation activities with participating education systems. For a more detailed explanation of the terminology and classification of policy priorities, see the Readers' Guide.

Table A C.1. School improvement: Priorities according to the OECD and participating education systems

	Analysis of OECD work	EPO Survey responses
	Improving learning conditions to support all students	**Making learning environments more inclusive for all students and provide support to schools**
Identified between 2015-19	AUT, BEL (Fl.), **CAN**, **CHL**, COL, **DNK**, **FRA**, **GRC**, **LVA**	BEL (Fr.), **CHL**, **GRC**, **LVA**, NZL, PRT, SVN
Identified at least between 2008-14	SVK	**CAN** (federal view), CZE, **DNK**, ESP, **FRA**, HUN, IRL, ITA, JPN, KOR, **LVA**, NOR, SWE
	General strategies for school support staff: improving the recruitment, organisation and competences	**Improving the working conditions of school support staff**
Identified between 2015-19	**EST**, KAZ, LVA	N/A
Identified at least between 2008-14	CZE, FIN, GBR (WLS), JPN, SVK	**EST**
	Attracting and retaining (a sufficient number of) (high-quality) teachers	**Making the teaching profession more attractive and retain teachers in the profession**
Identified between 2015-19	**BEL (De., Fl.**, Fr.), **GBR** (**ENG**, NIRL, SCT, WLS), ITA, LTU, **LVA**, SVK, SWE	IRL**, ISL**
Identified at least between 2008-14	AUS, FIN, **ISL**, **JPN**, MEX, **SVK**	**BEL (De., Fl.)**, CAN, CZE, DEU, EST, **GBR** (**ENG**), HUN, **JPN**, **LVA**, **SVK**, SWE
	Teacher qualifications, skills and training: improve, provide access, increase participation	**Improving teacher education and competencies**
Identified between 2015-19	BEL (Fl.), **CHL**, COL, DEU, DNK, EST, GBR (SCT), **KAZ**, LTU, **LVA**, **PRT**, SVK, SWE	**CHL**, CZE, GRC, **KAZ**, **NOR**
Identified at least between 2008-14	CHL, DNK, **FIN**, GBR (ENG, NIRL, WLS), **ISL**, JPN, **MEX**, **NOR**, **PRT**, SVK, SWE	AUS, BEL (Fr.), ESP, **FIN**, **ISL**, ITA, KOR, **LVA**, **MEX**, NZL, **PRT**, SVN, TUR
	Improving the working conditions of teachers and the operation of the teacher labour market	**Improving the working conditions of teachers**

	Analysis of OECD work	EPO Survey responses
Identified between 2015-19	**BEL** (**Fl.**), **GRC**, **KAZ**	CZE, **DEU**, **GRC**, **KAZ**
Identified at least between 2008-14	**DEU**, HUN, ISL, MEX, SVK	**BEL** (De., **Fl**.), DNK, LVA
	Raising the attractiveness of the school leadership position	**Making the school leadership profession more attractive**
Identified between 2015-19	CHL, EST, SVK, SWE	N/A
Identified at least between 2008-14	N/A	CZE, GBR (ENG)
	Increasing qualifications and participation in professional development and define role of school leaders	**Improving the competencies of school leaders**
Identified between 2015-19	AUT, **CHL**, COL, **GRC**, KAZ, SVK, SWE	**GRC**
Identified at least between 2008-14	**CHL**, FIN, GBR (WLS), MEX, SVK, SWE	BEL (Fr.), **CHL**, DNK, KOR, SVN

Table A C.2. Evaluation and assessment: Priorities according to the OECD and participating education systems

	Analysis of OECD work	EPO Survey responses
	Enhancing the quality and reliability of student assessments (e.g. through validation, further development, managing detrimental effects and sources of inequity, or ensuring alignment to curriculum)	**Related to student assessment**
Identified between 2015-19	COL, DEU, DNK, GBR (ENG), KAZ	**CZE**, SVN
Identified at least between 2008-14	**CZE,** GBR (NIRL), **MEX,** SVK	HUN, ISL, ITA, **MEX**, NZL
	Building assessment competencies among both teachers and school leaders to strengthen classroom-based assessment and prevent inequities in grading	**Related to competencies of teachers and school leaders**
Identified between 2015-19	COL, SVK, SWE	N/A
Identified at least between 2008-14	CZE, DNK, MEX, PRT, SWE	N/A
	Establishing effective teacher appraisal to help teachers improve their practice in order to improve student learning	**Related to teacher appraisal**
Identified between 2015-19	N/A	**CHL**
Identified at least between 2008-14	**CHL**, FIN, JPN, **MEX**, **SVK**, SWE	EST, **MEX**, **SVK**
	Achieving quality internal and external school evaluations that promote continuous improvement	**Related to school evaluation**
Identified between 2015-19	**AUS**, CHL, EST, FIN, GRC, **ITA**, LTU, SWE	**BEL** (**Fl.**, Fr.), **CZE**, ESP, PRT
Identified at least between 2008-14	AUT, **BEL (Fl.)**, CHL, **CZE**, FIN, **GBR** (**ENG**, WLS), **ITA**, LUX, **MEX**, NOR, NZL, SVK, SWE	**AUS**, **GBR (ENG)**, HUN, IRL, ISL, **ITA**, JPN, **MEX**
		Related to institutional evaluation
Identified between 2015-19	N/A	N/A
Identified at least between 2008-14	N/A	BEL (Fl.)
	Absence or underdevelopment of system evaluation components, with a need to ensure quality, clarity and ongoing collection and interpretation of data to inform improvement strategies	**Related to system evaluation**
Identified between 2015-19	DEU, FRA, GRC, ITA, **KAZ**, KOR, LUX, **LVA**, NZL, NOR, SVK, SWE, GBR (SCT)	**BEL** (**Fl.**, Fr.), **CZE**, **KAZ**, TUR
Identified at least between 2008-14	AUS, **BEL** (**Fl.**), **CZE**, DNK, GBR (NIRL, WLS), IRL, LUX, **MEX**, NOR, PRT, SVK, SWE	JPN, **LVA**, **MEX**
	Developing a coherent evaluation and assessment framework, avoiding duplication of procedures, and preventing inconsistency of objectives	**Related to evaluation and assessment frameworks**
Identified between 2015-19	COL, CRI, GBR (SCT)	BEL (Fr.), CHL, ITA
Identified at least between 2008-14	AUS, **CZE**, DEU, **DNK**, GBR (WLS), LUX, MEX, **NOR**, NZL, **PRT**, SVK, **SWE**	CHL, **CZE**, **DNK**, ESP, FIN, FRA, ISL, KOR, **NOR**, **PRT**, SVN, **SWE**, TUR

Table A C.3. Governance: Priorities according to the OECD and participating education systems

	Analysis of OECD work	EPO Survey responses
	Tackling unclear or unbalanced division of responsibility between national and local authorities and schools	**Tackling unclear or unbalanced division of responsibility between national and local authorities and schools**
Identified between 2015-19	**AUT**, **BEL (**De., **Fl., Fr.)**, **EST**, FRA, GBR (SCT), GRC, JPN, KAZ, **LVA**, LTU, **NOR**, **PRT**, SVN, **SWE**, **TUR**	**CZE**, **HUN**, MEX
Identified at least between 2008-14	**AUS**, **CZE**, GBR (WLS), **HUN**, ISL, **ITA**, JPN, KOR, LUX, **NOR**, **SVK**, **TUR**	**AUS**, **AUT**, **BEL** (**Fl.**, **Fr.)**, CHL, ESP, **EST**, FIN, GBR (ENG), **ITA**, **LVA**, MEX, NZL, **NOR**, **PRT**, **SVK**, **SWE**, **TUR**
	Putting in place quality assurance mechanisms	**Putting in place quality assurance mechanisms**
Identified between 2015-19	AUS, COL, CZE, EST, GBR (ENG), GRC, KAZ, LVA, NOR, SVK	N/A
Identified at least between 2008-14	COL, CZE, GBR (NIRL, SCT, WLS), KOR, MEX, NZL, PRT, SVK	CHL, HUN, SVN
	Strengthening data collection for monitoring and accountability	**Strengthening data collection for monitoring and accountability**
Identified between 2015-19	AUT, CAN, DNK, **BEL** (**Fl.**), **KAZ**, LVA, LTU, NOR, SWE	**BEL** (**Fl.**), **KAZ**
Identified at least between 2008-14	HUN	AUS, CZE
	Setting objectives for the education system	**Defining national education priorities and goals**
Identified between 2015-19	AUS, **BEL** (**Fl.**), CHL, COL, CRI, GBR (ENG), **GRC**, ISL, **JPN**, KAZ, LVA, LTU, **SWE**	**BEL** (**Fl.**, **Fr.**), **CZE**, DNK, **GRC**, PRT, **SWE**
Identified at least between 2008-14	**CZE**, GBR (NIRL, WLS), TUR	AUT, CAN, DEU, DNK, ESP, FRA, IRL, ITA, **JPN**
	Engaging stakeholders in decision making	**Engaging stakeholders in decision making**
Identified between 2015-19	AUS, CAN, CHL, CRI, EST, FIN, GBR (ENG), IRL, ITA, JPN, **KAZ**, LVA, LUX, NZL, NOR, POL, SVN	**CZE**, **KAZ**, **MEX**
Identified at least between 2008-14	**CZE**, FRA, DEU, GBR (ENG, WLS), **ISL**, ITA, **JPN**, LUX, **MEX**, NZL, SVK, SVN, SWE	**ISL**, **JPN**

Table A C.4. Funding: Priorities according to the OECD and participating education systems

	Analysis of OECD work	EPO Survey responses
	Increasing educational expenditure	**Maintaining adequate funding for education, avoiding budget cuts**
Identified between 2015-19	AUS, **BEL** (**Fl.**), CAN, CHL, COL, CRI, **DEU**, EST, GBR (ENG), HUN, ITA, KAZ, LVA, **MEX**, **SVK**	AUT, **BEL** (**Fl.**), CZE, **DEU**, **MEX**
Identified at least between 2008-14	JPN, KOR, **MEX**, SVN, **TUR**, USA	ISL, IRL, **SVK**, **TUR**
	Improving efficiency in use of resources	**Improving efficiency in use of resources**
Identified between 2015-19	**BEL** (**Fl.**), CHL, DNK, FRA, GBR (ENG), ISL, **KAZ**, **KOR**, **LVA**, LTU, NOR, SVK, SVN, **SWE**,	**BEL** (De.**, Fl.**, Fr.), **KAZ**, MEX, **SWE**
Identified at least between 2008-14	**BEL** (**Fl.**), IRL, ISL, **ITA**, SVN	**BEL** (**Fl.**, Fr.), CZE, ESP, FIN, **ITA**, **KOR**, **LVA**, MEX, PRT
	Refining criteria and mechanisms used to allocate funding to education institutions	**Refining criteria and mechanisms used to allocate funding to education institutions**
Identified between 2015-19	AUT, BEL (Fl.), CHL, COL, CZE, KAZ, LTU, NOR, SVN	BEL (Fr.), MEX
Identified at least between 2008-14	AUS, IRL, SVN	HUN, LVA
	Revising sources of funding in educational institutions	**Revising sources of funding in educational**
Identified between 2015-19	KAZ, LVA, SVN	CHL
Identified at least between 2008-14	AUS, **CAN**, EST, GBR (ENG, NIRL, SCT, WLS), IRL, ITA, JPN, POL, SVK, SVN	**CAN**
	Improving equity in resource allocation	**Improving equity in resource allocation**
Identified between 2015-19	AUS, BEL (Fl.), CAN, CHL, COL, **DEU**, GBR (ENG, NIRL, SCT, WLS), JPN, KAZ, NOR, **SVN**, SWE	AUT, CZE, DNK, MEX, **SVN**
Identified at least between 2008-14	N/A	BEL (De., Fr.), FRA, **DEU**, NZL
	Tackling shortages of human and material resources in schools	**Tackling shortages of high-quality teachers and school leaders**
Identified between 2015-19	AUT, BEL (Fl.), **CHL**, **KAZ**, LTU, MEX, NZL, SWE	**CHL**, **KAZ**
Identified at least between 2008-14	FIN, ISL, KOR, SVK	N/A

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