OECD Skills Studies

OECD Skills Strategy Lithuania

ASSESSMENT AND RECOMMENDATIONS

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BETTER POLICIES FOR BETTER LIVES

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Foreword

Developing and using people's skills effectively is crucial for Lithuania's economic prosperity, innovation and social cohesion.

Globalisation, digitalisation, demographic change and climate change are combining to increase and transform the skills needed to thrive in Lithuanian workplaces and society. People will need a stronger and more well-rounded set of skills, including cognitive, social and emotional, and job-specific skills, to flourish in life both in and outside of work. Lithuania will also need to make better use of people's skills in the labour market and in individual workplaces to harness the potential of people's skills. The COVID-19 crisis of 2020 has accelerated the digitalisation of learning and work, and made upskilling and reskilling even more critical for many adults.

Lithuania has achieved relatively strong skills performance in various areas. In terms of developing people's skills, participation rates in upper secondary and tertiary education are higher in Lithuania than in almost all other OECD countries. In terms of using people's skills, Lithuania does a good job overall of activating skills in the labour market, with men and women having relatively high and equal employment rates.

However, Lithuania faces several persistent skills challenges. Young people have comparatively low levels of cognitive and socio-emotional skills, and this has not improved over time. There remain large gaps in skill levels and educational attainment between youth from disadvantaged and advantaged backgrounds. Skills imbalances appear to be high, and many graduates are not well matched to their jobs. Many adults lack foundational skills such as literacy and numeracy, and relatively few adults participate in education and training. Employers are not using workers' skills to their full potential to support productivity and innovation.

In recent years, Lithuania has introduced various strategies and reforms covering different levels of education and training, and different areas of labour market and innovation policy. These have helped improve school and university networks, vocational education, teachers' education and conditions, among other things.

Today, Lithuania has a unique window of opportunity to build on these reforms to improve performance and equity across the skills system. Lithuania is in the process of developing several important medium- and long-term strategies that have a clear focus on skills. The OECD's Skills Strategy project seeks to support Lithuania to seize this opportunity. It does this by providing detailed analysis and widespread engagement with stakeholders, leading to several tailored recommendations for Lithuania outlined in this report.

The OECD stands ready to support Lithuania as it seeks to put skills at the forefront of its agenda for a more productive, innovative, green and equitable economy and society.

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The OECD team wishes to thank the Lithuanian Steering Group for this project for its strategic oversight. As of October 2020 the Steering Group was chaired by Lukas Savickas, First Deputy Chancellor, Office of the Government of the Republic of Lithuania (LRV). The Steering Group included: Eglė Radišauskienė, Vice-minister, Ministry of Social Security and Labour (SADM); Arūnas Plikšnys, Vice-minister, Ministry of Education, Science and Sport (SMSM); Marius Skuodis, Vice-minister, Ministry of Economy and Innovation (EIM); Loreta Maskoliovienė, Vice-minister, Ministry of Finance (FINMIN); Giedrius Viliūnas, Managing Director, Government Strategic Analysis Center (STRATA); Jovita Pretzsch, Representative of Trade Unions, Tripartite Council; Janina Matuizienė, Representative of Trade Unions, Tripartite Council; Gintautas Kvietkauskas, Representative of Employers, Tripartite Council; Birutė Miškinienė, Representative of Employers, Vilnius Chamber of Commerce, Industry and Crafts; and Agnė Kavaliauskienė, Advisor to the Group of Strategic Competences (LRV).

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Over 150 stakeholders participated in the various meetings that took place during the OECD's virtual consultations. These stakeholders represented ministries, government agencies, subnational authorities, education and training institutions, businesses and business associations, unions and community associations, academia, civil society and other organisations (see Annex A for a full list of participating organisations). The OECD would also like to thank the staff of STRATA for their active outreach and communication with stakeholders, and for other support during the project.

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While the report draws upon data and analysis from the OECD, Lithuanian authorities and other published sources, any errors or misinterpretations remain the responsibility of the OECD team. The opinions expressed and arguments employed herein do not necessarily reflect the official views of the OECD member countries nor the European Union.

Ben Game (OECD Centre for Skills) was the OECD project leader responsible for co-ordinating the National Skills Strategy project in Lithuania. The authors of this report from the National Skills Strategy team of the OECD Centre for Skills were: Chapter 1. Key insights and recommendations (Ben Game, Bart Staats, Sam Thomas and Daniel Unterweger); Chapter 2. Equipping young people with skills for work and life (Ben Game); Chapter 3. Raising adults' and enterprises' participation in learning (Sam Thomas and Stefano Piano); Chapter 4. Strengthening the use of skills in Lithuanian workplaces (Bart Staats); and Chapter 5. Strengthening the governance of skills systems (Daniel Unterweger). Visionary Analytics (external consultants) provided research assistance, feedback and consultation assistance throughout the project. Marieke Vandeweyer (VET team, OECD Centre for Skills) and Romane Viennet (OECD Directorate for Education and Skills) provided feedback on draft sections of the report.

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Abbreviations and acronyms

The main abbreviations and acronyms used in the report are listed below.

AES	Adult Education Survey
AI	Artificial intelligence
AIKOS	Open Information, Counselling and Guidance System (*Atvira profesinio informavimo ir konsultavimo sistema*)
ALMPs	Active labour market policies
CPD	Continuing professional development
CVT	Continuous vocational training
DIH	Digital Innovation Hubs
EC	European Commission
EIM	Ministry of the Economy and Innovation (*Ekonomikos ir inovacijų Ministerija*)
ESF	European Social Fund
ESIF	European Structural and Investment Funds
EU	European Union
EWCS	European Working Conditions Survey
FDI	Foreign direct investment
FINMIN	Ministry of Finance (*Finansų ministerija*)
GDP	Gross domestic product
HE	Higher education
HEI	Higher education institution
HPWP	High-performance workplace practices
HR	Human resources
HRM	Human resource management
ICT	Information and communications technology
IIP	Investors in People
ILA	Individual Learning Account
ISCED	International Standard Classification of Education
ITE	Initial teacher education
JAL	Junior Achievement Lithuania (*Lietuvos Junior Achievement*)
JRA	Job requirements approach
KPMPC	Qualifications and Vocational Education and Training Development Centre (*Kvalifikacijų ir profesinio mokymo plėtros centras*)
LAAE	The Lithuanian Association of Adult Education
LAMA BPO	Association of Lithuanian Higher Education Institutions to organise general admissions (*Lietuvos aukštųjų mokyklų asociaciją bendram priėmimui organizuoti*)
LDK	Lithuanian Employers' Confederation (*Lietuvos darbdavių konfederacija*)
LFS	Labour Force Survey
LIC	Lithuanian Innovation Centre
LPK	Lithuania Confederation of Industrialists (*Lietuvos pramonininkų konfederacija*)

LPSK	Lithuanian Trade Union Confederation (*Lietuvos profesinių sąjungų konfederacija*)
LRV	Lithuanian Business Confederation (*Lietuvos verslo konfederacija*)
LVK	Agency for Science, Innovation and Technology (*Mokslo, inovacijų ir technologijų agentūra*)
MITA	Lithuanian Employers' Confederation (*Lietuvos darbdavių konfederacija*)
MOOC	Massive open online course
NEC	National Examination Centre
NEET	Not in employment, education or training
NICS	Northern Ireland Civil Service People
NGO	Non-governmental organisation
NPP	National Plan for Progress 2021-2030 (*Nacionalinis pažangos planas*)
NŽISK	National Commission for the Co-ordination of Human Resources Monitoring (*Lietuvos Respublikos Vyriausybės komisija nacionalinei žmogiškųjų išteklių stebėsenai koordinuoti*)
PARP	Polish Agency for Enterprise Development (*Polska Agencja Rozwoju Przedsiębiorczości*)
PES	Public employment services
PIAAC	Survey of Adult Skills (Programme for the International Assessment of Adult Competencies)
PISA	Programme for International Student Assessment
R&D	Research and development
RPL	Recognition of prior learning
SAA	Skills assessment and anticipation
SADM	Ministry of Social Security and Labour (*Socialinės apsaugos ir darbo ministerija*)
SGI	Sustainable Governance Indicators
SKVC	Centre for Quality Assessment in Higher Education (*Studijų kokybės vertinimo centras*)
SME	Small and medium-sized enterprise
SMSM	Ministry of Education, Science and Sport of the Republic of Lithuania (*Švietimo, mokslo ir sporto Ministerija*)
STEAM	Science, technology, engineering, art (creative activities) and mathematics
STEM	Science, technology, engineering and mathematics
STRATA	Government Strategic Analysis Center (*Vyriausybės strateginės analizės centras*)
TALIS	Teaching and Learning International Survey
VET	Vocational education and training
WBL	Work-based learning
VDI	State Labour Inspectorate (*Valstybinė darbo inspekcija*)

Executive summary

OECD-Lithuania collaboration on the OECD Skills Strategy project

This OECD Skills Strategy (OSS) project provides Lithuania with tailored findings and recommendations on its skills performance from an international perspective, and supports Lithuania's ongoing strategic planning activities. The OSS project was launched via a virtual Skills Strategy Seminar in March 2020, with senior representatives from the Ministry of Education, Science and Sport; Ministry of Social Security and Labour; Ministry of Economy and Innovation; Ministry of Finance, the Tripartite Council (representing employers, trade unions and the government); the Office of the Government of Lithuanian Republic; and the Government Strategic Analysis Centre. The European Commission was also present.

During virtual consultations in May-June and September 2020, the OECD engaged with a range of ministries and government agencies and over 150 stakeholders in workshops, expert meetings, regional discussions and bilateral meetings (see Annex A). This process provided invaluable input that shaped the findings and recommendations in this report.

Key findings and opportunities for improving Lithuania's skills performance

In Lithuania, as in other OECD countries, megatrends such as digitalisation, globalisation, demographic change and climate change are transforming jobs and the way society functions and people interact. There are many consequences of these megatrends in Lithuania, including workers facing relatively high risks of job automation, employers often struggling to find the skills they need, and productivity becoming a more important driver of economic prosperity. The COVID-19 crisis commencing in 2020 has accelerated the digitalisation of learning and work, disrupted several economic sectors, and risks increasing inequalities in education and labour markets in Lithuania. Although the economic contraction of 2020 was relatively mild following major fiscal and financial measures, unemployment rose more starkly, with youth unemployment (15-24 year olds) reaching 28% in November 2020. While the OECD forecasts economic growth in 2021 and 2022, unemployment is expected to remain above pre-crisis levels at least until 2022.

These megatrends and challenges reinforce the need for Lithuania to design forward-looking, dynamic skills policies. To thrive in the world of tomorrow, people will need a stronger and more comprehensive set of skills, underpinned by high-quality learning opportunities across the life course, as well as better opportunities to use skills in the labour market and workplaces. Lithuania has made progress in this direction – the state progress strategy "Lithuania 2030", the National Plan for Progress (NPP) 2021-2030, the Programme of Government 2020 and other strategies have a strong focus on skills. Lithuania has embarked on a range of skills policy reforms in recent years spanning the funding of formal education, education network efficiencies, teacher education, vocational education governance, labour code amendments and more. In the context of Lithuania's ongoing medium- and long-term planning initiatives, the country has a unique window of opportunity to put skills at the top of the agenda to positively influence the megatrends, tackle the challenges and seize the opportunities facing the country.

The OECD and the Government of the Republic of Lithuania have identified four priority areas for improving Lithuania's skills performance. These priority areas are the focus of this report. The key findings and opportunities for improvement in each of the areas are summarised below and elaborated in subsequent chapters, which also have detailed policy recommendations.

Priority 1: Equipping young people in Lithuania with skills for work and life (Chapter 2)

Young people's cognitive, socio-emotional and technical skills are critical for their personal well-being and outcomes later in life, as well for countries' economic prosperity and social cohesion. Lithuania continues to expand young people's enrolment in different levels and forms of education and training. However, young people are not developing high levels of skills, with their performance below the OECD average and not improving over time. There are persistent gaps in student performance and tertiary attainment between youth from disadvantaged and advantaged backgrounds. The success of the education system in meeting labour market demand is mixed, with many graduates mismatched to their jobs.

The OECD has identified and made recommendations to help Lithuania realise three main opportunities for improvement related to young people's skills:

- Opportunity 1: Successfully implementing and complementing modern curricula.
- Opportunity 2: Strengthening Lithuania's teaching workforce.
- Opportunity 3: Making vocational and higher education more responsive to labour market needs.

Priority 2: Raising adults' and enterprises' participation in learning in Lithuania (Chapter 3)

Across the OECD, adults of all skills levels have growing needs to upskill and reskill during their careers in the context of technological change, job transitions, non-standard forms of work and longer working lives. Adult learning is essential for boosting adults' skills, and has become more urgent in the context of the COVID-19 crisis and its impact on labour markets. However, in Lithuania, awareness about adult learning benefits and opportunities remains low. Individuals and employers also report facing considerable financial and time-related barriers to engaging in adult learning. Finally, both the recognition of prior learning procedures and quality assurance mechanisms could be improved to ensure the benefits, quality and attractiveness of non-formal education and training.

The OECD has identified, and made recommendations to help Lithuania realise three main opportunities for improvement related to adult learning:

- Opportunity 1: Raising awareness about adult learning benefits and opportunities.
- Opportunity 2: Removing barriers to participation in adult learning.
- Opportunity 3: Strengthening the recognition and quality of non-formal adult education and training.

Priority 3: Using people's skills more effectively in Lithuania's workplaces (Chapter 4)

Effectively using skills in workplaces is associated with more satisfied and productive workers, which translates to higher business performance benefits for the economy and society. However, the skills of Lithuania's working population are not optimally used in workplaces. Workers use their reading, information and communication technology (ICT), writing and problem-solving skills less frequently in Lithuania's workplaces than on average across the OECD. There is a strong, positive link between the intensive use of skills and the adoption of high-performance workplace practices (HPWP), including work flexibility and autonomy, teamwork, training and development, and career progression and performance management. However, Lithuanian firms are adopting HPWP at a lower rate than their counterparts in most other OECD countries.

The OECD has identified and made recommendations to help Lithuania realise three main opportunities for improvement related to using skills:

- Opportunity 1: Enhancing the use of skills by supporting businesses to adopt high-performance work practices.
- Opportunity 2: Strengthening management and leadership skills to drive the transformation of workplaces.
- Opportunity 3: Empowering and engaging the workforce to make better use of their skills.

Priority 4: Strengthening the governance of skills policies in Lithuania (Chapter 5)

Effective governance arrangements are essential to support Lithuania's performance in developing and using people's skills, and for achieving the goals outlined in its medium- and long-term strategies (such as Lithuania 2030 and the new National Progress Plan). In Lithuania, horizontal co-ordination between ministries on skills policies continues to be challenging, and is relatively limited beyond the planning phase. The capacities of municipalities and regional development councils for vertical co-ordination, self-management and the management of education providers are often underdeveloped. Lithuania's performance in engaging stakeholders in skills policies is relatively strong, yet stakeholder associations sometimes lack the capacity to effectively engage. Lithuania has made substantial progress in the area of evidence-based policy making and skills assessment and anticipation tools, but these tools need to be improved further while strengthening the demand and capacity for evidence-based policy inside ministries. Career guidance is only available to some parts of the Lithuanian population, mostly youth and jobseekers in the economically stronger regions of the country. Lithuania's expenditure on education and training is low by international and regional comparison, funding sources are not highly diversified, and the impacts of skills investments are not systematically evaluated.

The OECD has identified and made recommendations to help Lithuania realise three main opportunities for improvement related to skills governance:

- Opportunity 1: Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system.
- Opportunity 2: Enhancing skills information and career guidance systems and practices.
- Opportunity 3: Ensuring the sustainable, well-targeted and shared financing of Lithuania's skills system.

1 Key insights and recommendations for Lithuania

This chapter summarises the context, key insights and policy recommendations of the OECD Skills Strategy project in Lithuania. It applies the OECD Skills Strategy Framework to provide a high-level assessment of the performance of Lithuania's skills system, and gives an overview of the four priority areas of focus selected for this project: 1) young people's skills; 2) adult learning; 3) skills use; and 4) skills governance. The chapter provides an overview of the policy context for each of the four priority areas and summarises the related key findings and recommendations. Subsequent chapters provide more details on the opportunities for improvement, good practices and policy recommendations for Lithuania in each priority area.

Skills matter for Lithuania

Skills are vital for enabling individuals and countries to thrive in an increasingly complex, interconnected and rapidly changing world. Countries in which people develop strong skills, learn throughout their lives, and use their skills fully and effectively at work and in society are more productive and innovative, and enjoy higher levels of trust, better health outcomes and a higher quality of life.

As new technologies and megatrends increasingly shape our societies and economies, getting skills policies right becomes even more critical for ensuring societal well-being and promoting inclusive and sustainable growth. For Lithuania, implementing a strategic approach to skills policies is essential given the country's persistent regional inequalities and relatively high exposure to digital and demographic disruptions. The COVID-19 crisis of 2020 has accelerated the digitalisation of learning and work, and risks increasing inequalities in education and labour markets. Lithuania currently has a unique opportunity to set policy directions for the next decade and beyond.

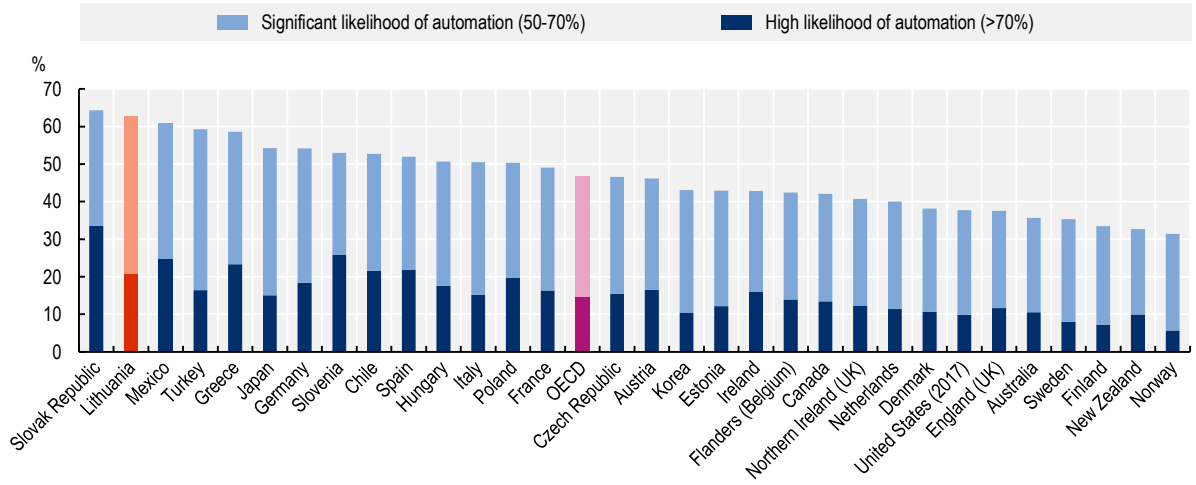
Skills are essential for Lithuania's response to global megatrends

In Lithuania, as in other OECD countries, megatrends such as digitalisation, globalisation, demographic change and climate change are transforming jobs and the way society functions and people interact. To thrive in the world of tomorrow, people will need a stronger and more well-rounded set of skills. These include foundational; cognitive and meta-cognitive; social and emotional; and professional, technical and specialised knowledge and skills. Lithuania will also need to make better use of people's skills in the labour market and in individual workplaces.

In particular, the digital transformation continues to have significant impacts on all aspects of life in Lithuania, including the development and use of skills. Information and communications technologies (ICT), advances in artificial intelligence (AI) and robotics are profoundly changing the way people learn, work, communicate and live across the OECD (OECD, 2019[1]). The Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC), shows that Lithuanian workers face among the highest risks of job automation in the OECD: about 20% of jobs in Lithuania face a high risk of being automated, while another 40% face significant changes in their tasks due to automation, a share higher than the OECD average (Nedelkoska and Quintini, 2018[2]) (Figure 1.1). Furthermore, the COVID-19 crisis has required a sudden transition to remote working in many occupations, forcing enterprises and workers to rapidly increase their digital competencies. Lithuania will need to encourage the development of skills and jobs that are more resilient to automation, and design interventions and investments to capture the benefits of digitalisation.

Figure 1.1. Cross-country variation in job automatability in selected countries

Percentage of jobs at risk by the degree of risk



Note: High risk – more than 70% probability of automation; risk of significant change – between 50% and 70% probability.
Source: Nedelkoska and Quintini (2018[2]), "Automation, skills use and training", *OECD Social, Employment and Migration Working Papers*, http://dx.doi.org/10.1787/2e2f4eea-en.

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Contributing further to the uncertainties associated with technological change is the continuing expansion of international trade and global value chains. New technologies and trade liberalisation have led to a more globalised world that is characterised by the expansion of supply chains and the outsourcing of certain forms of work. Lithuania's integration into international trade and global value chains continues to influence the structure and competitiveness of its economic sectors, which in turn has an ongoing impact on skills supply and demand in the labour market.

Emigration and population ageing are also profoundly affecting the Lithuanian economy and society. Migration flows turned positive in 2019 after being negative for 20 years. The shrinking share of the working-age population in Lithuania, as in many other OECD countries, is reducing the contribution of labour utilisation to economic growth. As a result, productivity growth will be an even more important driver of economic growth in the future, putting more pressure on the need to raise workers' output.

Environmental challenges – climate change, air quality, water pollution, waste management and biodiversity loss – have implications for skills, and potentially how they are developed and used. As a result of the green transition, some new "green jobs" will be created, while some existing jobs could be eliminated or transformed in terms of their day-to-day tasks and methods (ILO, 2017[3]; Martinez-Fernandez, Hinojosa and Miranda, 2010[4]). The long-term challenge for policy makers will be to help their economies move towards sustainable highly skilled, high-productivity activities.

Against this backdrop, people will increasingly need to upgrade their skills to perform new tasks in their existing jobs or acquire skills for new jobs. Strong foundational, digital and social and emotional skills, such as critical thinking, communication and adaptability, will become essential for people to be resilient to changing skills demands and to succeed in both work and life.

The COVID-19 pandemic has disrupted progress and may exacerbate systemic challenges

Lithuania was hit hard by the 2008 global financial crisis, and a deep recession followed. By 2019, Lithuania had regained the path to prosperity, with gross domestic product (GDP) growth among the highest in the OECD, and the employment rate above the European Union (EU) and OECD averages. However, the COVID-19 crisis halted the recovery, with the economy contracting by -0.8% and unemployment rising to 8.5% for the full year 2020, despite the government providing support to households and firms equivalent to almost 10% of GDP. The OECD forecasts the economy to rebound and unemployment to decline in 2021 (OECD, 2020[5]), although protracted disruptions in world trade could worsen this outlook.

Other persistent challenges remain that risk being exacerbated by the COVID-19 pandemic. Poverty rates are high, especially among the unemployed, less educated, single parents and older people (OECD, 2020[6]). Regional disparities in productivity and well-being are increasing, reflecting low investment in peripheral regions and low labour mobility towards economically strong areas. Additionally, labour productivity is only about two-thirds of the OECD average, reflecting a high incidence of labour informality and skills mismatch, among other things (OECD, 2020[6]). As international evidence shows that the crisis has disproportionately impacted the low skilled and low paid, Lithuania will need to enact targeted skills and other policies to prevent inequalities from increasing further.

Lithuania continues to face skills imbalances that undermine productivity growth. According to the OECD Skills for Jobs Database (OECD, 2018[7]), Lithuania faces a shortage of workers with knowledge of computers and electronics, skills in systems evaluation and analysis, and verbal and quantitative abilities. These shortages have particularly affected certain occupations (including science and engineering professionals, and chief executives, senior officials and legislators) and sectors (including ICT). Recent forecasts suggest that Lithuania could face hiring difficulties in a range of medium-skill occupations, including service and sales workers, as well as plant and machine operators and assemblers, and craft and related trades workers (Cedefop, 2020[8]). In 2019, about 41% of employed higher education (HE) and vocational education and training (VET) graduates in Lithuania (aged <35, not in formal education) were mismatched with their job by field of study and/or qualification level. Lowering skills mismatches in Lithuania to the levels of the best performing countries could equate to productivity gains of about 10% (Adalet McGowan and Andrews, 2017[9]). The COVID-19 pandemic has reduced hiring and shortage pressures in the short run, which could force more graduates to accept lower-skilled or poorly aligned jobs. The pandemic could also accelerate structural change across sectors, for example through shifts in consumer habits, which could exacerbate skills mismatches if education systems do not respond quickly enough.

Skills should be at the core of Lithuania's policy response

The above megatrends and challenges reinforce the need for Lithuania to design forward-looking, dynamic skills policies. To thrive in the world of tomorrow, people will need a stronger and more comprehensive set of skills. Strong foundational skills will make people more adaptable and resilient to changing skills demands, and digital, transversal, social and emotional, and job-specific skills (Box 1.1) will become increasingly essential for individuals to succeed in learning, work and life. High-quality learning across the life course should be accessible for everyone to enable full participation in society and to successfully manage transitions in the labour market. Adults will need greater opportunities to upskill and reskill, while learning providers will need to create more flexible and blended forms of learning. Firms will have to adopt more creative and productive ways of using their employees' skills. Finally, robust governance structures will be needed to ensure that reforms are sustainable.

The importance of skills for Lithuania is also reflected in the European Skills Agenda, which seeks to strengthen sustainable competitiveness as set out in the European Green Deal, implement the first

principle of the European Pillar of Social Rights (access to education, training and lifelong learning for everybody in the EU), and build resilience to react to crises (learning from the COVID-19 pandemic). In line with these goals, the European Commission (EC) has recommended that Lithuania improve quality and efficiency at all education and training levels, including adult learning. However, Lithuania has made limited progress on this recommendation since 2019 (European Commission, 2020[10]). In the context of Lithuania's ongoing medium- and long-term planning initiatives (discussed below), the country has a unique window of opportunity to put skills at the top of the agenda to positively influence megatrends, tackle the challenges and seize the opportunities facing the country. This Skills Strategy project seeks to support Lithuania to seize this opportunity.

Box 1.1. A wide range of skills are needed for success in work and life

The OECD Skills Strategy 2019 identifies a broad range of skills that matter for economic and social outcomes, including:

- **Foundational skills**: Including literacy, numeracy and digital literacy.
- **Transversal cognitive and meta-cognitive skills**: Including critical thinking, complex problem solving, creative thinking, learning to learn and self-regulation.
- **Social and emotional skills**: Including conscientiousness, responsibility, empathy, self-efficacy and collaboration.
- **Professional, technical and specialised knowledge and skills**: Needed to meet the demands of specific occupations.

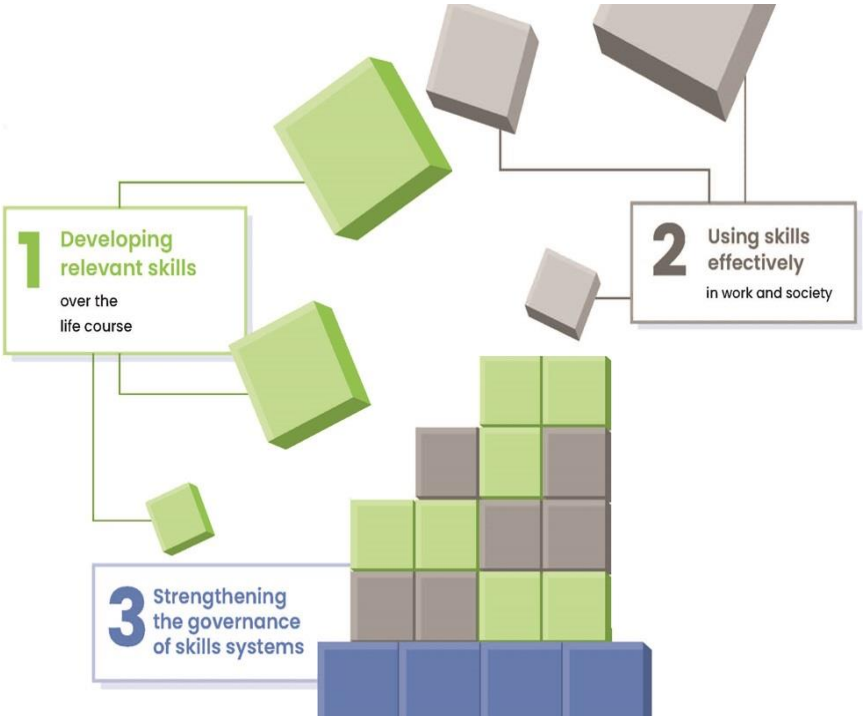
Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

The OECD Skills Strategy project in Lithuania

OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and build more effective skills systems. The OECD collaborates with countries to develop policy responses tailored to each country's specific skills challenges and needs. The foundation of this approach is the OECD Skills Strategy Framework (Figure 1.2), the components of which are:

- **Developing relevant skills over the life course**: To ensure that countries are able to adapt and thrive in a rapidly changing world, all people need access to opportunities to develop and maintain strong proficiency in a broad set of skills. This process is lifelong, starting in childhood and youth and continuing throughout adulthood. It is also "life wide", occurring both formally in schools and higher education, and non-formally and informally in the home, community and workplaces.
- **Using skills effectively in work and society**: Developing a strong and broad set of skills is just the first step. To ensure that countries and people gain the full economic and social value from investments in developing skills, people also need opportunities, encouragement and incentives to use their skills fully and effectively at work and in society.
- **Strengthening the governance of skills systems**: Success in developing and using relevant skills requires strong governance arrangements to promote co-ordination, co-operation and collaboration across the whole of government; engage stakeholders throughout the policy cycle; build integrated information systems; and align and co-ordinate financing arrangements. The OECD Skills Strategy project for Lithuania adopted this approach by forming an interdepartmental project team to support the whole-of-government approach to skills policies, and by engaging a broad variety of stakeholders.

Figure 1.2. The OECD Skills Strategy Framework



Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

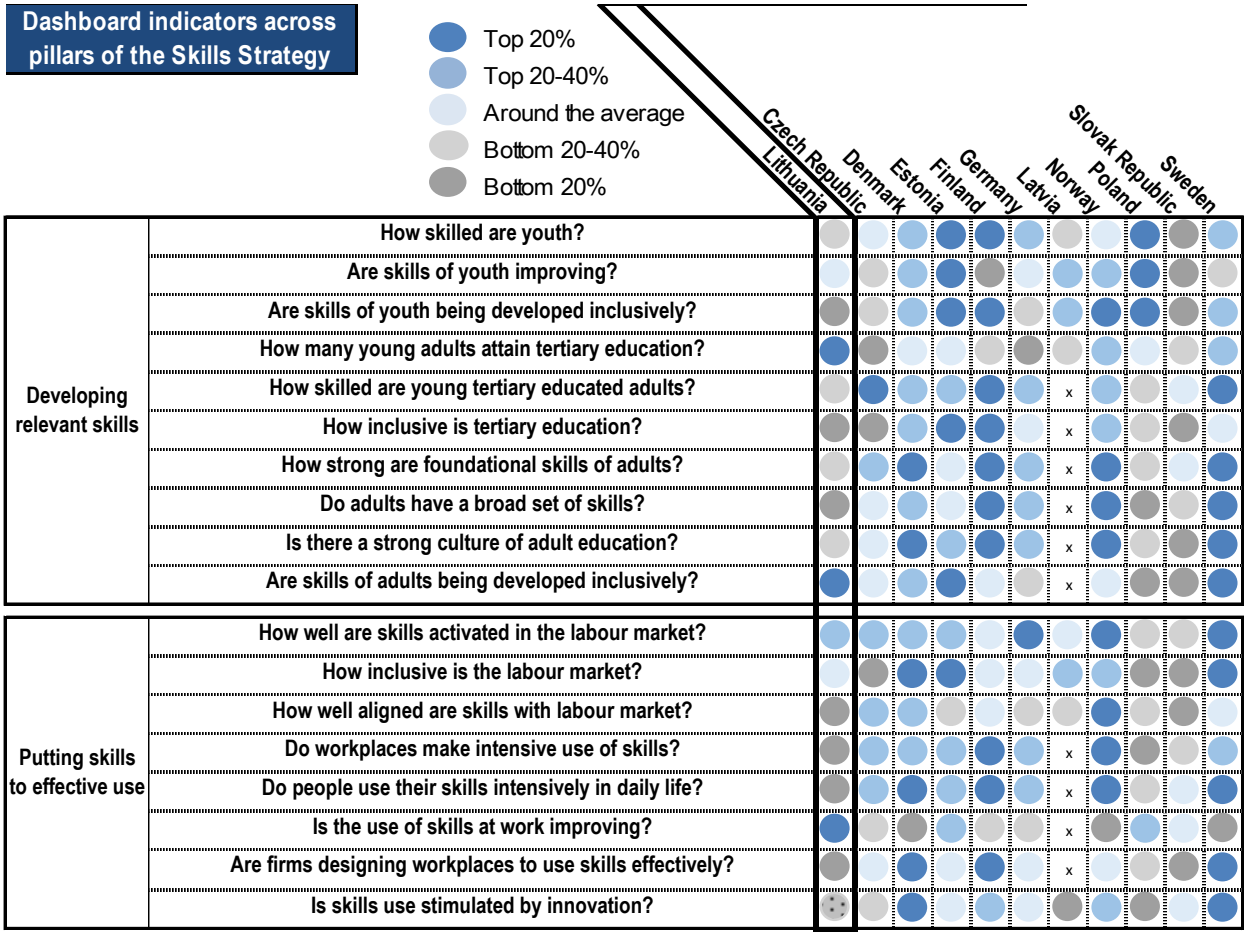
The OECD Skills Strategy project for Lithuania officially started at the onset of the COVID-19 pandemic, and so missions to Lithuania were replaced with virtual forms of engagement. The OECD held a virtual skills seminar in March 2020 to begin the project, assessment consultations in May and June to diagnose challenges, and recommendation consultations in September to develop recommendations. The virtual assessment and recommendations consultations involved bilateral meetings, expert group discussions, interactive stakeholder workshops, and webinars with government officials and stakeholders. The consultations sought not only to enrich the report with local insights, but also to develop a constructive dialogue and cultivate a shared understanding of skills challenges and opportunities as a basis for action. The OECD Skills Strategy project in Lithuania has engaged around 150 participants who represent ministries and agencies, municipalities, education providers, employers, workers, researchers, and other sectors.

The report was prepared after the initial outbreak of the COVID-19 pandemic and makes recommendations that could facilitate Lithuania's recovery, as well as recommendations to build the performance and resilience of Lithuania's skills system in the longer term.

The performance of Lithuania's skills system

The OECD Skills Strategy Dashboard provides an overview of the relative performance of countries across the dimensions of the OECD Skills Strategy (Figure 1.3). For each dimension of the strategy, there are a number of indicators, some of which are composite indicators, which provide a snapshot of each country's performance (see Annex 1.B for the indicators).

Figure 1.3. OECD Skills Strategy Dashboard: Lithuania and selected European countries



Note: These summary indicators are calculated as a simple average of a range of underlying indicators (see Annex 1.B). All underlying indicators have been normalised in a way that implies that a higher value and being among the "top 20%" reflects better performance. The "x" indicates insufficient or no available data and dotted circles indicate missing data for at least one underlying indicator.

Developing relevant skills

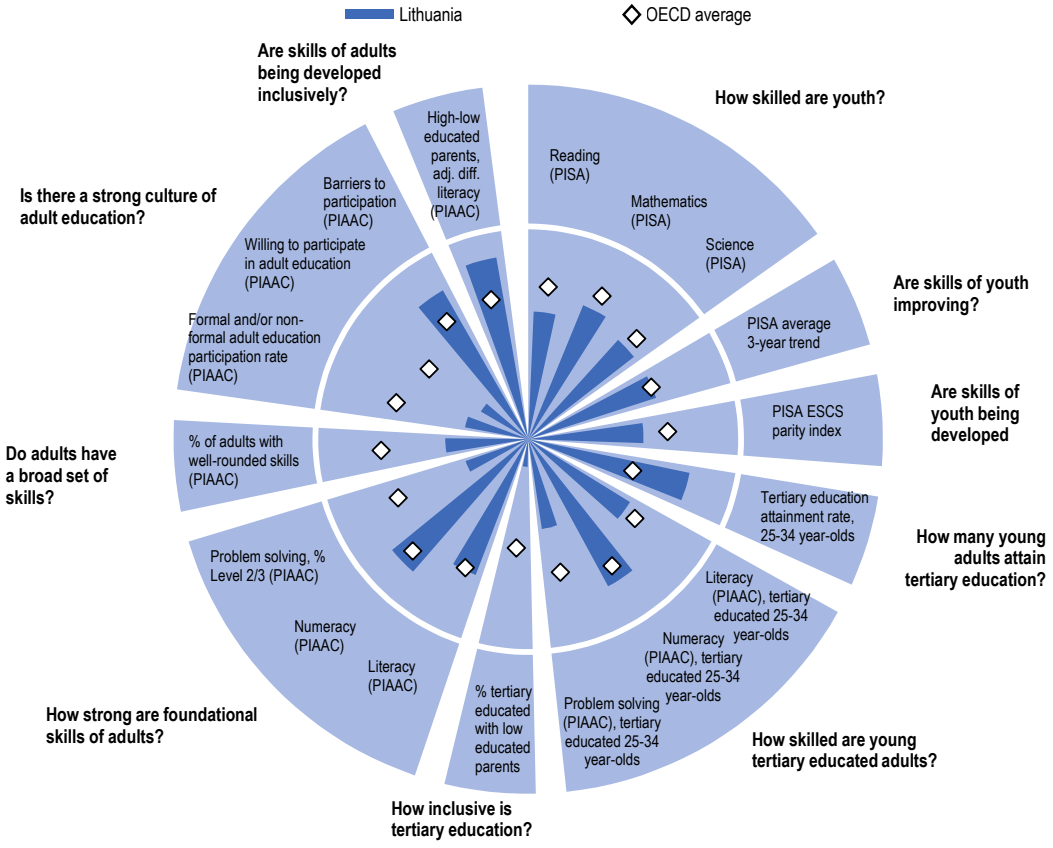
Lithuania could improve its performance in several areas of developing people's skills (Figure 1.4).

Participation rates are high at all levels of formal education, yet inequalities remain

Participation in education is compulsory from pre-primary to lower secondary education (from the ages of 6 to 16). Participation in early childhood education continues to increase, but is below the rates in Latvia and Estonia, and remains particularly low among children from socio-economically disadvantaged backgrounds. In compulsory education, Lithuania has among the lowest drop-out rates in the OECD, which has positive implications for equity. However, relatively few secondary students choose VET, and those that do are far more likely to be from disadvantaged backgrounds than those in general education. Lithuania has among the highest share of young adults (aged 25-34) with a tertiary education (55.2% in 2019) in the OECD, and this rate continues to grow. However, individuals from disadvantaged backgrounds remain under-represented in tertiary education. In 2020, only 17% of upper secondary graduates from low-income families entered tertiary education, compared to 68% from high-income families (Strata, 2020[11]).

Figure 1.4. Lithuania's performance on key indicators for developing relevant skills

Relative position in country ranking (based on normalised scores), where higher value reflects better performance



How to read this figure: The normalised scores indicate the relative performance across OECD countries: the further away from the core of the chart, the better the performance. For example, the indicator "Willing to participate in adult education" has a low score compared to the average, indicating a share of employees willing to participate near the bottom of the ranking.
Notes: ESCS refers to the PISA index of economic, social and cultural status. The OECD average is based on the sample of countries/regions assessed in the Survey of Adult Skills (PIAAC).
Source: See Annex 1.B for an explanation of sources and methodology.

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Young people lack high levels of skills

Young people in Lithuania have comparatively low levels of skills. Results from the OECD Programme for International Students Assessment (PISA) 2018 show that the performance of 15-year-old students in reading, mathematics and science remains below the OECD average, and has not improved over time (OECD, 2019[12]). Students from disadvantaged economic, social and cultural backgrounds perform worse than other students (to an extent that is consistent with the OECD average), and the performance gap has not narrowed over the last decade. Young tertiary graduates in Lithuania have lower levels of literacy skills, but higher levels of numeracy skills than the average for tertiary graduates in OECD countries.

Adults lack strong foundational skills, and few participate in education and training

Adults in Lithuania have lower levels of foundational skills (literacy, numeracy, problem solving) on average than adults in other OECD countries. Furthermore, compared to other OECD countries, relatively few adults in Lithuania (16%) have a well-rounded set of foundational skills (at least medium levels of proficiency in literacy, numeracy and problem solving). Foundational skills levels are relatively similar

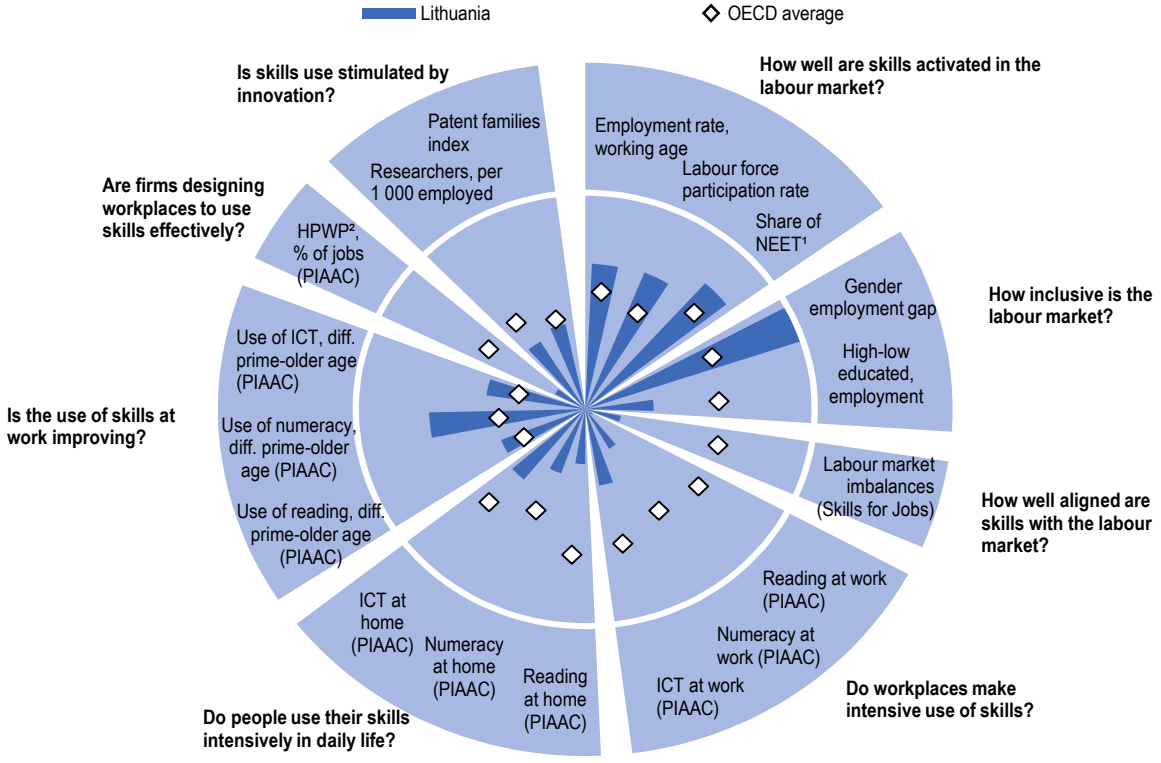
between adults who were raised in highly-educated households and those who were not. However, relatively few adults participate in education and training. Adults' motivation for adult learning is fairly low, and many who wish to participate face barriers to doing so.

Using skills effectively

Lithuania could also utilise people's skills more effectively in workplaces and society (Figure 1.5).

Figure 1.5. Lithuania's performance on key indicators for using skills effectively

Relative position in country ranking (based on normalised scores), where higher value reflects better performance



How to read this figure: The normalised scores indicate the relative performance across OECD countries: the further away from the core of the chart, the better the performance. For example, the indicator 'High-low educated, employment differences" indicates performance below the OECD average, i.e. Lithuania has a comparatively large difference in employment outcomes between its high- and low-educated workers.
Notes: The OECD average is based on the sample of OECD countries/regions assessed in the Survey of Adult Skills (PIAAC).
1. Youth not in employment, education or training (NEET).
2. High-performance workplace practices (HPWP).
Source: See Annex 1.B for an explanation of sources and methodology.

StatLink https://stat.link/kejx1a

A relatively high share of adults is active in the labour market

Lithuania does a relatively good job at activating people's skills in the labour market. A relatively high share of adults participate and are employed in the labour market, and the rate of young people not in employment, education or training (NEET) is below the OECD average. However, Lithuania's performance in achieving an inclusive labour market is mixed. Although there is virtually no gender gap in the employment rate, unlike in other OECD countries, Lithuania has one of the largest employment gaps

between high- and low-educated adults in the OECD, highlighting the value placed on tertiary education in the labour market.

Skills imbalances in the labour market are relatively high

According to the dashboard, Lithuania's labour market is experiencing a higher incidence of mismatches, shortages and surpluses than many other OECD countries. Other data from Lithuania, the OECD and Cedefop confirm this assessment (OECD, 2018[7]) (Cedefop, 2020[8]), as is discussed in Chapter 2 and elsewhere. For example, Lithuania has one of the largest shares of over-skilled workers (in literacy and numeracy) across the countries/economies participating in the Survey of Adult Skills (PIAAC).

People's skills are not used to their potential in work or society

Adults in Lithuania report that they use their skills (reading, numeracy and ICT) less frequently at work and in life than adults in most other OECD countries. This represents a missed opportunity to realise the benefits of investing in developing people's skills. Furthermore, in Lithuania the share of jobs in which high-performance work practices (HPWP) such as work flexibility and autonomy, teamwork, training and development, and career progression and performance management are used (15%) is about half of the OECD average. Low levels of skills use and HPWP may constrain innovation in Lithuania, and be constrained by a lack of innovation.

Strengthening the governance of skills systems

While not measured in the Skills Dashboard, sound public governance of the skills system is contingent upon a government's ability to co-ordinate, steer, monitor, communicate and work horizontally (across departments and institutions within government) and vertically (with local authorities and external public and private stakeholders). Many of today's skills challenges across OECD countries are rooted in poor governance arrangements across policy areas and levels of government, ineffective engagement with stakeholders, inadequate information on skills and learning outcomes, and inefficient financing mechanisms.

In Lithuania, horizontal co-ordination between ministries on skills policies continues to be challenging and appears to be limited beyond the planning phase, including in the implementation, monitoring and evaluation of policy. The capacities of municipalities and regional development councils for self-management and to manage their education providers are often underdeveloped. Lithuania's performance in engaging stakeholders in skills policies is somewhat stronger, yet stakeholder associations sometimes lack the capacity to effectively engage. Lithuania has made substantial progress in the area of evidence-based policy making and skills assessment and anticipation tools, but demand and capacity for evidence-based policy inside ministries is not strong. Lithuania's per-student expenditure on education is low by international and regional comparison, and funding sources are not highly diversified.

The policy context in Lithuania

A range of Lithuanian policies recognise the importance of skills

Lithuania has already developed a range of strategies and reforms (see Annex 1.C for a complete overview) to help the country positively influence megatrends, address the challenges and seize the opportunities facing its skills system. Relevant priorities and goals from these strategies are summarised at the beginning of each chapter to highlight their connection with the OECD's assessment and recommendations.

The state progress strategy “Lithuania 2030” (*Lietuva 2030*) is a national strategy document that outlines the vision of Lithuania's future to 2030. It envisions a learning society in which people are educated, interested in science and innovations, easy and familiar with the latest technologies, good at foreign languages, and eager to pursue lifelong learning. The National Plan for Progress (NPP) 2021-2030 outlines 10 strategic goals for Lithuania over the upcoming decade to ensure progress in social, economic, environmental and security policies. Strategic Aim 3 of the NPP is particularly skills focused and aims to increase the inclusion and effectiveness of education to meet the needs of the individual and society. The Programme of Government 2020 outlines the government’s missions for the next four years, and includes priorities such as “good school for all and modern education curriculum”, “market-responsive vocational education and training”, “lifelong learning for all in Lithuania”, “universal entrepreneurship” and “modern and efficient (public) institutions” (The Seimas of the Republic of Lithuania, 2020[13]). Finally, the Law on Strategic Governance seeks to create a results-oriented strategic governance system that integrates strategic planning, regional development and spatial planning processes to ensure long-term and sustainable public progress and efficient government finances. It creates the opportunity for skills policy to be co-ordinated to an extent that has not yet been achieved in the country.

Furthermore, as detailed in subsequent chapters, Lithuania has embarked on a range of skills policy reforms in recent years. These include funding models in formal education, the consolidation of schools and vocational and higher education institutions, initial and continuing teacher education, the governance of VET institutions, and labour code amendments. Monitoring and increasing the positive impacts of these reforms is critical for Lithuania as it enters a new period of strategic planning.

Lithuania has a unique opportunity to implement a strategic approach to skills

Lithuania is now in the midst of a new round of strategy development for the medium and long term. This gives Lithuania a unique window of opportunity to implement a more strategic approach to skills to help drive economic prosperity, social cohesion and sustainable growth. In summary:

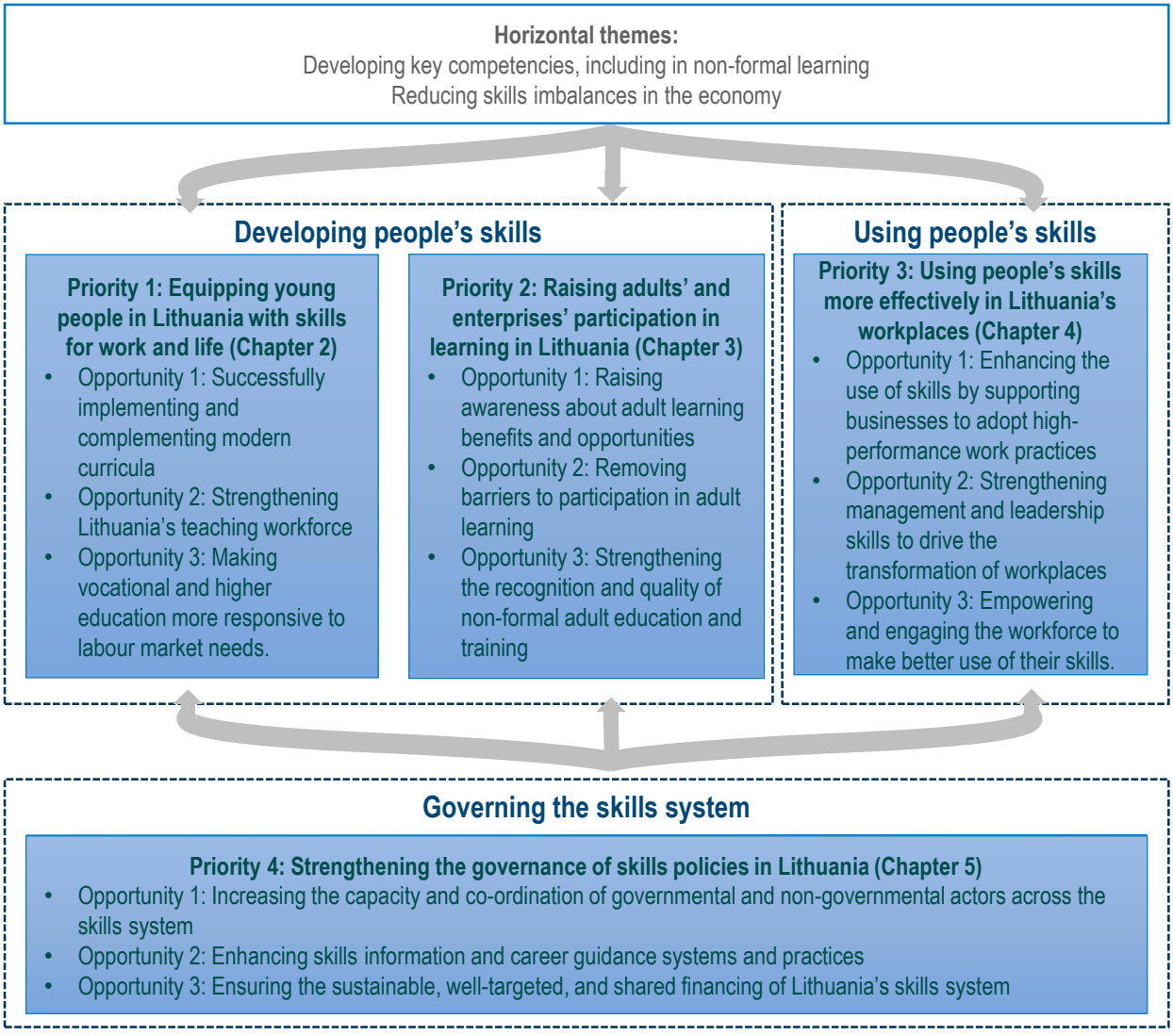
- Following the development of the National Plan for Progress (NPP) 2021-2030, Lithuania’s ministries are finalising their own National Development Programmes to outline how they intend to achieve Lithuania’s strategic goals in the NPP. The National Development Programmes will be approved by the Government and monitored by the Ministry of Finance.
- Lithuania is finalising its 2021-2027 EU Funds Investment Programme, which breaks down the overarching strategic objectives agreed in its partnership agreement into investment priorities, specific objectives and further into concrete actions. Consistent with the European Skills Agenda, skills are relevant across the policy objectives in the programme, especially the objectives for a smarter and more socially responsible Europe.
- Lithuania will submit a recovery and resilience plan to the European Commission by 30 April 2021 that outlines substantive reform and investment efforts to mitigate the economic and social impact of the coronavirus pandemic, with financing from the EUR 672.5 billion Recovery and Resilience Facility (RRF). Skills policies should be a core part of this plan, as skills cut across the four general objectives and European Flagship initiatives targeted by the RRF (including number 7 to “reskill and upskill”).
- Lithuania’s new Law on Strategic Governance (*Lietuvos Respublikos Strateginio Valdymo Įstatymas*) foresees “national agendas”, which are planning documents used by government to set the long-term agenda in specific policy areas, with ultimate reporting to the parliament.
- Lithuania’s long-term strategy for progress, Lithuania 2050, is being developed by 2022 and will set Lithuania’s vision for development and strategic directions. These could cover cross-cutting topics including skills.

The assessment and recommendations in this report can feed into these processes to help ensure that Lithuania's skills priorities, policies and investments over the next decade improve outcomes across the skills system.

Priority areas and recommendations

Based on the OECD's initial assessment of the performance of Lithuania's skills system and discussions with the Lithuanian national project team, four priority areas and two horizontal themes were identified for this Skills Strategy project. Over the course of the project, the OECD identified opportunities for improvement and developed recommendations in each of the priority areas based on in-depth desk analysis and virtual consultations with the Lithuanian Government and stakeholder representatives. The figure below depicts these priority areas, horizontal themes and opportunities for improvement (Figure 1.6).

Figure 1.6. Scope and focus of the OECD Skills Strategy Lithuania



The summaries below highlight the key findings and recommendations for each priority area, while subsequent chapters provide full details in these areas.

Priority 1: Equipping young people in Lithuania with skills for work and life (Chapter 2)

Young people's skills are critical for their personal well-being and outcomes later in life, as well for countries' economic prosperity and social cohesion. Across the OECD, individuals with higher literacy proficiency are more likely to be employed, earn high wages, trust others, participate in the democratic process and community life, and report good health than their less-skilled peers. For countries, skills are a key driver of innovation, productivity and, ultimately, economic growth, social cohesion and higher living standards (OECD, 2016[14]). Developing skills at an early age is, therefore, a key investment in the economic prosperity and well-being of countries. Countries whose youth develop strong skills typically have highly skilled adult populations, as skills outcomes in youth are strongly correlated with success in tertiary education (OECD, 2019[15]). Young people can develop skills in various learning contexts (schools, communities and even workplaces) and at different levels (early childhood education and care, primary, secondary and tertiary education). This learning may be formal (leading to a recognised qualification) or non-formal in nature. Young people increasingly need high levels of cognitive skills (e.g. literacy, problem solving), social and emotional skills (e.g. perseverance, teamwork), and technical skills to thrive in the modern world as adults. The COVID-19 pandemic has been a major test of the ability of institutions, teachers and families to equip young people with skills through remote learning, without leaving any students behind.

Lithuania continues to expand young people's enrolment in different levels and forms of education and training. However, participation remains relatively low in certain types of learning and for certain groups of learners. Beyond participating in and completing education programmes, it is essential that young people of all backgrounds develop a range of skills to a high level and build high expectations for their future. However, students in Lithuania are not developing high levels of skills. Successfully equipping young people with skills for work and life should positively affect their employment outcomes and reduce skills mismatches. While there is strong and growing demand for high levels of skills in Lithuania, the success of the education system in meeting these needs is mixed, with many graduates mismatched to their jobs.

Opportunity 1: Successfully implementing and complementing modern curricula

Raising students' performance in the school years and equipping them with the skills needed for success in work and life requires, among other things, a modern and effective school curricula. Lithuania is currently updating the general curriculum framework for primary, basic and secondary education (ISCED 1-3) to implement a competency based curricula that addresses various identified weaknesses. Some participants in this project raised concerns about how well general competences will be integrated across subjects, whether there is sufficient interdisciplinary content and coherence between levels of education, and whether curriculum overload is addressed. Successful implementation of the curricula will require stronger government engagement with general and vocational educational stakeholders, a clear plan for improving equity through the curricula, and modernised competency based student assessment. Ensuring more young people have access to high-quality non-formal education programmes will also be essential to complement the new curricula. Non-formal education activities are not equally available in all regions of Lithuania, quality is not monitored, and activities are not well-integrated with or recognised in formal education.

Opportunity 2: Strengthening Lithuania's teaching workforce

Equipping young people with higher levels of skills depends on capable and empowered teachers and school leaders. Investing in the competencies of teachers will be essential for realising the goals of curricula reforms. Lithuania could improve pathways into the teaching profession, as well as salary and non-salary conditions, to attract and retain more skilled candidates and empower excellence in teaching and leadership. Limited opportunities for full-time workloads and salary increases may deter people from entering the teaching profession and school leader positions. Lithuania could better empower teachers and school leaders by linking promotions more closely to responsibilities and appraisals, and further improving induction activities, professional collaboration and impactful feedback. Teachers and school

leaders also need the right competencies to successfully equip young people with skills for work and life. Lithuania could raise the quality of initial teacher education (ITE) by increasing practical learning, school leader training, and research and development capacity. Lithuania could improve continuous professional development (CPD) by increasing and better targeting public support at teachers' and leaders' identified training needs, more innovative forms of professional development, and formal training to teach additional subject areas.

Opportunity 3: Making vocational and higher education more responsive to labour market needs

Lithuania could also increase the responsiveness of vocational and higher education to current and anticipated labour market needs to better equip young people with skills for work and life. A responsive education system that allows students to develop a set of skills aligned with current and anticipated labour market needs is beneficial for students, employers and the economy as a whole. Lithuania could modify funding arrangements and admissions policies to increase incentives for institutions and students to respond to labour market needs. The determination of publicly funded places and subsidies by field of study in VET and HE could be more closely linked to labour market needs. Furthermore, public funding for institutions is not linked to VET and HE graduate outcomes, which dampens institutions' incentives to be responsive. Improving the labour market relevance of education requires effective interaction between the education system and employers. Participants stated that Lithuania lacks a culture of co-operation between educational institutions and employers. Employer involvement in institutional governance and course design is relatively well established, especially in VET, but employers need greater financial and non-financial support to offer work-based learning to students. Policy makers also lack reliable information on the quantity and quality of students' work-based learning experiences.

Priority 1: Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Successfully implementing and complementing modern curricula	
Implementing the new general education curricula and modern assessment practices	1.1 Continue to improve the design of the general curriculum framework during the final steps of the preparation phase. 1.2 Actively engage and communicate with education stakeholders to ensure the successful implementation of the new curriculum for general education, especially in socio-economically disadvantaged schools. 1.3 Modernise student assessment practices to complement the new curriculum for general education.
Complementing formal education with accessible, high-quality non-formal education and training	1.4 Recognise and reward the skills young people acquire through non-formal education and training, including in formal examinations and tertiary entrance. 1.5 Better target non-formal education and training programmes and vouchers to students from socio-economically disadvantaged backgrounds. 1.6 Systematically assess and monitor the quality and impact of non-formal education and training on young people's competencies to inform future investments.
Opportunity 2: Strengthening Lithuania's teaching workforce	
Attracting, retaining and empowering skilled teachers and school leaders	1.7 Make initial teacher education studies accessible to highly skilled students and professionals by continuing to develop and promote multiple pathways, delivery methods and incentives. 1.8 Continue improving career progression opportunities to attract, retain and motivate highly skilled teachers and school leaders, especially in socio-economically disadvantaged schools. 1.9 Improve non-salary work conditions and the school climate for teachers' and school leaders' well-being to empower teaching excellence, especially in socio-economically disadvantaged schools.
Training teachers and school leaders to equip young people with skills for work and life	1.10 Improve the content and quality of ITE by aligning it with the new general curricula, focusing more on practical learning and teachers' training needs, and investing in educational research. 1.11 Better target public funding for CPD to the needs of teachers, leaders and schools, while improving quality assurance and increasing funding (especially for socio-economically disadvantaged schools) over time.

Policy directions	High-level recommendations
Opportunity 3: Making vocational and higher education more responsive to labour market needs	
Ensuring that VET and HE funding and admission policies incentivise institutions and students to meet labour market needs	1.12 Make better use of "student basket" subsidies and performance contracts/funding to steer HE and VET enrolments towards fields facing shortages and/or of strategic importance. 1.13 Expand measures to support students from socio-economically disadvantaged backgrounds to access state-funded HE places, especially in fields experiencing skills shortages and/or of strategic importance.
Strengthening co-operation between employers and VET and HE institutions	1.14 Expand work-based learning (WBL) in VET and HE by increasing financial and non-financial support for apprenticeships and other forms of WBL. 1.15 Increase rural students' access to, and attract employers to be more involved in VET 'work-based learning' in VET institutions and sectoral practical training centres. 1.16 Expand existing administrative datasets with details on students' work-based learning activity to inform policy and ensure the quality of WBL.

Note: See Annex 1.A for the full recommendations.

Priority 2: Raising adults' and enterprises' participation in learning in Lithuania (Chapter 3)

Across the OECD, adults with lower literacy and numeracy levels are far more likely than those with higher levels of skills to have lower earnings and employment rates, report poor health, feel excluded from political processes and have less trust in others. Adults of all skill levels have a growing need to upgrade and reskill regularly in the context of technological change, more frequent transitions between jobs, the growth of non-standard forms of work (and by extension less access to employer sponsored training), and the lengthening of working lives. Adult learning (in all forms and contexts) is essential for boosting the skills of adults and can generate a range of personal, economic and social benefits. In the context of COVID-19, those unemployed will need extensive support to upskill and retrain in order to quickly adapt to changing economic conditions and a more challenging labour market.

Opportunity 1: Raising awareness about adult learning benefits and opportunities

Increased participation in adult learning is strongly linked to an individual's positive learning dispositions and perceptions that learning brings tangible benefits. A lack of awareness about adult learning benefits and opportunities can lead to low levels of motivation to participate in adult learning, and indicates that Lithuania will need to more actively reach out and promote the benefits of adult learning to individuals. A number of policy levers can support these efforts, including the dissemination of information through awareness-raising campaigns and online portals. Raising awareness about the benefits of adult education and training among enterprises is equally as important. Employers play a major role in facilitating non-formal education and training for employees, in addition to their role in providing informal learning on the job. Helping employers assess their training needs and put in place training plans can lead to increased participation in adult education and training.

Opportunity 2: Removing barriers to participation in adult learning

Even when individuals and employers are motivated to engage in adult learning, they frequently face barriers. A disproportionate number of enterprises in Lithuania list the high cost of continuous vocational training as a reason for not providing education and training opportunities for employees. This indicates a need to improve the availability of financial incentives for enterprises to facilitate training opportunities. The high cost of participation in adult education and training is also a barrier for individuals, which means that improving financial incentives for individuals will be necessary to reduce the number of adults who want to but cannot afford to participate in training. However, financial incentives alone are likely to be insufficient to reduce barriers to participation in adult learning. In Lithuania, time-related barriers such as the inability to fit training around personal and work commitments are another important obstacle to participating in adult learning. As a result, improving the flexibility of adult learning provision is crucial to improving access to adult learning opportunities.

Opportunity 3: Strengthening the recognition and quality of non-formal adult education and training

In Lithuania, as in other OECD countries, the majority of structured adult learning takes place within non-formal education and training. Non-formal learning forms a core part of the adult learning system because it is more flexible in duration and delivery than most formal learning. Non-formal courses are typically shorter than formal courses, enabling adults to take individual modules rather than full courses. They can take place via on-the-job training, open and distance education, courses and private lessons, seminars and workshops, as well as in vocational and higher education institutions. The diversity of non-formal offerings can present a challenge to ensure that learning outcomes are recognised and that training is of high quality. Learning is most rewarding for individuals when their achievements are visible and understood by employers. This matters for skills acquired in both non-formal and informal learning environments. Lithuania has taken important steps towards creating a national system of skills recognition over the past few years, but the quality of processes to recognise and validate non-formal and informal learning is still unequal between providers. Ensuring the high quality of non-formal adult education courses can also be challenging. Whilst Lithuania has robust quality assurance mechanisms for formal learning in both higher and vocational education, these are lacking in publicly funded non-formal adult education. Lithuania should consider strengthening *ex ante* and *ex post* quality assurance mechanisms to improve the quality of publicly funded non-formal education.

Priority 2: Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Raising awareness about adult learning benefits and opportunities	
Raising awareness about adult learning benefits and opportunities among individuals	2.1. Consolidate and expand online information about adult learning benefits, opportunities and funding into a one-stop shop (portal). 2.2. Introduce local awareness-raising initiatives through co-operation with local stakeholders to engage low-skilled adults in education and training.
Enabling employers to understand their training needs	2.3. Support enterprises to undertake training needs assessments and develop training plans, starting with SMEs in economic sectors of strategic importance.
Opportunity 2: Removing barriers to participation in adult learning	
Better using financial incentives to reduce barriers for employers	2.4. Streamline the application process for Competence Vouchers and other existing financial incentives directed at enterprises. 2.5. Introduce regional or sectoral training funds financed through a training levy.
Overcoming financial and time-related barriers for individuals	2.6. Expand financial incentives for adults to participate in adult learning, focusing on target groups such as low-skilled workers. 2.7. Improve the supply of online adult learning in the Lithuanian language by providing technical support to vocational and higher education institutions.
Opportunity 3: Strengthening the recognition and quality of non-formal adult education and training	
Improving the processes to recognise and validate non-formal and informal learning	2.8. Develop guidelines to support Lithuanian education institutions in implementing high-quality recognition and validation processes for non-formal and informal learning. 2.9. Consider introducing digital/open badges for non-formal and informal learning.
Strengthening quality assurance mechanisms in non-formal adult education and training	2.10. Establish quality labels for providers of non-formal adult education and training that exceed minimum certification requirements. 2.11. Introduce a monitoring framework for learning outcomes of publicly funded non-formal adult education and training.

Note: See Annex 1.A for the full recommendations.

Priority 3: Using people's skills more effectively in Lithuania's workplaces (Chapter 4)

In addition to making progress in developing strong skills among youth and adults, Lithuania should strive to use these skills as intensively as possible to realise the full potential of initial investments in skills. There has been growing awareness among policy makers across the OECD of the importance of effectively using skills in workplaces. Skills use is associated with the better performance of workers (e.g. higher job satisfaction and productivity), which helps to strengthen business performance and can help drive economic growth. The organisation of workplaces is arguably the most important determinant of skills use, especially through the adoption of a range of HPWP.

For Lithuania, effectively using skills could help to address challenges linked to megatrends (e.g. by supporting the transition to more high value-added jobs), and could contribute to the economic recovery from the COVID-19 crisis.

Opportunity 1: Enhancing the use of skills by supporting businesses to adopt HPWP

Lithuania has launched many strategies and programmes aiming to enhance business performance and move towards more high value-added activities. However, among these policies there is currently no focus on skills use and HPWP. A stronger focus on business support targeted at the level of workplaces could further strengthen and complement Lithuania's current policies aimed at transforming the business sector. Lithuania lacks support measures for businesses to adopt HPWP, such as awareness raising of the relevance of skills use and related HPWP, accessible and targeted business support for HPWP, and sectoral solutions that leverage employer networks and support sectoral collaboration to increase HPWP adoption.

Opportunity 2: Strengthening management and leadership skills to drive the transformation of workplaces

Strong and effective management and leadership has many benefits for businesses, including higher levels of employee engagement, more innovation and higher productivity. As a result, strong management and leadership skills can support the transformation of workplaces to help them more effectively use skills, strengthen business performance and transition towards more high value-added activities. There are, however, indications that management skills are not strong in Lithuania (e.g. 22% of managers have low skill levels, compared with 15% across the OECD). This is also reflected in the overall quality of management, for example data from the World Economic Forum Global Competitiveness Report suggest that many businesses do not rely on professional management (i.e. those selected on merit and qualifications). Currently, Lithuania lacks awareness of the importance of overcoming management and leadership skills challenges, and a strategic vision might be needed. The initial development of management and leadership skills in formal education is not strong, and available learning programmes are not sufficiently promoted to strengthen management and leadership skills.

Opportunity 3: Empowering and engaging the workforce to make better use of their skills

In addition to strong and effective management and leadership, the skills and attitudes of the workforce are critical for transforming workplaces to use skills more effectively. Without the buy-in and support of employees, the adoption of HPWP is more difficult to achieve. An empowered workforce is typically more motivated to develop and optimally use skills. In the context of a changing business environment (e.g. through COVID-19 and the digital transformation), empowering and engaging employees becomes even more important. In Lithuania, HPWP related to employee engagement, work autonomy and performance management are uncommon, and thus not empowering workers towards higher skills use. Only 10% of employers say that their employees are very motivated, compared with 17% across the EU and as high as 43% in top-performing countries such as Denmark and the Netherlands. Lithuania's

opportunities to improve the empowerment and engagement of employees are not limited to private enterprises, with evidence of relatively low skills use and HPWP in the country's public sector.

Priority 3: Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Enhancing the use of skills by supporting businesses to adopt HPWP	
Raising awareness of the relevance of effective skills use and HPWP	3.1. Create a central portal with user-friendly information for businesses on HPWP and related support programmes, including diagnostic tools, potentially as part of a broader awareness-raising campaign.
Providing relevant, targeted and accessible support to businesses on adopting HPWP	3.2. Encourage the greater adoption of HPWP by expanding existing and/or introducing new business support programmes that target workplace practices. 3.3. Ensure that public support for the adoption of HPWP is differentiated and targeted at employers' needs, for example through personalised mentoring and coaching services. 3.4. Minimise the administrative burdens on businesses taking advantage of support programmes by, for example, streamlining procedures and improving guidance.
Leveraging employer networks and supporting collaboration at the sector level to promote the adoption of HPWP	3.5. Facilitate the adoption of HPWP by strengthening business clusters and other collaborative networks that spread good practices and facilitate knowledge spillovers. 3.6. Strategically target HPWP support for businesses and collaborative networks at narrowly defined priority sectors in order to maximise the impact of this support.
Opportunity 2: Strengthening management and leadership skills to drive the transformation of workplaces	
Raising awareness of the importance of management and leadership skills for maximising skills use and business performance	3.7. Develop a strategic and shared vision for strengthening management and leadership skills in Lithuania's workplaces, accompanied by an action plan.
Strengthening the initial development of management, leadership and entrepreneurial skills	3.8. Expand and improve the quality of entrepreneurship education in schools in the context of the current update of school curricula, and set out a plan for further action. 3.9. Strengthen the development of management and leadership skills in higher education by making relevant modules and subjects more accessible and enhancing collaboration with businesses.
Promoting adult learning opportunities to strengthen management and leadership skills	3.10. Ensure the availability of relevant and flexible learning opportunities for different types of managers by assessing and filling gaps in the current provision and promoting online learning. 3.11. Enhance the willingness of managers to participate in learning through targeted awareness raising, information on the training offer, recognition of prior learning and financial support.
Opportunity 3: Empowering and engaging the workforce to make better use of their skills	
Empowering and engaging employees in the business sector	3.12. Encourage businesses to effectively engage and empower employees by promoting the adoption of advanced HR practices and people management approaches, pay systems and practices for job mobility. 3.13. Facilitate the active engagement of employees in workplaces by ensuring that employees have the capacity and motivation to be involved.
Empowering and engaging employees in the public sector	3.14. Continue to strengthen workplace and HR practices in the public sector through the broad adoption of good practices across the public sector and by building on the new Law on the Civil Service. 3.15. Build a culture of lifelong learning in public sector organisations by adopting a more long-term, strategic approach to skills development and by strengthening learning opportunities.

Note: See Annex 1.A for the full recommendations.

Priority 4: Strengthening the governance of skills policies in Lithuania (Chapter 5)

Well-functioning governance arrangements are central for effective skills policies. However, governance structures for skills policies are complex as they involve a wide variety of actors in the provision, financing, reform and day-to-day administration of skills policy. These actors range from different levels of government to stakeholders such as employers and their associations, employees and trade unions, education and training providers, and students. In addition, skills policies lie at the intersection of more "traditional" policy fields and so implicate ministries responsible for education, labour market, innovation, industrial and other policy domains. Furthermore, skills policies are designed in the context of uncertainty and change, such as rapid technological change, globalisation, and demographic and climate change, as well as the potential structural economic changes resulting from COVID-19. The latter could include

relocations of economic sectors considered as critical infrastructure or changed consumer behaviour leading to structural economic change (e.g. boosting online trade and business practices, increased domestic business and tourism), which could have consequences for skill needs. In light of these complexities, the success of Lithuania's skills policies will require a whole-of-government approach, effective stakeholder engagement, integrated information systems and co-ordinated financing arrangements to improve skills development and use.

Opportunity 1: Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system

In well-functioning skills systems, all actors should have sufficient opportunity to co-ordinate, as responsibilities for skills policies are dispersed. Skills policies should be guided by common goals and a shared vision across all relevant stakeholders and decision makers. However, this appears to be lacking in Lithuania. Individual ministries or semi-autonomous bodies should not pursue their own skills policies without co-ordination with other relevant ministries and governmental bodies, necessitating co-ordination across the "whole-of-government". Since its independence, Lithuania has invested substantial resources into building up a system of social partnership and consequently stakeholder engagement. This infrastructure should be leveraged in the future, as stakeholder engagement is more successful if it goes beyond ad hoc consultations towards the long-term institutionalisation of consultations. Furthermore, well-functioning stakeholder engagement depends on stakeholders perceiving their involvement as meaningful and consequential. Participants in this project stated that some stakeholders in Lithuania lack such positive perceptions. Subnational actors sometimes lack sufficient personnel, financial resources and expertise to fulfil their responsibilities in policy making, which shows their need for greater guidance and support from central government.

Opportunity 2: Enhancing skills information and career guidance systems and practices

Comprehensive information systems on current skills policy outcomes and future skills needs, as well as on the career opportunities connected to current and future skills needs, are an essential building block of well-governed skills systems. Lithuania could improve both the availability of information for evidence-based policy making and the use of this information by policy makers. For example, Lithuania could use qualitative "foresight" to take into account the fundamental uncertainties of future skill demands that are not fully identifiable via quantitative analysis. To improve the use of existing information by policy makers, Lithuania should take a more co-ordinated approach to understanding ministries' individual data needs and ensure that relevant stakeholders have sufficient capacity (personnel and expertise) to effectively use information in policy making. Individuals of different age groups lack the information and capacity to make wise learning and career decisions. A major shortcoming to this is that career guidance is only available to some parts of the Lithuanian population, mostly youth and jobseekers in the economically stronger regions of the country. Lithuania should consequently build a comprehensive information system to inform and guide the career choices of individuals across all regions and age groups.

Opportunity 3: Ensuring the sustainable, well-targeted and shared financing of Lithuania's skills system

Lithuania's spending on skills policy remains relatively low by international comparison. Beyond increasing public expenditure, Lithuania could resort to more innovative mechanisms for raising the financial resources necessary for sustainable skills policy. For example, cost-sharing mechanisms between central government, employers and potentially employees can help to raise the resources necessary for sustainable skills provision. The money allocated to skills policy should also be well targeted. Lithuania currently has a dense network of schools and higher education institutions relative to its population size, creating opportunities for cost savings. Contributions of international organisations to skills policies, in

particular from the European Union, are high in Lithuania. There is evidence that this funding is not consistently well targeted, as funding is rarely continued beyond the initial life of the project. Mechanisms need to be put into place to allow high-performing EU-funded programmes to continue on a permanent basis.

Priority 4: Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system	
Strengthening strategic planning and oversight in the Lithuanian skills system	4.1. Develop a shared, overarching vision for developing and using skills by creating a comprehensive skills strategy for Lithuania. 4.2. Improve inter-ministerial co-ordination by creating a designated, inter-ministerial body with lead authority and responsibility for skills policy.
Fostering national-level social partnership and stakeholder engagement in skills policy	4.3. Ensure close collaboration between a future Skills Policy Council and Lithuania's current Tripartite Council. 4.4. Increase the impact of issue-specific stakeholder engagement bodies by guaranteeing government accountability regarding given advice.
Increasing the capacity of governmental institutions and social partners at the subnational level	4.5. Increase the capacity of municipalities, regional development councils and sectoral professional committees to fulfil their responsibilities in the governance of Lithuania's skills system. 4.6. Strengthen social partnership at the subnational level by including trade unions in regional development councils.
Opportunity 2: Enhancing skills information and career guidance systems and practices	
Improving Lithuania's ability to use evidence in skills policy making	4.7. Improve the identification, communication and response to ministries' data needs through regular, inter-ministerial technical-level meetings. 4.8. Continue to improve skills needs assessment and anticipation in Lithuania, particularly in the areas of quantitative skills forecasting and qualitative skills foresight. 4.9. Increase the capacity of ministries and the Government Strategic Analysis Center (STRATA) to fulfil their functions in supporting and undertaking evidence-informed policy making.
Implementing a system of lifelong career guidance for individuals of all ages	4.10. Strengthen career guidance in Lithuania by establishing an integrated, comprehensive lifelong career guidance system to serve all regions and age groups, with multiple modes of delivery. 4.11. Expand the supply, awareness and uptake of career guidance services for adults to support their job searches and their efforts to upskill and reskill. 4.12. Ensure the accessibility of career guidance services for school students of all age groups, regardless of school type and geographical location.
Opportunity 3: Ensuring the sustainable, well-targeted and shared financing of Lithuania's skills system	
Ensuring well-targeted and shared investments across the skills system	4.13. Increase public investment in skills policies as part of a tripartite funding agreement. 4.14. Increase employer and potentially employee investment in skills development through the establishment of a tripartite funding agreement. 4.15. Better target funding across Lithuania's skills system by assessing options for cost-savings in the provision of higher and secondary-level education.
Enabling sustainable funding for well-functioning, externally-financed skills policies	4.16. Increase the long-term sustainability of externally funded skills projects by systematically identifying successful programmes and committing to continue them with state funding.

Note: See Annex 1.A for the full recommendations.

References

Adalet McGowan, M. and D. Andrews (2017), "Skills mismatch, productivity and policies: Evidence from the second wave of PIAAC", *OECD Economics Department Working Papers*, No. 1403, OECD Publishing, Paris, https://dx.doi.org/10.1787/65dab7c6-en. [9]

Cedefop (2020), *Skills forecast 2020: Lithuania*, https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/lithuania-2020-skills-forecast (accessed on 11 February 2021). [8]

European Commission (2020), *Recommendation for a COUNCIL RECOMMENDATION on the 2020 National Reform Programme of Lithuania and delivering a Council opinion on the 2020 Stability Programme of Lithuania*, https://ec.europa.eu/info/publications/2020-european-semester-country-specific-recommendations-commission-recommendations_en (accessed on 24 March 2021). [10]

Eurydice (2019), *Lithuania: National Reforms in School Education*, https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-38_en. [26]

Government of the Republic of Lithuania (2019), *Viešųjų konsultacijų metodika ir taikymo gairės*. [27]

ILO (2017), *Addressing the impact of climate change on labour*, International Labour Office (ILO), https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---relconf/documents/meetingdocument/wcms_543701.pdf (accessed on 29 November 2019). [3]

Martinez-Fernandez, C., C. Hinojosa and G. Miranda (2010), "Greening Jobs and Skills: Labour Market Implications of Addressing Climate Change", *OECD Local Economic and Employment Development (LEED) Papers*, No. 2010/2, OECD Publishing, Paris, https://dx.doi.org/10.1787/5kmbjgl8sd0r-en. [4]

National Regional Development Council (2017), *Lithuanian Regional Policy: White paper for harmonious and sustainable development 2017-2030*. [28]

Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", *OECD Social, Employment and Migration Working Papers*, Vol. 202, https://dx.doi.org/10.1787/2e2f4eea-en. [2]

OECD (2020), *OECD Economic Outlook, Volume 2020 Issue 2*, OECD Publishing, Paris, https://dx.doi.org/10.1787/39a88ab1-en. [5]

OECD (2020), *OECD Economic Surveys: Lithuania 2020*, OECD Publishing, Paris, https://dx.doi.org/10.1787/62663b1d-en. [6]

OECD (2019), *"Employment rate" (indicator)*, OECD, Paris, https://doi.org/10.1787/1de68a9b-en. [19]

OECD (2019), *"Labour force participation rate" (indicator)*, OECD, Paris, https://doi.org/10.1787/a452d2eb-en. [20]

OECD (2019), *OECD Learning Compass 2030: A Series of Concept Notes*, OECD, Paris, https://www.oecd.org/education/2030-project/contact/OECD_Learning_Compass_2030_Concept_Note_Series.pdf (accessed on 5 July 2020). [15]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [1]

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, OECD Publishing, Paris, https://doi.org/10.1787/5f07c754-en. [16]

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/5f07c754-en. [12]

OECD (2019), *Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database)*, OECD Publishing, Paris, http://www.oecd.org/skills/piaac/data/. [18]

OECD (2018), *"Employment by education level" (indicator)*, OECD, Paris, https://doi.org/10.1787/26f676c7-en. [22]

OECD (2018), *"Population with tertiary education" (indicator)*, OECD, Paris, https://doi.org/10.1787/0b8f90e9-en. [17]

OECD (2018), *"Youth not in employment, education or training (NEET)" (indicator)*, OECD, Paris, https://doi.org/10.1787/72d1033a-en. [21]

OECD (2018), *Skills for Jobs Database*, http://www.oecdskillsforjobsdatabase.org. [7]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [14]

Seimas of the Republic of Lithuania (2020), *Dėl Lietuvos Respublikos teritorijos bendrojo plano valstybės teritorijos erdvinio vystymo krypčių ir teritorijos naudojimo funkcinių prioritetų patvirtinimo, Nr. XIII-3021, priimta 2020 m. birželio 4 d.*. [24]

Seimas of the Republic of Lithuania (2020), *Lietuvos Respublikos regioninės plėtros įstatymo Nr. VIII-1889 pakeitimo įstatymas*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ab78cdf0b15c11ea9a12d0dada3ca61b?jfwid=-sdmh1t6jf. [23]

STRATA (2020), *STRATA homepage*, https://strata.gov.lt/en/ (accessed on 10 March 2021). [25]

Strata (2020), *Kaip skirtingo SES moksleiviams sukurti lygias galimybes įgyti aukštąjį išsilavinimą*, https://strata.gov.lt/images/tyrimai/2020-metai/svietimo-politika/2020-AM-prieinamumo-ataskaita.pdf. [11]

The Seimas of the Republic of Lithuania (2020), *Nutarimas Dėl Lietuvos Respublikos Vyriausybės programos [Ruling on the Program of the Government of the Republic of Lithuania]*. [13]

Annex 1.A. Policy recommendations

This annex presents the OECD's full policy recommendations for Lithuania arising from this project. These recommendations and the analysis, evidence and international examples that support them can be found in Chapters 2-5.

Priority 1: Equipping young people in Lithuania with skills for work and life (Chapter 2)

Opportunity 1: Successfully implementing and complementing modern curricula

Annex Table 1.A.1. Policy recommendations for successfully implementing and complementing modern curricula

Policy directions	Recommendations
Implementing the new general education curricula and modern assessment practices	**1.1. Continue to improve the design of the general curriculum framework during the final steps of the preparation phase.** In particular, the Ministry of Education, Science and Sport (SMSM) should focus efforts on ensuring well-integrated general competences across subjects, sufficient interdisciplinary content in the curriculum, coherence between levels of education (including with pre primary), and less risk of curriculum overload. This could involve more clearly defining and prioritising the competencies that young people should develop and consistently integrating foundational/transversal skills across subjects, while identifying opportunities to simplify the curricula. Subject content that is less comprehensive and challenging than in other OECD countries, such as mathematics, should be aligned with international standards. Experts should conduct a final review of the framework against the guidelines before implementation, and the SMSM should consider how to test the framework design with school leaders, educators and students. In the longer term, the SMSM and stakeholders should seek to make early childhood, general and vocational curricula coherent and mutually reinforcing so that students in all stages and paths of learning can develop skills for work and life in the 21st century.
	1.2. Actively engage and communicate with education stakeholders to ensure the successful implementation of the new curriculum for general education, especially in socio-economically disadvantaged schools. The SMSM should actively engage practitioners and experts to develop a shared understanding of what the vision and framework for the new curricula looks like in practice in both general and vocational schools, and of each stakeholder's revised roles and responsibilities for implementation. The SMSM and practitioners could develop knowledge, materials and space for the local and school level to understand and collectively design new curriculum, potentially by establishing collaborative networks. The SMSM should develop a communication strategy for the new curriculum, in particular utilising the reform website (mokykla2030.lt) to provide an interactive online portal with support materials and good practices. As part of this, the SMSM should proactively communicate how professional learning, school improvement services and resourcing will support the new curricula, especially for schools with more students from socio-economically disadvantaged backgrounds.
	1.3. Modernise student assessment practices to complement the new curriculum for general education. The SMSM should work with teachers, experts and other stakeholders to align the *matura* examination with the new competence-based curriculum. It should also supplement the *matura* with personal learning outcome folders, and potentially the externally moderated grading of classroom-based work (e.g. open/digital badges) and/or more formative assessment (e.g. as in Lithuania's new 4K learning model). Student assessment should aim to cover all relevant cognitive and non-cognitive competencies targeted in the curriculum. Students' tertiary entrance scores should be based on their performance and results according to all of these modernised student assessment practices.
Complementing formal education with accessible, high-quality non-formal education and training	**1.4. Recognise and reward the skills young people acquire through non-formal education and training, including in formal examinations and tertiary entrance.** Lithuania should seize the opportunity afforded by the current update of the general curriculum framework to implement a system to recognise and reward young people's competences developed in non-formal education and training. This could involve the use of personal learning outcome folders and/or alternative credentials (such as digital badges). Lithuania could learn from the experience of the Discover Yourself project, the new 4k model and/or the European Youth Pass project in Portugal. The skills young people acquire through non-formal education and training should be recognised in student assessments for the new curricula, as well as in tertiary entrance examinations.

Policy directions	Recommendations
	1.5. Better target non-formal education and training programmes and vouchers to students from socio-economically disadvantaged backgrounds. School communities (municipalities, leaders, teachers, guidance counsellors, etc.) should increase awareness-raising efforts to promote non-formal education and training, especially in disadvantaged schools. The SMSM should also consider increasing the monetary value of the learning voucher for students in rural areas to spur the demand for and supply of non-formal education and training in underserved areas. The SMSM and municipalities should co-operate to ensure that there is sufficient publicly subsidised transport for students in rural areas to allow them to participate in after school non-formal education programmes.
	1.6. Systematically assess and monitor the quality and impact of non-formal education and training on young people's competencies to inform future investments. Lithuania should implement a standard, robust monitoring and evaluation system for publicly funded non-formal education and training for young people to ensure that participants are developing skills for work and life. Various education and youth policy stakeholders should be involved in developing and implementing quality indicators, tools and systems. This should build on current leading practices in monitoring and evaluating non-formal education and training, such as the state methodology for the quality assurance of non-formal education, as well as practices from the field of youth work.

Opportunity 2: Strengthening Lithuania's teaching workforce

Annex Table 1.A.2. Policy recommendations for strengthening Lithuania's teaching workforce

Policy directions	Recommendations
Attracting, retaining and empowering skilled teachers and school leaders	**1.7 Make initial teacher education studies accessible to highly skilled students and professionals by continuing to develop and promote multiple pathways, delivery methods and incentives.** The SMSM and teacher training centres should continue to develop and promote diverse pathways for students and working professionals to become teachers, such as the consecutive, adjacent and alternative pathways. In order to increase the intake of skilled students and professionals to initial teacher education (ITE) programmes, the Lithuanian High Schools Association for Centralised Admission (LAMA BPO) and teacher training centres should also ensure that student selection processes systematically consider candidates' motivation, prior non-formal experience, skills and attitudes, in addition to academic achievements. Institutions should also develop processes to better recognise the formally and non-formally acquired competencies of mid-career professionals in order to offer tailored and expedited pathways to a formal teaching qualification. The SMSM should expand public funding for the I Choose to Teach! programme. It should also increase the value of teaching scholarships for highly skilled students and those specialising in fields experiencing shortages (e.g. Science, technology, engineering, art [creative activities] and mathematics [STEAM]; Vocational education and training [VET]), closely monitoring their impact and potentially making them conditional on entering the profession. Finally, the government and institutions should actively promote these pathways, methods and incentives in schools, universities and the labour market through various multimedia channels, as well as through expanded career guidance services (Chapter 5).
	1.8. Continue improving career progression opportunities to attract, retain and motivate highly skilled teachers and school leaders, especially in disadvantaged schools. More closely link teachers' and leaders' salaries to their responsibilities and the outcomes of their ongoing performance appraisal processes (and potentially ongoing professional certification), rather than tenure. Consider the greater use of pay increases or bonuses linked to appraisal processes (and potentially certification), as is the growing trend in OECD countries, and/or grants for teachers or teaching teams for innovation and excellence. Consideration should be given to developing oversight arrangements to ensure appraisal processes and promotions are implemented fairly and consistently across schools. Ensure that increases to school leaders' salaries are consistent with recent increases for teachers to attract and reward highly competent leaders. Introduce systematic national financial incentives for teaching in subjects in shortage (e.g. STEAM) and in rural and disadvantaged schools, for example in the student funding formula. Also, provide meaningful and impactful opportunities for continuing professional development (CPD) (see Recommendation 1.11).
	1.9 Improve non-salary work conditions and the school climate for teachers' and school leaders' well-being to empower teaching excellence, especially in disadvantaged schools. Further investigate the quality of non-salary work conditions and school climate in Lithuania, and its impact on teachers' performance. Expand activities positively associated with teachers' job satisfaction and self-efficacy in Lithuania, such as induction activities, professional collaboration, impactful feedback and autonomy. Look for opportunities to reduce teacher stress by reducing administrative work, especially for school leaders in rural areas and disadvantaged schools. This could be done, for example, by reviewing and reducing administrative burdens through streamlined processes, and by setting standards and allocating funding more consistently across municipalities for administrative support in schools. Provide more relevant and impactful opportunities for CPD to school leaders (see Recommendation 1.11). Teachers and school leaders should also have ongoing opportunities to provide feedback to central government on education policy, for example through engagement on the new school curricula (see Opportunity 1: Successfully implementing and complementing modern curricula) and improved skills policy engagement more broadly (see Chapter 5).

Policy directions	Recommendations
Training teachers and school leaders to equip young people with skills for work and life	**1.10 Improve the content and quality of ITE by aligning it with the new general curricula, focusing more on practical learning and teachers' training needs, and investing in educational research.** The SMSM should provide information and support to ITE providers to update their programmes in order to prepare teachers to implement the new general education curricula. ITE should familiarise teaching students with all major elements and content of the new general curricula, as well as best-practice teaching and learning and assessment strategies. The government should consider raising the minimum requirement for practical training, and/or find other ways to connect the theory and practice of ITE, such as involving current teachers/leaders in delivering some course content. The government and ITE institutions should expand national and international collaboration, increase investment and improve knowledge transfer with practitioners in educational research to facilitate continuous improvement and best practices in ITE. Finally, the government should closely monitor the impacts of recent ITE reforms on learning and teaching outcomes in the short term (for example by surveying educational stakeholders), and monitor ITE graduates' training needs (for example for information and communications technology [ICT] skills) in the longer term to guide further improvements to ITE.
	1.11 Better target public funding for CPD to the needs of teachers, leaders and schools, while improving quality assurance and increasing funding (especially for disadvantaged schools) over time. The SMSM should expand the Tęsk! programme to give more teachers the opportunity to teach in multiple subject areas. The government should formalise individual learning plans as part of teacher and school leader appraisals, and collect data on and monitor teachers' and school leaders' training needs over time. The government should require that CPD be linked to individual learning plans and broader school needs, and align national priorities for CPD with the results of the ongoing monitoring of training needs. In the first instance, priority could be given to CPD for the new curricula, as well as ICT skills, student assessment and classroom management for teachers; and data use, feedback, and financial management for school leaders. The SMSM, municipalities, institutions, experts and stakeholders should develop a quality assurance system for CPD to assess alignment with learning needs, user satisfaction, and impacts on teaching and leadership. With this system in place, the SMSM and municipalities should increase public funding for CPD to overcome barriers to the provision of and participation in relevant, high-quality CPD. In particular, higher rates of public CPD funding for teachers and school leaders should be provided in disadvantaged schools to improve their access to CPD and their capacity to teach and support disadvantaged students.

Opportunity 3: Making vocational and higher education more responsive to labour market needs

Annex Table 1.A.3. Policy recommendations for making vocational and higher education more responsive labour market needs

Policy directions	Recommendations
Ensuring that vocational education and training (VET) and higher education (HE) funding and admission policies incentivise institutions and students to meet labour market needs	**1.12 Make better use of "student basket" subsidies and performance contracts/funding to steer HE and VET enrolments towards fields facing shortages and/or of strategic importance.** The SMSM, in consultation with the National Commission for the Co-ordination of Human Resources Monitoring, social partners and institutions, should re-evaluate the effectiveness of the current methodology for allocating state-funded places by field of study to consider meeting labour market needs. They should also consider partially linking the value of student basket subsidies for different VET and HE programmes to labour market needs, as assessed by experts. As Lithuania improves its skills needs assessment and career guidance systems over time (see Chapter 5), the SMSM should consider decentralising the allocation of student basket subsidies, for example by removing field-of-study-level quotas for state-funded places and allowing funding to more freely follow students to courses of their choice. In addition, the SMSM should make use of performance agreements and/or performance funding to link some funding to completions by field of study and/or graduate employment outcomes to increase institutions' incentives to attract students to, and ensure they complete, programmes that meet labour market needs. Finally, the SMSM should seek to increase public transparency around how and why state-funded places are allocated, and make funding allocations more stable over the medium term (e.g. for a five-year period, with limited annual fluctuations) so that institutions have incentives to invest in new and innovative programmes that meet labour market needs. These measures should be complemented by measures that empower learners to make well-informed study choices, such as access to high-quality lifelong career guidance (see Chapter 5).
	1.13 Expand measures to support students from socio-economically disadvantaged backgrounds to access state-funded HE places, especially in fields experiencing skills shortages and/or of strategic importance. In the context of declining HE enrolment numbers and persistent inequalities in access, the SMSM should seek to improve admission policies, financial incentives and support for youth from socio-economically disadvantaged backgrounds. Lithuania's admission agency and institutions should seek to implement alternative pathways into HE for youth from disadvantaged backgrounds, for example by recognising a broader range of competencies in the admission process (see Opportunity 1) and by providing upfront academic support. The SMSM could raise the value of the student basket subsidy for students from low socio economic backgrounds to

Policy directions	Recommendations
	increase institutions' capacity to academically support students to successfully complete their studies. This could be complemented by expanded and more generous needs-based scholarships and loans for youth from disadvantaged backgrounds to help cover their living costs during studies. The SMSM should start with these measures in fields assessed by experts as facing shortages and/or being of strategic importance for the economy. The measures for students from disadvantaged backgrounds should be complemented by efforts to improve school performance in the long run (see Opportunity 1: Successfully implementing and complementing modern curricula, and Opportunity 2: Strengthening Lithuania's teaching workforce).
Strengthening co-operation between employers and VET and HE institutions	**1.14 Expand work-based learning (WBL) in VET and HE by increasing financial and non-financial support for apprenticeships and other forms of WBL.** The ministries overseeing apprenticeships should ensure that recent plans to expand financial support for apprentices and their employers are implemented. The ministries could also provide training for apprentice instructors, offer support materials to firms to help them develop their training skills, and facilitate networking among employers. They could promote bodies that work with groups of small employers to co-ordinate training, and support them with the administration and provision of apprenticeships. Ministries should also consider introducing financial incentives to firms for curriculum relevant traineeships and other types of work-based learning in VET and HE programmes to support WBL in the context of the current economic downturn.
	1.15 Increase rural students' access to, and attract employers to be more involved in VET 'work-based learning' in VET institutions and sectoral practical training centres. The government and municipalities should seek to increase subsidised transport for rural VET students to access sectoral practical training centres, particularly if they are unable to find workplace placements in the context of the current economic downturn. The ministries should work with institutions to reach out to and attract employers to be more involved with teaching and instruction at the centres. For example, this could be through offering credits to use the centre's infrastructure at a later time and/or financial incentives. This would have the added benefit of creating linkages between students and employers, and between centres and employers.
	1.16 Expand existing administrative datasets with details on students' work-based learning activity to inform policy and ensure the quality of WBL. The responsible ministries should collect administrative data from VET institutions, colleges and universities on the quantity and type of WBL undertaken by students to better inform policy in this field. The quality assurance agencies responsible for VET and HE should develop and implement a framework for monitoring the quality of WBL as part of their activities.

Priority 2: Raising adults' and enterprises' participation in learning in Lithuania (Chapter 3)

Opportunity 1: Raising awareness about adult learning benefits and opportunities

Annex Table 1.A.4. Policy recommendations for raising awareness about adult learning benefits and opportunities

Policy directions	Recommendations
Raising awareness about adult learning benefits and opportunities among individuals	**2.1. Consolidate and expand online information about adult learning benefits, opportunities and funding into a one-stop shop (portal).** This portal should merge existing information from various portals currently operating in Lithuania. The one-stop shop should also expand on previous efforts in order to include more comprehensive information on funding opportunities for adults and include indicators on the quality of courses and the direction of the labour market. It should also detail the benefits of engaging in learning throughout the life course. Lithuania might take inspiration from portals in other countries such as Northern Ireland's *Student Finance NI* and Poland's graduate tracking system (Ekonomicznych Losów Absolwentów) for guidance on how to present data in informative and user-friendly ways for adults.
	2.2. Introduce local awareness-raising initiatives through co-operation with local stakeholders to engage low-skilled adults in education and training. These initiatives could consist of outreach via emails, social media, radio and TV, and through in-person events and testimonials from past learners. Awareness-raising initiatives should be tailored to local job market conditions and allow for flexibility in design and delivery. They would benefit from being organised with all relevant stakeholders including the public employment service (PES), employers, trade unions and social partners. Adult learning co-ordinators could take the lead in overseeing the design and implementation of these awareness-raising initiatives.
Enabling employers to understand their training needs	**2.3. Support enterprises to undertake training needs assessments and develop training plans, starting with small and medium enterprises (SMEs) in economic sectors of strategic importance.** The Ministry of the Economy and Innovation (EIM) could support SMEs by hiring training specialists that SMEs can use to help them assess their training needs and design training plans. These measures could first be piloted for SMEs in sectors of strategic importance before being rolled out more widely. Funding for these support measures could come from the creation of a training levy (see Opportunity 2: Removing barriers to participation in adult learning).

Opportunity 2: Removing barriers to participation in adult learning

Annex Table 1.A.5. Policy recommendations for removing barriers to participation in adult learning

Policy directions	Recommendations
Better using financial incentives to reduce barriers for employers	**2.4. Streamline the application process for Competence Vouchers and other existing financial incentives directed at enterprises.** The EIM should ease the administrative burden of applying for financial incentives as this can deter enterprises, especially SMEs, from applying. This could include providing free support to help SMEs understand and fulfil the requirements. The training specialists introduced to help SMEs assess their training needs and produce training plans (see Opportunity 1: Raising awareness about adult learning benefits and opportunities) might be well placed to provide this support to SMEs applying for financial incentives.
	2.5. Introduce regional or sectoral training funds financed through a training levy. The EIM should consider moving to a more sustainable training funding model for enterprises by introducing a training levy that can raise money from employers specifically for adult education and training. This levy could be used to finance the creation of regional or sectoral training funds that would distribute training grants to firms in their sector or region in line with the fund's strategic priorities. Employer buy-in both for the design and implementation of this scheme will be crucial to its success. This could be facilitated through a tripartite funding agreement governed by a Tripartite Council (see Chapter 5).
Overcoming financial and time-related barriers for individuals	**2.6. Expand financial incentives for adults to participate in adult learning, focusing on target groups such as low-skilled workers.** The Ministry of Social Security and Labour (SADM), the SMSM and the EIM should come together to determine which groups of adults would benefit from additional financial incentives for training (such as low-skilled adults in employment) and decide whether an individual learning scheme such as subsidies (vouchers) or financial mechanisms such as loans or tax incentives are most appropriate for reaching the target groups. Lithuania could either expand the coverage of existing tax incentives and vouchers or introduce new incentives, such as subsidies for target groups like low-skilled workers. Information on these financial incentives should be brought together in one place so that adults are able to easily understand their financing options (see Opportunity 1: Raising awareness about adult learning benefits and opportunities).
	2.7. Improve the supply of online adult learning in the Lithuanian language by providing technical support to vocational and higher education institutions. Lithuania should build on its work so far to guarantee a sufficient supply of online courses during COVID-19 and into the future. The SMSM could consider providing vocational and higher education institutions (HEIs) with technical and methodological support to cheaply and efficiently design and deliver courses online. As part of this support, Lithuania could consider creating a common online learning platform that would bring together online courses from Lithuanian education providers. This platform could be hosted independently or incorporated into an online one-stop shop that brings together for individuals in a clear and engaging manner the provision of online training and information on all aspects of the adult learning system (see Opportunity 1: Raising awareness about adult learning benefits and opportunities).

Opportunity 3: Strengthening the recognition and quality of non-formal adult education and training

Annex Table 1.A.6. Policy recommendations for strengthening the recognition and quality of non-formal adult education and training

Policy directions	Recommendations
Improving the processes to recognise and validate non-formal and informal learning	**2.8. Develop guidelines to support Lithuanian education institutions in implementing high-quality recognition and validation processes for non-formal and informal learning.** The SMSM, in conjunction with the Qualifications and Vocational Education and Training Development Centre (KPMPC), the Centre for Quality Assessment in Higher Education (SKVC), and vocational and HEIs, should develop guidelines and standards for the recognition of prior learning (RPL) system to ensure that all education institutions carrying out RPL have access to the methodologies, tools and reference materials needed to effectively certify prior learning. These guidelines could be informed by input from the ongoing project, Improvement of the System for Assessment and Recognition of Competences and Qualifications Acquired in Different Pathways. Adults will also need to be made aware of the RPL system and how they can have their skills recognised. This could be done via an online one-stop shop (see Opportunity 1: Raising awareness about adult learning benefits and opportunities) and through career guidance counsellors (see Chapter 5).
	2.9. Consider introducing digital/open badges for non-formal and informal learning. The SMSM, the EIM and the SADM, in co-operation with representatives of the non-formal education sector and employers, should consider working with education institutions to develop open badges that would enable adults to visualise their skillset online. For example, the completion of non-formal courses could be awarded with a badge that adults can incorporate into online portfolios or curriculum vitae indicating the skills taught and developed on the programme. Lithuania could begin by introducing such badges for online non-formal courses delivered through a common learning virtual platform (see Opportunity 2: Removing barriers to participation in adult learning).

Policy directions	Recommendations
Strengthening quality assurance mechanisms in non-formal adult education and training	**2.10. Establish quality labels for providers of non-formal adult education and training that exceed minimum certification requirements.** To strengthen the ex ante recognition and certification of non-formal adult education and training providers, Lithuania should consider introducing quality labels for the best-performing providers in the certification process. Establishing quality labels should be a cross-ministry effort also involving the KPMPC, the SKVC, and other stakeholders such as education institutions. These labels could help to drive quality improvements by encouraging providers to exceed minimum requirements. Publicly funded non-formal providers could be required to meet this more comprehensive set of criteria.
	2.11. Introduce a monitoring framework for the learning outcomes of publicly funded non-formal adult education and training. Ministries and stakeholders should together decide on standardised indicators for a monitoring framework across publicly funded non-formal adult education courses. These could consist of labour market outcomes as well as the satisfaction of participants with the provided training. The KPMPC and the SKVC could arrange this through post-participation surveys or through the collection of administrative data from training providers. The results of these learning outcomes should be communicated clearly to adults, perhaps through an online portal (see Opportunity 1: Raising awareness about adult learning benefits and opportunities).

Priority 3: Using people's skills more effectively in Lithuania's workplaces (Chapter 4)

Opportunity 1: Enhancing the use of skills by supporting businesses to adopt high-performance workplace practices (HPWP)

Annex Table 1.A.7. Policy recommendations for enhancing the use of skills by supporting businesses to adopt HPWP

Policy directions	Recommendations
Raising awareness of the relevance of effective skills use and HPWP	**3.1. Create a central portal with user-friendly information for businesses on HPWP and related support programmes, including diagnostic tools, potentially as part of a broader awareness-raising campaign.** The EIM, or one of its agencies, should centralise the currently fragmented provision of information for businesses in a single portal, with more emphasis on skills use and the adoption of HPWP. This portal should be especially useful for, and targeted at, SMEs that are most in need of support, and information should be presented in a business-friendly manner, e.g. by presenting concise information on good practice and success stories, as well as simple guides on how to implement specific HPWP. The portal could also play a crucial role in informing, guiding and supporting employers with benchmarking the performance of their business and finding relevant support programmes by including diagnostic tools that will help them to identify their business needs, challenges and opportunities. The portal should be supported by strong governance structures and could be part of a broader awareness-raising campaign for businesses on adopting HPWP and transforming workplaces (e.g. in business media and through outreach by government agencies and employer organisations).
Providing relevant, targeted and accessible support to businesses on adopting HPWP	**3.2. Encourage the greater adoption of HPWP by expanding existing and/or introducing new business support programmes that target workplace practices.** The Lithuanian Government and agencies with responsibilities in business support could put more emphasis on workplace practices in support programmes. This could be achieved by enhancing the reach and/or scope of existing programmes (e.g. Process LT [Procesas LT]), or by introducing new programmes that affect activities at the level of the workplace. In this context, Lithuania should direct public support to promoting digitalisation in workplaces, including by building on existing initiatives (e.g. digital innovation hubs) and good examples (e.g. its success in developing the digital and technology intensive Fintech sector).
	3.3. Ensure that public support for the adoption of HPWP is differentiated and targeted at employers' needs, for example through personalised mentoring and coaching services. To raise the impact of existing and potential new support programmes that help to strengthen workplace performance, the Lithuanian Government and related agencies with relevant responsibilities should aim to target these programmes at employers' needs. To this end, Lithuania could apply a differentiated approach to business support, whereby programmes are targeted at groups of businesses that face comparable challenges related to the adoption of HPWP. To achieve this, Lithuania should implement its plans for consolidating programmes to overcome fragmented responsibilities across organisations and mechanisms, and reorganise programmes to address the needs of different groups of businesses. In addition, developing official typologies of groups of firms based on the challenges they face, with programmes adapted to address their challenges, could help to facilitate differentiated support. Lithuania could also expand mentoring and coaching programmes, which are by their nature targeted and tailored to the needs of the employer, by building on and possibly expanding existing programmes such as the National Mentorship Network.

Policy directions	Recommendations
	3.4. Minimise the administrative burdens on businesses taking advantage of support programmes by, for example, streamlining procedures and improving guidance. The Lithuanian Government, and the EIM in particular, should limit the administrative burden linked to programmes that will support the adoption of HPWP by reviewing and minimising the occurrence of situations where regulations overlap or are excessive and unnecessarily stringent. The ministry could also seek to simplify and accelerate application procedures by better integrating different information systems to allow automated checks. To facilitate this, Lithuania should aim to improve the relationship between service providers and business recipients. Service providers should become more like "competence centres" that actively support and work together with businesses, rather than "inspectors". Associations and clusters could potentially play a more prominent role in helping businesses to overcome administrative barriers by guiding them through administrative procedures (e.g. by introducing a specific point of contact for support).
Leveraging employer networks and supporting collaboration at the sector level to promote the adoption of HPWP	**3.5. Facilitate the adoption of HPWP by strengthening business clusters and other collaborative networks that spread good practice and facilitate knowledge spillovers.** To catalyse change in Lithuanian workplaces, the EIM, and the Agency for Science, Innovation and Technology (MITA) in particular, should aim to further strengthen collaborative networks, facilitate more sector-specific interventions, and spread good practice and knowledge across the Lithuanian business sector. This could involve facilitating knowledge spillovers on HPWP and broader business practices between strong performing businesses (e.g. international businesses and large state-owned enterprises) and small (more locally operating) businesses. Lithuania should also introduce measures that help to strengthen collaboration and trust between members of collaborative networks, including providing sufficient resources to achieve this, and to promote more co-operation between the networks.
	3.6. Strategically target HPWP support for businesses and collaborative networks at narrowly defined priority sectors in order to maximise the impact of this support. The Lithuanian Government and the EIM in particular, should identify and target support for the adoption of HPWP at strategic priority sectors to raise the impact of support programmes and to strengthen specialisation in fields with higher value-added activities. Building on the broader priorities set out in the Smart Specialisation Strategy, the more narrowly defined sectors could include finance (especially Fintech), information technology services, innovative biotechnology, laser manufacturing and photonics. For these sectors, Lithuania should develop long-term strategies and consider prioritised and targeted business support.

Opportunity 2: Strengthening management and leadership skills to drive the transformation of workplaces

Annex Table 1.A.8. Policy recommendations for strengthening management and leadership skills to drive the transformation of workplaces

Policy directions	Recommendations
Raising awareness of the importance of management and leadership skills for maximising skills use and business performance	**3.7. Develop a strategic and shared vision for strengthening management and leadership skills in Lithuania's workplaces, accompanied by an action plan.** The Lithuanian Government – especially the EIM – should develop a strategic vision for management and leadership skills as part of a broader National Skills Strategy (see Recommendation 4.1). This vision could help to make these management and leadership skills a higher policy priority, create momentum for co-ordinated action, and clarify the types of skills that need to be developed. The vision could be accompanied by an action plan with concrete measures (as explained in subsequent recommendations) that could set out the direction, objectives and actions needed to strengthen leadership and management in Lithuanian workplaces. The government should actively involve stakeholders, especially employers, in the development of the vision and action plan to build a common understanding of the objectives and build commitment to provide support and resources for implementing these actions.
Strengthening the initial development of management, leadership and entrepreneurial skills	**3.8. Expand and improve the quality of entrepreneurship education in schools in the context of the current update of school curricula, and set out a plan for further action.** To strengthen entrepreneurship education, Lithuania should utilise the final stages of the current update of the school curricula to make entrepreneurship skills more prominent across subjects (see also Chapter 2 for a discussion on curricula). As part of the vision and action plan for management and leadership skills (as recommended in the previous section), Lithuania could also develop a plan that describes the actions needed to meet Lithuania's ambitions for entrepreneurship education across all levels of education. The plan should build on existing programmes and actions in the Entrepreneurship Action Plan of Lithuania for 2014-2020, and include actions to expand the role of Junior Achievement Lithuania, better evaluate and monitor the outcomes of entrepreneurship education, and learn from both national and international best practice. These actions should also be supported by a common institutional framework and centralised implementation.

Policy directions	Recommendations
	3.9. Strengthen the development of management and leadership skills in higher education by making relevant modules and subjects more accessible and enhancing collaboration with businesses. Lithuania could make management and business courses at HEIs, as well as entrepreneurship courses, more widely available and accessible to students from other programmes. For instance, HEIs could offer these courses as optional modules or "parallel" study forms. HEIs could also consider embedding management and leadership skills, as well as entrepreneurial skills, across the curriculum of different studies – i.e. not as a standalone subject, but as part of other subjects. Furthermore, to better align the study offer and teaching methods with the needs of the market, Lithuania could strengthen collaboration between the business sector and HEIs (see also Chapter 2), for instance in the form of partnerships, internships, mobility and research.
Promoting adult learning opportunities to strengthen management and leadership skills	**3.10. Ensure the availability of relevant and flexible learning opportunities for different types of managers by assessing and filling gaps in the current provision and promoting online learning.** To ensure that different types of managers and leaders (e.g. for different firm size, sectors, management level) have access to relevant learning opportunities, Lithuania should locate the gaps in the current provision of learning and aim to fill these gaps by creating incentives for private sector providers to deliver relevant courses, or by introducing new programmes by government agencies. There could be an enhanced role for HEIs by making their offer of management and leadership courses more accessible to adults, for example by stimulating modular, flexible and part-time learning opportunities. Lithuania should ensure that the training offer for managers is easily accessible by raising flexibility through the enhanced provision of online learning. Lithuania should also assess if available online courses for developing management and leadership skills could be expanded, ensure effective testing methods and certificates, and establish quality assurance mechanisms.
	3.11. Enhance the willingness of managers to participate in learning through targeted awareness raising, information on the training offer, recognition of prior learning and financial support. The Lithuanian Government and related agencies should consider a targeted campaign on the benefits of lifelong learning for managers, which is supported by the effective dissemination of information on learning opportunities. These could both be combined with the central portal and awareness-raising campaign on adopting HPWP and transforming workplaces, as recommended in Opportunity 1. In addition, the management and leadership skills acquired through experience and other types of non-formal learning should be better recognised (as discussed in Chapter 3), which could help to motivate managers to learn more (e.g. by reducing the time required to achieve a formal qualification). Lithuania should also aim to provide more financial support for learning by managers (see Chapters 3 and 5 for discussions on funding mechanisms for adult learning). This could potentially be achieved by expanding the scope of the competence voucher to allow it to be used by more high-skilled workers, thereby supporting participation in management and leadership programmes.

Opportunity 3: Empowering and engaging the workforce to make better use of their skills

Annex Table 1.A.9. Policy recommendations for empowering and engaging the workforce to make better use of their skills

Policy directions	Recommendations
Empowering and engaging employees in the business sector	**3.12. Encourage businesses to effectively engage and empower employees by promoting the adoption of advanced human resources (HR) practices and people management approaches, pay systems and practices for job mobility.** The EIM and the SADM, as well as related agencies, should consider various soft measures that could help to facilitate a cultural change in businesses where employees are more empowered and engaged. These measures could include the promotion of advanced HR practices and people management (e.g. performance appraisals), remuneration and pay systems where skills acquired on the job are rewarded, and practices that help to enhance mobility in businesses (e.g. job shadowing and talent programmes). To this end, Lithuania could publicise good practices by Lithuanian businesses and the benefits of these practices for employee performance in the central portal and a related awareness-raising campaign on adopting HPWP and transforming workplaces (recommended in Opportunity 1). Lithuania could also introduce and/or expand measures that help to recognise and raise awareness of employers that successfully improve workplace cultures (including, but not limited to, accredited standards, charters and pledges).
	3.13. Facilitate the active engagement of employees in workplaces by ensuring that employees have the capacity and motivation to be involved. The Lithuanian Government, and the SADM in particular, should continue to strengthen various forms of employee representation (e.g. works councils, trade unions and trustees) in workplaces. To this end, Lithuania should ensure that employees have the right skills, knowledge and motivation to actively and effectively be involved. Lithuanian employees should have access to high-quality information on the benefits of employee representation and on how to effectively participate, which can be disseminated on websites targeted at employees and their work conditions and distributed by organisations such as trade unions and the State Labour Inspectorate.

Policy directions	Recommendations
Empowering and engaging employees in the public sector	**3.14. Continue to strengthen workplace and HR practices in the public sector through the broad adoption of good practices across the public sector and by building on the new Law on the Civil Service.** Lithuania should further increase HPWP and improve the overall performance of the public sector by ensuring that all public sector organisations provide clear career paths, performance reviews, skills mapping and professional development. This could help to transform the organisational culture and better attract and retain talent. Potentially, these measures could be combined in a comprehensive public administration reform to improve the effectiveness, quality and efficiency of government. Lithuania could also more widely adopt initiatives implemented by the Law on the Civil Service across the public sector (i.e. also outside the civil service), including initiatives to reduce fragmentation and unify the remuneration system in the public sector. This approach should be supported by a system to monitor and evaluate public sector programmes. In this context, Lithuania could consider introducing a survey for employees in the public sector on their attitudes and experiences of working within a public sector organisation.
	3.15. Build a culture of lifelong learning in public sector organisations by adopting a more long-term, strategic approach to skills development and by strengthening learning opportunities. To strengthen the culture of lifelong learning for all employees in the public sector, Lithuania should adopt a more long-term, strategic approach to skills development in public sector organisations as part of a National Skills Strategy (see Recommendation 4.1). Such an approach could include clear objectives on how to raise participation, as well as a better assessment and evaluation of what skills need to be developed (possibly informed by the survey of public sector employees – as mentioned above). Moreover, the Lithuanian Government should ensure that there are sufficient training opportunities (with a particular emphasis on online learning) and provide incentives to employees to participate (e.g. by linking training to performance appraisal and career pathways).

Priority 4: Strengthening the governance of skills policies in Lithuania (Chapter 5)

Opportunity 1: Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system

Annex Table 1.A.10. Policy recommendations for increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system

Policy directions	Recommendations
Strengthening strategic planning and oversight in the Lithuanian skills system	**4.1 Develop a shared, overarching vision for developing and using skills by creating a comprehensive skills strategy for Lithuania.** First, this strategy could be granted the status of "national agenda" under the Lithuanian Law on Strategic Governance, as this enables a cross-sectoral approach addressing all sectors of the skills system and providing strategic objectives, targets and high-level indicators. Second, the strategy should clarify the main roles and responsibilities of governmental actors (e.g. ministries, semi-autonomous bodies, subnational administrative units and learning providers), as well as non-governmental stakeholders (see the next section "Fostering national-level social partnership and stakeholder engagement in skills policy") and thereby define clear accountability for results. This accountability could also be translated into law. Third, this strategy should also be accompanied by concrete "programming level" planning documents, as foreseen in the Lithuanian Law on Strategic Governance. This enables the identification of clear measures to fulfil the strategic objectives of the national agenda in the respective sub fields of skills policy, to be co-ordinated by a future Skills Policy Council (see Recommendation 4.2). This should include, for example, a clear, comprehensive and shared plan for developing young people's skills in Lithuania (see Chapter 2). Finally, a Lithuanian skills strategy should base its objectives on the best available skills evidence (see Opportunity 2) and should include common funding priorities and potential cost-sharing agreements (see Opportunity 3).
	4.2 Improve inter-ministerial co-ordination by creating a designated, inter-ministerial body with lead authority and responsibility for skills policy. The current National Commission for the Co-ordination of Human Resources Monitoring (Lietuvos Respublikos Vyriausybės komisija nacionalinei žmogiškųjų išteklių stebėsenai koordinuoti, NŽISK) could be transformed into a "Skills Policy Council" to oversee all sectors of the skills system. High-level political meetings (e.g. with vice-ministers) should provide strategic guidance and make political decisions. These meetings should be complemented by more frequent, lower-level technical meetings (e.g. among career civil servants), reserved for in depth discussions on concrete policy issues, implementation and data needs (see Opportunity 2). The Skills Policy Council should also oversee the implementation of the abovementioned skills strategy for Lithuania. This includes co-ordination across the various programming level planning documents of the different sub fields of skills policy, and proposals for revisions of the skills strategy. The Skills Policy Council could also be responsible for overseeing high-level indicators and progress towards strategic objectives and targets identified in the skills strategy, while the monitoring of lower-level indicators of programming level planning documents remains the responsibility of individual ministries. The Skills Policy Council should work in close collaboration with the national Tripartite Council (see the section "Fostering national-level social partnership and stakeholder engagement in skills policy").

Policy directions	Recommendations
Fostering national-level social partnership and stakeholder engagement in skills policy	**4.3 Ensure close collaboration between a future Skills Policy Council and Lithuania's current Tripartite Council.** This would include regular communication between the proposed Skills Policy Council and the social partners represented in the Tripartite Council. Members of the Skills Policy Council could be part of a sub-committee within the Tripartite Council, for example the education sub-committee or a newly created sub-committee for skills. The Skills Policy Council should thereby inform social partner representatives of the Tripartite Council in a timely manner on planned future draft legislation and seek their advice, as well as ask Tripartite Council members for feedback on already implemented programmes and potential future revisions. In order to foster this system of social partnership, Lithuania should continue to honour unanimous decisions by employer associations and trade unions within the Tripartite Council. Furthermore, the current practice of sending government representatives (e.g. ministers) with decision-making powers to the Tripartite Council should be continued to establish mutual trust between social partners and the government, and ensure the accountability of government to decisions taken by the council.
	4.4 Increase the impact of issue-specific stakeholder engagement bodies by guaranteeing government accountability regarding given advice. Minimum criteria for consultation with stakeholder engagement bodies should be implemented to ensure the sufficient quality of communication between these bodies and government, and create greater incentives for stakeholders to actively participate in consultation processes. For example, transparency in how stakeholders' advice is used should be ensured, which might include mandatory written responses from the respective ministries to any advice given.
Increasing the capacity of governmental institutions and social partners at the subnational level	**4.5 Increase the capacity of municipalities, regional development councils and sectoral professional committees to fulfil their responsibilities in the governance of Lithuania's skills system.** In order to increase the expertise of subnational actors in skills policy, Lithuania's ministries and/or semi-autonomous bodies responsible for the policy fields in question should ensure the sufficient provision of training workshops for municipalities, regional development councils and sectoral professional committees, combined with strategic and methodological guidance for skills policy making. Potential providers of these capacity building activities could include the SMSM, the National Education Agency, the KPMPC, the SKVC, and the Education Exchanges Support Foundation. For regional development councils, the newly created competence centres could engage in similar capacity building activities. Lithuania should also increase the human and financial resources of municipalities, regional development councils and sectoral professional committees. Financial resources could be raised via better targeting the funding in Lithuania's skills system (which could lead to cost savings on the side of municipalities) and/or the creation of a tripartite funding agreement (see Opportunity 3).
	4.6 Strengthen social partnership at the subnational level by including trade unions in regional development councils. The Lithuanian Government should implement legislation that establishes a certain balance of power between employer and employee representatives in regional development councils, particularly if these councils gain more authority as part of the further implementation of the new Regional Development Act. While an advisory/observatory seat for trade unions in regional development councils can be a first step, the Lithuanian Government could also consider giving each social partner a fixed minimum number of seats in order to establish parity between employer and employee representatives.

Opportunity 2: Enhancing skills information and career guidance systems and practices

Annex Table 1.A.11. Policy recommendations for enhancing skills information and career guidance systems and practices

Policy directions	Recommendations
Improving Lithuania's ability to use evidence in skills policy making	**4.7 Improve the identification, communication and response to ministries' data needs through regular, inter-ministerial technical-level meetings.** The inter-ministerial National Commission for the Co-ordination of Human Resources Monitoring (NŽISK) and a future Skills Policy Council (see also Opportunity 1) should intensify efforts to identify and follow-up on the data needs expressed by ministries. Meetings of this body at a higher, political level (e.g. vice ministers) could be complemented by more frequent, lower-level technical meetings (e.g. career civil servants, heads of divisions and department directors to facilitate the communication of respective data needs and create commitment by ministries to use evidence in policy making. Political-level meetings should subsequently decide which actor should be obliged to follow up on specific data needs, thus ensuring the sufficient provision of data in the long term.
	4.8 Continue to improve skills needs assessment and anticipation in Lithuania, particularly in the areas of quantitative skills forecasting and qualitative skills foresight. In order to avoid skills mismatches, Lithuania (and in particular NŽISK) should first assess and address the most immediate data needs in the field of skills forecasting, in particular the need for regularly conducted medium-term forecasts on future skills supply and demand across occupations, with an emphasis on high value-added sectors. Second, Lithuania should better supplement quantitative forecasts with qualitative data from stakeholders and experts. In order to design effective skills development measures in the face of ongoing megatrends and/or current uncertainties resulting from the COVID-19 crisis, the Government Strategic Analysis Center (STRATA) and/or individual ministries and their semi-autonomous bodies (in potential collaboration with research institutes, universities and colleges) should increase skills foresight exercises (see Box 5.5 in Chapter 5).

Policy directions	Recommendations
	4.9 Increase the capacity of ministries and STRATA to fulfil their functions in supporting and undertaking evidence-informed policy making. In the short term, STRATA together with individual ministries should co-ordinate and carry out training workshops to increase knowledge of and sharing of best practices for evidence-informed policy making in the area of skills policies. In the long term, Lithuania should consider implementing a specific analytical track within the civil service that offers competitive salaries and upwards career mobility, thereby attracting highly skilled analysts. The Lithuanian Government should also assess and ensure that individual ministries and STRATA currently have sufficient financial and human resources (see Opportunity 3) to fulfil their respective responsibilities in the area of evidence-informed skills policy making.
Implementing a system of lifelong career guidance for individuals of all ages	**4.10 Strengthen career guidance in Lithuania by establishing an integrated, comprehensive lifelong career guidance system to serve all regions and age groups, with multiple modes of delivery.** For example, Lithuania could create common professional and quality standards for career guidance and set up common information tools that equip counsellors with labour market intelligence (for example based on data from NŽISK). Lithuania could potentially appoint a dedicated agency responsible for providing and managing career guidance across all age groups and modes of delivery, building on existing competencies within the PES. Lithuania should also build the specific modes of delivery of such an integrated system on existing infrastructure. For example, one-stop shop regional career centres (such as the Alytus Career Guidance Centre) should be built on youth job centres wherever possible, and the use of digital tools for career guidance could be strengthened by building on existing efforts of the PES to adapt career guidance in the context of the pandemic. All career guidance providers in Lithuania should increase their provision of remote guidance services (e.g. via phone, email, social media and video call) to achieve better coverage across Lithuania's regions. The government should encourage providers to use the same digital tools (e.g. video call software) in order to enable local career guidance counsellors to exchange best practices, improve the compatibility of services across different providers and clients and achieve cost savings.
	4.11 Expand the supply, awareness and uptake of career guidance services for adults to support their job searches and their efforts to upskill and reskill. Regional career centres and digital modes of delivery (see Recommendation 4.10), when expanded, should also serve the target group of adults, regardless of their employment status. Awareness about these new offerings could be raised via specific information campaigns directed at adults using social media and the Internet as part of a more general effort to increase awareness about adult learning (see Chapter 3). Lithuania should assess if the PES (or a future dedicated agency responsible for career guidance, see previous recommendation) has sufficient capacity to meet the needs of new target groups of regional career centres and digital modes of delivery (e.g. employed adults), including financial resources and expertise.
	4.12 Ensure the accessibility of career guidance services for school students of all age groups, regardless of school type and geographical location. Regional career centres, when expanded, should provide schools across all of Lithuania's regions access to high-quality career guidance services. Staff from regional career centres, jointly with local employers, should engage in outreach activities in schools. Similarly, schools and individual teachers should be encouraged and supported to provide scheduled class excursions to nearby regional career centres, if possible considering pandemic trends. These visits could be followed up by additional counselling sessions at the regional career centres. These sessions could be face to face or virtually with students in schools to mitigate the health concerns associated with the current pandemic. Virtual sessions would also reach more schools and students in remote locations.

Opportunity 3: Ensuring sustainable, well-targeted, and shared financing of Lithuania's skills system

Annex Table 1.A.12. Policy recommendations for ensuring sustainable, well-targeted, and shared financing of Lithuania's skills system

Policy directions	Recommendations
Ensuring well-targeted and shared investments across the skills system	**4.13 Increase public investment in skills policies as part of a tripartite funding agreement.** As public expenditure for skills policies is still low in international comparison, the government should pledge to increase its expenditure as part of a tripartite funding agreement for skills policies, signed by government, employer and employee representatives. The resources provided by government as part of this agreement could be used for a broad range of activities, for example to increase the capacity of ministries, STRATA and subnational actors (see Opportunities 1 and 2, and Chapter 4), to guarantee continued funding for well-functioning European Social Fund (ESF) projects (see the next section "Enabling sustainable funding for well-functioning, externally-financed skills policies"), as contributions to a skills fund/levy and/or individual learning scheme (see Chapter 3 and Recommendation 4.14), as well as for other recommendations identified in this report.

Policy directions	Recommendations
	4.14 Increase employer and potentially employee investment in skills development through the establishment of a tripartite funding agreement. In exchange for increased public expenditure on skills policies, representatives of employers and employees (e.g. employer associations, trade unions) within the Tripartite Council should commit to increase their contributions to skills policies, for example via potentially mandatory contributions to a skills fund/levy (see Chapter 3). Public contributions to a fund could match employer and employee contributions and therefore increase the social partners' willingness to contribute. These resources could be used for a variety of skills programmes, but could also help to increase the capacities of sectoral professional committees (which are also organised in a tripartite manner, see Opportunity 1). The governance of the training fund, including decisions on the level of contributions and how to spend the funds, should be undertaken in a tripartite manner, for example within the education sub-committee or a dedicated sub-committee for skills within the Tripartite Council (see also Opportunity 1).
	4.15 Better target funding across Lithuania's skills system by assessing options for cost savings in the provision of higher and secondary-level education. Lithuania should assess options for achieving cost savings in higher and secondary-level education, including through better inter-municipal co-operation between education providers, incentives for municipalities to achieve cost savings in their respective secondary school network, and/or changes in Lithuania's higher education network. First, concerning inter-municipal co-operation in service provision, regional development councils can constitute a forum to discuss potential for inter-municipal co-operation. Lithuania should assess if some municipal public service administration powers including education should be transferred to the county-level, leading to cost savings, as foreseen in the New Regional Development Act. Second, Lithuania should assess if municipalities can be incentivised to achieve cost savings in the provision of secondary education, for example by holding central government subsidies for secondary education at current levels and letting them keep part or all of potential cost savings. In this regard, Lithuania should ensure that in order to increase the capacities of municipalities in skills policy making (see Opportunity 1) and teachers' skills (see Chapter 2), these savings remain ring fenced to skills policy related tasks. A third option for Lithuania's central government is to assess potential cost savings as a result of changes to Lithuania's higher education network.
Enabling sustainable funding for well-functioning, externally-financed skills policies	**4.16 Increase the long-term sustainability of externally funded skills projects by systematically identifying successful programmes and committing to continue them with state funding.** A potential Skills Policy Council (see Opportunity 1) could jointly decide on successful programmes to be permanently implemented and financed by Lithuania's own budget if external funding ends. In these decisions, the Skills Policy Council should be supported by systematic evaluations of ESF-funded programmes. Commitment to undertake systematic evaluations should already be included in the application for external funding, setting aside a certain share of programme budget for thorough evaluation. Funding for well-functioning policies should be secured as part of increased public expenditure (see the previous section "Ensuring well-targeted and shared investments across the skills system").

Annex 1.B. The OECD Skills Strategy Dashboard

This annex presents the OECD Skills Strategy Dashboard. The objective of the Dashboard is to present an overview of the performance of skills systems in OECD countries. It is the starting point for analysis in the diagnostic phase of Skills Strategy projects and allows the OECD and the Project Team to identify the priority skills policy themes to be covered in greater detail in the report. Presenting the relative position of countries on key skills outcomes, the Dashboard provides a general overview of the strengths and weaknesses of a given country or region's skills system. This annex describes the characteristics, presents the indicators and describes the underlying methods for calculating indicators.

Characteristics

The OECD Skills Strategy Dashboard is the result of internal consultation and analysis of core indicators used in OECD Skills Strategy projects. It presents a simple, intuitive overview of the outcomes of skills systems that is easy to interpret, and gives a quick overview of a country's skills performance across the dimensions of the OECD Skills Strategy ("developing relevant skills" and "putting skills to effective use"). The Dashboard applies a broad definition of skills by presenting foundational skills, problem-solving skills and breadth of skillsets, and considers both economic and social outcomes. A total of 33 key outcome indicators were selected and grouped into 16 aggregated indicators.

Indicator selection

The selection of indicators followed a process whereby a longlist of the most commonly used indicators in OECD Skills Strategy reports was gradually reduced to a shortlist of core indicators. This process built on the principle that the indicators describe the core outcomes of the different dimensions of the skills system. In addition, these indicators express outcomes in terms of level, trend, distribution and equity. The indicators need to be comparatively easy to interpret and based on OECD sources, using the most recently available.

Method for the calculation of aggregate indicators

To develop aggregate indicators that represent the relative position of countries on key outcomes of the skills system, a number of calculations were made on the collected data. To describe the relative position across countries, a score for each indicator was calculated ranging from 0 to 10, with 0 for the weakest performance and 10 for the strongest performance. This resulted in an indicator that allows comparisons between different types of indicator (e.g. averaging performance of literacy scores and educational attainment rates). The resulting scores were normalised in such a way that better performance results in a higher score. Subsequently, an unweighted average of the indicators was calculated for each of the aggregates, and these scores were then ranked. The final ranking was separated into five groups of equal size, ranging from top 20% to bottom 20% performer. Aggregate indicators are only presented in the Dashboard when more than half of the underlying indicators have data available.

Annex Table 1.B.1. The OECD Skills Strategy Dashboard: Dimensions, indicators and sources

Dimension and aggregates	Indicator	Source
Developing relevant skills		
How skilled are youth?	Reading (PISA[1]), mean score, 2018	OECD (2019[16]), *PISA 2018 Results (Volume I): What Students Know and Can Do*, https://doi.org/10.1787/5f07c754-en.
	Mathematics (PISA[1]), mean score, 2018	
	Science (PISA[1]), mean score, 2018	
Are the skills of youth improving?	PISA[1] average three-year trend (reading, mathematics, science)[2]	
Are the skills of youth being developed inclusively?	PISA[1] economic, social and cultural status (ESCS) parity index, science performance, 2015	
How many young adults attain tertiary education?	Tertiary education attainment rate, 25-34 year-olds, 2018[3]	OECD (2018[17]), "Population with tertiary education" (indicator), https://doi.org/10.1787/0b8f90e9-en.
How skilled are young tertiary-educated adults?	Literacy (PIAAC[4]), mean score, tertiary-educated 25-34 year-olds, 2012, 2015, 2018	OECD (2019[18]), *Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database)*, www.oecd.org/skills/piaac/.
	Numeracy (PIAAC[4]), mean score, tertiary-educated 25-34 year-olds, 2012, 2015, 2018	
	Problem solving (PIAAC[4]), % level 2/3, tertiary-educated 25-34 year-olds, 2012, 2015, 2018	
How inclusive is tertiary education?	Share tertiary educated with both parents less than tertiary, 2012, 2015, 2018	
How strong are foundational skills of adults?	Literacy (PIAAC[4]), mean score, 2012, 2015, 2018	
	Numeracy (PIAAC[4]), mean score, 2012, 2015, 2018	
	Problem solving (PIAAC[4]), % level 2/3, 2012, 2015, 2018	
Do adults have a broad set of skills?	Percentage of adults with a broad set of skills (PIAAC[4]) (level 3-5 in literacy and numeracy and level 2-3 in problem solving), 2012, 2015, 2018	
Is there a strong culture of adult education?	Formal and/or non-formal adult education participation rate (PIAAC[4]), last 12 months, 2012, 2015, 2018	
	Willing to participate in adult education (PIAAC[4]), percentage of population, 2012, 2015, 2018	
	Low barriers to participation (PIAAC[4]), low percentage of adults wanting to participate but who did not, 2012, 2015, 2018	
Are the skills of adults being developed inclusively?	High-low educated parents, adjusted literacy difference (PIAAC[4]), 2012, 2015, 2018	
Putting skills to effective use		
How well are skills activated in the labour market?	Employment rate, working age, 2019	OECD (2019[19]), "Employment rate" (indicator), https://doi.org/10.1787/1de68a9b-en.
	Labour force participation rate, 2019	OECD (2019[20]), "Labour force participation rate" (indicator), https://doi.org/10.1787/a452d2eb-en.
	Low share of youth not in employment education or training (NEET), 15-29 year-olds, 2018	OECD (2018[21]), "Youth not in employment, education or training (NEET)" (indicator), https://doi.org/10.1787/72d1033a-en.
How inclusive is the labour market?	Gender (male-female), employment rate difference, 2019	OECD (2019[19]), "Employment rate" (indicator), https://doi.org/10.1787/1de68a9b-en.
	High-low educated, employment rate difference, 2017	OECD (2018[22]), "Employment by education level" (indicator), https://doi.org/10.1787/26f676c7-en.
Do workplaces make intensive use of skills?	Reading at work (PIAAC[4]), score, 2012, 2015, 2018	OECD (2019[18]), *Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database)*, http://www.oecd.org/skills/piaac/.
	Numeracy at work (PIAAC[4]), score, 2012, 2015, 2018	
	Information and communication technology (ICT) at work (PIAAC[4]), score, 2012, 2015, 2018	

Dimension and aggregates	Indicator	Source
Do people use their skills intensively in daily life?	Reading at home (PIAAC[4]), score, 2012, 2015, 2018	
	Numeracy at home (PIAAC[4]), score, 2012, 2015, 2018	OECD (2019[18]), *Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database)*, http://www.oecd.org/skills/piaac/.
	ICT at home (PIAAC[4]), score, 2012, 2015, 2018	
Is the use of skills at work improving?	Reading skills use at work difference prime-age adults (26-54) and older (55-65) (PIAAC[4]), 2012, 2015, 2018	
	Numeracy skills use at work difference prime-age adults (26-54) and older (55-65) (PIAAC[4]), 2012, 2015, 2018	
	ICT skills use at work difference prime-age adults (26-54) and older (55-65) (PIAAC[4]), 2012, 2015, 2018	
Are firms designing workplaces to use skills effectively?	High-performance workplace practices, percentage of jobs (PIAAC[4]), 2012, 2015, 2018	

Notes: Indicators without a specific source between brackets are OECD indicators from OECD Data (https://data.oecd.org/home/).
1. Programme for International Student Assessment (PISA).
2. The average trend is reported for the longest available period since PISA 2006 for science, PISA 2009 for reading, and PISA 2003 for mathematics.
3. Labour market imbalances, average standard deviation across occupations in wages, employment, hours worked, unemployment and under-qualifications, 2015/17.
4. Survey of Adult Skills, a product of the Programme for the International Assessment of Adult Competencies (PIAAC).

Annex 1.C. Strategies and recent reforms in Lithuania related to skills and education

Annex Table 1.C.1. Recent strategies and reforms related to skills and education

Strategies/reforms	Year	Overview
Lithuania's Progress Strategy "Lithuania 2030" (*Lietuva 2030*)	May 2012	A national strategy document that outlines the vision of Lithuania's future up to 2030. The strategy has three main progress areas: smart society, smart economy and smart governance.
National Education Strategy 2013-2022	2013	Sets the priorities for all aspects of education for the coming decade for youth and adults in formal and non-formal education.
National Plan for Progress (NPP) 2021-2030	September 2020	Outlines 10 strategic goals for Lithuania over the upcoming decade to ensure progress in social, economic, environmental and security policies.
Programme of the Eighteenth Government of the Republic of Lithuania	2020	Includes government priorities until 2024 and beyond, including many skills-related priorities such as "good school for all and modern education curriculum", "market-responsive vocational education and training" , "lifelong learning for all in Lithuania", "universal entrepreneurship" and "modern and efficient [public] institutions".
Lithuanian Regional Policy White Paper 2017-2030	2017	Foresees co-ordination between mayors, delegated municipal council members and socio-economic partners in regional development councils, and seeks to adapt vocational and higher education to the social and economic needs of regions.
General plan for the territorial development of Lithuania	2020	Emphasises opportunities for municipalities and regions to voluntarily cluster together into regions based on co-operation needs.
Lithuanian Industry Digitisation Roadmap 2019-2030	2019	Guidance for industry digitisation efforts following Industry 4.0 initiatives across Europe to make local manufacturing more proficient and competitive. It is the first milestone for the new Smart Specialisation Strategy and its priority areas, and serves as a basis for the Science, Technology and Innovation Strategy and the National Progress Programme.
Draft Lithuanian Programme 2021-2027	2020	Describes five policy objectives for Lithuanian funding from the EU for the period 2021-2027.
New Regional Development Act	2020	Transforms regional development councils at the county level from an advisory body to a legal entity established by municipalities of a specific county. They are responsible for regional development policy, including the management of certain regional public service delivery systems, partially including education.
Development Programme for Non-formal Adult Education and Continuing Education 2016–2023	2016	Aims to create and develop non-formal adult education and continuing education that meets the needs of the individual and society.
Action Plan for the Development of Lifelong Learning 2017-2020	2017	Outlines several objectives to increase lifelong learning including the development and implementation of vocational standards and modular vocational training programmes, and strengthening the contribution of municipalities and non-formal adult education service providers regarding the development of the non-formal adult education system.
Structural education reforms	2016-2020	A programme of reforms seeking to improve performance and equity across the education system, including optimisation of the network of VET and HE institutions, better after-school learning, safe schools, and modernised teaching and learning for the future.
Law on Employment	2016	Establishes public subsidies for firms offering apprenticeships equal to 40% of the employee's wage. The law also introduces the validation of non-formal and informal learning as one of the measures supporting learning opportunities.
Law on Strategic Governance	2020	Sets a new system of strategic documents and integration of almost all existing documents into the new framework.
Law on the Civil Service	2019	Aimed to increase the competitiveness of the civil service to attract the most talented employees, as well as to increase the efficiency of the civil service. In addition to various changes for the regulation of civil servants' salaries, the law strengthened the adoption of workplace practices.

Strategies/reforms	Year	Overview
The Labour Code amendments (*Darbo kodeksas*)	2017	In 2017, several revisions of the Labour Code came into force, affecting various aspects of flexible working time arrangements, new forms of employment contracts (including for apprenticeships), new regulations for fixed-term employment contacts, better work-life balance and learning opportunities, and changes in the area of employee representation and collective bargaining. The Labour Code also introduced training leave of up to five days per year for employees participating in non-formal training, partially covered by the employer.
Introduction of the "class basket" scheme for school-funding	2018	80% of funding is now allocated according to number of classes and class size, and only a smaller part calculated according to number of pupils.
Introduction of public consultation guidelines	2019	Specify a minimum amount of time to be allocated for consultation and its preparation, as well as mandatory feedback to stakeholders on how their advice is used (concerns only open public consultations).
Regulations of Initial Training of Pedagogues (*Pedagogų rengimo reglamentas*)	2018	Changed the institutions, levels and models of training for teacher training. Only teacher training centres and other HE institutions that have co-operation treaties with centres now provide initial teacher education.
Guidelines for renewing national curriculum	2019	Outline the vision, rationale and parameters for updating the curricula framework for general education.
Reform of VET programmes	2017	Goals included updating VET curricula and methods, focusing on competitive 21st century competences, developing a sustainable network of VET institutions, and increasing social inclusion.
Creation of Government Strategic Analysis Center (STRATA)	2019	Restructuring and transformation of the "Research and Higher Education Monitoring and Analysis Centre" (MOSTA, previously located at the SMSM) into a new "Government Strategic Analysis Center" (STRATA) that is directly subordinate to the government.
National Monitoring of Human Resources system (*Nacionalinė žmogiškųjų išteklių stebėsena*)	Since 2016	Aims to integrate all available data on individuals from different information systems, in particular administrative data, into one platform. It includes data on the qualifications and education of individuals, their professions and wages, their employers, and their age categories. All state authorities are obliged by law to use results of the system in decision making in the fields of labour market, education and human resource development.

Source: Seimas of the Republic of Lithuania (2020[23]), *Lietuvos Respublikos regioninės plėtros įstatymo Nr. VIII-1889 pakeitimo įstatymas*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ab78cdf0b15c11ea9a12d0dada3ca61b?jfwid=-sdmh1t6jf; Seimas of the Republic of Lithuania (2020[24]), *Dėl Lietuvos Respublikos teritorijos bendrojo plano valstybės teritorijos erdvinio vystymo krypčių ir teritorijos naudojimo funkcinių prioritetų patvirtinimo, Nr. XIII-3021, priimta 2020 m. birželio 4 d.;* STRATA (2020[25]), *STRATA homepage*, https://strata.gov.lt/en/; Eurydice (2019[26]), *Lithuania: National Reforms in School Education*, https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-38_en; Government of the Republic of Lithuania (2019[27]), *Viešųjų konsultacijų metodika ir taikymo gairės*; National Regional Development Council (2017[28]), *Lithuanian Regional Policy: White paper for harmonious and sustainable development 2017-2030*.

2 Equipping young people in Lithuania with skills for work and life

Equipping young people in Lithuania with skills for work and life is central to Lithuania's vision for a learning society that is modern, dynamic and ready for future challenges. The skills that young people develop from early childhood into early adulthood are foundational to their personal well-being and their contribution to the economy, society and the environment. This chapter explores three opportunities for Lithuania to better equip young people with skills for work and life: 1) successfully implementing and complementing modern curricula; 2) strengthening Lithuania's teaching workforce; and 3) making vocational education and training and higher education more responsive to labour market needs.

The importance of equipping young people with skills for work and life

A critical question facing Lithuania, and education systems across the OECD, is how to prepare young people for the jobs of the future and equip them with the skills to tackle societal challenges that we cannot yet imagine and use technologies that have not yet been invented. Furthermore, it is important to understand how young people can be equipped to thrive in an interconnected world where they need to understand and appreciate different perspectives and worldviews, interact respectfully with others, and take responsible action towards sustainability and collective well-being (OECD, 2019[1]).

Young people's skills are critical for their personal well-being and outcomes later in life, as well for countries' economic prosperity and social cohesion. Across the OECD, individuals with higher literacy proficiency are more likely to be employed, earn high wages, trust others, participate in the democratic process and community life, and report good health than their less-skilled peers. For countries, skills are a key driver of innovation, productivity and, ultimately, economic growth, social cohesion and higher living standards (OECD, 2016[2]). Developing skills at an early age is therefore a key investment in the economic prosperity and well-being of countries. Countries whose youth develop strong skills typically have highly skilled adult populations, as skills outcomes in youth are strongly correlated with success in tertiary education and skills proficiency in later life (OECD, 2019[3]).

The importance of young people developing a broad range of relevant skills is growing. In Lithuania, as in other OECD countries, megatrends such as globalisation, digitalisation, population ageing and migration are transforming the skills individuals need to effectively participate in work and society (OECD, 2019[3]). Students need support to develop not only knowledge and skills, but also attitudes and values that can guide them towards ethical and responsible actions (OECD, 2019[1]). Strong skills developed in youth help foster a culture of lifelong learning that can shield individuals against technological displacement. The current economic slowdown and shrinking of Lithuania's labour force arising from population ageing and emigration is putting greater pressure on young graduates to develop the skills in highest demand in the labour market so that they have a smooth transition into employment and avoid skills mismatches that could impede growth.

The COVID-19 pandemic and subsequent school closures in 2020 have tested Lithuania's capacity for, and highlighted the importance of, effectively equipping young people with skills for life. An imperative for Lithuania, and other OECD countries, is to help students recover from how the pandemic has affected their learning gains, and to help the entire education system be more resilient in the face of future shocks. This entails understanding the impact of the pandemic and school closures on young people's skills, targeting support at young people to catch up and continue their studies, and making more effective use of technology in the teaching and learning process, particularly through remote and blended learning (OECD, 2020[4]).

Equipping young people with skills for work and life is also central to Lithuania's vision and goals for the future (Table 2.1).

Table 2.1. Lithuania's strategic goals for young people's skills

Strategy/policy	Description and relevant priorities
Lithuania 2030 "*Lietuva 2030*"	Lithuania's "*Lietuva 2030*" strategy sets a vision for a "learning society" that is modern and dynamic, ready for future challenges and able to perform in an ever-changing world. Lithuania 2030 has three main progress areas: smart society, smart economy and smart governance. The relevant objectives for young people's skills relate to "smart society", and include: Gear the general education system to creativity, citizenship and leadership skills. Develop programmes focused on creativity, quest and personal development, as well as a competence assessment and self-assessment framework. Reorganise the concentrated examination system to a balanced system of accumulation and recognition of various learning achievements. Facilitate proper learning environments, establish science laboratories, create arts education tools and establish wellness areas in all schools. Consolidate Lithuanian studies as the basis for humanistic education, which encompasses training on generic cultural competencies, the development of a creative individual and public education. Introduce media literacy programmes in all education institutions. Support the non-formal academic, sport and creative education of gifted children. Bring together the country's best teachers, science, culture and sports experts. Attract foreign professionals. Enable Lithuania's high school students to study at foreign universities for at least one semester, particularly focusing on Nordic-Baltic student exchanges.
National Education Strategy for 2013-2022	The objectives of this strategy cover improving the quality of teaching, introducing a culture of education quality based on evidence, ensuring access to education and equal opportunities, and guaranteeing the efficiency of the education system and individuals' learning decisions.
National Plan for Progress (NPP) 2021-2030	This consists of 10 strategic aims, goals and impact indicators for 10 years. Relevant goals for young people's skills are centralised in "Strategic Aim 3: Increase the inclusion and effectiveness of education to meet the needs of the individual and the society", and include: 3.1. Improve educational outcomes and reduce gaps between different groups of learners. 3.2. Increase the inclusion and accessibility of education, and ensure a safe environment for everyone. 3.4. Improve the match between the competences acquired in education institutions and in the labour market. 3.6. Strengthen the attractiveness of the teaching profession. Create an effective system of teacher training and competence development.
Programme of the Government of the Republic of Lithuania	The government programme includes priority projects related to young people's skills in the area "Equal Starting Positions for all Lithuanian People". These include: 2.2. A good school for everyone and modern educational content. 2.3. Attractive teachers' workplace and teacher training "excellence" centres. 2.7. Modern, efficient and mission-oriented higher education management. 2.8. Vocational education and training system that meets market needs.

Source: Seimas of the Republic of Lithiania (2013[5]), *Dėl Valstybinės švietimo 2013-2022 metų strategijos patvirtinimo*, https://www.e-tar.lt/portal/legalAct.html?documentId=b1fb6cc089d911e397b5c02d3197f382.; Government of the Republic of Lithuania (2012[6]), Lithuania's Progress Strategy Lithuania 2030 (Lietuva 2030), https://www.lietuva2030.lt/en/; Seimas (2013[7]), Lithuanian National Education Strategy 2013-2022, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.463390; Government of the Republic of Lithuania (2020[8]), 2021–2030 metų nacionalinis pažangos planas [National Plan for Progress 2021-2030], https://ministraspirmininkas.lrv.lt/uploads/ministraspirmininkas/documents/files/NPP%20planas.pdf; Seimas (2020[9]), Resolution No Xiv-72 on the Programme of the Eighteenth Government of The Republic Of Lithuania.

This chapter considers opportunities to better equip young people in Lithuania with skills for work and life using the definitions in Box 2.1.

Box 2.1. Definitions

Young people are defined in this report as people aged 0 to 29 years old, as in the Lithuanian context this covers the age groups eligible for and/or likely to be enrolled in learning, from early childhood education through to tertiary education.

The process of developing young people's skills includes learning:

- In various learning contexts (educational institutions, communities and workplaces).
- At different levels of education (pre-primary, primary, secondary and tertiary education).
- In different forms of learning, namely formal (leading to a recognised qualification) and non-formal education and training (e.g. extracurricular music, arts, theatre, sport, camps).

"Skills for work and life" refers to the competencies (knowledge, skills, attitudes and values) that today's students need to thrive in and shape the world, both today and in the future. In particular, this chapter focuses on young people's cognitive skills (e.g. literacy and problem solving), social and emotional skills (e.g. perseverance and teamwork), and technical skills (e.g. in mechatronics and life sciences), as these are, to varying degrees, the focus of the Programme for the International Assessment of Adult Competencies (PIAAC) and the Programme for International Student Assessment (PISA).

Source: OECD (2019[3]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.; OECD (2019[1]), *OECD Learning Compass 2030: A Series of Concept Notes*, https://www.oecd.org/education/2030-project/contact/OECD_Learning_Compass_2030_Concept_Note_Series.pdf.

Overview and performance of young people's skills development in Lithuania

Overview of Lithuania's education and training system

Lithuania's education system is relatively decentralised. National institutions, municipalities and educational institutions all share responsibility for the quality of education provided (Table 2.2).

Table 2.2. Lithuanian government and stakeholder bodies responsible for young people's skills

Body	Responsibilities
Parliament (the Seimas)	Establishes the national education policy. It adopts laws that regulate the educational field, for example the Law on Education, the Law on Vocational Education and Training, and the Law on Higher Education and Research. The Seimas also adopts a national education strategy every 10 years, which is prepared by the government (i.e. Lithuania's National Education Strategy for 2013-2022). It can adopt guidelines for policy change in individual areas of education, such as the 2017 Guidelines for Change at General Education Schools. The Seimas considers and approves the annual state budget and funds for municipal budgets. This includes the approval of funds for education (for the "student basket" and "class basket", for universities, and for other educational and scientific institutions, etc.). The Seimas also exercises parliamentary scrutiny over the implementation of strategic documents, laws etc., and establishes state universities. The Education Council of Lithuania is an advisory body that provides legal counsel to the Seimas concerning legislation on education.
Ministries	
Ministry of Education, Science and Sport (SMSM)	Develops, implements and monitors national policy on education and research and higher education studies. According to the Law on Education, the SMSM is primarily responsible for the quality of education and for the financing of education. The SMSM co-ordinates the activities of municipalities' education departments (local level) in implementing state education policy. The SMSM approves the criteria for preschool education curricula, the General Curriculum Framework for Pre-Primary Education, the Description of the Procedure for Pre-Primary Education, and the general content of formal education and training (descriptions of primary, lower secondary, upper secondary education programmes, general curricula and teaching plans). The minister also approves the criteria for education programmes supplementing formal education (i.e. non-formal programmes) financed by state or municipal funds.

Body	Responsibilities
The Ministry of the Economy and Innovation (EIM)	Responsible for creating and implementing human resource development policy. EIM's skills development policies target and seek to expand and deepen the knowledge, skills and competences of the working age population (16+). It is therefore involved in the recognition of regulated professional qualifications. Along with the SMSM, the EIM sets and approves the procedures for a professional training standards structure and the preparation and modification of professional training standards.
Ministry of Social Security and Labour (SADM)	Supports young people's skills development through Lithuania's public employment service (PES) and youth work (a broad range of social, cultural, educational, sports-related and political activities carried out with, by and for young people through non-formal and informal learning). The SADM is responsible for employment and labour market services implemented by the PES. Young unemployed persons up to 29 years of age are a separate target group for the PES and receive specific measures (including training) to help them integrate into the labour market.
Government institutions/agencies	
Department of Youth Affairs	A separate institution under the SADM that implements the objectives of the state youth policy through measures to enhance the motivation of, and possibilities for, youth to acquire education, get work and engage in an active social life. The department also takes part in solving youth related problems and develops non-formal education for youth.
National Agency for Education (Nacionalinė švietimo agentūra, NSA)	Under the SMSM, this agency has a mission to implement the state's preschool, pre-primary and general education policies, and induce education institutions (except for higher education institutions) and other education providers to ensure the quality of education. It does this by providing information, counselling, qualification improvement and (self-) education assistance; conducting education monitoring and education research; and developing the education curriculum and co-ordinating its implementation
Qualifications and Vocational Education and Training Development Centre (KPMPC)	Under the SMSM, KPMPC manages the Lithuanian qualifications system and seeks to improve vocational education and training (VET) quality. It also, among other things, implements VET qualification development initiatives.
Lithuanian Centre of Non-formal Youth Education (LMNSC)	Under the SMSM, the LMNSC initiates and participates in the preparation of legal acts; submits proposals to create, implement and disseminate innovations on the issues of non-formal education policy for children; prepares and improves in-service training programmes for teachers; and provides methodological assistance.
Centre for Quality Assessment in Higher Education (SKVC)	Under the SMSM, SKVC is an independent public agency that implements the external quality assurance policy in higher education and contributes to the development of human resources by the creation of enabling conditions for free movement. The centre was founded by the SMSM as an expert institution.
Government Strategic Analysis Center (STRATA)	Provides government and ministries with the independent, research-based information required to make evidence-based public policy decisions, for example through the reports "Vocational Education in Lithuania 2019" and "Overview of Lithuanian Higher Education, Research and Innovation Status".
Municipalities	Implement the national education policy. Responsible for ensuring formal education up until the age of 16 (organising preschool education, pre-primary education, general education, vocational training and vocational guidance, and other non-formal and informal education for children). They also organise transportation to educational institutions, and other aspects.
Stakeholders	Various associations represent education and training institutions, schools heads, teachers, employers, and municipalities in equipping young people with skills for work and life.
Sectoral professional committees	Advisory bodies, established on the basis of co-operation, that are intended to co-ordinate strategic issues of qualification system formation and VET in specific economic sectors according to economic function, product, services and technologies.

Source: Government of the Republic of Lithuania (2020[10]), OECD Skills Strategy for Lithuania Questionnaire; Eurydice (2021[11]), *Lithuania Overview*, https://eacea.ec.europa.eu/national-policies/eurydice/content/lithuania_en.

A range of providers deliver learning opportunities to young people in Lithuania, the majority of which are public institutions. Participation in education is concentrated in general rather than vocational programmes (Table 2.3).

Table 2.3. Institutions providing formal and non-formal education in Lithuania (2019)

Type of educational institution	ISCED levels provided	Main orientation of the programmes provided	Total number of educational institutions	Number of public educational institutions	Total number of participants
Formal education					
Preschool (*ikimokyklinio ugdymo mokykla*)	0	(-)	779	593	103 067
Primary school (*pradine mokykla*)	1	(-)	141	118	28 357
Pre-gymnasium (*progimnazija*)	1, 2	G	160	154	95 601
Lower secondary school (*pagrindine mokykla*)	1, 2	G	307	288	59 901
Gymnasium (*gimnazija*)	2, 3	G	404	379	162 956
VET institution (*profesinio mokymo mokykla*)	2, 3, 4	V	70	64	27 826
Sectoral practical training centres within VET institutions	2, 3, 4	V	42	42	(-)
Special schools (*specialioji mokykla*) (for children with special educational needs)	0, 1, 2, 3	G	44	43	3 864
Colleges (*kolegija*)	6	V	22	12	32 931
Universities (*universitetas*)	6-8	G	19	12	73 011
Non-formal education					
Education providers of accredited non-formal education programmes for children	(-)	(-)	1721*	220 (municipal funded)	214 104

Notes: G= General; V= Vocational; (-) Not applicable; *includes providers listed above whose main activity is not non-formal education (such as vocational and higher education institutions). ISCED is the International Standard Classification of Education.
Source: SMM (2020[12]), Education Management Information System (Švietimo valdymo informacinė sistema): Educational and Science Institutions: Groups, Types and Dependence (Švietimo ir mokslo institucijos pagal grupes, tipus ir priklausomybę) (2018/2019 school year); Eurydice (2020[13]), *Lithuania: Statistics on Educational Institutions*, https://eacea.ec.europa.eu/national-policies/eurydice/content/statistics-organisation-and-governance-44_en.

Lithuania's performance

Participation and completion of education

Young people's active participation in different levels and forms of learning from early childhood onwards is essential to help them develop skills for work and life. Lithuania continues to expand young people's enrolment in different levels and forms of education and training. However, participation remains relatively low in certain types of learning, and for certain groups of learners.

Participation in early childhood education has risen, but some groups of children still miss out. From 2005 to 2017, the enrolment rates of children under the age of 3 in education in Lithuania doubled to 25%. However, participation remains slightly below the averages for Latvia and Estonia, and well below the OECD average (36%), largely reflecting parental leave arrangements that allow a parent to stay home with a child under the age of 2 (OECD, 2019[14]). Enrolment rates of children from age 3 to age 6 in education in Lithuania have also risen over time and are consistent with the OECD average (OECD, 2019[14]). However, in both cases participation gaps between advantaged and disadvantaged children and urban and rural children remain relatively large (European Commission, 2019[15]) (OECD, 2017[16]). The OECD previously recommended that Lithuania should expand participation in rural areas by stimulating parental demand for childcare services, among other measures (OECD, 2017[16]). Since then, the Lithuanian government has lowered the compulsory starting age of preschool education for children determined to be at "social risk", while also introducing other measures such as improved transport to/from preschool facilities in rural areas (Seimas of the Republic of Lithuania, 2020[17]).

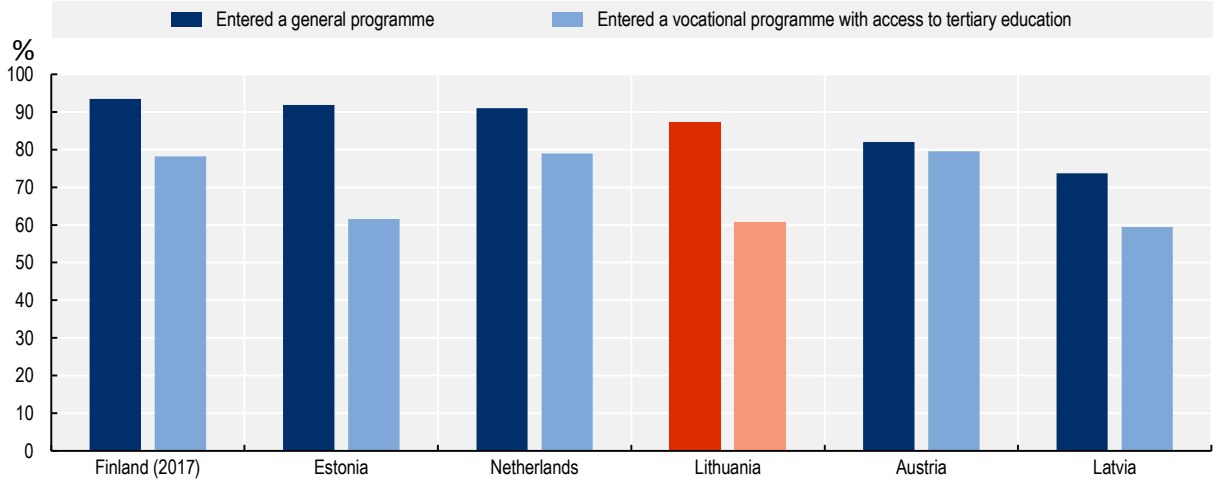
Participation and completion rates in primary and secondary school are among the highest in the OECD overall. Participation in primary and lower secondary education is universal, while participation of 15-19 year olds in formal education (94% in 2018) is among the highest of all OECD countries (OECD, 2020[18]). Lithuania has the second lowest early leaving rate from education and training in the European Union (EU) (4.7%), and the rate in rural areas almost halved from 11.6% in 2010 to 6.6% in 2018 (European Commission, 2019[15]).

However, initial VET programmes remain unpopular, and are over-represented with males and low-performing, typically disadvantaged students. The share of upper secondary students attending vocational programmes (27% in 2018) is well below the OECD average of 42% (although in a small number of municipalities, including Visaginas, VET is more popular than general education). None of Lithuania's secondary VET students were in combined school- and work-based programmes[1] (such as apprenticeships) in 2018, according to international data. However, more recent national data show that about 1.9% of initial VET students were in apprenticeships in 2018-2019 (EC, 2020[19]). Furthermore, the share of women in upper secondary VET (35%) is lower than in all OECD countries except Greece, in part reflecting the concentration of VET activity in male-dominated fields (especially engineering, manufacturing and construction) (see below) (OECD, 2020[18]). VET students are more likely than general (gymnasium) students to report that they are from single parent families and a poor family situation, and receive some kind of social support (Beleckienė et al., 2020[20]).

Fewer upper secondary VET students in Lithuania complete their programme (61% in 2018) than the OECD average for VET students (70%) and for Lithuanian students in general education (87%) (Figure 2.1), although the share of VET drop-outs in Lithuania has been decreasing (Beleckienė et al., 2020[20]). Females perform particularly poorly in VET in Lithuania, with only 57% completing their VET programme compared to 90% in general upper secondary, the largest gap in the OECD (OECD, 2020[18]).

Figure 2.1. Completion rate of upper secondary education, by programme orientation (2018)

Completion rate within the theoretical duration plus two years



Note: Countries are ranked in descending order of the completion rate of students who entered a general programme (for true cohort, by the theoretical duration plus two years).

Source: OECD (2020[18]), *Education at a Glance 2020: OECD Indicators*, https://doi.org/10.1787/69096873-en.

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A high proportion of young people in Lithuania have attained tertiary education. In 2019, tertiary attainment among those aged 30-34 was 57.8%, among the highest of all EU-27 countries, and above the national EU2020 target (48.7%) (European Commission, 2019[15]). A relatively high proportion (about two-thirds) of tertiary educated young adults in Lithuania have a bachelor's level qualification (OECD, 2019[14]), in part

because many graduate from colleges, which offer three-year professional (vocationally oriented) bachelor degrees (Table 2.3) (OECD, 2017[16]). However, the high tertiary education rate is also the result of high emigration of lower educated youth, which is helping to mask declining enrolments in tertiary education since 2011 owing to population decline. Furthermore, short-cycle tertiary programmes, which can provide participants with professional knowledge, skills and competencies (for example bank officers, lawyer assistants, technologists), were established in law in 2018 but are yet to be offered by institutions. In contrast, 10% of young people across the OECD are expected to enter short-cycle education by the age of 25 (OECD, 2019[14]).

Disadvantaged and VET students are under-represented in tertiary education. In 2020, only 17% of upper secondary graduates from the lowest income quintile entered tertiary education, compared to 68% from the highest income quintile. The access of disadvantaged students to higher education (HE) has not improved since 2015 (Strata, 2020[21]). Pathways between VET (where low performing and disadvantaged students are over-represented) and HE are weak, with students from vocational upper secondary programmes representing only 1% of entrants into bachelor's programmes in Lithuania, compared to 28% across the OECD on average (OECD, 2019[14]).

Completion rates in tertiary education are not high. Completion rates[2] for bachelor degree students in Lithuania (65%) were slightly below the OECD average (67%) in 2017, and were particularly low for males (15 percentage points less than females) and students from VET schools (16 percentage points lower than general education students) (OECD, 2019[14]). Completion rates for tertiary students are slightly higher in colleges than in universities, and differ considerably by field of study. For example, only about 50% of tertiary students (in both colleges and universities) in information and communication technology (ICT) programmes complete their studies, compared to 71% of students in technological sciences in universities, and 87% of students in physical sciences in colleges. One reason given by students for not completing ICT programmes was that secondary school did not sufficiently prepare them for the programmes (Kuodytė, 2020[22]). More generally, the officials and stakeholders consulted during this skills strategy project (project participants) raised concerns that schools may not be preparing students to successfully complete their tertiary studies. For example, in 2020 only about 65% of school leavers passed the state's school leaving/higher education entry examination (*matura*) in mathematics, compared to 82% in 2019 (National Agency for Education, 2020[23]).

Participation in non-formal education is high and growing, but unequal across regions. Across the OECD, countries are investing in various types of non-formal education for young people, such as cultural, political, social, sporting, or scientific activities, which may be delivered as extracurricular activities, youth work, volunteering, etc. A key goal of non-formal education is to complement the formal curriculum to help young people develop broad skillsets. Non-formal education can have considerable benefits for young people. In PISA 2018, students enrolled in schools that offered more creative extracurricular activities performed better in reading, on average, than students with fewer available extracurricular activities, even after accounting for student and school socio-economic profile (OECD, 2020[24]). Yet in Lithuania, the supply and diversity of non-formal education activities are not equal in all schools and regions. For example, a relatively high share of schools offer "creative" extracurricular activities (band, orchestra or choir; school play or school musical; and art club or art activities). However, disadvantaged, rural and public schools offer fewer of these activities than other schools. In particular, while the supply of non-formal science, technology, engineering and mathematics (STEM) programmes, including robotics and coding camps, is a priority in current policy, it has been unequal across regions and less accessible to youth in rural areas. Some pedagogues have also expressed concerns about the quality of teaching and learning in existing non-formal STEM programmes (Bilbokaitė, Šlekienė and Bilbokaitė-Skiauterienė, 2018[25]) (see Opportunity 1: Successfully implementing and complementing modern curricula).

In the context of COVID-19, the impact of school closures and remote learning on participation and completion in Lithuania need to be closely assessed. Across the OECD there has been evidence of higher drop-outs in post-compulsory education during school closures, especially among students from

disadvantaged backgrounds (OECD, 2020[26]). Publicly available data and research on these effects are currently limited in Lithuania, and will need to be assessed by relevant authorities.

Learning expectations and outcomes

Beyond participating in and completing education programmes, it is essential that young people of all backgrounds develop a range of skills to a high level during their studies, and build positive expectations for their future learning and work. Despite Lithuania's strong overall performance in involving young people in different forms of education and training, students are not developing high levels of skills.

Lithuania's students do relatively well at learning the knowledge taught in school curricula during initial education. The Trends in International Mathematics and Science Study (TIMMS) and the Progress in International Reading Literacy Study (PIRLS) assess how well year 4 and year 8 students have mastered the factual and procedural knowledge taught in school curricula. According to TIMSS 2019 and PIRLS 2016, the achievements of Lithuanian fourth and eighth grade students in mathematics, science and reading are above the average for participating countries, and have generally been improving over time (Mullis et al., 2020[27]).

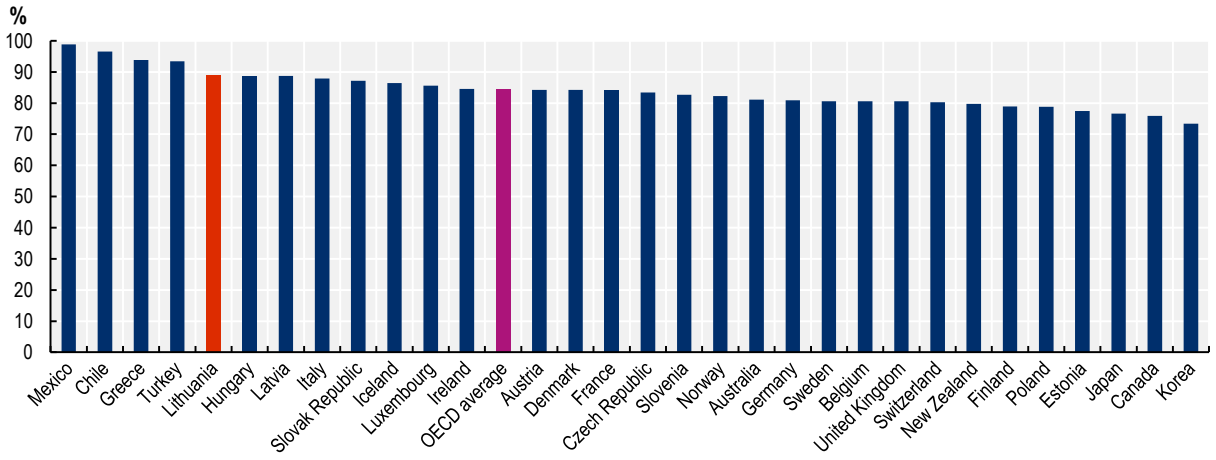
However, Lithuania's students do less well at applying their knowledge in real-world settings. PISA assesses how well 15-year-old students can both reproduce and extrapolate from what they have learned in science, mathematics and reading, as well as how they apply their knowledge in unfamiliar settings. According to PISA 2018, the performance of 15-year-old students in reading, mathematics and science remained below the OECD average, and had not clearly improved over time (OECD, 2019[28]). A high share of 15-year-old students in Lithuania (almost 90%) are not high performers in any of the three PISA domains (Figure 2.2). These results are not directly comparable with TIMMS and PIRLS as they assess different constructs and different samples of students, and do not include the same countries. However, they do suggest that Lithuanian students need to develop stronger skills in applying their knowledge in real world settings in the school years.

Young people in Lithuania also have lower collaborative problem-solving skills (their capacity to work with others to build understanding, share effort and reach a solution) than young people in most other OECD countries (OECD, 2019[28]). These skills are increasingly important as young people will need to collaborate with people from different cultures, appreciate a range of ideas and perspectives, and work with others on more complex tasks often in highly digital environments.

Lithuania has relatively large performance differences between students in rural and urban schools, and in public and private schools, which are driven by differences in students' socio-economic status. According to PISA 2018, the performance of students from rural areas is persistently lower than the performance of urban students, and this gap is almost twice as large as in Latvia and four times larger than in Estonia. This is driven by higher levels of socio-economic disadvantage among students in rural schools rather than their location. After controlling for differences in students' social-economic status, Lithuania is actually one of the few countries in which rural students outperform urban students (OECD, 2020[29]). Furthermore, the small number of students in private schools (4%) outperform students in public schools to a greater extent than in all OECD countries except Greece, Slovenia and Columbia. However, again this gap disappears after controlling for differences in students' socio-economic status (OECD, 2020[24]).

Figure 2.2. Students who are not top performers, PISA 2018

% of 15 year olds who are not top performers (Level 5 or 6) in any of the three domains (reading, mathematics, science) in PISA 2018



Source: OECD (2019[28]), *PISA 2018 Results (Volume I): What Students Know and Can Do*, https://doi.org/10.1787/5f07c754-en.

StatLink https://stat.link/k1d5i0

The expectations of Lithuanian students for the future are not particularly high, and differ considerably by socio-economic background. For example, according to PISA 2018, far fewer disadvantaged students than advantaged students expect to complete tertiary education, and this gap (44 percentage points) is among the largest in the OECD. Relatively few high-performing (science and/or mathematics) students in Lithuania expect to work as science, engineering or health professionals, owing largely to low expectations among boys (OECD, 2019[30]). Low student demand and preparedness for certain STEM studies (such as ICT) have historically been a challenge for meeting skills needs and realising Lithuania's smart specialisation goals (see Opportunity 3: Making vocational and higher education more responsive to labour market needs).

The skill levels of recent graduates in Lithuania are not consistently high. According to the 2015 PIAAC Survey of Adult Skills, for example, 16-34 year-old graduates from upper secondary VET programmes in Lithuania have lower literacy, numeracy and problem-solving skill levels than VET graduates in most other OECD countries. Furthermore, only in Lithuania are the skill levels of upper secondary VET graduates no higher than those of lower secondary graduates. Tertiary graduates have literacy and numeracy skill levels similar to the OECD average, but relatively low levels of problem-solving skills. While general upper secondary and tertiary graduates have higher skill levels than lower secondary graduates in Lithuania, the difference is smaller than in most other OECD countries (Vandeweyer and Verhagen, 2020[31]), suggesting a greater role for developing young people's skills in higher levels of education.

In the context of COVID-19, the impacts of school closures and remote learning on student performance in Lithuania need to be closely assessed to ensure that anyone who fell behind receives support to catch up. "Learning losses" could be large and persistent, with young learners from disadvantaged backgrounds facing the greatest risks of falling behind (OECD, 2020[4]). In Lithuania, measures to provide pupils with computers and Internet during school closures could lead to significant gains in digital teaching and learning capacity (National Audit Office of Lithuania, 2020[32]). However, it will be important to consolidate these gains beyond the immediate crisis, and to assess how remote learning has affected student performance overall, and for specific groups of learners and schools.

Responsiveness and graduate outcomes

Successfully equipping young people with skills for work and life can positively affect their employment outcomes and help to lower skills mismatches in the labour market. While there is strong and growing demand for tertiary level skills in Lithuania, demand differs by field of study, and various medium-level and advanced vocational skills are also important for the economy. The available evidence suggests that the success of Lithuania's initial VET and HE systems in meeting these diverse skills needs is mixed, limiting the benefits of education and training for youth, employers and the economy. The challenges for policy are to increase the share of graduates finding well-matched jobs, improve employment outcomes for VET graduates specifically, and ensure students and institutions understand and have the capacity and incentives to respond to evolving skills needs in the labour market.

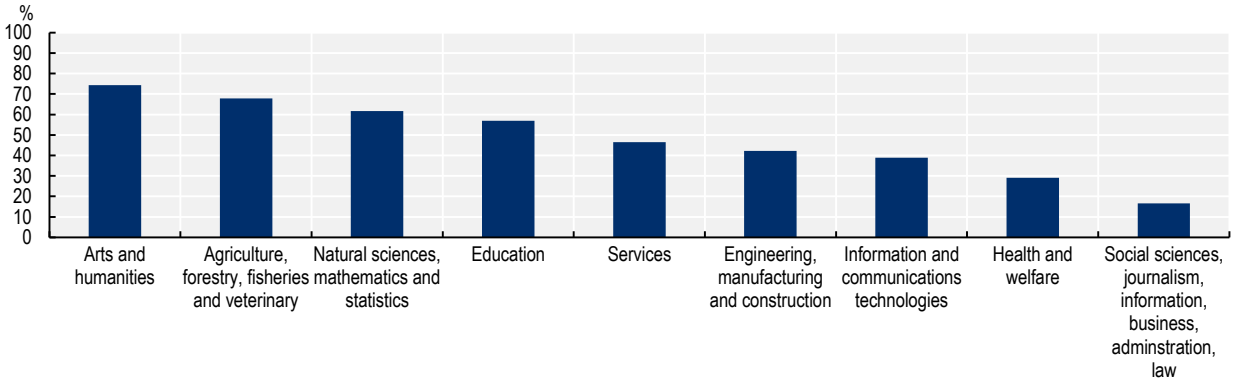
HE graduates experience much better employment outcomes than VET graduates in Lithuania, signalling relatively strong labour market demand for tertiary level skills. In 2019, young tertiary educated adults (25-34 year olds) in Lithuania had among the highest employment rates in the OECD (92%) (OECD, 2020[18]). They earnt 58% more than upper secondary educated young adults, which is one of the largest earnings advantages in the OECD. Transitions to the labour market are relatively fast, with approximately 70-75% of bachelor's and 80-82% of master's students finding employment within six months of graduating (Jakštas et al., 2018[33]). Employment rates for recent VET graduates in Lithuania (81%) are similar to the OECD average, but are 11 percentage points lower than for HE graduates, one of the largest differences in the OECD. Furthermore, unlike in most OECD countries, upper secondary VET graduates in Lithuania do not perform much better than graduates of general upper secondary education in finding work (OECD, 2020[18]).

While the vast majority of HE and VET graduates find work, many are mismatched with their jobs, suggesting that education could be more responsive to the labour market. Skills mismatches are costly – according to PIAAC, over-qualified workers in Lithuania earn on average 17% less than well-matched workers, while workers who are mismatched by field of study earn about 8% less, a rate higher than all OECD countries except Estonia (OECD, 2019[34]). In 2019, about 41% of employed HE and VET graduates in Lithuania (aged <35, not in formal education) were mismatched with their jobs by field of study and/or qualification level. While this was below the average for EU member countries (about 45%), both HE and VET graduates in Lithuania were more likely to be mismatched by field of education (about one-third of graduates) than the average for EU member countries. About one-fifth of HE graduates are over-qualified, and Lithuanian data show that approximately one-fifth of recent university bachelor graduates and one-third of college bachelor graduates work in low-skilled jobs (Jakštas et al., 2018[33]).

Graduate levels of mismatch, and to a lesser extent employment, differ depending on field of study, further suggesting a lack of responsiveness to labour market needs. For example, in 2018 the employment rate for tertiary graduates aged 25-34 years old ranged from 84% for graduates of arts and humanities to 95% for graduates of engineering, manufacturing and construction (OECD, 2020[18]). However, this range is consistent with the OECD average, and lower than the ranges observed in Latvia (14 percentage points) and Estonia (23 percentage points). Lithuanian research shows that VET graduate employment is very low for some fields of study (ranging from 55.6% for architecture and construction graduates [in part reflecting undeclared work] to 92.2% for security service graduates) (Beleckienė et al., 2020[20]). In tertiary education, levels of mismatch also differ considerably by field of study. In Lithuania, a relatively high share of young tertiary graduates from the fields of education, agriculture, and arts and humanities work in jobs not matched to their field of study (Figure 2.3).

Figure 2.3. Young tertiary graduates experiencing field-of-study mismatch, by field, 2019

Share of employed tertiary graduates (<35 years old, not in education) whose job is not matched with their field of study, by field of study



Source: Vandeweyer and Verhagen (2020[31]), "The changing labour market for graduates from medium-level vocational education and training", *OECD Social, Employment and Migration Working Papers*, No. 244, https://doi.org/10.1787/503bcecb-en.

StatLink https://stat.link/zs2hl9

In line with these current labour market signals, a large share of school leavers are enrolling in HE. Enrolments in VET, however, may be too low to meet future demand for certain middle- and higher-skilled jobs. Recent forecasts suggest that over the next decade, Lithuania could face a shortage of medium-qualified workers in occupations such as service workers and shop and market sales workers, as well as plant and machine operators and assemblers, and craft and related trades workers (Cedefop, 2020[35]). Furthermore, higher-level VET qualifications, especially in non-traditional fields such as software development, network engineering and cybersecurity, are becoming increasingly important for OECD countries (Vandeweyer and Verhagen, 2020[31]). Such qualifications have the potential to play an important role in meeting Lithuania's labour market needs for mid- to high-level STEM skills (for example in engineering and information technology). However, as noted earlier, enrolments in upper secondary VET are among the lowest in the OECD, and only 1.5% of 15-19 year olds are enrolled in post-secondary non-tertiary education (which is vocationally oriented). Tertiary institutions do not currently offer short-cycle tertiary programmes, despite the potential for these programmes to quickly meet evolving labour market needs (and offer a pathway for upper secondary VET graduates into higher education). Furthermore, colleges that offer vocationally oriented professional bachelor degrees account for a relatively small share of HE enrolments (about 30%).

By field of study, recent enrolment and graduation patterns in HE and VET are broadly similar to the OECD average, but in some areas do not appear to be closely aligned with Lithuania's skills needs. In 2018, 32% of new entrants to tertiary education in Lithuania (ISCED 5-8) entered the three fields comprising STEM (natural sciences, mathematics and statistics; ICT; engineering, manufacturing and construction), a rate surpassed by only the United States (39%). Within these fields, Lithuania has a relatively large number of entrants to engineering, manufacturing and construction (21%). Some of these sub-fields have actually been experiencing skills surpluses (OECD, 2018[36]). Furthermore, there are relatively few entrants to natural sciences, mathematics and statistics (4%) (OECD, 2019[14]), a field that project participants stated as being highly relevant for Lithuania's smart specialisation priorities, such as energy and sustainable environment, health technologies, and agricultural innovation. There are also low levels of enrolment in some VET fields of strategic importance to Lithuania. As noted earlier, enrolments in upper secondary vocational education are highly concentrated in the fields of engineering, manufacturing and construction,

as well as services (OECD, 2020[18]). Certain study fields linked to newer technologies and industries – such as ICT and environmental protection – comprise a very small share of VET enrolments.

Increasing the responsiveness of VET and HE in Lithuania will be essential to complement short-term youth employment measures in the context of the coronavirus crisis and to improve graduate outcomes in the medium-long term. The economic disruption caused by COVID-19 has lowered job prospects for recent graduates, with youth unemployment (15-24 year olds) reaching 28% in November 2020, the highest rate since 2012 (OECD, 2021[37]). Even with a best case scenario, the OECD forecasts that overall unemployment in Lithuania will be 9.1% in 2020 and 8.2% in 2021, well above 2019 levels (6.3%) (OECD, 2020[38]). Graduates' initial labour market experience has a profound influence on later working life, and a crisis can have long-lasting negative effects on employment and earnings perspectives (OECD, 2020[39]). As Lithuania implements short-term measures such as the reinforced Youth Guarantee, which offers comprehensive job support to young people, it will be essential that it also closely monitors how graduate employment and mismatches evolve in the current environment, and seeks to make education more responsive to evolving labour market needs.

Opportunities to better equip young people with skills for work and life

Lithuania's performance in equipping young people with skills for work and life reflect many factors that include individual, institutional and system-level factors, as well as broader economic and social conditions in the country. However, three critical opportunities for improvement have been identified based on a review of literature, desktop analysis, and data and input from officials and stakeholders consulted as part of this project.

The OECD considers that Lithuania's main opportunities for improvement in the area of equipping young people with skills for work and life are:

1. Successfully implementing and complementing modern curricula.
2. Strengthening Lithuania's teaching workforce.
3. Making VET and HE more responsive to learner and labour market needs.

While Lithuania also needs to improve skills needs intelligence and career guidance in order to better equip young people with skills for work and life, these issues are discussed in Chapter 5 of this report.

Opportunity 1: Successfully implementing and complementing modern curricula

Raising students' performance in the school years and equipping them with the skills needed for success in work and life requires, among other things, a modern and effective school curricula. Previous research has highlighted the importance of curriculum for the quality of education and student outcomes (Wyse, Hayward and Pandya, 2016[40]; OECD, 2019[41]; Voogt et al., 2016[42]). Curricula design can also have implications for equity, as students from disadvantaged backgrounds tend to benefit when curriculum content is challenging, and may not reach their potential if able to choose lower level courses (Voogt et al., 2016[42]). This is particularly important for Lithuania's VET schools, in which low-performing students from disadvantaged backgrounds are relatively concentrated. For Lithuania, it is essential that the SMSM and stakeholders successfully design, implement and communicate the new general curriculum framework for primary, basic and secondary education in both general and vocational education schools to improve students' performance. Lithuania's new competency based curricula will also need to be complemented by modern assessment practices and more high-quality and better targeted non-formal education and training outside of the classroom.

Lithuania, like many other OECD countries, is tackling the great challenge of identifying what kinds of competencies today's students need for the future, and how to design learning environments and

implement curricula to equip students with such competencies. The OECD's Future of Education and Skills 2030 project (Education 2030) is developing a future-oriented conceptual learning framework that supports a common understanding of what knowledge, skills, attitudes and values are important for students to learn (e.g. the OECD Learning Compass 2030). It is also conducting an international comparative analysis to guide evidence-based debates and facilitate international peer learning and self-reflection on curriculum redesign for the future. As part of this, Lithuania has participated in the OECD's Curriculum Content Mapping document analysis exercise, which involved mapping seven learning areas of the curriculum against a list of 28 competencies that stem from the Learning Compass 2030 to explore how knowledge is intended to be taught together with skills (e.g. critical thinking, creative thinking, co-operation/collaboration), attitudes and values (e.g. respect, empathy). Lithuania has also participated in the Mathematics Curriculum Document Analysis project to investigate the extent to which it has incorporated 21st century skills into the current mathematics curriculum. Key results from these exercises are summarised below. Looking forward, the OECD is preparing thematic reports on curriculum redesign that can further inform Lithuania's efforts. These reports cover curriculum overload, managing the time lag between today's curriculum and future needs, ensuring equity through curriculum innovations, managing curriculum flexibility and autonomy, embedding values into the curriculum, and designing/planning for effective implementation (OECD, 2019[1]).

Lithuania is in different phases of curriculum reform at different levels of its education system. The phases of curriculum reform include planning, decision making, preparation, implementation and monitoring (OECD, 2021[43]). In Lithuania, updated pre-primary and secondary vocational education and training curricula have been implemented and are now in the monitoring phase. In 2016, the pre-primary education programme was updated to foster entrepreneurship, ICT and social competencies, and to improve cohesion with the primary education curriculum. This comes with updated methodological and teaching guidance to preschool and pre-primary teachers (Government of the Republic of Lithuania, 2020[10]). However, implementation of the curriculum has been hampered by a number of factors, including teachers' lack of ICT skills (see Opportunity 2: Strengthening Lithuania's teaching workforce). VET curricula were updated in 2015 and included a move to modular VET programmes. VET curricula are updated on an ongoing basis, as professional standards are updated (Eurydice, 2019[44]).

Several participants in this project argued that the current priority for Lithuania is the general school curricula, in particular ensuring the success of the ongoing update of the general curriculum framework for primary, basic and secondary education (ISCED 1-3). The SMSM is currently finalising the preparation phase and entering the implementation phase of the update. Participants highlighted the need to successfully implement the general curriculum framework by effectively engaging with school leaders and teachers, communicating the general curriculum framework in a clear and accessible way, and complementing new curricula with modernised assessment practices and high-quality non-formal education and training. Project participants also highlighted the need to complement new curricula with high-quality teaching (see Opportunity 2: Strengthening Lithuania's teaching workforce), and ensure the curricula prepare students to further develop skills (such has mathematics) in tertiary education that meet labour market needs (see Opportunity 3: Making vocational and higher education more responsive to labour market needs).

Implementing the new general education curricula and modern assessment practices

The SMSM has identified several weaknesses with the current general curriculum framework for primary, basic and secondary education (ISCED 1-3). The Curriculum Content Mapping that Lithuania carried out within the scope of the OECD project Education 2030 found that the general curriculum framework of certain subjects (such as mathematics) covers less content and is less demanding than in other OECD countries. Furthermore, the inclusion of certain skills, qualities, abilities and values (perseverance and resilience, trust and respect) in the general curriculum framework is unbalanced: over-prominent in some subjects and lacking in others. And while certain competences such as problem solving or critical thinking

are often indicated in the general curriculum framework for various subjects, they do not appear to be translating into student competences according to national and international metrics (e.g. PISA). Finally, the standardised examination system (culminating in the *matura* exit examination) does not directly assess many of the transversal competencies targeted by the curricula, thereby narrowing teachers' and students' educational goals to subject proficiency, and limiting the possibility for students to receive ongoing feedback (OECD, 2017[16]; National Agency for Education, 2019[45]).

Participants in this project reiterated the importance of addressing these and other problems with the current general education curricula in Lithuania. They stated that general competences (such as perseverance and resilience, trust and respect) are not yet well integrated across subjects, particularly in middle school (lower secondary), and there is little interdisciplinary content in the curriculum. Curricula at different levels of education still lack coherence as they differ in how they prioritise similar knowledge, skills, values and attitudes. This disadvantages students transitioning between levels of education. The curricula, and therefore teachers and students, are overloaded with an excessive amount of content to be taught and learned in the available time (particularly in middle school). General school curricula have expanded steadily over time to include new competencies, and the same knowledge is taught several times across different learning stages. Some project participants also raised concerns that the implementation of the general curriculum in vocational schools is of a lower quality than in general education schools, which may be limiting performance and equity in secondary education. Furthermore, student assessment continues to be focused on subject matter knowledge rather than cross-cutting competences, and still relies on high-stakes exams (*matura*) rather than moderated grading or formative assessment. Even with the best curricula, this is a disincentive to teaching and learning the cross-cutting skills, values and attitudes required for success in work and life. Early childhood education is not included in the current reform of the school curriculum, so ensuring coherence between these levels of learning will be essential.

In order to address many of these challenges and ensure higher quality general education, the SMSM, as mentioned, is currently updating the general curriculum framework for primary, basic and secondary education (ISCED 1-3). In 2019, Lithuania developed the Guidelines for Updating the General Curriculum Framework for primary, basic and secondary education. These guidelines draw on an impressive range of national and international evidence, and cover changes to the goals, learning outcomes (competences), learning content and assessment of student achievements. They seek to ensure that new curricula integrate sustainable development, creativity, entrepreneurship and STEAM competences (science, technology, engineering, art [creative activities] and mathematics). They establish competence-oriented education covering knowledge (subject, interdisciplinary, procedural and epistemic), skills (cognitive, metacognitive, emotional, social and practical) and values (personal, interpersonal and societal). Based on the guidelines, Lithuania is updating school curricula in 2020/2021 with the involvement of over 120 experts (National Agency for Education, 2019[45]). The new curricula is planned to be implemented in schools in 2022. Recommendations for implementation are being developed that involve illustrating achievement levels with examples, such as indicating the interconnection of interdisciplinary topics within the area of education and the subjects taught, giving examples of student activities associated with (educational) learning outcomes, and proposing how to work with students with different educational needs (National Agency for Education, 2019[45]). The most recent government programme also sets a goal to better integrate digital literacy into STEM subjects (Seimas, 2020[9]).

Project participants highlighted limitations with the current update of the general curriculum framework. In terms of the guidelines and process for updating curricula, they commended the continued move to a competence-based curriculum, although some stated that the identification and definition of competencies remains vague. More generally, some project participants stated that the process lacks a clear vision, and that the SMSM has been only partially successful in co-ordinating the numerous and diverse actors and interests involved. Timelines are short given that this is a once-in-a-decade reform, school leaders and teachers have not been closely involved, and trade unions have mainly focused on teacher workloads and

salaries. Furthermore, project participants were concerned that teachers and school leaders currently lack the incentives, skills and capacity to properly implement the competence-based curriculum as currently designed, and may struggle with the increased flexibility afforded to teachers in the new curriculum without appropriate support (see Opportunity 2: Strengthening Lithuania's teaching workforce).

In order to successfully implement the current reforms of general school curricula it will be essential that authorities effectively engage stakeholders and complement the curricula with modernised assessment practices (Gouëdard et al., 2020[46]).

The SMSM and involved stakeholders should continue to refine and improve the quality of the curriculum design in the final steps of the preparation phase. In particular, they should seek to ensure that general competences are well integrated across subjects, and that there is sufficient interdisciplinary content in the curriculum, coherence between levels of education (including with pre-primary), and less overload. This could involve a close final expert review of the framework against the guidelines. The SMSM could start to articulate how assessment practices and teacher preparation, as well as school funding, could be adapted to complement the new curriculum, in order to equip young people with cross-cutting skills, values and attitudes for success in work and life, without leaving any schools or students behind.

The SMSM could strengthen its engagement of educational stakeholders in the implementation phase to support successful implementation. Policy makers, experts, teachers, school leaders and representatives of students and families should develop a shared understanding of what the vision and framework for the new curricula looks like in practice, and of each stakeholder's revised roles and responsibilities for implementation. This involves developing a shared overarching vision of what the curriculum implies for practice in schools, and defining associated operational objectives and indicators to monitor progress towards achieving the vision. The SMSM could develop knowledge, materials and space for the local and school level to be able to understand and collectively design their own curriculum reflecting the aspirations of the framework. This will likely require investments in developing the capacity of education professionals to be the main drivers of the curriculum in schools by enhancing their skills and competencies and promoting their collaboration (see Opportunity 2: Strengthening Lithuania's teaching workforce), and potentially by establishing collaborative networks that leverage curriculum expertise and resources, with wide participation from practitioners and experts.

Participants in this project also highlighted that a clear communications strategy including an interactive online portal for the new curriculum with support materials and good practices would be highly beneficial for practitioners. The SMSM has developed a reform website[3], but currently the information that it provides is relatively high level, and it does not offer support materials and good practices in an interactive format. New Zealand's Curriculum Online website[4] is an example of a more comprehensive online portal that aims to help educators create an engaging, inclusive, and dynamic curriculum that meets the needs of their unique school communities. The website offers a range of information, resources, news, advice, guidance, inspiring school stories, practical ideas and research reports, etc.

It will be important for the SMSM to devise a plan for ensuring that implementation of the curricula helps to reduce, and not intensify, longstanding inequalities in the education system. As noted earlier, curricula design can also have implications for equity, as students from disadvantaged backgrounds tend to benefit when challenged by curriculum content, and may not reach their potential if able to choose lower level courses (Voogt et al., 2016[42]). School leaders, teachers and students in disadvantaged schools will require relatively more guidance, training and resourcing in order to achieve the goals of the new curricula. Equity considerations should be prioritised in the provision of professional learning, school improvement services and resourcing to avoid risks of inequalities increasing with curriculum realisation (OECD, 2020[47]).

Lithuania should also define and begin to communicate how assessment practices will be reformed to support the curricula. This requires assessment approaches that give teachers and students incentives to develop all of the knowledge, values and skills defined in the new curricula. The OECD previously

recommended that Lithuania adopt moderated grading that contributes to students' tertiary entry scores, or realign the framework and content of the *matura* examinations to assess more of the competencies in curricula (OECD, 2017[16]). The current guidelines stipulate that evidence of student achievements in formal and non-formal contexts shall be collected in personal learning outcome folders (known as portfolios in some OECD jurisdictions, such as Queensland, Australia), and that this evidence shall be credited at the end of primary, basic and secondary education curricula (National Agency for Education, 2019[45]).

As the technologies to assess some of the desired outcomes of the new curricula may not yet exist, different assessment practices may be needed for different purposes, and new assessment methods should be developed that value student outcomes and actions that cannot be easily measured (OECD, 2019[1]). Lithuania's new 4k learning model (I create, I change, with others, for others) could help to serve this purpose as it promotes reflection-based student learning and self-development, with a focus on self and formative assessment (Ministry of Education, Science and Sport, 2020[48]). New Zealand takes an approach of "assessment for learning", a process by which teachers use assessment information to adjust their teaching, and students to adjust their learning strategies. Assessment is envisioned as a way to motivate and engage students in their learning because it is done in collaboration between the teacher and the learner (New Zealand Ministry of Education, 2021[49]). Additionally, alternative credentials (such as open digital badges and micro-credentials) could be utilised in secondary education to allow students to accumulate externally issued credentials that are recognised when entering tertiary education for specific areas of learning, with less emphasis on final exams (IMS Global Learning Consortium, 2021[50]; Kato, Galán-Muros and Weko, 2020[51]).

In order to successfully implement the new general education curricula, Lithuania could potentially build on its own good practice in national student achievement tests, and learn from curriculum reforms in Wales and Finland (Box 2.2). Wales (United Kingdom), a country of similar size to Lithuania, is ahead of Lithuania in its timelines for implementing a new school curriculum, and has partnered with the OECD in this journey. Finland completed a reform of its national core curricula at all levels of education between 2014 and 2017, ensuring coherence across the education system. Broad participation and support for municipalities and practitioners was central to Finland's approach.

Box 2.2. Relevant national and international examples: Implementing and complementing school curricula

Lithuania – National student achievement tests

National student achievement tests (*Nacionaliniai mokinių pasiekmų patikrinimai*) (standardised testing) have been used for school improvement, and could potentially be expanded to measure more general competencies (e.g. critical thinking) in line with the new curricula.

These tests examine the achievements of second, fourth, sixth and eighth grade students in general education schools. The tests currently cover reading, writing and mathematics (and science and social education for eighth grade students). Since 2011, the assessments have been carried out by the National Examination Centre (NEC).

Based on the test data, the SMSM prepares a series of publications for politicians, educators and the public that aim to provide a concise presentation of educational challenges. The available data are crucial for making decisions that improve teaching. Schools get anonymised results and can use them to compare themselves with others. In addition, NEC provides individual reports for assessed students (and their parents) on their learning outcomes.

Wales – Achieving the new curriculum

Wales has successfully mapped out its policy plan to move away from what had become a highly prescriptive national curriculum to one that focuses on the future, is adapted to learners' diverse needs, and puts teachers and principals back into positions of leaders of learning and teaching. The policy vision is clear and looks to the long term. The new curriculum framework aspires to best practices in terms of 21st century learning and gives high levels of agency for all stakeholders. The curriculum reform was developed as part of a wider reform agenda that included key complementary policies for its implementation. The Welsh Government and other system leaders have started developing initiatives to support schools with curriculum implementation.

The Welsh Government invited the OECD to assess the implementation of the new Curriculum for Wales, review the country's readiness to implement the new policy, and suggest next steps for implementation. The OECD found that the challenge for Wales will be to remain true to the vision, while shifting the perspective of the strategy from being policy driven to focused on schools. To ensure the intentions of the new curriculum translate into practice, it is essential for Wales to address several issues, including a lack of deep understanding of what successful realisation of the curriculum might look like in practice, challenges for schools to design their own curriculum, and implications in terms of developing specific capabilities. There is a risk of inequalities increasing due to the challenges that disadvantaged schools might have in implementing the curriculum, which accentuates the need to clarify the resources available for schools. Following OECD recommendations and discussions with practitioners, the Welsh Government and the Strategic Education Delivery Group updated their implementation strategy to guide the common effort to support schools through the curriculum launch, which is scheduled for September 2022.

Finland – Reform of national core curricula

Between 2014 and 2017, Finland reformed the national core curricula at all levels of education, forming a coherent line throughout the entire education system. The national reform process was guided by transparency and extensive participation, a strong knowledge base, and future orientation (supported by futures research). Based on the national guidelines, all municipalities and schools constructed their own local curricula. An integrative, multidisciplinary pedagogical approach was emphasised, and new tools for crossing the boundaries of subjects were developed. Finland has now experienced nearly two school years of teaching and learning based on the new curricula. The reforms seem to have had a strong influence on school practices, on the provision of education in municipalities and on teacher education.

Source: Lituanistika mokykloje (2019[52]), *Nacionaliniai mokinių pasiekimų tyrimai*, http://www.lituanistika.emokykla.lt/tyrimai/2013-m-vbe-rezultatai/nacionaliniai-mokiniu-pasiekimu-tyrimai/.; National Examination Centre (2021[53]), *Švietimo problemų analizės [Analysis of Educational problems]*, https://www.nec.lt/183/.; OECD (2020[47]), *Achieving the New Curriculum for Wales*, https://doi.org/10.1787/4b483953-en.; Halinen (2018[54]), *The New Educational Curriculum In Finland*, http://www.allianceforchildhood.eu/files/Improving_the_quality_of_Childhood_Vol_7/QOC%20V7%20CH06%20DEF%20WEB.pdf.

Recommendations for implementing the new curricula and modern assessment

1.1. **Continue to improve the design of the general curriculum framework during the final steps of the preparation phase**. In particular, the SMSM should focus efforts on ensuring well-integrated general competences across subjects, sufficient interdisciplinary content in the curriculum, coherence between levels of education (including with pre-primary), and less risk of curriculum overload. This could involve more clearly defining and prioritising the competencies that young people should develop and consistently integrating foundational/transversal skills across subjects, while identifying opportunities to simplify the curricula. Subject content that is less comprehensive and challenging than in other OECD countries, such as mathematics, should be aligned with international standards. Experts should conduct a final review of the framework against the guidelines before implementation, and the SMSM should consider how to test the framework design with school leaders, educators and students. In the longer term, the SMSM and stakeholders should seek to make early childhood, general and vocational curricula coherent and mutually reinforcing so that students in all stages and paths of learning can develop skills for work and life in the 21st century.

1.2. **Actively engage and communicate with education stakeholders to ensure the successful implementation of the new curriculum for general education, especially in socio-economically disadvantaged schools**. The SMSM should actively engage practitioners and experts to develop a shared understanding of what the vision and framework for the new curricula looks like in practice in both general and vocational schools, and of each stakeholder's revised roles and responsibilities for implementation. The SMSM and practitioners could develop knowledge, materials and space for the local and school level to understand and collectively design new curriculum, potentially by establishing collaborative networks. The SMSM should develop a communication strategy for the new curriculum, in particular utilising the reform website (mokykla2030.lt) to provide an interactive online portal with support materials and good practices. As part of this, the SMSM should proactively communicate how professional learning, school improvement services and resourcing will support the new curricula, especially for schools with more students from socio-economically disadvantaged backgrounds.

1.3. **Modernise student assessment practices to complement the new curriculum for general education**. The SMSM should work with teachers, experts and other stakeholders to align the *matura* examination with the new competence-based curriculum. It should also supplement the *matura* with personal learning outcome folders, and potentially the externally moderated grading of classroom-based work (e.g. open/digital badges) and/or more formative assessment (e.g. as in Lithuania's new 4K learning model). Student assessment should aim to cover all relevant cognitive and non-cognitive competencies targeted in the curriculum. Students' tertiary entrance scores should be based on their performance and results according to all of these modernised student assessment practices.

Complementing formal education with accessible, high-quality non-formal education and training

To facilitate young people's development of the transversal competencies (e.g. socio-emotional skills) identified in the new school curricula, it will be essential to give more young people access to high-quality non-formal education programmes. Such programmes targeting specific skills (such as coding or other ICT skills) can also improve young people's performance in higher levels of formal education, as well as their later employment outcomes.

Young people can develop skills in various learning contexts (homes, schools, communities and workplaces), including through non-formal education and training (not leading to a recognised qualification). Non-formal education and training (which may be delivered as extracurricular activities in or outside of schools, or via youth work) can have an explicit academic focus (e.g. offering additional enrichment or remedial lessons) or aim to achieve a broader set of goals, such as physical exercise and health, the development of creativity and practice or appreciation of the arts, or volunteering and engagement with the community. Non-formal education and training can help students develop non-cognitive skills that are helpful for academic success, such as persistence, teamwork or a stronger sense of belonging at school, and help develop social networks (Farb and Matjasko, 2012[55]; Stuart et al., 2011[56]). However, research suggests that extracurricular activities might have the unintended effect of enhancing disparities in achievement related to socio-economic status, because they tend to be more frequently available to students from advantaged socio-economic backgrounds (OECD, 2020[24]).

Various ministries in Lithuania are increasing their investments in non-formal education and training for young people. The SMSM introduced a universal non-formal education basket/voucher for children in 2015, with a total budget of EUR 12 million per year (with vouchers worth EUR 10-20 per enrolment). This helps young people to partly cover non-formal education fees, and 30% of youth participating in non-formal education programmes utilise the voucher. Municipalities also fund 220 non-formal education and training institutions, bringing total public funding to about EUR 100 million (Government of the Republic of Lithuania, 2020[10]). In addition, the Department of Youth Affairs funds and oversees 69 open youth spaces and 43 open youth centres, which provide non-formal education to around 8 000 young people to help them develop their personal and social competences and to promote social participation. The department also oversees outreach and mobile programmes and youth volunteering, through which young people can develop a range of competencies.

In Lithuania today, 65% of students participate in non-formal education programmes (up from 50% in 2016). According to PISA, 32% of 15-year-old students attended extracurricular activities at school and 44% attended activities out of school (with most attending both) in 2018 (OECD, 2020[24]). Most programmes for non-formal children's education (78%) are related to music, arts, choreography, dance, theatre and sport, although there have been a small number of successful examples of ICT-related programmes such as "coding camps".

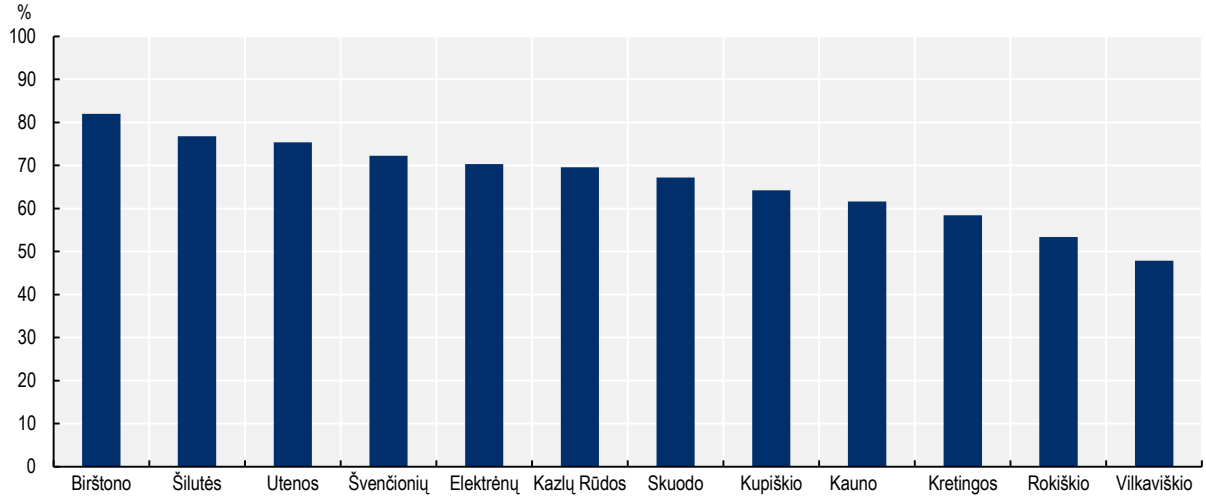
According to project participants, there are various strengths with the current arrangements for supporting the non-formal education of youth: the voucher enables young people to develop competencies in a non-academic setting, especially by financially supporting and empowering vulnerable groups; the offer of programmes at the municipal level is growing (more than 1 000 programmes were developed since the beginning of 2016); and the improvement of young people's social competencies acquired after certain activities (e.g. mobile work with youth, open work with youth) is monitored.

However, Lithuania is not yet realising the full potential of non-formal education to complement school curricula and equip young people with skills for work and life. In particular, non-formal education activities are not equally available in all regions of Lithuania (Figure 2.4), especially for STEAM subjects (Bilbokaitė, Šlekienė and Bilbokaitė-Skiauterienė, 2018[25]). As noted earlier (see the section on Lithuania's performance), a relatively high share of schools in Lithuania offer creative extracurricular activities, but these activities are less common in disadvantaged, rural and public schools (OECD, 2020[24]). The value

of the voucher (EUR 15 per enrolment) is likely insufficient to stimulate enough demand and to draw providers to non-urban areas. One survey found that households in Vilnius with young children enrolled in non-formal sports activities spent EUR 550 on average over nine months on these sports activities (Čingiene, 2020[57]). It is also often difficult for students in rural areas to stay behind after school to participate in non-formal programmes because of limited transport options to get home (National Audit Office of the Republic of Lithuania, 2015[58]). International literature shows that investments in non-formal and extracurricular programmes can actually be regressive and favour advantaged students, as noted above (OECD, 2020[24]), which means that Lithuania needs to find ways to target its national voucher system and municipal funding to disadvantaged students. This could involve, for example, targeted awareness-raising campaigns and higher levels of support in disadvantaged and rural schools.

Figure 2.4. Differences in young people's participation in non-formal education and training, selection of municipalities, 2018-19

Share of students in general education schools who participate in non-formal education programmes for children or attend general education school clubs



Source: Education Management Information System (2021[59]) *Neformalus vaikų švietimas [Non-formal education for children]*, http://svis.emokykla.lt/neformalus-vaiku-svietimas/.

StatLink https://stat.link/j0p75r

Participants in this project also noted a lack of coherence and integration between formal and non-formal education, despite their similar objectives. Currently in Lithuania, the Law on Volunteering provides that volunteering activity may be recognised as practical work and/or learning experience, or credited as social work under a programme of general education (Republic of Lithuania, 2011[60]). For example, the Youth Voluntary Service (*Jaunimo Savanoriška Tarnyba*, JST), established in 2018, is an intensive six-month volunteer programme for young people aged 14 to 29. Volunteers who complete more than three months of continuous service (not less than 40 hours/month) receive a certificate that certifies their competencies and provides the possibility to get 0.25 entrance points for admission to first cycle studies (Government of the Republic of Lithuania, 2020[10]). However, in 2020 only 198 youth had used these points when entering higher education. More generally, project participants stated that the recognition of non-formal education and training is not common in practice, and that its impact on students' aggregate scores is very low. With few exceptions, the skills young people acquire through non-formal education and training are not recognised and rewarded in formal examinations or tertiary entrance (National Agency for Education, 2019[45]).

Lithuania should seek to implement a nationwide model for schools to recognise and reward young people's competences developed in non-formal education and training. The Guidelines for Updating

the General Curriculum Framework state that the general curriculum framework can serve as a reference point for non-formal education programmes, and that student achievements in non-formal contexts should be credited. Lithuania's new "4k model" takes steps towards the greater coherence and integration of different forms of learning, including recognition, and introduces a process to validate and evaluate competencies acquired by non-formal and informal learning (Ministry of Education, Science and Sport, 2020[48]). Lithuania could also build on its experience using open digital badges to recognise learning and participation achievements in a variety of programmes. For example, the Department of Youth Affairs and the Lithuanian Association of Non-formal Education developed and implemented the badge-based validation and recognition system for the national volunteering scheme "Discover Yourself" (Badge Wallet, 2021[61]). Lithuania could also consider the experience of the European Youth Pass project, and especially Portugal's experience implementing a youth pass to recognise students' competencies from non-formal education and training (Box 2.3).

Lithuania also lacks a nationwide quality assurance and monitoring system for non-formal education and training, which may limit the government's capacity to maximise the impacts of its investments, and inhibit the recognition of non-formally acquired skills. A national audit in 2015 found that the quality of non-formal education of school children was not sufficient (National Audit Office of the Republic of Lithuania, 2015[58]). For example, municipalities were generally not carrying out external performance assessments, and some were delivering low-quality non-formal education programmes (owing to the lack of specific national quality standards and/or insufficient resources). A study in the Šiauliai municipality found that the extent of quality assurance and the perceived quality of non-formal STEAM programmes were below that of non-formal music education, sports, fine art and dance programmes (Bilbokaitė, Šlekienė and Bilbokaitė-Skiauterienė, 2018[25]).

In 2018, a pilot of a quality assurance evaluation methodology in six municipalities found several areas needing improvement in non-formal education providers, including data-based decision making, curricula, and educational goals, achievements and evaluation (Saranienė, 2018[62]). In 2019, the Minister of Education, Science and Sport recommended that providers of non-formal education adopt the piloted methodology of quality assurance (Box 2.3). However, as of 2020 many municipalities had not formally adopted the recommendation and methodology, and those that had had done so to varying degrees. The extent and results of the quality assurance evaluations are also not monitored by central government. Quality assurance and monitoring could also be more systematic for youth volunteering. The Department of Youth Affairs has processes in place to assure the quality of the volunteer activities that it co-ordinates or implements. The Department of Youth Affairs and the public employment service (PES) have also developed standards of quality and self-evaluation activities for specific projects, and some municipalities (Šilale) have enacted regulations to set standards and procedures for volunteer activities. However, aside from the Department of Youth Affairs, no systematic volunteering quality assurance system exists among organisations providing volunteer activities (European Commission, 2021[63]).

Lithuania should seek to implement a standard quality assurance and monitoring system for non-formal education and training to ensure that young people of all backgrounds are successfully developing skills for work and life. Research in the field of youth work has highlighted the importance of quality indicators, tools (for gathering statistics, surveying young people, assembling and presenting results, etc.) and systems to improve the credibility and recognition of non-formal education and training undertaken by young people (European Commission, 2015[64]). Implementing an effective quality assurance system should be a joint process in which all stakeholders engage. Lithuania's methodology for the quality assurance of non-formal education provides a solid base, and the government could ensure its use by all municipalities by linking it to state funding and/or mandating its use (Box 2.3). Furthermore, European institutions and countries like Portugal have designed a range of quality tools and systems for non-formal education and training on which Lithuania could draw to bolster quality assurance over time. These include performance-based funding, self and peer assessment of youth centre activities, and the development of detailed administrative datasets, youth surveys, etc. (European Commission, 2015[64]). In particular,

the European Youth Forum's Framework for Quality Assurance of Non-formal Education could be instructive for Lithuania's efforts

Communication and peer learning between school teachers and instructors of non-formal programmes will also be important to ensure that curricula and teaching practices are complementary. The rationale for such communication is varied and includes: the common priorities that exist for teaching and learning; the need to reduce duplication and gaps and associated funding efficiencies; and inter-dependencies and spillover effects between the two systems. Recent evaluations of European programmes for peer learning between teachers and youth workers through interactive training suggest that such experiences can be effective in creating mutual understanding about content and teaching approaches (Tarasova et al., 2020[65]). Some project participants stated that interactions between teachers in formal education and instructors in non-formal education are currently limited.

Box 2.3. Relevant national and international examples: Non-formal education and training for youth

Lithuania – Recognition and quality assurance of non-formal education

In 2019, the Minister of Education, Science and Sports recommended that providers of non-formal education for children apply a standard methodology of quality assurance, which was specified in a ministerial order. This methodology includes monitoring, performance self-assessment and external evaluation, and research. The external evaluation includes indicators such as whether children have developed general and professional competencies and received certificates of acquired competencies. The methodology was piloted in six municipalities, and evaluations concluded that the methodology was effective, and that most indicators were measurable and allowed an objective assessment of provider performance.

However, the evaluations also highlighted the need to provide support and guidance to municipalities and providers to undertake self-assessments, and to ensure the competencies of evaluators, among other matters. As of late 2020, just over half of Lithuania's 60 municipalities had formally adopted the methodology in municipal legislation. However, the success of the methodology's implementation in municipalities, and of central government's collection and use of the results in policy making, are yet to be seen.

Portugal – Youth Pass

The Portuguese government launched the Youth Pass certificate in 2017, a recognition and validation instrument for competences acquired by young people in non-formal education. The Youth Pass also gives youth a personalised free-of-charge certificate that, over time, can be updated with new competences.

This is built on the European Union Youthpass, a tool to document and recognise learning outcomes from youth work and solidarity activities funded by Erasmus+: Youth in Action and European Solidarity Corps Programmes. This initiative responds to the need to enhance and recognise young people's non-formal skills acquired through voluntary work and participation in youth associations, thereby promoting citizenship education, youth associations and volunteering.

The Youth Pass in Portugal helps young people (aged 12 to 18) create a record of their skills and competences, which can be used later when applying for a job. It is also a new way for young people participating in the Youth in Action programme to describe what they have done and learned during activities such as youth exchanges and training courses.

The Youth Pass is created, managed and issued by the Portuguese Institute of Sport and Youth (Instituto Português do Desporto e Juventude). The recognised and validated competences are classified into the different areas including communication; mathematics, science and technology; digital competence; learning to learn; social and civic competences; sense of initiative and entrepreneurship; and sensibility/cultural expression/creativity.

Source: Government of the Republic of Lithuania (2019[66]) (2019[66]), *Dėl Neformaliojo vaikų švietimo ir jo teikėjų veiklos kokybės užtikrinimo metodikos patvirtinimo*, https://www.e-tar.lt/portal/lt/legalAct/5fddafe0512311e9975f9c35aedfe438.; National Agency for School Evaluation (2021[67]), *Neformaliojo vaikų švietimo ir jo teikėjų veiklos kokybės išorinis vertinimas*, http://www.nmva.smm.lt/isorinis-vertinimas/neformaliojo-vaiku-svietimo-teikeju-veiklos-kokybes-isorinis-vertinimas/.; Cedefop (2018[68]), *Portugal: Youth Pass*, https://www.cedefop.europa.eu/en/news-and-press/news/portugal-youth-pass.

Recommendations for complementing formal education with non-formal education and training

1.4. **Recognise and reward the skills young people acquire through non-formal education and training, including in formal examinations and tertiary entrance**. Lithuania should seize the opportunity afforded by the current update of the general curriculum framework to implement a system to recognise and reward young people's competences developed in non-formal education and training. This could involve the use of personal learning outcome folders and/or alternative credentials (such as digital badges). Lithuania could learn from the experience of the Discover Yourself project, the new 4k model and/or the European Youth Pass project in Portugal. The skills young people acquire through non-formal education and training should be recognised in student assessments for the new curricula, as well as in tertiary entrance examinations.

1.5. **Better target non-formal education and training programmes and vouchers to students from socio-economically disadvantaged backgrounds**. School communities (municipalities, leaders, teachers, guidance counsellors, etc.) should increase awareness-raising efforts to promote non-formal education and training, especially in disadvantaged schools. The SMSM should also consider increasing the monetary value of the learning voucher for students in rural areas to spur the demand for and supply of non-formal education and training in underserved areas. The SMSM and municipalities should co-operate to ensure that there is sufficient publicly subsidised transport for students in rural areas to allow them to participate in after school non-formal education programmes.

1.6. **Systematically assess and monitor the quality and impact of non-formal education and training on young people's competencies to inform future investments**. Lithuania should implement a standard, robust monitoring and evaluation system for publicly funded non-formal education and training for young people to ensure that participants are developing skills for work and life. Various education and youth policy stakeholders should be involved in developing and implementing quality indicators, tools and systems. This should build on current leading practices in monitoring and evaluating non-formal education and training, such as the state methodology for the quality assurance of non-formal education, as well as practices from the field of youth work.

Opportunity 2: Strengthening Lithuania's teaching workforce

Alongside successfully implementing a modern school curricula and expanding opportunities for high-quality non-formal education, equipping young people with higher levels of skills depends on capable and empowered teachers and school leaders in both general and vocational education institutions. Investing in the competencies of teachers will be essential for achieving the goals of Lithuania's curricula reforms.

Teachers and school leaders are among the most important components of the quality of the school-based learning process. Decades of research have found that teachers and school leaders shape the quality of instruction, which strongly affects students' learning and outcomes (OECD, 2019[69]). Effective teachers create fertile learning environments, inspire and motivate students, and bring out the best in their students. Access to high-quality teachers is even more relevant for students from disadvantaged backgrounds or for those with special learning needs. A good teacher can play a key role in compensating for unfavourable socio-economic environments by providing learning opportunities for those who otherwise would have been left behind. School leaders can help to develop a spirit of innovation responsiveness among their staff by encouraging them to accept new ideas, by working with staff in school-based professional learning communities, and by making assistance available to support teachers in the process of change (OECD, 2019[69]). Strengthening Lithuania's teaching and school leader workforce is critical for improving young people's skills for work and life.

Recent analysis has highlighted the need to strengthen the teaching and school leadership workforce at various levels of education in Lithuania (OECD, 2017[16]). Project participants confirmed that the need for a more capable and empowered teaching workforce has been a persistent challenge and policy priority for decades in Lithuania, and features in almost all strategic documents related to skills development. Some project participants viewed teachers as the most important factor for improving the quality of formal education in Lithuania. Lithuania's 2020 government programme includes the project "Attractive Teacher's Workplace and Teacher Training 'Excellence' Centres", which involves initiatives to make schools a more attractive workplace for teachers, ensure excellence centres produce international level teachers, and introduce a national system of in-service teacher training that responds to needs, among other things (European Commission, 2020[70]).

Lithuania's teaching and school leadership workforce in primary and secondary education is facing challenges of workforce ageing, skills shortages and underperformance in some areas. This partly reflects trends such as declining student populations and the late retirement of older teachers. About 20% of teachers are expected to reach the standard pension age in 2021, but do not face compulsory retirement (European Commission, 2019[15]). It also reflects the limited attractiveness of a teaching career for youth and working professionals, the lack of support and incentives for teachers and leaders to excel, and the quality of initial teacher education and continuous professional development. Demographic trends causing declining student numbers in Lithuania have led to various pressures on the school network, including smaller schools, falling workloads and lower salaries. Opportunities for improving funding across the school network are discussed in Chapter 5.

Lithuania has enacted several policy changes in recent years to improve the performance of its teaching workforce. The SMSM introduced a revised teacher education model in 2017 that described the competences of a modern teacher, established a comprehensive admittance procedure to initial teacher education programmes, expanded training for a wider range of teacher specialisations, and established an induction period in the working place during the first year of employment. It also expanded pathways to the teaching profession to include the concurrent model (pedagogy and subject knowledge are integrated into a pedagogical degree), the adjacent model (pedagogy is studied alongside a non-pedagogical degree), the consecutive model (pedagogy is studied after an initial degree), and alternative ways (special programmes for existing degree holders) (Eurydice, 2019[71]). Teachers can now obtain multiple professional specialisations in order to teach more subjects, instead of specialising in just one area.

The new model also introduced structural changes to the teacher education system. Until September 2018, 17 higher education institutions (HEIs) were providing initial teacher education (ITE). Now, three teacher training centres and other HEIs that have co-operation treaties with centres provide initial teacher education. The centres are universities that meets the requirements set by the SMSM, and currently include those at Vilnius University, Kaunas Vytautas Magnus University and Siauliai University. The centres develop modern study programmes to train teachers in multiple specialisations (e.g. to teach several subjects) so that graduates have more professional opportunities. The SMSM has introduced measures to enhance the development of ITE in the three centres, such as financing for targeted activities and collaboration and networks between the centres.

The SMSM left various practical, administrative and systemic questions open for centres of ITE to solve, expecting that the universities in charge of the centres would take an active role in co-creating the new system. In addition, a change was introduced to the teacher payment scheme in 2018 to address the problem of many teachers being employed and paid on a part-time basis. Teachers are now paid on a full-time equivalent basis (rather than an hourly rate) and are paid for education-related activities other than classroom-based teaching to increase their workloads and earning capacity (Varanauskas, 2020[72]).

Lithuania can further strengthen its teaching and school leadership workforce by monitoring and building on these reforms to attract more skilled candidates into teaching, by better empowering excellence in teaching and leadership, and by better training teachers and school leaders to equip young people with skills for the 21st century. While this section focuses on teachers and school leaders in primary and secondary school, the findings and recommendations also provide insights that may be applicable to pre-primary and tertiary education.

Attracting, retaining and empowering skilled teachers and school leaders

Lithuania could improve pathways into the teaching profession, as well as salary and non-salary conditions, in order to attract and retain more skilled candidates, and empower excellence in teaching and leadership.

Attracting and retaining teachers and school leaders

Lithuania has struggled to attract a sufficient number of new candidates into the teaching profession. Entry into Lithuania's main type of teacher education programmes at universities and colleges (concurrent programmes) fell from about 1 800 in 2010 to 400 in 2019. This was not offset by the slight increases in enrolment in consecutive and adjacent programmes (which are still generally perceived as inferior to the concurrent model) or in the "Teach for All" one-year non-degree programme (Varanauskas, 2020[72]). More recently, enrolment in all ITE programmes at universities and colleges have increased (Table 2.4), likely reflecting recent increases to salaries and scholarships (see below). However, Lithuania still faces the challenge that only half of ITE graduates end up in a teaching position (MOSTA, 2018[73]).

Table 2.4. Enrolment in ITE programmes, universities and colleges

	2016	2017	2018	2019	2020
Universities	611	378	305	205	474
Colleges	251	259	346	224	427
Total	862	637	651	429	901

Source: LAMA BPO (2021[74]), *2018 m. priimtųjų į programas skaičiaus kaita*, https://bakalauras.lamabpo.lt/priimtuju-i-programas-skaiciaus-kaita/.

Low enrolment in teaching programmes combined with few graduates entering the profession has contributed to skills shortages, particularly in some fields. The historical oversupply of teachers in Lithuania, reflecting a declining student population and late teacher retirement, is turning into a situation of

shortage, especially for some programmes and regions. Participants in this project stated that there are teacher shortages in several fields of VET, for STEAM subjects and in rural areas. Initial modelling predicted a shortage of almost 700 primary school teachers in total in the four years to 2022 (Leiputė, Padvilikis and Hyland, 2018[75]).

Furthermore, high-skilled students have typically not been choosing teaching as a profession. In the 2016 Survey of Adult Skills (PIAAC), for example, the teaching workforce of Lithuania, although trained to a bachelor's degree level, displayed numeracy skills lower than those of other tertiary graduates, as well as lower than the average level of teachers in other OECD member countries (OECD, 2017[16]). In particular, Lithuania has struggled to attract new teachers with strong pedagogical and professional qualifications and experience into initial VET. This represents a major challenge for education equity in Lithuania, given the fact that disadvantaged students are concentrated in VET.

Lithuania also faces challenges regarding retaining younger, skilled teachers and school leaders. For example, almost 30% of teachers below the age of 51 in Lithuania state that they want to leave teaching in the next five years, among the highest rate in the OECD, and double the OECD average (OECD, 2020[76]).

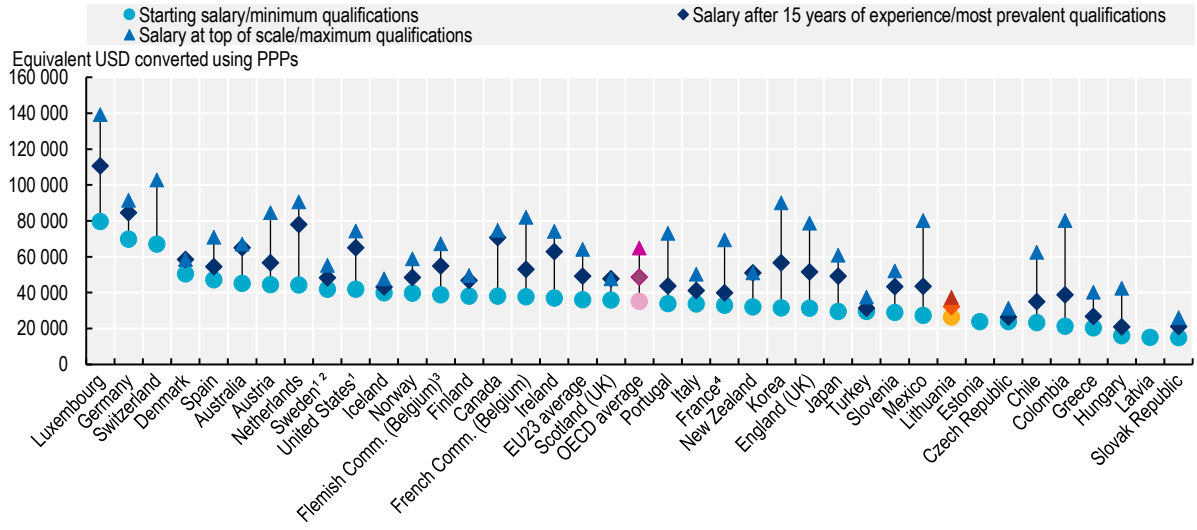
Several factors have limited the attractiveness of the teaching profession to youth, teachers and professionals in other sectors.

The teaching profession does not appear to be highly valued in society, and therefore lacks prestige. According to data from the 2018 OECD Teaching and Learning International Survey (TALIS), only 14% of Lithuanian teachers perceive that their profession is valued in society (26% OECD average) (OECD, 2020[76]). The prestige of the teaching profession can help boost the attractiveness of teaching careers among trainee teachers and improve the retention of effective teachers. Raising and maintaining prestige have been long-term endeavours of many educators, teacher organisations, social actors and policy makers across the OECD (OECD, 2020[76]).

Recent improvements to teachers' salary structure helps to make the profession more attractive, but limited opportunities for salary increases and full-time hours may still deter some teaching candidates. In 2018, only 11% of teachers in Lithuania were satisfied with their salary, well below the OECD average (39%) (OECD, 2020[76]). Since 2018, teachers' actual salaries have increased from 92% to 140% of tertiary educated workers' average earnings (in 2016 levels). Opportunities for teachers to increase their salaries through promotions have been limited, giving teachers little reward for experience and development. However, since 2018, lower secondary teachers' statutory salaries after 15 years of experience were increased from only 4% higher than the starting salary for new teachers with minimum qualifications to 22% higher. This, however, remains below the OECD average of 38% (Figure 2.5).

Figure 2.5. Lower secondary teachers' statutory salaries at different points in teachers' careers (2019)

Annual statutory salaries of teachers in public institutions, in equivalent USD converted using purchasing power parities



Notes:
1. Actual base salaries.
2. Salaries at top of scale and minimum qualifications, instead of maximum qualifications.
3. Salaries at top of scale and most prevalent qualifications, instead of maximum qualifications.
4. Includes the average of fixed bonuses for overtime hours.
Countries and economies are ranked in descending order of starting salaries for lower secondary teachers with minimum qualifications.
Source: OECD (2020[18]), *Education at a Glance 2020: OECD Indicators*, https://doi.org/10.1787/69096873-en.

StatLink https://stat.link/zv4j50

A major challenge for teacher salaries has been the large number of teachers involuntarily teaching part-time amidst declining student numbers. In 2018, the share of lower secondary teachers working part-time in Lithuania (35%) was higher than in all but four other OECD countries (OECD, 2019[69]). As noted earlier, teacher salaries have been restructured to increase workload and earning capacity. The government has also initiated a new programme called "*Tęsk*" ("Continue") that allows teachers to acquire, at no cost, additional qualifications to teach more than one subject in school and thus increase their hours. This programme has been widely popular in its first three years, but has only been able to accommodate around 800 teachers in total (Varanauskas, 2020[72]).

Potential teaching candidates may also be deterred by a lack of suitable pathways into the teaching profession. Recent research in Lithuania found a lack of flexibility in initial teacher education studies in terms of different pathways and modes of delivery that could attract highly skilled students and professionals (Varanauskas, 2020[72]). The student selection process for pedagogical studies is focused on academic achievements more than candidate motivation, prior non-formal experience, skills and attitudes. Lithuania lacks well-developed processes for recognising formally and non-formally acquired competencies of youth and professionals from other sectors, which could allow them to fast track the process of acquiring a formal teaching qualification.

Insufficient pathways into ITE may harm the quality of teaching and learning in secondary VET most of all, potentially compounding disadvantage for students from low socio-economic backgrounds. There are widely acknowledged concerns about the profile, currency and depth of professional experience among

VET teachers. According to a recent review (OECD, 2017[16]), some Lithuanian vocational teachers have no hands-on experience in their occupational area. Almost all vocational teachers in Lithuania have professional qualifications in their area of specialisation, but more than 40% have no prior relevant work experience, and about 30% of vocational teachers in 2015-16 lacked a pedagogical qualification (OECD, 2017[16]). Further improving pathways for mid-career professionals will be essential to strengthen the teaching workforce in Lithuania's 70 VET institutions. At the same time, recent research by the OECD highlights that flexible pathways for industry professionals into the VET teaching profession will need to be combined with sufficient and flexible opportunities to acquire pedagogical skills/qualifications (OECD, 2021[77]). Alternatively, industry professionals can be brought into the classroom in more flexible/non-formal ways (e.g. in workshops, or by teaching only a limited number of hours per year/week) without becoming qualified teachers. This requires strong engagement between VET schools and employers (see Opportunity 3: Making vocational and higher education more responsive to labour market needs).

Lithuania has recently introduced various measures to improve pathways into the teaching profession, including for students and professionals from other sectors. The 2018 Regulations of Initial Training of Pedagogues (*Pedagogų rengimo reglamentas*) diversified pathways to the teaching profession (for example by introducing adjacent, consecutive and alternative pathways). Lithuania has also increased scholarships for students entering teaching programmes. From 2020, students studying to become teachers are to receive "motivation scholarships" (Government of the Republic of Lithuania, 2020[10]). These scholarships need to be well targeted to high-skilled students and specialisations in shortage (e.g. STEAM, VET), and their impact closely monitored. As Lithuania's career guidance system is underdeveloped (Opportunity 3: Making vocational and higher education more responsive to labour market needs), education institutions will need to proactively promote these new pathways, methods and incentives in schools, universities and the labour market.

Empowering teachers and school leaders to excel

Lithuania could also better empower teachers and school leaders to excel in equipping young people with skills for work and life by linking promotions more closely to responsibilities and performance, and by boosting teachers' job satisfaction through efforts to improve induction activities (such as informal peer work, welcome handbooks), professional collaboration, impactful feedback and teacher autonomy.

Building on recent changes to teacher salary levels and progression could help to reward teachers' and school leaders' excellence and innovation. Some participants in this project stated that a major frustration for younger teachers is that progression and promotion is largely linked to tenure (years of service) rather than responsibilities and performance. As such, younger teachers are paid less than older teachers for the same responsibilities. This could negatively affect teachers' motivation for excellence and responsibility. Building on the recent improvements to salary progression (discussed earlier), Lithuania could more closely align progression with international standards over time (Figure 2.5). It could also link promotions more closely to teachers' responsibilities, the outcomes of teachers' ongoing performance appraisals, and/or certification (*atestacija*) as a teaching professional. Furthermore, as school leaders' salaries were not raised as part of these reforms, and senior teachers can now earn as much as school leaders, teachers now have less incentive to become school leaders. Lithuania should seek to reward teachers taking on school leadership responsibilities by also raising school leader salaries. This would complement a recent policy to limit the term of school leader appointments in order to create leadership opportunities for younger teachers.

Overall, Lithuanian teachers and school leaders are less satisfied with their profession and working environment than peers in most other OECD countries (OECD, 2020[76]). Teachers' job satisfaction has a positive impact on teachers, school climate and students, and is positively associated with teachers' performance, attitudes, efforts and confidence (self-efficacy). It also has strong implications for retention, attrition, absenteeism, burnout, commitment to education goals and teachers' job performance (OECD, 2020[76]). In Lithuania, relatively high shares of teachers agree that they regret becoming a teacher (16%)

and/or that it might have been better to choose another profession (58%). The vast majority of teachers in Lithuania agree that overall they are satisfied with their job (83%), but this is lower than in all OECD countries except the United Kingdom and Japan. Furthermore, Lithuania has the highest share of school leaders in the OECD who wonder whether they should have chosen another profession (77%).

A range of factors appear to be inhibiting teachers' satisfaction. In Lithuania, factors positively associated with teachers' job satisfaction include induction activities, professional collaboration, impactful feedback and teacher autonomy (OECD, 2020[76]). However, Lithuania had very low rates of induction and professional collaboration in 2018. The 2017 reforms introduced a formal induction period which has been positively received; however, an expert group recently determined that it would be more effective if managed by schools, as in some other countries (e.g. Finland), rather than universities, given their direct involvement in teaching and learning (Varanauskas, 2020[72]). Rates of impactful feedback are slightly above the OECD average, but it is still only received by half of Lithuania's teachers. Teacher autonomy is an important factor for teacher satisfaction and experimentation and innovation in the classroom. Some experts consulted during this project stated that teachers often lack autonomy and trust from school heads, and are given prescriptive instructions on how to implement the curriculum. In contrast, TALIS findings show that 86% of teachers in Lithuania report having control over determining course content in their class, which is consistent with the OECD average. Furthermore, teachers in Lithuania have a relatively high level of responsibility over school policies, instruction and curriculum, and many opportunities to participate in school decisions compared to other OECD countries (OECD, 2020[76]). Lithuania should monitor and carefully consider how to support teacher autonomy in the context of the current reforms to curricula.

School leaders do not always have strong internal and external support to facilitate excellence in teaching and learning. Some participants in this project highlighted that school leaders typically lack managerial support in the form of management teams, deputies, accountants, etc, and that there is a large variation in the extent and nature of support provided by municipalities as school founders. Some 75% of school leaders in Lithuania report that having too much administrative work and keeping up with changing requirements from local, municipal/regional, state or national/federal authorities are sources of stress "quite a bit" or "a lot", which is above the OECD averages. Reflecting these challenges, the SMSM announced plans for consulting school heads about the administrative, financial, legal and public procurement challenges they face (Ministry of Education, Science and Sport, 2020[78]). Uneven support for school leaders are a major concern for equity, as these rates of stress are highest for school leaders in rural schools and schools with higher shares of disadvantaged students (OECD, 2020[76]). A lack of relevant continuous professional development (CPD) for school leaders may also inhibit excellence in schools (see below).

Lithuania could learn from recent initiatives in Sweden and Estonia to better attract, retain and empower teachers and school leaders (Box 2.4).

Box 2.4. Relevant Lithuanian and international examples: Attracting and empowering teachers

Lithuania – I Choose to Teach!

The "I Choose to Teach!" programme seeks to attract recent university graduates from different disciplines to train as teachers and work in schools. This programme was started with EU funding and is now managed by the School Improvement Centre with business support. Programme participants receive tailored professional development to help them develop their teaching skills.

The high popularity of the programme is evidenced by the fact that every year 400-500 people who want to become teachers apply. After four selection stages (motivational questionnaire, group assignment, lesson simulation, tests and interviews), 20-30 participants are invited to join the project. Participants work at the school for two years, during which time they are provided with all kinds of help, such as mentoring, training and counselling.

The 192 I Choose to Teach! participants and alumni have reached 117 schools and around 31 000 students. After two years of the programme, about two-thirds of participants remain working as teachers. Overall, more than 70% of participants remain actively involved in education, either working as teachers, developing and implementing educational projects, working in the education system at the national level, and/or remaining involved in education through voluntary activities.

Sweden – Enhancing the prestige and attractiveness of the teaching profession

The Swedish National Agency for Education (Skolverket) determined that upcoming recruitment needs would be difficult to meet, and predicted a future shortage of teachers. In 2014, the Swedish government introduced the National Gathering for the Teaching Profession, which contained measures to avoid this situation and boost the attractiveness of the profession. The legislation included financial incentives in the form of salary increases and more rapid wage progression for teachers, linked to their competences and development. In 2016, this was followed by the Teacher Salary Boost initiative (*Lärarlönelyftet*), which rewarded teachers after they completed professional development programmes.

A second axis of the government strategy was to facilitate and encourage entry to the profession by promoting alternative pathways to teaching and increasing government grants for new teachers. Grants were also implemented to improve working conditions and career possibilities, targeting drop-outs among teachers.

These measures were complemented by an information campaign entitled Pass it On (*För det vidare*), which was designed to attract more people to teaching, encourage the retention of those already in the system and boost the social prestige of the profession. This media-based operation, in the form of a website, contains general information on the teaching profession, presents existing opportunities for teaching professionals and promotes entry to the profession through original materials (OECD, 2020[76]).

Estonia – Raising satisfaction and prestige in teaching

In Estonia, ensuring teachers' satisfaction and their image in society is at the core of the Lifelong Learning Strategy 2014-2020. Government action has included salary increases and reforms in work organisation to make the teaching profession highly valued in society. To attract the best candidates and make teaching a viable employment option, the average salaries of teachers have been adjusted to make them consistent with the qualifications required and the set of skills developed. Novice teachers' salaries have been specifically targeted to boost the popularity of the teaching profession for young people. The salary system for teachers also incorporates incentives to motivate professional development, with the possibility of taking half a year away from teaching to fulfil definite developmental assignments.

In addition, the Youth to School programme (*Noored Kooli*) seeks to raise interest in teaching and education by awarding scholarships to a select group of university students who teach at school for two years while taking part in teaching and leadership training. Upon completion of the programme, students can keep working at school, return to university or work elsewhere.

Estonia also values the teaching profession through education awards to expand the social recognition of education personnel. At the annual Teacher of the Year gala, awards are distributed to celebrate the contributions of the most outstanding education professionals to education quality and student support.

Source: Renkuosi mokyti (2021[79]), Renkuosi *mokyti! (I Choose to Teach!) website*, https://www.renkuosimokyti.lt/.; OECD (2020[76]), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, https://doi.org/10.1787/19cf08df-en.

Recommendations for attracting and empowering teachers and leaders

1.7. **Make initial teacher education studies accessible to highly skilled students and professionals by continuing to develop and promote multiple pathways, delivery methods and incentives**. The SMSM and teacher training centres should continue to develop and promote diverse pathways for students and working professionals to become teachers, such as the consecutive, adjacent and alternative pathways. In order to increase the intake of skilled students and professionals to ITE programmes, the Lithuanian High Schools Association for Centralised Admission (LAMA BPO) and teacher training centres should also ensure that student selection processes systematically consider candidates' motivation, prior non-formal experience, skills and attitudes, in addition to academic achievements. Institutions should also develop processes to better recognise the formally and non-formally acquired competencies of mid-career professionals in order to offer tailored and expedited pathways to a formal teaching qualification. The SMSM should expand public funding for the I Choose to Teach! programme. It should also increase the value of teaching scholarships for highly skilled students and those specialising in fields experiencing shortages (e.g. STEAM, VET), closely monitoring their impact and potentially making them conditional on entering the profession. Finally, the government and institutions should actively promote these pathways, methods and incentives in schools, universities and the labour market through various multimedia channels, as well as through expanded career guidance services (see Chapter 5).

1.8. **Continue improving career progression opportunities to attract, retain and motivate highly skilled teachers and school leaders, especially in socio-economically disadvantaged schools**. More closely link teachers' and leaders' salaries to their responsibilities and the outcomes of their ongoing performance appraisal processes (and potentially ongoing professional certification), rather than tenure. Consider the greater use of pay increases or bonuses linked to appraisal processes (and potentially certification), as is the growing trend in OECD countries, and/or grants for teachers or teaching teams for innovation and excellence. Consideration should be given to developing oversight arrangements to ensure appraisal processes and promotions are implemented fairly and consistently across schools. Ensure that increases to school leaders' salaries are consistent with recent increases for teachers to attract and reward highly competent leaders. Introduce systematic national financial incentives for teaching in subjects in shortage (e.g. STEAM) and in rural and disadvantaged schools, for example in the student funding formula. Also, provide meaningful and impactful opportunities for CPD (see next section).

1.9. **Improve non-salary work conditions and the school climate for teachers' and school leaders' well-being to empower teaching excellence, especially in socio-economically disadvantaged schools**. Further investigate the quality of non-salary work conditions and school climate in Lithuania, and its impact on teachers' performance. Expand activities positively associated with teachers' job satisfaction and self-efficacy in Lithuania, such as induction activities, professional collaboration, impactful feedback and autonomy. Look for opportunities to reduce teacher stress by reducing administrative work, especially for school leaders in rural areas and disadvantaged schools. This could be done, for example, by reviewing and reducing administrative burdens through streamlined processes, and by setting standards and allocating funding more consistently across municipalities for administrative support in schools. Provide more relevant and impactful opportunities for CPD to school leaders (see next section). Teachers and school leaders should also have ongoing opportunities to provide feedback to central government on education policy, for example through engagement on the new school curricula (see Opportunity 1: Successfully implementing and complementing modern curricula) and improved skills policy engagement more broadly (see Chapter 5).

Training teachers and school leaders to equip young people with skills for work and life

In addition to being attracted to and empowered when in the teaching profession, teachers and school leaders in general and vocational education need the right competencies to successfully equip young people with skills for work and life. Ensuring the quality and availability of initial teacher education and continuous professional development also helps to attract, retain and motivate teachers.

High-quality initial teacher education is an important factor in determining the quality of teaching and learning in Lithuania's schools. Teachers' education affects the teaching strategies they adopt and the quality of their instruction which, in turn, are significantly related to student achievement (OECD, 2019[69]). In order for teachers to deliver high-quality instruction and help all students reach their full potential, countries need to establish and sustain a coherent system of initial teacher preparation. However, while evidence on effective teacher education is growing, it is far from being clear-cut and conclusive, making it challenging for governments to make evidence informed decisions about policy reform in this field (OECD, 2019[80]).

High-quality and accessible CPD is becoming increasingly important for Lithuania's teachers and school leaders to help them ensure the quality of teaching and learning in schools. A crucial component of professionalism among teachers and schools leaders is their participation in ongoing in-service professional development. Achieving a professional-level mastery of complex skills and knowledge is a prolonged and continuous process, and professionals must continually update their skills as the body of technology, skills, and knowledge advances (OECD, 2019[69]). This is particularly important for VET teachers, as megatrends such as digitalisation and automation continue to transform the skills required in vocational occupations (see Chapter 1). In Lithuania, as in most other OECD countries, impactful CPD is positively associated with teachers' job satisfaction and self-efficacy (OECD, 2019[69]). As megatrends change what skills students need for success in work and life (see Chapter 1), and countries update curricula accordingly, teachers need opportunities to upskill and reskill to pass these skills onto students.

Teachers in many OECD countries, including Lithuania, are not using effective teaching strategies to their full potential, suggesting a need for improved ITE and CPD. For example, OECD studies provide repeated evidence that cognitive activation practices are positively related to student learning and achievement (Echazarra et al., 2016[81]). As part of such practices, teachers might, for example, ask questions and give problems that make students reflect or think for an extended time, ask students to decide on procedures for solving complex problems, present problems in different contexts, or help students learn from mistakes. However, while cognitive activation instruction is positively associated with students' mathematics performance in Lithuania (and in other OECD countries), it is used relatively infrequently by teachers (Echazarra et al., 2016[81]). Such instruction practices could be particularly beneficial for Lithuania's VET institutions, given comments by project participants and evidence from previous reviews (OECD, 2017[16]) that the teaching quality of the general education curriculum in VET institutions is relatively low. Effective teaching strategies will be essential to complement and ensure the successful implementation of the new school curricula (see Opportunity 1: Successfully implementing and complementing modern curricula).

As noted earlier, Lithuania has enacted reforms to teacher education in recent years. Clearer pathways to acquiring teacher qualifications were defined through consecutive and concurrent study programmes, and structural changes to the teacher education system led to the creation of three teacher education excellence centres. While CPD remains the personal responsibility of each teacher, centres of ITE now have a strengthened role in CPD, with legislation emphasising the possibility for teachers to enrol in ITE modules and receive formal credits towards formal qualifications. Such CPD is publicly financed (Varanauskas, 2020[72]). It is essential that Lithuania monitors and ensures the success of these reforms, including complementing and adapting them as necessary, to ensure that teachers develop the competencies they need to equip young people with skills for the 21st century.

Initial teacher education

Lithuania could further boost the quality of ITE by increasing practical learning, school leader training, and research and development capacity in educational sciences, as well as by monitoring the success of new provisions for induction and mentoring, and adjusting them as needed. Younger teachers in Lithuania report a lack of preparedness for teaching in some areas (OECD, 2019[69]).

ITE in Lithuania appears to be focused on theoretical knowledge at the expense of practical knowledge. A previous OECD review found that ITE is mainly focused on traditional subject matters and curriculum content, with limited focus on the actual teaching process. Initial teacher education should be more closely connected to real-life classrooms and ongoing professional development (Shewbridge et al., 2016[82]).

In particular, research highlights the importance of having opportunities to engage in a teaching practicum that requires planning lessons or analysing student work, rather than just listening to lectures (Boyd et al., 2009[83]). Several countries have recently reformed their initial teacher education systems to make teaching practicum a mandatory element (OECD, 2019[80]). In Lithuania, while 84% of teachers who graduated in the five years before the 2018 TALIS survey reported that their formal education or training included classroom practice, only 75% felt that their ITE left them "well prepared" or "very well prepared" for classroom practice. The incidence of and preparedness for classroom practice was low for younger teachers in Lithuania compared to older teachers and younger teachers across the OECD (OECD, 2019[69]). A recent review in Lithuania determined that the country's one semester minimum for school (teaching) practice and the lack of current teachers' involvement in delivering initial teacher education may contribute to the gap between teachers' theoretical and practical knowledge. It recommended designating at least one quarter of each ITE programme to practical learning (placements) and including practitioners (teachers) in the development and delivery of study programmes (Varanauskas, 2020[72]).

The competencies that teachers develop in ITE and that they are asked to help students develop in the new general education curricula need to be harmonised. The Regulations on Teacher Training (*Pedagogų rengimo reglamentas*) state that eight general competencies and five special competencies are needed in order to acquire a teaching qualification. These general competencies include leadership; creativity, problem solving and critical thinking; social justice and public spirit; reflection and self-assessment; and consistent development. The special competences include understanding of a student and his/her environment; creation, management and implementation of educational content; and ensuring a student's progress, evaluation of his/her achievements and feedback. The guidelines for the update of general education curricula state that students should develop the following competences: social and emotional, cognitive, creativity, civic, cultural, and communication. The extent to which these competencies overlap and how teachers will be prepared to teach them is unclear and will need to be reviewed as part of the curricula update.

Training for school leaders appears to be a major gap in Lithuania that risks negatively affecting teachers' and students' performance. Evidence suggests that school principals who are trained more thoroughly in instructional and organisational leadership more often display effective leadership, which is associated with more teacher collaboration, higher qualifications of teams of teachers in the school and school improvement progress (Orphanos and Orr, 2013[84]). However, the share of principals who undertook school administration or principal training or instructional leadership training before taking up their role as a principal is lower in Lithuania (<30%) than in all other OECD-TALIS countries (OECD, 2019[69]). Combined with the stress that principals are facing from administrative work and policy changes (discussed earlier), this could be inhibiting school leaders' capacity to drive school improvements.

Lithuania lacks strong research capacity and knowledge transfer in educational sciences to underpin excellence and continuous improvement in teacher education programmes. As noted in research by Varanauskas (2020[72]), there is no long-term (longitudinal) research and little planning for future research. Large research groups do not exist, and there is no cross-institutional co-operation. Educational research is the second weakest social science field in Lithuania for research and development performance

(MOSTA, 2018[85]). Related to this, ITE programmes are not based on the latest scientific research, and co-operation between teachers and researchers is almost non-existent (Varanauskas, 2020[72]). This may threaten the successful implementation of modern curricula in schools, especially as teachers are likely to lack familiarity with the latest education research to contribute to the update (Opportunity 1: Successfully implementing and complementing modern curricula).

Induction and mentoring are a vital final step in ITE as graduates enter the workplace, therefore the success of Lithuania's new model for induction and mentoring should be monitored and adjusted if needed. As noted earlier, induction activities are positively correlated with teachers' job satisfaction in Lithuania. However, before the reform only 21% of teachers reported having participated in some kind of formal or informal induction when they joined their current school, compared to 42% of teachers across the OECD. Only 9% of novice teachers (with up to five years of experience) in Lithuania had an assigned mentor, compared to 22% across the OECD (OECD, 2020[76]). While the new induction system has been positively received, as noted earlier the system could potentially be more effective if managed by schools, as in some other countries (e.g. Finland), rather than universities, given their direct involvement in teaching and learning. The study recommended to either reduce or cease the role of ITE providers in induction/mentoring, and transfer responsibility and resourcing to schools. ITE centres could also be involved in training school mentors (Varanauskas, 2020[72]).

Continuous professional development

Despite universal CPD participation, there appears to be a shortage of high-quality CPD for teachers and school leaders in Lithuania. Lithuania could boost the quality of CPD and its impact on teaching and learning by increasing and better targeting public support to the identified training needs of teachers and leaders, and by providing more innovative forms of professional development and formal training to teach additional subject areas. This should be complemented with a clearer vision and set of responsibilities in the system, as well as a more systematic evaluation of outcomes (see Chapters 3 and 5).

Some participants in this project stated that a lack of vision and clear roles in the CPD system is contributing to fragmentation, which undermines the government's capacity to ensure quality in the system. A diverse range of public and private providers offer formal and non-formal training opportunities, from which teachers are free to select. In Lithuania, CPD is provided by around 60 teacher centres, which are established by municipalities, some private organisations and several HEIs. Lithuania lacks detailed data on CPD training patterns and evidence on the quality of training (Beleckienė et al., 2020[20]). Participants in this project also stated that the roles of the new ITE centres in CPD regarding other publicly funded providers are unclear.

A range of public measures are in place to ensure teachers' participation in CPD in Lithuania, and participation is universal. Teachers are entitled to a minimum of five days CPD during a school year. Five days of in-service training per year is actually a necessary pre-condition for a teacher to be appraised and retain or increase their qualification category, with a higher qualification category leading to a higher salary. There are different funding sources for teacher CPD, including state funding provided to schools, other state and municipality funding, EU structural funds, or teachers' personal resources. In most cases, CPD is financed using school and EU structural funds (Varanauskas, 2020[72]). Compared to teachers in other OECD countries, Lithuanian teachers are more likely to receive some form of financial/non-financial support to participate in CPD, and they participate in more CPD activities (OECD, 2019[69]).

Evidence on the availability and relevance of CPD training is mixed. In Lithuania, the share of teachers who feel that their CPD activities had a positive impact on their teaching practices (89%) is above the OECD average (82%). The main reasons teachers gave for this positive impact were that CPD built on the teacher's prior knowledge, adapted to the teacher's personal development needs, and provided opportunities to practice/apply new ideas and knowledge in the teacher's own classroom (OECD, 2019[69]). However, teachers in Lithuania were far less likely than teachers in other OECD countries to report that

impactful training had focused on innovation in the teacher's teaching or had taken place over a longer timeframe (several weeks or longer).

Lithuanian teachers and school leaders report higher training needs than their peers in most other OECD countries, signalling that they lack access to relevant CPD. For example, over 20% of Lithuanian teachers report training needs in ICT skills for teaching, student assessment practices, and student behaviour and classroom management, all of which are above the OECD averages (OECD, 2019[69]). School leaders report their highest training needs as using data for improving the quality of the school (46%), providing effective feedback (34%) and financial management (34%), all of which again are well above the OECD averages.

Furthermore, many teachers still report facing barriers to participating in training, including a lack of relevant training, despite their universal participation in CPD. For example, about 43% of teachers report facing the barrier of no relevant CPD being offered, compared to 38% across the OECD. Furthermore, 54% of teachers report that professional development is too expensive, while 47% report that professional development conflicts with the work schedule. Only half (53%) of Lithuania's teachers report receiving reimbursement or payment of costs for their CPD, while 37% were released from teaching duties for activities during regular working hours. Similarly, the cost and relevance of CPD are barriers for over 30% of school leaders in Lithuania, which exceeds the OECD average. In initial VET, the amount that institutions allocate to CPD varies greatly, from EUR 1 000 to EUR 19 000 (0.3%-0.8% of total budgets) (Beleckienė et al., 2020[20]). This is a concern given that professional development opportunities for VET teachers (including work-based learning) are crucial to ensure that their industry knowledge/skills remain up to date with industry trends (OECD, 2021[77]). This suggests that many teachers and school leaders are currently inhibited from participating in the CPD they would ideally like to undertake.

A major challenge for ensuring the relevance and impact of CPD is the lack of integration between teachers' appraisals and CPD. The OECD found that the provision of teacher professional development was not based on a systematic analysis of the needs of teachers, schools or the system overall (Shewbridge et al., 2016[82]). Some participants in this project stated that very few teachers have individual learning plans, which results in teachers participating in multiple short-term training activities in an unsystematic way. Developing learning plans for teachers as part of their appraisals, and using these to choose training, could help increase the impact of CPD.

School leaders and teachers could also engage more in innovative forms of professional development. While traditional training in the form of courses or seminars can be effective (Hoban and Erickson, 2004[86]), school-embedded professional development, such as peer-learning opportunities, tends to have a larger impact on teaching practices and can significantly reduce the cost of training. Teacher coaching (i.e. a school-embedded approach to in-service training) can have positive impacts on both teachers' instruction and students' achievement (Kraft, Blazar and Hogan, 2018[87]). In Lithuania, participation in peer and/or self-observation and coaching as part of a formal school arrangement by teachers (69%) and school leaders (44%) is well below the level of participation in in-person courses/seminars (albeit to a similar extent as the OECD average).

In light of this evidence, paid leave and public subsidies for CPD may not be sufficient for teachers and providers to engage in high-quality CPD. Evidence suggests that many teachers and school leaders are engaging in CPD for which they partly or fully pay, and would participate more (and in different types of CPD) with greater financial support. While the SMSM began providing national priorities for CPD in 2016 to better steer and support high-quality, high-value CPD, it has not provided targeted funds for CPD in these areas (Varanauskas, 2020[72]).

Opportunities to gain qualifications to teach additional subject areas are unlikely to be sufficient to keep up with demand. The SMSM and the National Agency for Education have been providing possibilities for current teachers to acquire specialisations in other subjects/areas in order to be able to teach these subjects and maintain a full-time workload and salary amidst falling student numbers. In March 2018,

the four-year project “Continue!” (*Tęsk!*) was launched, which offers free training for current teachers so that they can gain the additional qualifications required to teach more than one subject in school (Box 2.5). This programme has been widely popular, and has over the course of three years been offered to 821 teachers. However, these numbers are modest, given that 35% of teachers in Lithuania worked on a part-time basis in 2018 (OECD, 2019[69]).

Lithuania is implementing several measures to improve the CPD system for teachers and school leaders, the effects of which are not yet clear. Recent regulations have strengthened the role of centres of ITE in delivering CPD, thus allowing teachers to enrol in modules provided by ITE centres and receive formal credits, which can accumulate to a qualification. The SMSM finances these studies for teachers. A recent statute more clearly defines responsibilities for CPD, for example, national institutions are in charge of permanent monitoring and co-ordinate implementation. The statute also sets a minimum of 40 hours for CPD programmes, enables various flexible programmes (including self-education), and requires programme content to be based on research evidence. The SMSM has identified priority competencies for professional development for 2020-2022, namely digital literacy, skills to meet a variety of students’ educational needs, and the leadership of teachers and headteachers.

Box 2.5. Relevant national and international examples: Training school teachers and leaders

Lithuania – "*Tesk*" project

The "*Tęsk!*" ("Continue!") project from 2018-2021 seeks to improve student achievement by providing support for innovations in teacher professional development and pre-service teacher training. The project targets beginning teachers, teachers who want to re-qualify or get an additional qualification, and individuals from beyond the education sector who hold a higher education degree and want to become a teacher.

In particular the project funds the acquisition of an additional subject qualification for serving teachers to help tackle the problem of small schools in which a single subject teacher is not able to work full-time. The project offers free training for current teachers to gain the additional qualifications required to teach more than one subject in school. Over 800 teachers have participated in formal education and training through the project, allowing many to acquire additional qualifications and increase their teaching workload, among other benefits.

Estonia – Competency framework for teachers

Estonia has identified a strategic approach to improve initial teacher preparation by aligning teacher education programmes to national competency standards. Estonia’s teacher standards (2013) provide a competency framework for teachers, as well as guide the curriculum of teaching institutions and the assessment of graduating teacher candidates. The University of Tartu in Estonia revised its curriculum in 2012-13 in parallel with the development of the new teacher standards, and now focuses on four core pedagogical areas: communication and feedback in school, designing learning and instruction, teaching and reflection, and a teacher’s identity and leadership. Estonian initial teacher education also includes a minimum 50 days of practicum experience at a school site, and a mandatory 12 month induction programme that includes the support of a trained mentor.

Source: Education Development Centre (2018[88]), *Continue! Project summary*, https://www.upc.smm.lt/projektai/tesk/english.php.; Varanauskas (2020[72]), *Reform of the Network of Teacher Education Institutions in Lithuania: Final Report*, https://www.smm.lt/uploads/documents/veikla/tarptautinis%20bendradarbiavimas/Final%20report.pdf.

Recommendations for training teachers and school leaders to equip young people with skills for work and life

1.10. **Improve the content and quality of ITE by aligning it with the new general curricula, focusing more on practical learning and teachers' training needs, and investing in educational research**. The SMSM should provide information and support to ITE providers to update their programmes in order to prepare teachers to implement the new general education curricula. ITE should familiarise teaching students with all major elements and content of the new general curricula, as well as best-practice teaching and learning and assessment strategies. The Government should consider raising the minimum requirement for practical training, and/or find other ways to connect the theory and practice of ITE, such as involving current teachers/leaders in delivering some course content. The Government and ITE institutions should expand national and international collaboration, increase investment and improve knowledge transfer with practitioners in educational research to facilitate continuous improvement and best practices in ITE. Finally, the Government should closely monitor the impacts of recent ITE reforms on learning and teaching outcomes in the short term (for example by surveying educational stakeholders), and monitor ITE graduates' training needs (for example for ICT skills) in the longer term to guide further improvements to ITE.

1.11 **Better target public funding for CPD to the needs of teachers, leaders and schools, while improving quality assurance and increasing funding (especially for socio-economically disadvantaged schools) over time**. The SMSM should expand the *Tęsk!* programme to give more teachers the opportunity to teach in multiple subject areas. The Government should formalise individual learning plans as part of teacher and school leader appraisals, and collect data on and monitor teachers' and school leaders' training needs over time. The Government should require that CPD be linked to individual learning plans and broader school needs, and align national priorities for CPD with the results of the ongoing monitoring of training needs. In the first instance, priority could be given to CPD for the new curricula, as well as ICT skills, student assessment and classroom management for teachers; and data use, feedback, and financial management for school leaders. The SMSM, municipalities, institutions, experts and stakeholders should develop a quality assurance system for CPD to assess alignment with learning needs, user satisfaction, and impacts on teaching and leadership. With this system in place, the SMSM and municipalities should increase public funding for CPD to overcome barriers to the provision of and participation in relevant, high-quality CPD. In particular, higher rates of public CPD funding for teachers and school leaders should be provided in disadvantaged schools to improve their access to CPD and their capacity to teach and support disadvantaged students.

Opportunity 3: Making vocational and higher education more responsive to labour market needs

In addition to implementing and complementing the new school curricula, as well as strengthening the teaching workforce, Lithuania could increase the responsiveness of vocational and higher education to current and anticipated labour market needs to better equip young people with skills for work and life. A responsive education system that allows students to develop a set of skills aligned with current and anticipated labour market needs is beneficial for students, employers and the economy as a whole.

As noted earlier, while responsive education systems benefit students, providers and enterprises, initial VET and HE in Lithuania do not appear to be highly responsive to labour market needs. Responsive

education systems help graduates achieve higher employment rates, avoid the "scarring effects" of youth unemployment and build resilience to future changes in the world of work. However, while the vast majority of HE and VET graduates in Lithuania find work, many are mismatched with their jobs. Graduate employment rates and levels of mismatch also differ depending on field of study. VET enrolments may be too low to meet future demand for certain middle- and higher-skilled jobs. Furthermore, recent enrolment and graduation patterns in HE and VET do not appear to be closely aligned with Lithuania's skills needs in some areas. The lack of responsiveness of VET and HE may be contributing to skills imbalances in Lithuania's labour market.

Various Lithuanian strategies prioritise the importance of meeting the evolving skills needs of Lithuania's economy and society. For example, Lithuania's National Plan for Progress 2021-2030 sets goals to improve the match between the competences acquired in education institutions and the labour market. The 2020 government programme seeks to make HE and VET more responsive to the needs of the economy and society through initiatives to link higher education funding to performance indicators, and to implement an apprenticeship culture, among other things (Seimas, 2020[9]).

Recent reforms in VET and HE seek to make education more responsive to labour market needs. All VET institutions were given the status of "self-governing organisation" in 2018. This decentralised model aims to provide wider engagement and shared responsibility for ensuring that VET programmes correspond to labour market needs, provide better practical training conditions in companies, and improve the employability of VET graduates (OECD, 2017[16]). Networks of VET institutions were also reorganised in each of the 10 regions based on an evaluation of demographic trends, economic needs, etc., as well as institutions' programmes, responsiveness to skills needs in the economy, learners, pedagogical staff, accessibility, etc. In each region, programmes are being reviewed to identify duplication and assess alignment with labour market needs. By the end of 2020, there were 57 VET institutions remaining, and many overlapping programmes within regions had been abolished (Eurydice, 2020[89]). This took place alongside other amendments, such as the introduction of modular programmes and the apprenticeship model, mentioned earlier. In higher education, reforms of the funding and quality assurance systems, as well as further consolidation of HEI networks, were planned for 2017-2020. These reforms included plans to introduce a performance and results-oriented funding system, bring programmes closer to the needs of the market, and introduce results-oriented quality assurance that measures student employment rates, among other things. However, while some steps have been taken to optimise the network of HEIs, the implementation of funding and quality assurance reforms have been delayed, in part because of contradictions with existing national laws (Caturianas and Budraitis, 2019[90]).

The available data and evidence, including input from project participants, suggest that funding design, co-operation between institutions and employers, and career guidance are the major factors inhibiting the responsiveness of initial VET and HE to labour market needs in Lithuania. Funding and admissions policies are not creating strong incentives for institutions and individuals to respond to labour market needs. Educational institutions and employers do not systematically and effectively co-operate, especially in the provision of work-based learning. Finally, project participants frequently highlighted the lack of accessible and high-quality career guidance services to students in schools, colleges and universities, to guide their study choices towards meeting labour market needs. The need for a lifelong career guidance system in Lithuania, which would also meet the needs of young people, is discussed in Chapter 5.

Ensuring that VET and HE funding and admission policies incentivise institutions and students to meet labour market needs

Lithuania could modify funding arrangements and admissions policies to increase incentives for institutions and students to respond to labour market needs. This could be done by more closely linking the number and value of state-funded places ("student baskets") across different fields of study to current and anticipated skills needs, as determined by experts. State funding will need to be stable in the medium term to give institutions the time and incentives to invest in developing high-quality, responsive programmes.

Furthermore, state funding could be partially linked to institutions' performance in meeting labour market needs, for example as measured by graduate employment outcomes. In the medium to long term, as Lithuania improves its skills assessment and anticipation and career guidance systems it could consider moving away from the centralised determination of state-funded places by field of study to allow funding to more freely follow students to programmes of their choosing.

Across the OECD, governments use funding arrangements for education and training institutions to steer the mix of provision in favour of subjects that are either strategic or face high labour market demand. Such incentives may be necessary as education and training providers may be reluctant to respond to changing labour market demand given that adapting or developing courses can be costly in terms of financial and human resources (OECD, 2017[91]). Students may also lack sufficient information and guidance to make study choices aligned with labour market prospects. Several approaches can be taken to steer the mix of provision, as shown in Box 2.6.

Box 2.6. Supply-side financial incentives for steering education and training

- **Subsidies**: Governments can heavily influence provision by targeting public subsidies at particular courses only, by varying the subsidy amount for different courses, or by funding the development of specific transversal skills across all programmes. The use of subsidies to encourage institutions to provide certain types of courses assumes that the fundamental problem is a lack of provision, and that once this supply-side bottleneck is removed, sufficient demand exists for the courses being subsidised.
- **Performance-based funding** (or "outcomes-based funding"): This bases an element of the funding formula on a set of predefined outcomes, such as the number of students/graduates in certain fields, or the labour market outcomes of graduates.
- **Performance contracts** (or "target agreements" or "development contracts"): These involve the government and providers agreeing on certain objectives to be attained by the providers. Performance contracts can be tied to funding and reward organisations for graduate labour market outcomes or for the provision of certain types of courses.
- **One-off capital funding**: This seeks to establish the conditions for institutions to deliver programmes/skills for which there is a high cost of setting up or expanding programmes (particularly where capital investments are significant).
- **Regulating start-up of new programmes** (and closing existing ones): This can be seen as a financial incentive insofar as a programme's eligibility for public subsidies is conditional on it being approved. In many cases, such approval is carried out by education experts and based on an assessment of the anticipated learning outcomes, the quality of instruction (including the qualifications of the teaching staff and the adequacy of physical infrastructure and other resources available), as well as on the positioning of the new programme in relation to existing programmes (e.g. to avoid duplication). Increasingly, however, countries also require evidence of a labour market need for new programmes.
- **Tuition fee policy**: In theory, countries can steer investments in education and training by allowing institutions to charge different tuition fees by field of study. In practice, however, this is rarely undertaken. While several countries vary tuition fees by field of study, it does not appear as though they lower tuition fees to incentivise students to pursue certain fields of study over others. If anything, fees are higher for subjects for which there is higher labour market demand. Presumably, the promise of higher labour market returns is deemed to be a sufficient incentive for individuals to pursue those fields of study.

Source: OECD (2017), *Financial* Incentives *for Steering Education and Training*, Getting Skills Right, http://dx.doi.org/10.1787/9789264272415-en.

Public funding for initial VET and HE is widely available to students, subject to previous qualifications, the field of study selected, and in HE, academic performance. In both initial VET and HE, the SMSM determines the number of state-funded (free of charge) places for each field of study. Subject to these quotas, initial VET is free of charge for students acquiring the qualification for the first time, while in HE an individual's first degree at each level is free of charge, should the student meet the academic standards required for admission.[5] Subject to these criteria, VET and HEIs are then funded on the principle of the "money follows the student", which is called the "student basket" in Lithuania.[6] The state subsidy is paid based on the number of eligible students enrolled and seeks to encourage healthy competition and differentiation between institutions, and allow students/parents to choose institutions more flexibly, among other goals.

The process for determining the maximum number of state-funded places available for each field of study in VET and HE is highly centralised, and could distort the supply and demand of programmes. While comparative information on VET is sparse, in HE most governments across the OECD have limited control over student numbers by field of study. In 2017, only Lithuania and three other OECD countries (Estonia, Hungary and Turkey) had a centralised system in which an authority external to the university decided on the number of state-funded study places (OECD, 2017[91]). Since then, Estonia has abandoned this centralised system in favour of negotiated agreements with institutions (Box 2.7). The SMSM is required to consider the country's needs for economic, social and cultural development (including labour market needs) when setting the number of state-funded places for each field of study in HE. It can do this, for example, through consultations with the National Commission for the Co-ordination of Human Resources Monitoring (*Lietuvos Respublikos Vyriausybės komisija nacionalinei žmogiškųjų išteklių stebėsenai koordinuoti*).

For initial VET places, the SMSM also considers the opinions of regional councils. However, in the absence of a comprehensive and detailed skills assessment and anticipation system in Lithuania (see Chapter 5), it is difficult for the government to ensure that these quotas are aligned to labour market needs, including at a regional level. A recent national audit of VET found that the SMSM has not clearly planned or justified the allocation of state-funded positions, with too few students enrolled in manufacturing and processing and ICT (National Audit Office of the Republic of Lithuania, 2020[92]). After a recent decision to expand state-funded student places, a large number of these places have gone unfilled in some fields (e.g. ICT programmes in HE), while demand exceeds supply in other fields (e.g. business, administration and law in HE) (Table 2.5). As Lithuania strengthens its skills assessment and anticipation and career guidance systems (Chapter 5), it should consider alternatives to the central planning of state-funded places, such as allowing state-funded places to more freely follow students to fields and programmes of their choosing.

State funding for university places and admissions policies may not be working together sufficiently to support students from disadvantaged backgrounds. Some participants in this project stated that HEIs sometimes lower admission requirements to attract more students and state revenue, potentially in breach of agreements with government and/or externally determined admission criteria. This may lower incentives for school students and teachers to raise their performance (see Opportunity 2: Strengthening Lithuania's teaching workforce). More often, institutions offer fee-paying places with low admission requirements in fields and programmes where either there are no state-funded places left or students have not met admission requirements. For example, in 2020 there were 778 students enrolled in state-funded places and 350 students enrolled in fee-paying places in undergraduate and integrated humanitarian studies programmes in Lithuanian universities. The availability of fee-paying places has the positive side effect of improving access to HE for students who perform lower on the *matura* exam (and who are also more likely to be from disadvantaged backgrounds). However, the funnelling of low-performing students into fee-paying places is likely to be regressive, as students from disadvantaged backgrounds perform below advantaged students on average (OECD, 2019[30]). Lithuania should monitor and seek to increase the number of students from disadvantaged backgrounds in state-funded places, including those lacking strong academic performance. This could be done, for example, through alternative admission pathways,

a larger subsidy (student basket) to increase institutions' capacity and incentives to attract and academically support disadvantaged students to successfully complete HE studies, and expanded scholarships and loans for students from disadvantaged backgrounds to help to cover their living costs.

Table 2.5. Offered and unfilled state-funded places, by field of education, 2019/20

	HE (colleges and universities) Number of state-funded places offered	Number of unfilled state-funded HE places	Initial VET Number of state-funded places offered	Number of unfilled state-funded Initial VET places
Education	465	188		
Arts and humanities	1 718	82	875	0
Social sciences, journalism and information	1 262	0		
Business, administration and law	1 890	0	2 315	259
Natural sciences, mathematics and statistics	812*	50*		
Information and communication technologies	3 630	899	1 565	163
Engineering, manufacturing and construction	1 375	188	8 210	823
Agriculture, forestry, fisheries and veterinary	414	85	830	214
Health and welfare	1 433	48	1 620	0
Services			4 570	75

Note: * Universities only, not colleges.
Source: Seimas of the Republic of Lithuania (2019[93]), *Dėl Asmenų, išskyrus asmenis, kuriems taikomas Lietuvos Respublikos užimtumo rėmimo įstatymas, Lietuvos Respublikos neįgaliųjų socialinės integracijos įstatymas ar Lietuvos Respublikos vidaus tarnybos statutas, pageidaujančių įgyti kvalifikaciją, priėmimo*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/176151706ddb11e99ceae2890faa4193/asr.; LAMA BPO (2020[94]), 2020 m. stojančiųjų skaičius ir jų pasirengimas (2020 number of entrants and their preparation), https://bakalauras.lamabpo.lt/2020-m-stojanciuju-skaicius-ir-ju-pasirengimas/.

The monetary value of the student basket for HE and VET programmes in different fields of study do not create incentives for institutions to invest in programmes that respond to labour market needs. While the SMSM considers skills needs when determining the allocation of state-funded places, it does not consider skills needs in setting the value of the student basket by field of study. The SMSM calculates the student basket for VET and HE to cover the costs of delivering the course/programme, including teaching costs and the salaries of teachers, school administration, and key support staff; textbooks and school materials; and teacher in-service training. The SMSM takes into account expenses for teacher salaries based on the number of students enrolled, the number of teaching hours and class size. The funding formula assigns extra weight for students with special educational needs, migrants and those studying in a minority language. The student basket also takes into account the cost of practical training in different fields. In secondary VET, this has resulted in higher per student funding than in general secondary education, reflecting VET's higher costs for infrastructure, teaching and work-based training, etc. (OECD, 2017[16]). As such, the student baskets are not highly differentiated by field of study (Table 2.6), and do not create incentives for institutions to invest in programmes that respond to labour market needs.

Table 2.6. Student basket (public subsidy per student), by field of education, 2020/21

	Universities Student basket (public subsidy) EUR	Colleges Student basket (public subsidy) EUR
Education	980	686
Arts and humanities	1 228	1 130
Social sciences, journalism and information	620	484
Business, administration and law	557	487
Natural sciences, mathematics and statistics	917	
Information and communication technologies	984	643
Engineering, manufacturing and construction	1 050	
Agriculture, forestry, fisheries and veterinary	1 068	718
Health and welfare	976	681

Note: Derived from the number of study places and the total value of public subsidies in EUR.
Source: Ministry of Education, Science and Sport (2020[95]), *Dėl preliminaraus valstybės finansuojamų pirmosios pakopos ir vientisųjų studijų vietų, į kurias 2020 metais priimami studentai, skaičiaus, studijų stipendijų skaičiaus ir skiriamo valstybės finansavimo,* https://www.e-tar.lt/portal/lt/legalAct/6438f1c07a4f11eab005936df725feed/asr.

An increasing number of OECD countries (e.g. Australia, Czech Republic, Denmark, England) partly base the value of public subsidies for programmes on an assessment of skills shortages and priority occupations, in addition to the costs of delivery (OECD, 2017[91]). Furthermore, given the growing importance of developing transversal skills in VET and HE, more and more governments are seeking to encourage institutions to provide transversal skills for all students, regardless of their field of study. For example, in the period 2014-20, Poland introduced the Competency Development Programme to fund skills development across all courses of study, with a particular focus on entrepreneurial, professional, interpersonal and analytical skills (OECD, 2019[96]). The SMSM could consider making use of skills needs intelligence, including qualitative and regional intelligence, in setting the value of the student basket for each field/programme. School performance would need to be improved, and/or HE admission requirements adapted (and academic support services in HE strengthened), in order for these subsidies to reach more students.

Other public funding measures in Lithuania may create incentives for students and institutions to respond to labour market needs, but the size and uptake of these funds is limited. Universities can apply for targeted funding to increase the number of study places in areas of national importance that are less popular among students. In the VET sector, institutions and individual employers may apply to the SMSM for funding to start a new programme in an area where there is a clear skills need. However, in practice this targeted funding represents a very small share of institutions' revenue. In HE, targeted scholarships seek to attract students to study areas deemed important for the state, such as teacher training and marine science study programmes (Eurydice, 2019[97]), and the government plans to increase scholarships in VET (Seimas, 2020[9]). However, the impact of these scholarships is likely to be low, as only 569 university students in 2019-2020 received scholarships of any sort (social, incentive, study, doctoral, etc.) (Education Management Information System, 2021[98]).

Furthermore, public funding for VET and HE institutions is not linked to graduate study and labour market outcomes, which lowers institutions' incentives to develop, attract students, and help them complete programmes that respond to labour market needs. Performance-based funding (or outcomes-based funding) and performance contracts are increasingly being used by OECD countries. This involves funding being connected to measureable indicators to incentivise and reward the achievement of specific policy goals (Estermann and Claeys-Kulik, 2016[99]). The advantage of this approach is that it places responsibility in the hands of institutions and encourages them to think carefully about how to increase intake/graduation in certain subjects and how to improve the labour market outcomes of their students, while also giving institutions the freedom to come up with their own solutions (OECD, 2017[91]). In Poland, for example, 5% of professional HEI (college) revenue is based on the relative unemployment rate of their graduates

(Box 2.7). In Finland, polytechnics receive approximately 3% of funding based on graduate employment rates (Jongbloed et al., 2015[100]), while in VET, performance-based funding accounts for 35% of institutions' funding and is based on completed qualifications and competencies (Ministry of Education and Culture, 2019[101]). Lithuania's 2020 government programme states that the government's intention is to link HE study funding with the level of graduate competencies and employment indicators (Seimas, 2020[9]). In several OECD countries, performance funding is greater for VET and colleges than for academic universities – a differentiation that Lithuania could consider following.

In 2019, Lithuania's government updated regulations to allow the SMSM to enter into performance-based contracts/agreements with providers for a small amount of funding (capped at 5% of institutions' basic funding), which is above and beyond what institutions already receive. The SMSM has not yet made any such agreements with institutions, and if they do the level of performance-based funding may be insufficient to make institutions more responsive. Lithuania should seek to implement an element of performance-based funding and/or use performance contracts for colleges and universities. Funding could be partially based on outcomes metrics such as completions by field of study, and graduate employability and skills match to their jobs. Lithuania will be even better placed to do this as it continues to improve its skills needs intelligence and detailed administrative datasets arising from the National Monitoring of Human Resources system (see Chapter 5).

Box 2.7. Relevant national and international examples: Funding incentives for responsive education

Estonia – From centrally planned to negotiated state-funded places

Like Lithuania, Estonia had a centralised system for determining the number of state-funded places in higher education programmes each year, taking into account labour market needs. However, Estonia abandoned this system as it was found to be not effective at solving skills shortages, and instead introduced distortions. Estonia now sets and directs public subsidies based on performance agreements, which give institutions more autonomy to decide how many study places to offer in different fields of study, while still allowing the government to negotiate certain floors or ceilings on the size of individual programmes. For example, agreements have included clauses to reduce the number of admissions in law programmes, increase admissions in ICT courses, and to accept a minimum number of students to first year medicine. From 2017, Estonia also allocated up to 20% of funds based on performance, with one of the six indicators being the labour market outcomes of graduates.

Estonia has found that performance agreements are more useful for influencing the responsiveness of higher education institutions, decreasing unreasonable duplication of study programmes within and between institutions, and supporting study areas of national importance. The performance agreements have also included other criteria such as internationalisation, support services for students, co-operation with the business sector and development of common curricula and to allocate funds on the basis thereof.

Poland – Performance based funding

The massification of higher education in Poland means that labour market outcomes of graduates are an important perspective for future students, higher education institutions and policy makers at the national level.

Poland's algorithm for allocating funding to professional higher education institutions (colleges) is based on four criteria: students, staff, graduates and income. The graduate criteria refers to the number of graduates and the relative graduate unemployment rates based on findings from graduate career tracking. Some 5% of funding is based on the graduate criteria.

The Polish Graduate Tracking System, based on administrative data, allows for the monitoring of graduate outcomes in the labour market by institution, field of study and individual course. A mix of absolute and relative measures allow the government to assess graduate outcomes in the context of local labour market conditions. Results of the first two waves of graduate tracking show that the outcomes vary by study area and over time.

Source: Eurydice (2020[102]), *Estonia: Higher Education Funding*, https://eacea.ec.europa.eu/national-policies/eurydice/content/higher-education-funding-24_en.; OECD (2019[96]), OECD Skills Strategy Poland: Assessment and Recommendations, https://doi.org/10.1787/b377fbcc-en.; OECD (2017[91]), Financial Incentives for Steering Education and Training, http://dx.doi.org/10.1787/9789264272415-en.

Recommendations for ensuring that VET and HE funding and admission policies incentivise institutions and students to meet labour market needs

1.12. **Make better use of "student basket" subsidies and performance contracts/funding to steer HE and VET enrolments towards fields facing shortages and/or of strategic importance**. The SMSM, in consultation with the National Commission for the Co-ordination of Human Resources Monitoring, social partners and institutions, should re-evaluate the effectiveness of the current methodology for allocating state-funded places by field of study to consider meeting labour market needs. They should also consider partially linking the value of student basket subsidies for different VET and HE programmes to labour market needs, as assessed by experts. As Lithuania improves its skills needs assessment and career guidance systems over time (see Chapter 5), the SMSM should consider decentralising the allocation of student basket subsidies, for example by removing field-of-study-level quotas for state-funded places and allowing funding to more freely follow students to courses of their choice. In addition, the SMSM should make use of performance agreements and/or performance funding to link some funding to completions by field of study and/or graduate employment outcomes to increase institutions' incentives to attract students to, and ensure they complete, programmes that meet labour market needs. Finally, the SMSM should seek to increase public transparency around how and why state-funded places are allocated, and make funding allocations more stable over the medium term (e.g. for a five-year period, with limited annual fluctuations) so that institutions have incentives to invest in new and innovative programmes that meet labour market needs. These measures should be complemented by measures that empower learners to make well-informed study choices, such as access to high-quality lifelong career guidance (see Chapter 5).

1.13. **Expand measures to support students from socio-economically disadvantaged backgrounds to access state-funded HE places, especially in fields experiencing skills shortages and/or of strategic importance**. In the context of declining HE enrolment numbers and persistent inequalities in access, the SMSM should seek to improve admission policies, financial incentives and support for youth from disadvantaged backgrounds. Lithuania's admission agency and institutions should seek to implement alternative pathways into HE for youth from socio-economically disadvantaged backgrounds, for example by recognising a broader range of competencies in the admission process (see Opportunity 1) and by providing upfront academic support. The SMSM could raise the value of the student basket subsidy for

students from low socio-economic backgrounds to increase institutions' capacity to academically support students to successfully complete their studies. This could be complemented by expanded and more generous needs-based scholarships and loans for youth from disadvantaged backgrounds to help cover their living costs during studies. The SMSM should start with these measures in fields assessed by experts as facing shortages and/or being of strategic importance for the economy. The measures for students from disadvantaged backgrounds should be complemented by efforts to improve school performance in the long run (see Opportunity 1: Successfully implementing and complementing modern curricula, and Opportunity 2: Strengthening Lithuania's teaching workforce).

Strengthening co-operation between employers and VET and HE institutions

Improving the labour market relevance of education requires effective interaction between the education system and employers (OECD, 2015[103]). In VET, employers frequently co-operate with VET institutions at the national and subnational level to suggest adjustments to the curriculum and feed in other relevant information (Kuczera and Jeon, 2019[104]). In HE, employers should collaborate with universities to ensure that the content of the curriculum is labour market relevant (OECD, 2017[105]). Employers should also collaborate with education institutions to provide work-based learning that will allow students to develop work relevant technical skills using up-to-date equipment and work practices, as well as soft skills that are valuable in the workplace (OECD, 2018[106]).

The importance and challenge for governments in supporting effective co-operation between educational institutions and employers is amplified in the context of COVID-19. The economic slowdown has left many firms in a position where they have either delayed hiring, shed staff or closed altogether. Fewer firms have the capacity to provide work-based learning opportunities to students and may not see other forms of engagement with educational institutions as a priority in this context. In addition, increasing numbers of students face short-term risks of unemployment, which could have a scarring effect on their employability in the long term if left unchecked. Work-based learning opportunities for these students could help to improve their labour market prospects and reduce their risks of unemployment.

Participants in this project stated that Lithuania lacks a culture of co-operation between educational institutions and employers, and that co-operation is often ad hoc. The challenge for Lithuania has been to enact policies that raise and align the incentives of institutions and employers to co-operate effectively. Achieving this will help ensure that youth in VET and HE are equipped with the skills that meet current and anticipated labour market needs.

Employer involvement in the governance of VET institutions has been lower in practice than intended by the relevant regulations. In several OECD countries (including Flanders [Belgium)], Estonia and Poland), employers, and often trade unions, play a role in HEI governance bodies (OECD, 2017[105]). In Lithuania, the law stipulates that HEIs must include external stakeholders in their councils, which elect rectors, approve budgets and strategy, etc. In practice, employer representatives are often selected to sit on HEI councils. Across the OECD, employer involvement in institutional governance is even more common in VET systems. However, in Lithuania this has not been the case in practice. For example, in 2018, employers were involved in the governance of only 15 out of 70 VET schools in Lithuania (Cedefop, 2019[107]; National Audit Office of the Republic of Lithuania, 2020[92]). Since 2018, changes to the governance of VET schools make them "self-governing organisations" with their own public budget governed by representatives of the SMSM, regional and municipal governments, private employers, and industry representatives (Government of the Republic of Lithuania, 2020[10]). It will be important to convince employers of the value of this co-operation in order to interest them to be active in this role.

Employer involvement in curriculum design for VET and colleges is relatively systematic in Lithuania, and appears to be improving with recent policy changes. Lithuania's 18 sectoral professional committees (SPCs), comprising business representatives, employers, employees and education providers, are advisory bodies that aim to support the effectiveness of the qualifications system and the labour market relevance of vocationally oriented programmes in specific economic sectors. Their activities include assessing vocational training programmes or their modules and helping to conduct external evaluation exercises of vocational training suppliers offering formal vocational training (Cedefop, 2019[108]). Increasing the capacity of SPCs will be important for ensuring that they play this role effectively (see Chapter 5). Individual VET institutions prepare their own curriculum in accordance with legislation, and it is recommended that this is done with working groups composed of representatives of the school community (including employers) (Eurydice, 2020[109]).

High-quality work-based learning (WBL) is an essential element of co-operation between institutions and employers to help make education more responsive to labour market needs. WBL can include apprenticeships, field experience, mandatory professional practice, co-operative education placements, internships, applied research, project learning and service learning. WBL complements the learning that takes place in the classroom or laboratory by enabling students to develop work-relevant technical and professional skills using up-to-date equipment and work practices, as well as transversal skills such as teamwork, communication and negotiation (OECD, 2012[110]). Certain skills developed in work-based learning, such as interpersonal sensitivity and professionalism, are especially difficult to develop in the classroom (Shoenfelt, Stone and Kottke, 2013[111]).

WBL is built into VET programmes in Lithuania to a limited extent. Initial VET in Lithuania is school based and includes 8 to 15 weeks in either a company (as an unpaid traineeship) or a school-based workshop simulating working conditions (Cedefop, 2019[112]). In contrast to "dual" vocational systems (e.g. Germany or Switzerland), the duration of the Lithuanian student's firm-based work experience is brief. Lithuania has a network of 42 sectoral practical training centres in its 70 VET institutions that seek to raise the attractiveness of VET, improve the quality of practical training for VET students and teachers, and generate additional revenue for VET institutions by allowing them to offer paid services to local businesses. Lithuania is also seeking to make WBL available by expanding apprenticeships.

Recent efforts to improve WBL in initial VET in Lithuania have focused on introducing apprenticeships, but employers are likely to need considerable financial and non-financial support to offer such opportunities. As noted earlier, Lithuania has been unable to achieve its goals for developing an apprenticeship system, with financial barriers identified as a major obstacle for firms (Beleckiene, 2019[113]). The OECD has previously recommended that Lithuania consider a modification of the student basket funding methodology for vocational schools to recognise and reward the work-based instruction of vocational students (Shewbridge et al., 2016[82]). Lithuania is seeking to do this with the recent 25% funding premium introduced for apprenticeships. Plans are in place for firms to receive compensation of 70% of the wage of the apprentice and social security contributions (up to 1.5 times the minimum wage), as well as up to 20% of the wage of the manager in charge of training of the apprentice. However, Lithuania's many micro-sized firms may have limited capacity to oversee an apprentice, even with financial support. It will be essential that the ministries involved in apprenticeships also implement effective non-financial incentives that could include capacity building and support measures designed to help employers make better use of apprentices, such as the provision of training for apprentice instructors, offering support materials to firms to help them develop their training skills, and facilitating networking among employers (OECD, 2017[16]).

Initial VET institutions and smaller sized firms in Lithuania may also lack incentives to support non-apprenticeship forms of WBL in workplaces. Vocational school heads have estimated that 85% or more of students' work experience is undertaken in firms (OECD, 2017[16]). However, almost 30% of Lithuania's upper secondary VET graduates (15-34 years old) in 2016 reported that they had undertaken no work experience during their studies. This is a missed investment, as Lithuania's vocational graduates (16-34 years old) who completed a traineeship during their studies had much higher employment rates

(78%) in 2016 than their counterparts who had no work experience (65%) (Musset, 2019[114]). VET institutions may lack incentives to increase work-based learning, despite its benefits, given their long experience with and large investments in school-based training (especially in Lithuania's 42 sectoral practical training centres). Additionally, many Lithuanian firms may lack the financial incentives, experience and robust capacities for the provision of work-based learning. Similar to the proposed premium for apprenticeships in the student basket, Lithuania could consider a premium for shorter term WBL experiences that take place with employers.

Industry professionals are not highly engaged in the teaching process in VET schools and sectoral practical training centres, which may be a missed opportunity for students to learn about the latest practices and technology. Recruiting industry professionals on a part- or full-time basis to teach in VET programmes can help to ensure that courses are responsive (OECD, 2017[105]; OECD, 2021[77]). Industry professionals can be recruited as teachers through simplified pathways or engaged in flexible/non-formal ways (e.g. workshops, teaching only a limited number of hours per year/week) without becoming teachers in order to bring industry knowledge/expertise to the classroom (OECD, 2021[77]). This is particularly important in the context of Lithuania's VET, as one survey showed that over 40% of vocational teachers have no prior relative work experience in the area they teach (Vaitkute, 2016[115]; OECD, 2017[16]). Lithuania's network of 42 sectoral practical training centres were intended to raise the attractiveness of VET, improve the quality of practical training of VET students and teachers, and generate additional revenue for VET institutions, permitting them to offer paid services to local businesses. However, these ideas have proven relatively unattractive to employers (National Audit Office of the Republic of Lithuania, 2020[92]), who are not highly engaged in their activities. Furthermore, students from rural areas are often disadvantaged in terms of access to a sectoral practical training centre because of distance and transport limitations. The OECD recommended that Lithuania ensure the financial sustainability of sectoral practical training centres and improve the accessibility of the centres through a system of student support that puts them within reach of all vocational learners (OECD, 2017[16]). In the context of COVID-19 and subdued work placement prospects for youth, attracting employers to be more involved in the teaching process at sectoral practical training centres could help ensure the benefits of WBL for youth.

WBL is gradually becoming a more prominent part of HE in Lithuania, but its implementation is largely dependent on individual institutions. WBL in HE can include placements (internships/apprenticeships), traineeships and entrepreneurship. WBL is an integral part of the professional higher education curriculum in colleges in particular. For example, in business studies at Vilnius College, at least 40 European Credit Transfer and Accumulation System (ECTS) credits are dedicated for students' practical experience in businesses. Moreover, business simulation courses (5 ECTS) provide students the opportunity to simulate working in different parts of a company to better understand business processes. Experiences such as the "Creativity Camp" involve businesses in presenting real world challenges to students, who need to find real solutions. Furthermore, almost half of HE students in Lithuania work during their studies, and half of these in a job (very) closely linked to their field of study (Masevičiūtė, Šaukeckienė and Ozolinčiūtė, 2018[116]).

Policy makers lack data on the extent and quality of WBL in VET and HE, from which they could design effective policies. In HE, individual institutions collect some information on WBL and may report this in their annual reports. For example, the 2019 annual report of the University of Vilnius showed that 389 students went on an Erasmus+ internship, and that a programme was introduced to allow students to work on projects set by enterprises (University of Vilnius, 2020[117]). However, Lithuania currently lacks a system and consistent approach between institutions for monitoring the quality of WBL for students. This limits the ability of the ministries involved in VET to ensure funds and policies are directed effectively and efficiently. Such monitoring should be developed, and for VET could be included within the VET monitoring system being established as a part of the national project: Strengthening VET Quality Assurance Systems and Processes.

Despite these systemic challenges, various promising practices exist in Lithuania, and elsewhere, which could inform future improvements. In HE, promising practices include the project Erasmus+ KA2:

Co-operation for innovation and the exchange of good practices – Knowledge Alliances and the PATIRTIES PARTNERIAI LT, which gives students hands-on training by asking them to solve company challenges. The Project Strategic Partnership GRADual: Increasing Students/Graduates Employment Readiness (Government of the Republic of Lithuania, 2020[10]), led to the creation of the Partners 4 Value University-Business Consortium in Lithuania, which has enabled almost 500 HE students to undertake internships with businesses (Box 2.8).

Box 2.8. Relevant national and international examples: Collaboration between institutions and employers

Lithuania – Partners 4 Value

Partners 4 Value is the first university-business consortium in Lithuania, taking place between the Lithuanian Confederation of Industrialists (LPK) and the leading Lithuanian universities (Vilnius University, Vilnius Gediminas Technical University, Kaunas University of Technology, Vytautas Magnus University and Klaipeda University). Its goal is to expand "real life" training opportunities for students and university personnel through business-international and organisation-university partnerships. It aims to improve youth employment readiness and job prospects in local and international markets, among other things. This is achieved by promoting university-business co-operation, entrepreneurial education, and investing in the human potential of future leaders. Some 497 students completed an internship between December 2017 and December 2019.

England and Sweden – Recruiting industry professionals to VET teaching

In several countries, such as Sweden and England, there are simplified pathways for industry professionals to enter the VET teaching workforce.

In Sweden, all school teachers should be certified, and only these teachers can have permanent employment and are allowed to set grades. For VET teachers, however, the Education Act permits an exception: non-certified teachers in VET can have permanent employment and set grades independently if certified teachers are unavailable. In England (United Kingdom), each VET provider recruits its own teachers. Candidates with work experience and/or relevant qualifications in a trade can apply directly for teaching vacancies and then train – on a voluntary basis – for a teaching qualification on the job, if supported by their employer. It is also possible for trainee teachers to undertake pre-employment training, which is typically delivered by universities.

Norway – Financial and non-financial support for WBL (apprenticeships)

Norway, like several other OECD countries, offers a range of financial incentives and non-financial support for employers to offer work-based learning in the form of apprenticeships. Some of this support is tailored to small and medium-sized enterprises (SMEs). Norway offers a direct subsidy per apprentice depending on apprentice characteristics (such as age, disability, school performance, migration status, gender, previous education) and sector characteristics.

The Norwegian Directorate for Education offers free resources for apprentice instructors on their website, including short movies showing how instruction can be carried out in practice. Following a recent campaign in Norway, training companies can now brand themselves with a label for "approved learning enterprise" to encourage consumers to buy goods and services from them, and so that more enterprises join the apprenticeship scheme. Apprenticeship training agencies (*opplæringskontor*) are an important form of support for SMEs to hire apprentices as they establish new apprenticeship places, supervise companies with apprentices, train staff involved in the instruction of apprentices and organise the administrative tasks related to being a training company.

The Norwegian government has also introduced rules for apprenticeship requirements in public procurement. For contracts worth a minimum of NOK 1.5 million (Norwegian krone), the government must buy goods and services from companies that are an approved apprenticeship provider. These regulations mainly apply to the building, construction and ICT sectors, and seek to ensure that every VET student in search of an apprenticeship finds one.

Source: Lithuanian Confederation of Industrialist (2021[118]), *Patirties partneriai LT*, https://www.lpk.lt/patirties-partneriai-lt/.; (OECD, 2021[77]); Kuczera (2017[119]) "Striking the right balance: Costs and benefits of apprenticeship", *OECD Education Working Papers*, https://doi.org/10.1787/995fff01-en.

Recommendations for strengthening co-operation between employers and VET and HE institutions

1.14. Expand work-based learning (WBL) in VET and HE by increasing financial and non-financial support for apprenticeships and other forms of WBL. The ministries overseeing apprenticeships should ensure that recent plans to expand financial support for apprentices and their employers are implemented. The ministries could also provide training for apprentice instructors, offer support materials to firms to help them develop their training skills, and facilitate networking among employers. They could promote bodies that work with groups of small employers to co-ordinate training, and support them with the administration and provision of apprenticeships. Ministries should also consider introducing financial incentives to firms for curriculum relevant traineeships and other types of work-based learning in VET and HE programmes to support WBL in the context of the current economic downturn.

1.15 Increase rural students' access to, and attract employers to be more involved in VET 'work-based learning' in VET institutions and sectoral practical training centres. The government and municipalities should seek to increase subsidised transport for rural VET students to access sectoral practical training centres, particularly if they are unable to find workplace placements in the context of the current economic downturn. The ministries should work with institutions to reach out to and attract employers to be more involved with teaching and instruction at the centres. For example, this could be through offering credits to use the centre's infrastructure at a later time and/or financial incentives. This would have the added benefit of creating linkages between students and employers, and between centres and employers.

1.16. Expand existing administrative datasets with details on students' work-based learning activity to inform policy and ensure the quality of WBL. The responsible ministries should collect administrative data from VET institutions, colleges and universities on the quantity and type of WBL undertaken by students to better inform policy in this field. The quality assurance agencies responsible for VET and HE should develop and implement a framework for monitoring the quality of WBL as part of their activities.

Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Successfully implementing and complementing modern curricula	
Implementing the new general education curricula and modern assessment practices	1.1 Continue to improve the design of the general curriculum framework during the final steps of the preparation phase. 1.2 Actively engage and communicate with education stakeholders to ensure the successful implementation of the new curriculum for general education, especially in socio-economically disadvantaged schools. 1.3 Modernise student assessment practices to complement the new curriculum for general education.
Complementing formal education with accessible, high-quality non-formal education and training	1.4 Recognise and reward the skills young people acquire through non-formal education and training, including in formal examinations and tertiary entrance. 1.5 Better target non-formal education and training programmes and vouchers to students from socio-economically disadvantaged backgrounds. 1.6 Systematically assess and monitor the quality and impact of non-formal education and training on young people's competencies to inform future investments.
Opportunity 2: Strengthening Lithuania's teaching workforce	
Attracting, retaining and empowering skilled teachers and school leaders	1.7 Make initial teacher education studies accessible to highly skilled students and professionals by continuing to develop and promote multiple pathways, delivery methods and incentives. 1.8 Continue improving career progression opportunities to attract, retain and motivate highly skilled teachers and school leaders, especially in socio-economically disadvantaged schools. 1.9 Improve non-salary work conditions and the school climate for teachers' and school leaders' well-being to empower teaching excellence, especially in socio-economically disadvantaged schools.
Training teachers and school leaders to equip young people with skills for work and life	1.10 Improve the content and quality of ITE by aligning it with the new general curricula, focusing more on practical learning and teachers' training needs, and investing in educational research. 1.11 Better target public funding for CPD to the needs of teachers, leaders and schools, while improving quality assurance and increasing funding (especially for socio-economically disadvantaged schools) over time.
Opportunity 3: Making vocational and higher education more responsive to labour market needs	
Ensuring that VET and HE funding and admission policies incentivise institutions and students to meet labour market needs	1.12 Make better use of "student basket" subsidies and performance contracts/funding to steer HE and VET enrolments towards fields facing shortages and/or of strategic importance. 1.13 Expand measures to support students from socio-economically disadvantaged backgrounds to access state-funded HE places, especially in fields experiencing skills shortages and/or of strategic importance.
Strengthening co-operation between employers and VET and HE institutions	1.14 Expand work-based learning (WBL) in VET and HE by increasing financial and non-financial support for apprenticeships and other forms of WBL. 1.15 Increase rural students' access to, and attract employers to be more involved in VET 'work-based learning' in VET institutions and sectoral practical training centres. 1.16 Expand existing administrative datasets with details on students' work-based learning activity to inform policy and ensure the quality of WBL.

References

Badge Wallet (2021), *Achievement programme "Discover Yourself"*, https://www.badgewallet.eu/en/badge-systems/volunteering/ (accessed on 7 March 2021). [61]

Beleckiene, G. (2019), *European inventory on validation of non-formal and informal learning 2018 update: Lithuania*, https://cumulus.cedefop.europa.eu/files/vetelib/2019/european_inventory_validation_2018_Lithuania.pdf. [113]

Beleckienė, G. et al. (2020), *Vocational Education and Training in Lithuania 2019*, STRATA, Vilnius. [20]

Bilbokaitė, R., V. Šlekienė and I. Bilbokaitė-Skiauterienė (2018), *The Situation of and the Need for STEAM Non-formal Education: The Context of Lithuanian Teachers' Opinions*, http://dx.doi.org/10.21125/edulearn.2018.2077. [25]

Boyd, D. et al. (2009), "Teacher Preparation and Student Achievement", *Educational Evaluation and Policy Analysis*, Vol. 31/4, pp. 416-440, http://dx.doi.org/10.3102/0162373709353129. [83]

Caturianas, D. and M. Budraitis (2019), "Assessment of the ongoing higher education reforms in Lithuania", *NESET Ad hoc report no. 3/2019*. [90]

Cedefop (2020), *Skills forecast 2020: Lithuania*, https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/lithuania-2020-skills-forecast (accessed on 11 February 2021). [35]

Cedefop (2019), *Developments in vocational education and training policy in 2015-19: Lithuania*, https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/developments-vocational-education-and-training-policy-2015-19-lithuania (accessed on 27 March 2021). [107]

Cedefop (2019), *Lithuania - Summary of main elements and distinctive features of VET*, Vocational education and training in Europe, https://www.cedefop.europa.eu/el/tools/vet-in-europe/systems/lithuania (accessed on 27 March 2021). [112]

Cedefop (2019), *Lithuania: Sectoral Professional Committees – Strong Voices in the Lithuanian Qualifications System*, https://www.cedefop.europa.eu/da/news-and-press/news/lithuania-sectoral-professional-committees-strong-voices-lithuanian-qualifications-system. [108]

Cedefop (2018), *Portugal: Youth pass*, https://www.cedefop.europa.eu/en/news-and-press/news/portugal-youth-pass. [68]

Čingiene, V. (2020), "The effect of lithuanian household income on the choice of non-formal education of children through sports and related costs", *Innovative Marketing*, Vol. 16/1, http://dx.doi.org/10.21511/im.16(1).2020.02. [57]

EC (2020), *Education and training monitor 2020: Lithuania*, Publications Office of the EU, https://op.europa.eu/en/publication-detail/-/publication/3fe8aef3-2496-11eb-9d7e-01aa75ed71a1/language-en/format-PDF/source-171314879 (accessed on 8 March 2021). [19]

Echazarra, A. et al. (2016), "How teachers teach and students learn: Successful strategies for school", *OECD Education Working Papers*, No. 130, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jm29kpt0xxx-en. [81]

Education Development Centre (2018), *Continue! Project summary*, https://www.upc.smm.lt/projektai/tesk/english.php. [88]

Education Management Information System (2021), *Neformalus vaikų švietimas [Non-formal education for children]*, http://svis.emokykla.lt/neformalus-vaiku-svietimas/ (accessed on 7 March 2021). [59]

Education Management Information System (2021), *Studijos, mokslas*, https://www.svis.smm.lt/studijos%2C-mokslas/ (accessed on 8 March 2021). [98]

Estermann, T. and A. Claeys-Kulik (2016), "Performance-Based Funding of Universities in Europe", *International Higher Education* 85, http://dx.doi.org/10.6017/ihe.2016.85.9250. [99]

European Commission (2021), *YouthWiki Lithuania: National Programme for Youth Volunteering*, https://national-policies.eacea.ec.europa.eu/youthwiki/chapters/lithuania/24-youth-volunteering-at-national-level (accessed on 7 March 2021). [63]

European Commission (2020), *Recommendation for a council recommendation on the 2020 National Reform Programme of Lithuania and delivering a Council opinion on the 2020 Stability Programme of Lithuania*, https://ec.europa.eu/info/publications/2020-european-semester-country-specific-recommendations-commission-recommendations_en (accessed on 24 March 2021). [70]

European Commission (2019), *Education and Training Monitor 2019: Lithuania*, https://ec.europa.eu/education/resources-and-tools/document-library/education-and-training-monitor-2019-lithuania-report_en (accessed on 6 July 2020). [15]

European Commission (2015), *Quality Youth Work: A common framework for the further development of youth work*, Report from the Expert Group on Youth Work Quality Systems in the EU Member States, https://eurofamnet.eu/agencies/youth-development-programs/european-commission-expert-group-youth-work-quality-systems-eu (accessed on 13 February 2021). [64]

Eurydice (2021), *Lithuania Overview*, https://eacea.ec.europa.eu/national-policies/eurydice/content/lithuania_en (accessed on 6 March 2021). [11]

Eurydice (2020), *Estonia: HIgher Education Funding*, https://eacea.ec.europa.eu/national-policies/eurydice/content/higher-education-funding-24_en. [102]

Eurydice (2020), *Lithuania: Organisation of Vocational Upper Secondary Education*, https://eacea.ec.europa.eu/national-policies/eurydice/content/organisation-vocational-upper-secondary-education-27_ro (accessed on 26 March 2021). [89]

Eurydice (2020), *Lithuania: Statistics on Educational Institutions*, https://eacea.ec.europa.eu/national-policies/eurydice/content/statistics-organisation-and-governance-44_en. [13]

Eurydice (2020), *Lithuania: Teaching and Learning in Vocational Upper Secondary Education*, https://eacea.ec.europa.eu/national-policies/eurydice/content/teaching-and-learning-vocational-upper-secondary-education-27_en. [109]

Eurydice (2019), *Lithuania: Higher Education Funding*, https://eacea.ec.europa.eu/national-policies/eurydice/content/higher-education-funding-44_en (accessed on 27 March 2021). [97]

Eurydice (2019), *Lithuania: Initial Education for Teachers Working in Early Childhood and School Education*, https://eacea.ec.europa.eu/national-policies/eurydice/content/initial-education-teachers-working-early-childhood-and-school-education-43_en (accessed on 26 March 2021). [71]

Eurydice (2019), *Lithuania: National Qualifications Framework*, https://eacea.ec.europa.eu/national-policies/eurydice/content/national-qualifications-framework-44_en#_ftn1. [44]

Farb, A. and J. Matjasko (2012), "Recent advances in research on school-based extracurricular activities and adolescent development", *Developmental Review*, Vol. 32/1, pp. 1-48, http://dx.doi.org/10.1016/j.dr.2011.10.001. [55]

Gouëdard, P. et al. (2020), "Curriculum reform: A literature review to support effective implementation"*, OECD Education Working Papers*, No. 239, OECD Publishing, Paris, https://dx.doi.org/10.1787/efe8a48c-en. [46]

Government of the Republic of Lithuania (2020), *2021–2030 metų nacionalinis pažangos planas [National Plan for Progress 2021-2030]*, https://ministraspirmininkas.lrv.lt/uploads/ministraspirmininkas/documents/files/NPP planas.pdf. [8]

Government of the Republic of Lithuania (2020), *OECD Skills Strategy for Lithuania Questionnaire*. [10]

Government of the Republic of Lithuania (2019), *Dėl Neformaliojo vaikų švietimo ir jo teikėjų veiklos kokybės užtikrinimo metodikos patvirtinimo*, Minister for Education and Sport of the Republic of Lithuania, https://www.e-tar.lt/portal/lt/legalAct/5fddafe0512311e9975f9c35aedfe438. [66]

Government of the Republic of Lithuania (2012), *Lithuania's Progress Strategy Lithuania 2030 (Lietuva 2030)*, https://www.lietuva2030.lt/en/. [6]

Halinen, I. (2018), *The New Educational Curriculum Reform in Finland*, Alliance for Childhood European Network Foundation, Brussels, Belgium, http://www.allianceforchildhood.eu/files/Improving_the_quality_of_Childhood_Vol_7/QOC%20V7%20CH06%20DEF%20WEB.pdf. [54]

Hoban, G. and G. Erickson (2004), "Dimensions of Learning for Long-term Professional Development: comparing approaches from education, business and medical contexts", *Journal of In-service Education*, Vol. 30/2, http://dx.doi.org/10.1080/13674580400200247. [86]

IMS Global Learning Consortium (2021), *Open Badges: About*, https://openbadges.org/about (accessed on 6 March 2021). [50]

Jakštas, G. et al. (2018), *Žmogiškųjų išteklių būklės ataskaita 2018 (Human Resources Status Report 2018)*, MOSTA. [33]

Jongbloed, B. et al. (2015), *Performance-based funding and Performance Agreements in fourteen Higher Education Systems. Report for the Ministry of Education, Culture and Science*. [100]

Kato, S., V. Galán-Muros and T. Weko (2020), "The emergence of alternative credentials", *OECD Education Working Papers*, No. 216, OECD Publishing, Paris, https://dx.doi.org/10.1787/b741f39e-en. [51]

Kraft, M., D. Blazar and D. Hogan (2018), "The Effect of Teacher Coaching on Instruction and Achievement: A Meta-Analysis of the Causal Evidence", *Review of Educational Research*, Vol. 88/4, pp. 547-588, http://dx.doi.org/10.3102/0034654318759268. [87]

Kuczera, M. (2017), "Striking the right balance: Costs and benefits of apprenticeship", *OECD Education Working Papers*, No. 153, OECD Publishing, Paris, https://dx.doi.org/10.1787/995fff01-en. [119]

Kuczera, M. and S. Jeon (2019), *Vocational Education and Training in Sweden*, OECD Reviews of Vocational Education and Training, OECD Publishing, Paris, https://dx.doi.org/10.1787/g2g9fac5-en. [104]

Kuodytė, V. (2020), *From the formation of career expectations to the development of qualifications: what trends in career development are revealed by research and data? (Nuo lūkesčių karjerai formavimosi iki kvalifikacijos tobulinimo: kokias karjeros raidos tendencijas atskleidžia tyrimai ir duomenys?)*, STRATA. [22]

LAMA BPO (2021), *2018 m. priimtųjų į programas skaičiaus kaita*, Lithuanian High Schools Association for Centralised Admission, https://bakalauras.lamabpo.lt/priimtuju-i-programas-skaiciaus-kaita/ (accessed on 7 March 2021). [74]

LAMA BPO (2020), *2020 m. stojančiųjų skaičius ir jų pasirengimas (2020 number of entrants and their preparation)*, https://bakalauras.lamabpo.lt/2020-m-stojanciuju-skaicius-ir-ju-pasirengimas/ (accessed on 26 March 2021). [94]

Leiputė, B., G. Padvilikis and Á. Hyland (2018), *Forecasting the Teaching Workforce in Lithuania: Final project report*, MOSTA. [75]

Lithuanian Confederation of Industrialists (2021), *Patirties partneriai LT*, https://www.lpk.lt/patirties-partneriai-lt/ (accessed on 8 March 2021). [118]

Lituanistika mokykloje (2019), *Nacionaliniai mokinių pasiekimų tyrimai*, http://www.lituanistika.emokykla.lt/tyrimai/2013-m-vbe-rezultatai/nacionaliniai-mokiniu-pasiekimu-tyrimai/. [52]

Masevičiūtė, K., V. Šaukeckienė and E. Ozolinčiūtė (2018), *Combining Studies and Paid Jobs: Thematic Review*, http://www.araneum.lt (accessed on 27 March 2021). [116]

Ministry of Education and Culture (2019), *Financing of vocational education and training*, Ministry of Education and Culture, Finland, https://minedu.fi/documents/1410845/4150027/Financing+of+vocational+education+and+training/cf88b996-d53a-1ac1-8d11-570b4ce12f50/Financing+of+vocational+education+and+training.pdf. [101]

Ministry of Education, Science and Sport (2020), *Dėl preliminaraus valstybės finansuojamų pirmosios pakopos ir vientisųjų studijų vietų, į kurias 2020 metais priimami studentai, skaičiaus, studijų stipendijų skaičiaus ir skiriamo valstybės finansavimo*, https://www.e-tar.lt/portal/lt/legalAct/6438f1c07a4f11eab005936df725feed/asr. [95]

Ministry of Education, Science and Sport (2020), *Pakartotinė viešoji konsultacija dėl 4k modelio*, Press release, https://www.smm.lt/web/lt/pranesimai_spaudai/naujienos_1/pakartotine-viesoji-konsultacija-del-4k-modelio- [48]

Ministry of Education, Science and Sport (2020), *Rengiami pokyčiai mokyklų vadovams: greitesnė atranka, mažesnė administracinė našta, daugiau pagalbos*, https://www.smm.lt/web/lt/pranesimai_spaudai/naujienos_1/rengiami-pokyciai-mokyklu-vadovams-greitesne-atranka-mazesne-administracine-nasta-daugiau-pagalbos. [78]

MOSTA (2018), *Palyginamojo MTEP vertinimo rezultatai (Results of comparative R&D evaluation)*, https://strata.gov.lt/lt/mokslo-technologiju-ir-inovaciju-politika/rezultatu-archyvas#2018-m (accessed on 26 March 2021). [85]

MOSTA (2018), *Pedagogikos absolventų integracijos darbo rinkoje apžvalga (An overview of the integration of pedagogical graduates into the labor market)*. [73]

Mullis, I. et al. (2020), *TIMSS 2019: International Results in Mathematics and Science*. [27]

Musset, P. (2019), "Improving work-based learning in schools"*, OECD Social, Employment and Migration Working Papers*, No. 233, OECD Publishing, Paris, https://dx.doi.org/10.1787/918caba5-en. [114]

National Agency for Education (2020), *2020 Metų Matematikos Valstybinio Brandos Egzamino Rezultatų Statistinė Analizė*, https://www.nsa.smm.lt/wp-content/uploads/2020/12/8762_2020_MAT_st_ana-red.pdf. [23]

National Agency for Education (2019), *Guidelines for Updating the General Curriculum Framework*, Ministry of Education, Science and Sport. [45]

National Agency for School Evaluation (2021), *Neformaliojo vaikų švietimo ir jo teikėjų veiklos kokybės išorinis vertinimas*, http://www.nmva.smm.lt/isorinis-vertinimas/neformaliojo-vaiku-svietimo-teikeju-veiklos-kokybes-isorinis-vertinimas/ (accessed on 7 March 2021). [67]

National Audit Office of Lithuania (2020), *Changes in the education are taking place, but they do not yet ensure sufficient progress in the quality of education*, Press release, https://www.vkontrole.lt/pranesimas_spaudai_en.aspx?id=25166. [32]

National Audit Office of the Republic of Lithuania (2020), *National Audit Office: quality of vocational training is ensured insufficiently, the number of students is decreasing, premises and equipment are used inefficiently*, https://www.vkontrole.lt/pranesimas_spaudai_en.aspx?id=25035 (accessed on 26 March 2021). [92]

National Audit Office of the Republic of Lithuania (2015), *National Audit Office: development of non-formal education of school-children is insufficient*, https://www.vkontrole.lt/pranesimas_spaudai_en.aspx?id=18345 (accessed on 26 March 2021). [58]

National Examinations Centre (2021), *Švietimo problemų analizės [Analysis of Educational problems]*, https://www.nec.lt/183/ (accessed on 7 March 2021). [53]

New Zealand Ministry of Education (2021), *Assessment for learning*, https://assessment.tki.org.nz/Assessment-for-learning (accessed on 6 March 2021). [49]

OECD (2021), *Curriculum analysis - OECD Future of Education and Skills 2030*, https://www.oecd.org/education/2030-project/curriculum-analysis/ (accessed on 26 March 2021). [43]

OECD (2021), "Teaching and learning in VET: Providing effective practical training in school-based settings", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/64f5f843-en. [77]

OECD (2021), *Unemployment rate by age group* (indicator), https://dx.doi.org/10.1787/997c8750-en (accessed on 11 February 2021). [37]

OECD (2020), *Achieving the New Curriculum for Wales*, Implementing Education Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/4b483953-en. [47]

OECD (2020), "Education and COVID-19: Focusing on the long-term impact of school closures", *OECD Policy Responses to Coronavirus (COVID-19)*, OECD Publishing, Paris, https://doi.org/10.1787/2cea926e-en. [26]

OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/69096873-en. [18]

OECD (2020), *OECD Economic Outlook, Volume 2020 Issue 1*, OECD Publishing, Paris, https://dx.doi.org/10.1787/0d1d1e2e-en. [38]

OECD (2020), *OECD Economic Surveys: Lithuania 2020*, OECD Publishing, Paris, https://dx.doi.org/10.1787/62663b1d-en. [29]

OECD (2020), *OECD Employment Outlook 2020: Worker Security and the COVID-19 Crisis*, OECD Publishing, Paris, https://dx.doi.org/10.1787/1686c758-en. [39]

OECD (2020), *PISA 2018 Results (Volume V): Effective Policies, Successful Schools*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/ca768d40-en. [24]

OECD (2020), *Skills Summit 2020: Skills Strategies for a World in Recovery. Issues for Discussion*, https://skills-summit-slovenia.sta.si/pdf/Background_Paper.pdf. [4]

OECD (2020), *TALIS 2018 Results (Volume II): Teachers and School Leaders as Valued Professionals*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/19cf08df-en. [76]

OECD (2019), *A Flying Start: Improving Initial Teacher Preparation Systems*, OECD Publishing, Paris, https://dx.doi.org/10.1787/cf74e549-en. [80]

OECD (2019), *Education at a Glance 2019: OECD Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/f8d7880d-en. [14]

OECD (2019), *Education Policy Outlook 2019: Working Together to Help Students Achieve their Potential*, OECD Publishing, Paris, https://dx.doi.org/10.1787/2b8ad56e-en. [41]

OECD (2019), *OECD Learning Compass 2030: A Series of Concept Notes*, OECD, Paris, https://www.oecd.org/education/2030-project/contact/OECD_Learning_Compass_2030_Concept_Note_Series.pdf (accessed on 5 July 2020). [1]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [3]

OECD (2019), *OECD Skills Strategy Poland*, OECD, http://dx.doi.org/10.1787/b377fbcc-en. [96]

OECD (2019), *PISA 2018 Results (Volume I): What Students Know and Can Do*, PISA, OECD Publishing, Paris, https://dx.doi.org/10.1787/5f07c754-en. [28]

OECD (2019), *PISA 2018 Results (Volume II)*, OECD, http://dx.doi.org/10.1787/b5fd1b8f-en. [30]

OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/1f029d8f-en. [34]

OECD (2019), *TALIS 2018 Results (Volume I): Teachers and School Leaders as Lifelong Learners*, TALIS, OECD Publishing, Paris, https://dx.doi.org/10.1787/1d0bc92a-en. [69]

OECD (2018), *Seven Questions about Apprenticeships*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264306486-en. [106]

OECD (2018), *Skills for Jobs Database*, http://www.oecdskillsforjobsdatabase.org. [36]

OECD (2017), *Education in Lithuania*, Reviews of National Policies for Education, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264281486-en. [16]

OECD (2017), *Financial Incentives for Steering Education and Training*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264272415-en. [91]

OECD (2017), *In-Depth Analysis of the Labour Market Relevance and Outcomes of Higher Education Systems: Analytical Framework and Country Practices Report*, OECD, Paris, http://www.oecd.org/education/skills-beyond-school/LMRO%20Report.pdf. [105]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [2]

OECD (2015), *OECD Skills Outlook 2015*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264234178-en. [103]

OECD (2012), *Better Skills, Better Jobs, Better Lives*, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264177338-en. [110]

Orphanos, S. and M. Orr (2013), "Learning leadership matters", *Educational Management Administration & Leadership*, Vol. 42/5, pp. 680-700, http://dx.doi.org/10.1177/1741143213502187. [84]

Renkuosi mokyti! (2021), *Renkuosi mokyti! (I Choose to Teach!) website*, https://www.renkuosimokyti.lt/. [79]

Republic of Lithuania (2011), *Law on Volunteering*. [60]

Saranienė, O. (2018), *Neformaliojo Vaikų Švietimo Teikėjų Veiklos Kokybės Išorinis Vertinimas: Pirmosios Patirtys, Įžvalgos Ir Rezultatai (External Evaluation of the Quality of Non-formal Education for Children: First Experiences, Insights and Results)*. [62]

Seimas (2020), *Resolution No XIV-72 on The Programme of the Eighteenth Government of the Republic of Lithuania*. [9]

Seimas (2013), *Lithuanian National Education Strategy 2013–2022*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.463390. [7]

Seimas of the Republic of Lithania (2013), *Dėl Valstybinės švietimo 2013-2022 metų strategijos patvirtinimo*, https://www.e-tar.lt/portal/legalAct.html?documentId=b1fb6cc089d911e397b5c02d3197f382. [5]

Seimas of the Republic of Lithuania (2020), *Lietuvos Respublikos švietimo įstatymo Nr. I-1489 2, 7, 8, 24, 36, 47 ir 67 straipsnių pakeitimo įstatymas*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/d4c5bb0024de11eb8c97e01ffe050e1c?jfwid=-lrzsfpu36. [17]

Seimas of the Republic of Lithuania (2019), *Dėl Asmenų, išskyrus asmenis, kuriems taikomas Lietuvos Respublikos užimtumo rėmimo įstatymas, Lietuvos Respublikos neįgaliųjų socialinės integracijos įstatymas ar Lietuvos Respublikos vidaus tarnybos statutas, pageidaujančių įgyti kvalifikaciją, priėmimo*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/176151706ddb11e99ceae2890faa4193/asr. [93]

Shewbridge, C. et al. (2016), *OECD Reviews of School Resources: Lithuania 2016*, OECD Reviews of School Resources, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264252547-en. [82]

Shoenfelt, E., N. Stone and J. Kottke (2013), "Internships: An Established Mechanism for Increasing Employability", *Industrial and Organizational Psychology*, Vol. 6/1, pp. 24-27, http://dx.doi.org/10.1111/iops.12004. [111]

SMM (2020), *Education Management Information System (ŠVIETIMO VALDYMO INFORMACINĖ SISTEMA)*, https://www.svis.smm.lt/ (accessed on 25 March 2021). [12]

Strata (2020), *Kaip skirtingo SES moksleiviams sukurti lygias galimybes įgyti aukštąjį išsilavinimą*, https://strata.gov.lt/images/tyrimai/2020-metai/svietimo-politika/2020-AM-prieinamumo-ataskaita.pdf. [21]

Stuart, M. et al. (2011), "The impact of engagement with extracurricular activities on the student experience and graduate outcomes for widening participation populations", *Active Learning in Higher Education*, Vol. 12/3, pp. 203-215, http://dx.doi.org/10.1177/1469787411415081. [56]

Taguma, M. and S. Shirai (eds.) (2016), *E2030 Curriculum Analysis: Literature Review on the Impact Study*. [42]

Tarasova, O. et al. (2020), "Integration of Non-Formal Learning Approaches into the Formal Education by Peer Learning of Teachers and Youth Workers", *Revista Romaneasca pentru Educatie Multidimensionala*, Vol. 12/1Sup1, http://dx.doi.org/10.18662/rrem/12.1sup1/239. [65]

University of Vilnius (2020), *Vilniaus universiteto 2019 metų veiklos ataskaita [University of Vilnius 2019 Activity Report]*, https://www.vu.lt/site_files/Vilniaus_universiteto_2019_m._metine%CC%87_veiklos_ataskaita.pdf. [117]

Vaitkute, L. (2016), *Key competences in vocational education and training - Lithuania*, Cedefop, https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/key-competences-vocational-education-and-training-lithuania (accessed on 26 March 2021). [115]

Vandeweyer, M. and A. Verhagen (2020), "The changing labour market for graduates from medium-level vocational education and training", *OECD Social, Employment and Migration Working Papers*, No. 244, OECD Publishing, Paris, https://dx.doi.org/10.1787/503bcecb-en. [31]

Varanauskas, A. (2020), *Reform of the Network of Teacher Education Institutions in Lithuania: Final Report*, e Expert Working Group on the Reform of the Network of Teacher Education Institutions (2019-20), https://www.smm.lt/uploads/documents/veikla/tarptautinis%20bendradarbiavimas/Final%20report.pdf (accessed on 14 February 2021). [72]

Wyse, D., L. Hayward and J. Pandya (2016), *The SAGE Handbook of Curriculum, Pedagogy and Assessment: Two Volume Set*, http://dx.doi.org/10.4135/9781473921405. [40]

Notes

[1] In combined school- and work-based programmes, less than 75% of the curriculum is presented in the school environment (including special training centres for VET) or through distance education, with the remainder occurring on the job in a workplace.

[2] Calculated using the true cohort method, which requires using longitudinal surveys or student registers to follow an entry cohort to the theoretical duration of the programme plus three years.

[3] https://www.skola2030.lv

[4] https://nzcurriculum.tki.org.nz

[5] Students who do not meet the admission requirements for a state-funded university or college programme may be offered a fee-paying place in the programme by the institution.

[6] In Lithuania, public funding for VET and HE is allocated according to the “student basket” methodology, whereas funding for general and lower levels of education is allocated according to the “class basket” methodology. The student basket allocates funding as a function of the number of students enrolled in the institution, and the class basket allocates funding as a function of the number of classes offered by the institution (OECD, 2017[16]).

3 Raising adults' and enterprises' participation in learning in Lithuania

Across all countries, participation in adult learning has significant benefits for individuals, employers and society as a whole. There is a growing need to upgrade and reskill regularly in adulthood in the context of technological change, more frequent transitions between jobs and the lengthening of working lives. In Lithuania, increasing participation in adult learning can also help employers and individuals recover from the COVID-19 crisis in the short term, and move towards higher-value added industries and occupations in the long term. This chapter explains the importance of raising participation in adult learning in Lithuania and provides an overview of current practices and performance. It then explores three opportunities to raise participation in adult learning in Lithuania by: 1) raising awareness about adult learning benefits and opportunities; 2) removing barriers to participation in adult learning; and 3) strengthening the recognition and quality of non-formal adult education and training.

The importance of raising adults' and enterprises' participation in learning

Raising adults' and enterprises' participation in learning is increasingly important for Lithuania. The megatrends of automation, demographic change and integration into global value chains are transforming the skills individuals need to effectively participate in work and society. Lithuania has a higher proportion of jobs at risk of automation than most OECD countries and a rapidly ageing population (see Chapter 1). To adapt, people will need to upgrade their skills to perform new tasks in their existing jobs, or acquire new skills for new jobs (OECD, 2019[1]). Upskilling and reskilling can be pursued through formal, non-formal, and informal learning opportunities (Box 3.1).

Box 3.1. Definition of formal education, non-formal education and informal learning

Formal education/learning: Formal education/learning is provided in schools, colleges, universities or other educational institutions, and leads to a certification that is recognised by the national educational classification.

Non-formal education/learning: Non-formal education/learning is defined as an education or training activity that does not necessarily lead to a formal qualification, such as on-the-job training, open or distance education, courses or private lessons, and seminars or workshops.

Informal learning: Informal learning relates to typically unstructured, often unintentional, learning activities that do not lead to certification. In the workplace, this is a more or less an automatic by-product of the regular production process of a firm.

Source: OECD (2011[2]), *PIAAC Conceptual Framework of the Background Questionnaire Main Survey*, www.oecd.org/skills/piaac/PIAAC(2011_11)MS_BQ_ConceptualFramework_1%20Dec%202011.pdf.

Participation in adult learning has significant benefits for individuals, employers and society as a whole. For individuals, participation in formal adult education and training can lead to better employment prospects, higher wages and upward social and/or occupational mobility (Midtsundstad, 2019[3]). For enterprises, training leads to higher productivity growth and is often a complement to innovation in the workplace (Acemoglu, 1998[4]; Dearden, Reed and Van Reenen, 2006[5]; Konings and Vanormelingen, 2015[6]). Participation in adult learning can also generate strong social benefits: higher-skilled adults typically report better health, feel more included in political processes and trust others more than low-skilled adults. Adult learning opportunities can help individuals achieve these higher levels of skills (OECD, 2016[7]).

Lithuania has identified adult learning as a priority for the country in several strategies including the Action Plan for the Development of Lifelong Learning 2017-2020, the National Plan for Progress (NPP) 2021-2030, and most recently the Programme of Government from December 2020 (Table 3.1). Combined, these strategies have promoted adult learning as an important part of the national skills landscape.

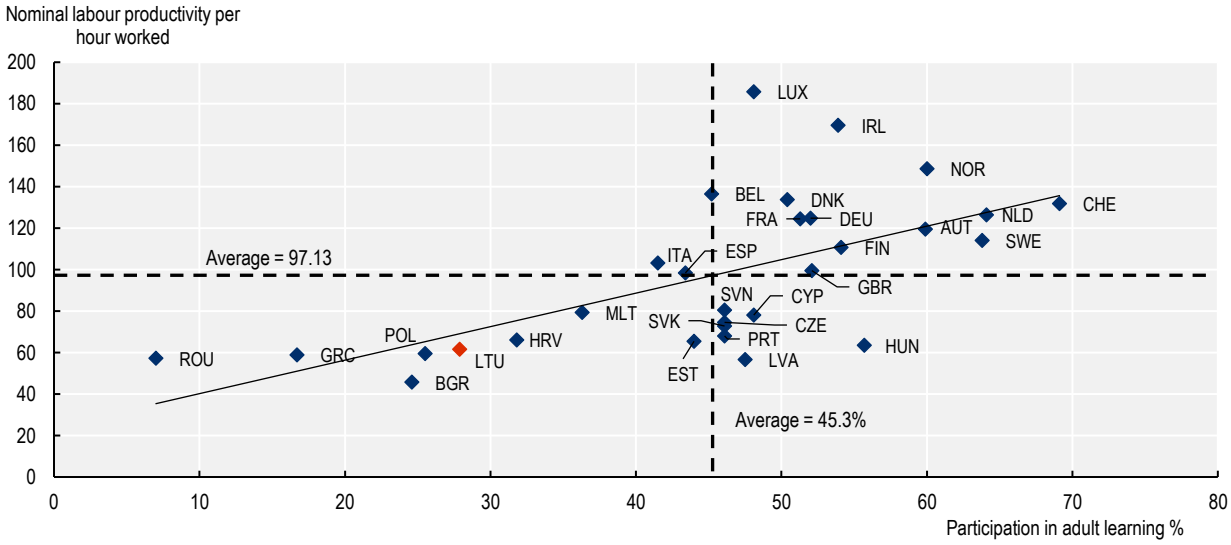
In Lithuania, the adult learning system can play a crucial role in addressing two cross-cutting challenges. In the short term, it can facilitate recovery from the COVID-19 crisis, which has led to a significant contraction in economic activity and is projected to lead to a sustained increase in unemployment for the foreseeable future (see Chapter 1). Adult learning can help people get back to work by providing upskilling and reskilling opportunities.

In the long term, a stronger adult learning system can help Lithuania strengthen its labour productivity. Raising participation in adult learning will support Lithuania's move towards high-productivity, high-skilled

activities by raising the supply of high-skilled adults, which in turn generates demand for highly skilled jobs and increases productivity. Currently, relatively few adults participate in adult learning to improve their skillset, which contributes to productivity remaining low (Figure 3.1).

Figure 3.1 Participation in adult learning and labour productivity

Percentage of adults aged 25-64 who participated in formal and/or non-formal learning opportunities in the past 12 months, measured against nominal labour productivity per hour worked



Note: Year for all data is 2016. Labour productivity per hour worked is calculated as real output per unit of labour input (measured by the total number of hours worked). European Union (EU) average (excluding the United Kingdom) is the base = 100. Unit of measure is percentage of EU total based on million purchasing power standards (PPS). PPS is a common currency that eliminates the differences in price levels between countries.

Source: OECD calculations based on data from Eurostat (2020[8]), *Adult Education Survey 2016: Participation rate in education and training by age*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_101/default/table?lang=en; Eurostat (2020[9]), *Labour productivity per person employed and hour worked*, https://ec.europa.eu/eurostat/databrowser/view/tesem160/default/table?lang=en.

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Overview and performance of Lithuania's adult learning system

Overview of the current adult learning system

Strategies and policies for adult learning

Adult learning forms a key part of Lithuanian national strategies, and adult learning is the subject of several dedicated strategies (Table 3.1). The legal basis for Lithuania's adult learning system is spread across numerous laws and policies, with many notable reforms in recent years. These include: the Law on Non-Formal Adult Education in 2014, the Labour Code in 2016, the Law on Employment in 2016, and the Law on Vocational Education in 2017. Together these laws have expanded the adoption of modularity in vocational education, created the legal conditions for apprenticeships and work-based training, and introduced training leave.

Table 3.1. Lithuania's strategic goals related to adult learning

Strategy	Year	Description	Adult learning related objectives
Programme of Government	December 2020	The Programme of Government outlines priority projects for the government across a range of policy areas.	Government Priority Project: Lifelong learning opportunities for every Lithuanian resident. Key initiatives: • Lifelong planning system. • Strong non-formal learning system. • Focus on those who do not want to learn.
National Plan for Progress (NPP) 2021-2030	September 2020	The NPP outlines 10 strategic goals for Lithuania over the upcoming decade to ensure progress in social, economic, environmental and security policies.	Strategic Goal 3: Increase the inclusion and effectiveness of education to meet the needs of the individual and society: • To implement an efficient and effective adult lifelong learning system in order to match personal skills and qualifications with the needs of the individual, the labour market and the environment.
Action Plan for the Development of Lifelong Learning 2017-2020	June 2017	The action plan outlines several objectives to increase lifelong learning.	Objective Two: To ensure a system of incentives and equal opportunities for lifelong learning: • Development and implementation of vocational standards and modular vocational training programmes. • Strengthening the contribution of municipalities and non-formal adult education service providers to the development of the non-formal adult education system.
Development Programme for Non-formal Adult Education and Continuing Education 2016–2023	April 2016	The Development Programme aims to create and develop non-formal adult education and continuing education that meets the needs of the individual and society.	Objective One: To create and develop a sustainable adult education system: • To create conditions for adults to acquire general competencies and form positive attitudes towards lifelong learning, to develop formal and non-formal education opportunities, digital learning content and programmes, to create mechanisms for the recognition of competencies acquired during non-formal and informal learning.
National Education Strategy 2013-2022	December 2013	The National Education Strategy set the priorities for all aspects of education for the coming decade including adult learning.	Objective Four: Create a system of incentives and equal conditions for lifelong learning: • Strengthen motivation to learn by linking lifelong learning to learners' choices by creating a system of financial support. • Create a coherent system of adult education, including a mechanism for non-formal adult funding, inter-institutional co-ordination, information and counselling, quality assurance in non-formal learning and the recognition of non-formally acquired competences.
Lithuania's Progress Strategy "Lithuania 2030"	May 2012	Lithuania 2030 is a national strategy document that outlines the vision of Lithuania's future up to 2030. The strategy has three main progress areas: smart society, smart economy and smart governance.	Smart society: • To create an effective system for lifelong learning that successfully adapts information communication technologies and ensures the acquisition and development of the knowledge and skills required for an active society. • Ensure that access to non-formal education and lifelong learning is made available across Lithuania.

Source: Government of the Republic of Lithuania (2020[10]), *Aštuonioliktosios Lietuvos Respublikos Vyriausybės Programa [Programme of Government]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAP/3955e800388111eb8c97e01ffe050e1c; Government of the Republic of Lithuania (2020[11]), *2021–2030 metų nacionalinis pažangos planas [National Plan for Progress 2021-2030]*, https://ministraspirmininkas.lrv.lt/uploads/ministraspirmininkas/documents/files/NPP%20planas.pdf; Ministry of Education, Science and Sport (2017[12]), *Mokymosi visą gyvenimą plėtros 2017–2020 metų veiksmų planą [Action Plan for the Development of Lifelong Learning]*, https://www.e-tar.lt/portal/lt/legalAct/8d34ecd05c0411e79198ffdb108a3753; Government of the Republic of Lithuania (2016[13]), *Neformaliojo suaugusiųjų švietimo ir tęstinio mokymosi [Development Programme for Non-formal Adult Education and Continuing Education 2016–2023]*, https://www.e-tar.lt/portal/lt/legalAct/3a34e780007811e6b9699b2946305ca6; Government of the Republic of Lithuania (2013[14]), *Valstybinė švietimo 2013–2022 metų strategija [Lithuanian National Education Strategy 2013–2022]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.463390; Government of the Republic of Lithuania (2012[15]), *Lithuania's Progress Strategy: Lithuania 2030 (Lietuva 2030)*, https://e-seimas.lrs.lt/rs/lasupplement/TAP/TAIS.423800/45a6c4cce8a3835f3c3f3b4625587aff/format/ISO_PDF/.

Roles and responsibilities in the adult learning system

Adult learning is a cross-cutting priority area that requires direction from a range of stakeholders. In Lithuania, ministries with important responsibilities in this area include the Ministry of Education, Science and Sport (SMSM), the Ministry of Social Security and Labour (SADM), and the Ministry of the Economy and Innovation (EIM) (Table 3.2).

Table 3.2. Principle actors in the adult learning system

Body	Responsibilities
Ministry of Education, Science and Sport	Formulates vocational training policy, and organises, co-ordinates and controls its implementation. Plans vocational guidance and is responsible for the quality of formal vocational programmes. Organises and co-ordinates the dissemination of information about vocational training schools and their vocational training programmes. Responsible for externally evaluating higher education institutes (HEIs). Co-ordinates activities of education departments of municipal administrations in the implementation of the state education policy.
Ministry of Social Security and Labour	Submits proposals to the Government of the Republic of Lithuania for the implementation of employment support policy, and co-ordinates, analyses and controls the implementation of employment support policies in accordance with the EU employment strategy. Organises and finances the implementation of employment support measures and labour market services, and sets conditions and procedures for the provision of labour market services, the implementation of employment support measures, and labour market monitoring.
Ministry of the Economy and Innovation	Oversees European Social Fund (ESF) programmes to facilitate training in firms (see Opportunity 2). Formulates human resources development policy, and organises, co-ordinates and controls its implementation. Participates in the formation of vocational training policy, and develops, organises and implements measures aimed at attracting human resources to priority areas of the economy. Participates in the implementation of the activities of the development of the Lithuanian qualification system and the organisation of the assessment of competencies.
Municipalities	Responsible for implementing adult learning policy. This includes developing a network of vocational training providers to meet the needs of the region and plan, organise and administer vocational guidance in line with priorities set from the SMSM. Municipalities appoint adult learning co-ordinators who manage local initiatives, design action plans, and allocate budgets for adult learning initiatives and programmes.
Lithuania's public employment service (PES)	Implements employment support policy. The PES is a budgetary institution operating under the SADM. Some of the functions of the PES regarding skills and employment include setting the criteria and procedures for the selection of jobseekers eligible for participation in active labour policy measures and the selection of employers wishing to implement these active labour market policy (ALMP) measures, monitoring the national labour market and the labour market of individual regions, and implementing ALMPs and programmes on increasing employment.
Qualifications and Vocational Education and Training Development Centre (KPMPC)	Manages the Lithuanian qualifications system, oversees the quality of vocational training, and organises the preparation and/or updating of modular programmes.
Centre for Quality Assessment in Higher Education (SKVC)	Implements external quality assurance policy in higher education (HE). Assesses the quality of institutions and qualifications and provides information on HE systems and qualifications recognition.
Non-formal Adult Education Council	Advises the government on the strategic priorities of non-formal adult learning in Lithuania and helps facilitate greater co-ordination among stakeholders for its successful implementation across the country. The council is made up of representatives from employers, employees, non-governmental organisations, and state and municipality institutions
The Lithuanian Association of Heads of Adult Education Centres	Promotes collaboration between institutions of formal and non-formal education and organises events for the continuing professional development of staff of adult education centres.
The Lithuanian Association of Adult Education (LAAE)	Brings together those working in the field of adult education (such as vocational institutions, adult learning centres and universities) to promote lifelong learning. Participates in the creation of policy documents and legal acts on education.

Source: Government of the Republic of Lithuania (2017[16]), *švietimo įstatymo (Law on Education),* https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/eedc17d2790c11e89188e16a6495e98c?jfwid=qjs00elq1; Government of the Republic of Lithuania (2016[17]), *užimtumo įstatymas (Law on Employment),* https://e-seimas.lrs.lt/portal/legalAct/en/TAD/5f0be3809c2011e68adcda1bb2f432d1; Government of the Republic of Lithuania (2017[18]), *Lietuvos Respublikos profesinio mokymo įstatymo [The Law on Vocational Education and Training],* www.e-tar.lt/portal/lt/legalAct/093a9010eb0b11e7acd7ea182930b17f/asr; KPMPC (2020[19]); *About us*, www.kpmpc.lt/kpmpc/en/apie-mus/about-us/ SKVC (2020[20]), *About us*, https://www.skvc.lt/default/en/about; Eurydice (2019[21]), *Adult Education: Distribution of Responsibilities*, https://eacea.ec.europa.eu/national-policies/eurydice/content/distribution-responsibilities-43_en.

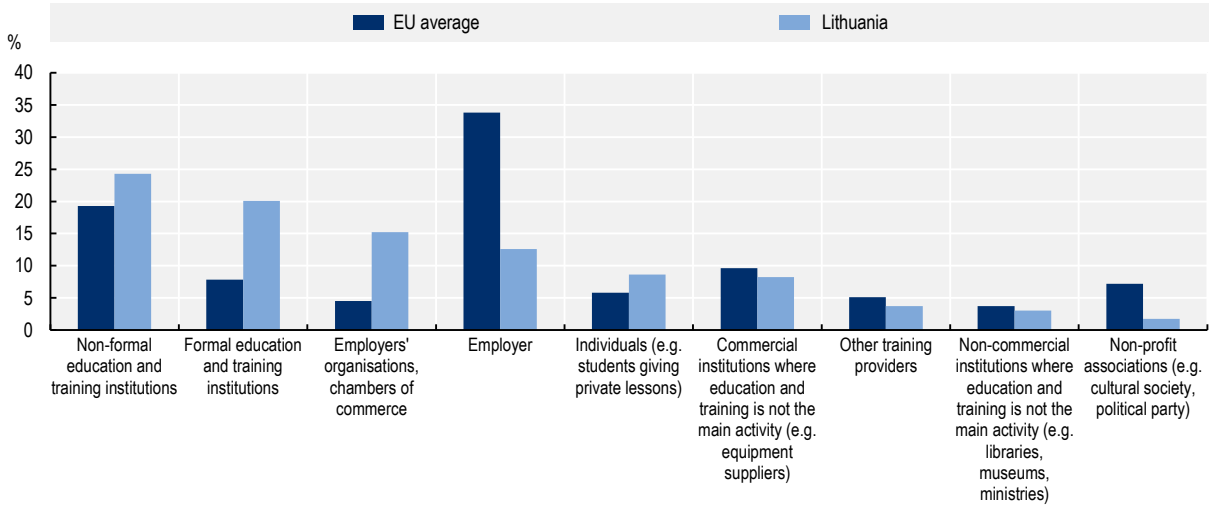
Main providers in the adult learning system

In Lithuania, a variety of providers offer formal and non-formal adult learning opportunities. Formal education and training providers include adult general education centres, vocational education and training (VET) schools, and HEIs. According to the Open Information, Counselling and Guidance System (AIKOS), there are 56 adult general education schools, 64 state VET institutions and 5 non-state VET institutions, and 41 HEIs (including universities and colleges) in Lithuania (Ministry of Education Science and Sport, 2020[22]; Eurydice, 2020[23]). Non-formal education and training takes place in HE and vocational institutions and with training providers, as well as in the workplace and through workshops, seminars and conferences. There are no statistics on the overall number of institutions providing non-formal training, however AIKOS indicates that there are 104 non-formal adult education schools (Ministry of Education Science and Sport, 2020[22]; Eurydice, 2020[23]).

In Lithuania, non-formal adult learning opportunities are concentrated within education institutions rather than employers. The highest percentage of non-formal learning takes place in non-formal education and training institutions (24.3%), followed by formal education and training providers (20.1%) and employers' organisations such as chambers of commerce (15.2%). This differs greatly from most other EU countries, where employers play a far more significant role in the provision of adult training opportunities (Figure 3.2). On average, around 35% of training across the EU takes place with employers compared to around 13% in Lithuania. The proportion of non-formal training provided by employers is lower in Lithuania than in any other EU country.

Figure 3.2. Distribution of non-formal education and training activities by provider

Percentage of non-formal education and training activities that take place by provider



Note: Formal education institutions also offer non-formal training. All EU averages calculated in this chapter exclude the United Kingdom.
Source: Eurostat (2020[24]), *Adult Education Survey 2016: Distribution of non-formal education and training activities by provider*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_170/default/table?lang=en.

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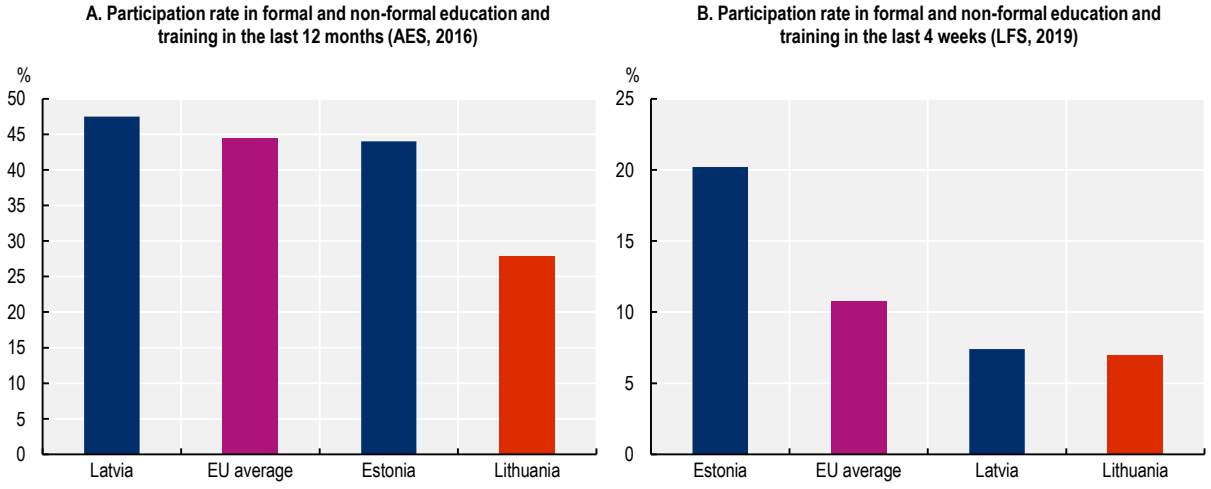
Lithuania's performance

Relatively few adults and enterprises engage in adult learning in Lithuania. According to data from the Adult Education Survey (AES) and the Labour Force Survey (LFS), adults in Lithuania participate less in formal and non-formal learning opportunities than their counterparts in neighbouring Latvia and Estonia and in EU countries on average. Furthermore, adults under-participate compared to the EU average regardless of employment status, education level or age. Weak motivation is a key reason that participation rates in adult learning remain comparatively low. Similarly, according to data from the Continuing Vocational Training Survey (CVTS), firms in Lithuania provide fewer learning opportunities for their employees than most EU countries.

Participation in formal and non-formal education by individuals

Relatively few adults in Lithuania participate in formal and/or non-formal education and training. In 2019, only about 7% of adults had participated in adult education and training on average over a four-week period. This was below the rates for Estonia (20.2%), Latvia (7.4%) and EU member states on average (10.8%) (Figure 3.3). It was also significantly below the rates of leading European countries such as Sweden (34.3%) and Switzerland (32.3%). Participation in formal and non-formal adult education over the past 12 months is also low in Lithuania (Figure 3.3). According to the AES, 27.9% of adults engaged in training over the past year compared to an EU average of 44.4%.

Figure 3.3. Participation rate in adult learning in Lithuania and other countries



Note: The differences in participation rates between the AES and LFS is because of their different time frames. The LFS is measuring participation in just the previous four weeks, whereas the AES is measuring participation across the previous year. It would therefore be expected that participation rates with the AES are much higher, as is the case here.

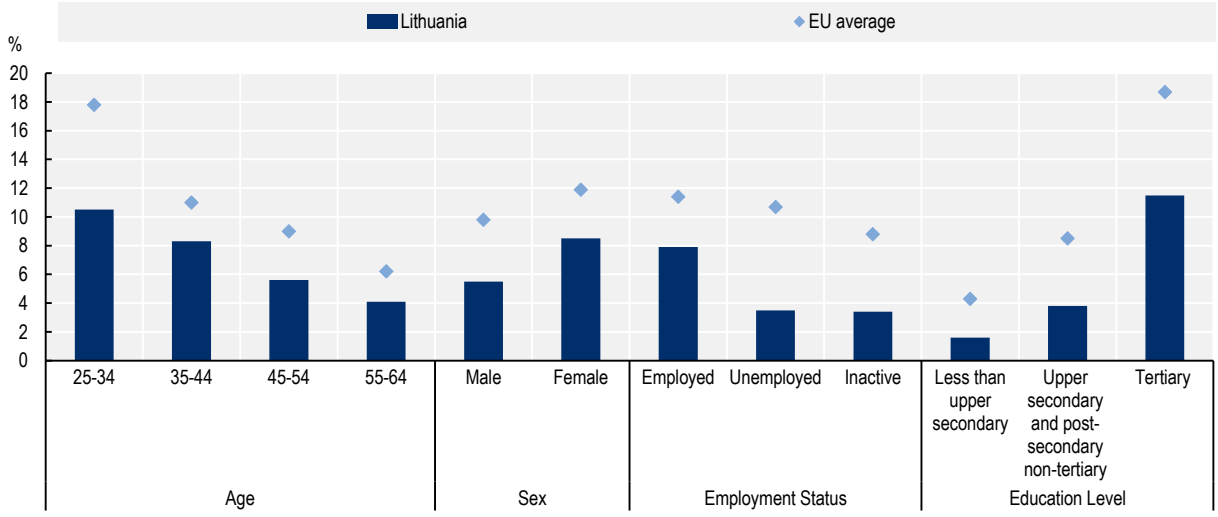
Source: Eurostat (2020[8]), *Adult Education Survey 2016: Participation rate in education and training by age*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_101/default/table?lang=en; Eurostat (2020[25]), *Labour Force Survey 2019: Participation rate in education and training (last 4 weeks) by sex, age and educational attainment level*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_02/default/table?lang=en.

StatLink https://stat.link/3hpscm

In line with other EU countries, older, unemployed and lower-educated adults in Lithuania participate less in adult learning than young, employed and highly educated adults. However, participation is particularly low in Lithuania for adults aged 25-34, unemployed adults and individuals with a tertiary education (Figure 3.4). For example, just 3.5% of unemployed people participated in training over a four-week period in 2019 – one of the lowest rates in the EU.

Figure 3.4. Participation rate in formal and non-formal education and training for different demographic characteristics

Percentage of adults aged 25-64 who participated in formal and/or non-formal education over the last four weeks



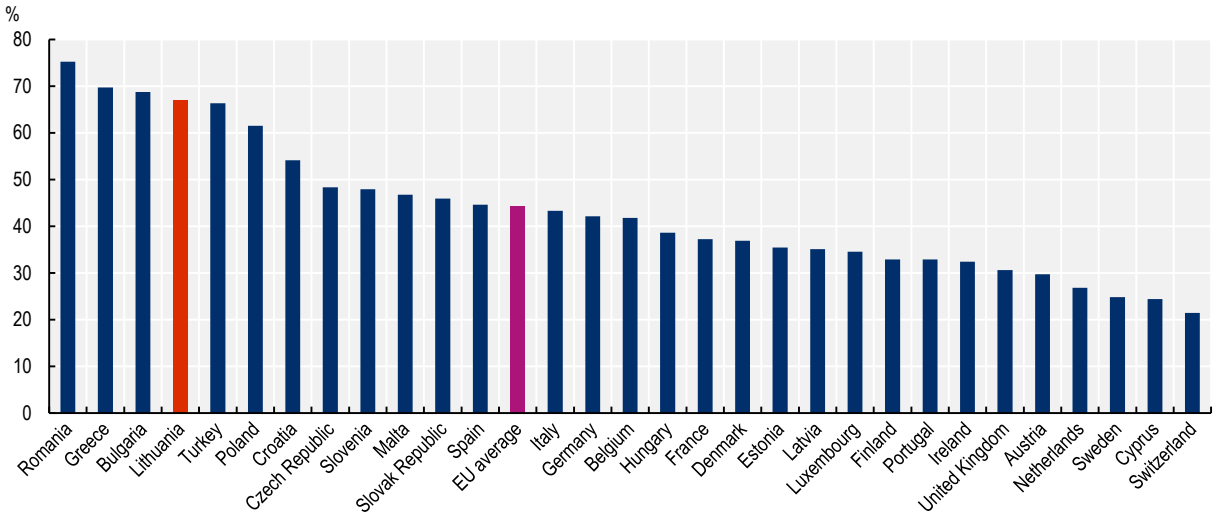
Source: Eurostat (2020[26]), *Labour Force Survey 2019: Participation rate in education and training (last 4 weeks) by sex, age and labour status*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_03/default/table?lang=en; Eurostat (2020[25]), *Labour Force Survey 2019: Participation rate in education and training (last 4 weeks) by sex, age and educational attainment level*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_02/default/table?lang=en.

StatLink https://stat.link/waug5e

Low participation in adult learning is driven by low levels of motivation to upskill and reskill throughout the life course. The percentage of adults who did not participate in training and did not want to is one of the highest in the EU (Figure 3.5). Around 67% of adults in Lithuania did not want to participate in training compared to an EU average of 44.3%, and rates of 35.4% in Estonia and 35.1% in Latvia. Overcoming low levels of motivation to engage in adult learning will require a multi-faceted approach that raises awareness about adult learning benefits and opportunities (see Opportunity 1), reduces financial and time-related barriers (see Opportunity 2), and improves the quality of learning opportunities (see Opportunity 3).

Figure 3.5. Motivation to participate in adult learning and training

Percentage of adults aged 25-64 who did not participate and did not want to participate in training



Source: Eurostat (2020[27]), *Adult Education Survey 2016: Population by will to participate in education and training*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_175/default/table?lang=en.

StatLink https://stat.link/i7cwvz

Participation in training provided by employers

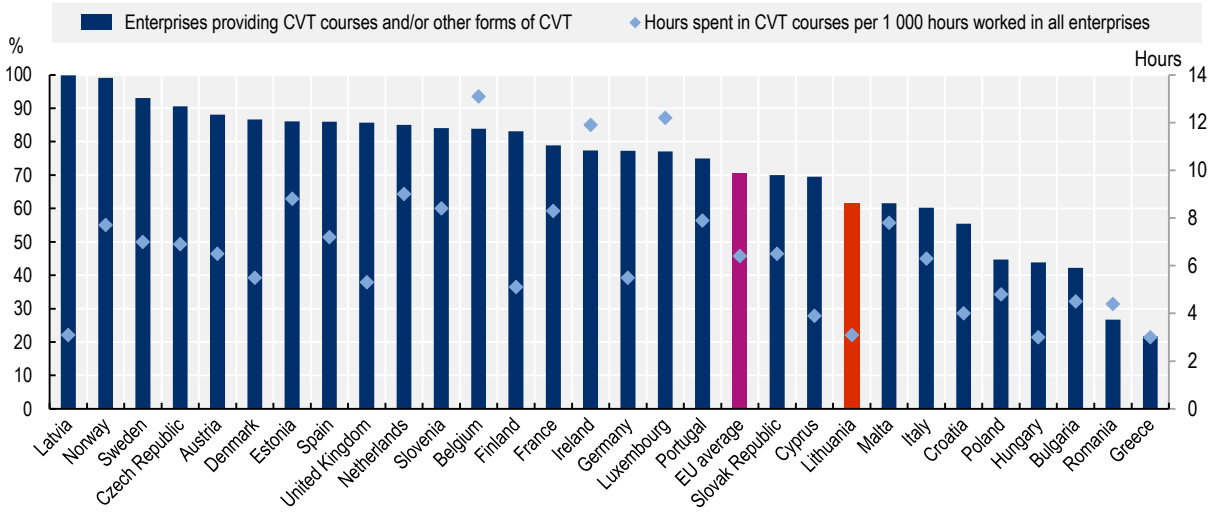
Participation in training by enterprises is also low. In Lithuania, 61.6% of enterprises (with 10+ employees) provide their employees with continuing vocational training (CVT) courses or another form of CVT such as guided on-the-job training or training at conferences and workshops (Figure 3.6). This is below the EU average of 70.5% and below the rates for Estonia, (86.1%) and Latvia (99.9%). Low participation in training is most pronounced among small firms (10-49 employees). Small firms in Lithuania are 10.6% less likely to provide training than the EU average, whereas large firms (250+ employees) are actually 1.2% more likely to provide such training (CVTS, 2015[28]). This is problematic, as Lithuanian small and medium-sized enterprises (SMEs) play a comparatively greater role in the economy than in other EU countries. In 2017, SMEs generated 68.5% of value added and 76.1% of employment, compared to EU averages of 56.8% and 66.4% respectively (European Commission, 2019[29]).

The intensity of training in Lithuania could be improved. Only employees in Greece and Hungary spend less time in CVT than employees in Lithuania (Figure 3.6). For every 1 000 hours spent working, 3.1 are spent in training in Lithuania compared to an EU average of 6.4 hours.

Encouraging greater participation in adult learning among firms, and especially among SMEs, will require various policy initiatives that enable firms to understand their training needs (see Opportunity 1), reduce the cost of training (see Opportunity 2) and encourage the adoption of high-performance work practices (HPWP) by managers (see Chapter 3).

Figure 3.6. Training provision and intensity in Lithuania and other countries

Percentage of all enterprises providing continuing vocational training (CVT), and hours spent training per 1 000 hours worked in all enterprises



Source: Eurostat (2020[30]), Continuing Vocational Training Survey 2015: Enterprises providing training by type of training and size class - % of all enterprises, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_01s/default/table?lang=en; Eurostat (2020[31]), Continuing Vocational Training Survey 2015: Hours spent in CVT courses by size class – hours per 1000 hours worked in all enterprises, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_21s/default/table?lang=en.

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Opportunities to raise adults' and enterprises' participation in learning

Lithuania's performance in raising adults' and enterprises' participation in learning reflects many factors. These include individual, institutional and system-level factors, as well as broader economic and social conditions in the country. However, three critical opportunities for improvement have been identified based on a review of literature, desktop analysis, and data and input from officials and stakeholders consulted in conduct of this OECD Skills Strategy project.

The OECD considers that Lithuania's main opportunities for improvement in the area of raising adults' and enterprises' participation in learning are:

1. Raising awareness about adult learning benefits and opportunities.
2. Removing barriers to participation in adult learning.
3. Strengthening the recognition and quality of non-formal adult education and training.

Opportunity 1: Raising awareness about adult learning benefits and opportunities

Increased participation in adult learning is strongly linked to positive learning dispositions, whereby adults perceive that education brings tangible benefits for themselves, associate the experience of education positively, and believe that they are still young enough to engage in meaningful learning opportunities (Windisch, 2015[32]). When adults are not positively disposed to training opportunities it is very difficult to engage potential learners, even if financial and time-related barriers are minimised (see Opportunity 2) (White, 2012[33]). However, according to a recent lifelong learning survey in Lithuania, only 35% of adults

recalled having heard or seen information about the importance of participating in adult learning over the previous three years (STRATA, 2020[34]).

The lack of awareness about the benefits and opportunities of adult learning can lead to low levels of motivation to participate in adult learning, and indicates that Lithuania will need to more actively reach out and promote the benefits of adult learning to individuals, as Lithuania's government already recognises (Eurydice, 2015[35]; Government of the Republic of Lithuania, 2020[10]). The success of adult learning systems depends on providing individuals with the information to make informed decisions at all stages of the learning journey (OECD, 2019[1]).

An in-depth analysis of adult learning policies by the European Commission (EC) has identified a number of policy levers that can support these efforts, including the dissemination of information through awareness-raising campaigns and online portals (European Commission, 2015[36]). Targeted career guidance is also crucial for raising the awareness of adult learning benefits and opportunities. Especially in the context of increased unemployment resulting from the COVID-19 pandemic, guidance services will be essential to encourage displaced workers to upskill and reskill where appropriate. Creating a lifelong career guidance system is discussed extensively in Chapter 5 and should form a core component of strategies to raise awareness about adult learning benefits and opportunities among individuals.

Raising awareness about the benefits of adult education and training among enterprises is equally as important. Employers play a major role in facilitating non-formal education and training for employees, in addition to their role in providing informal learning on the job. Helping employers assess their training needs and put in place training plans can lead to increased participation in adult education and training.

Raising awareness about adult learning benefits and opportunities among individuals

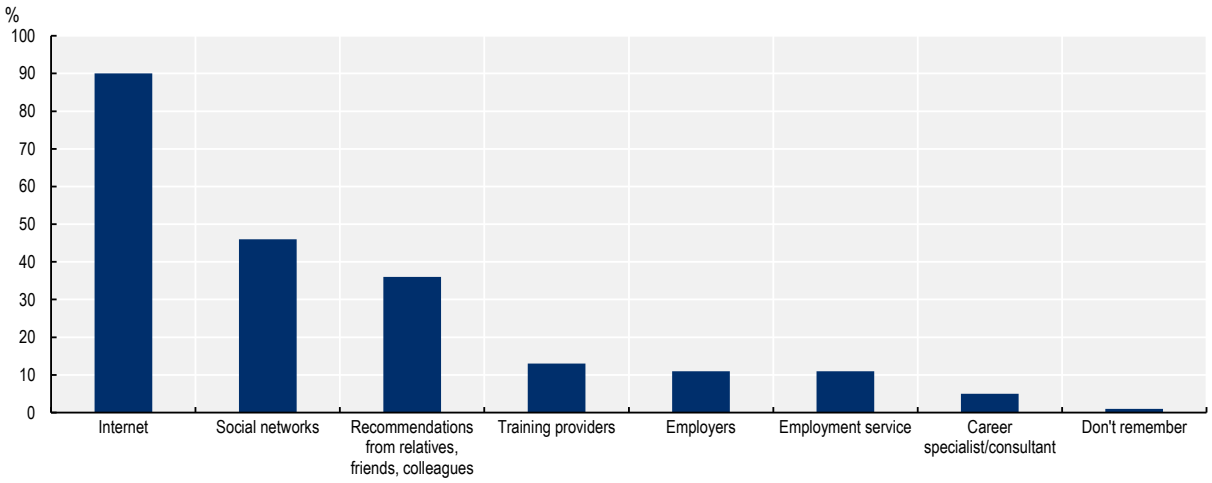
Low motivation to participate in training (see section on Lithuania's performance) suggests that Lithuania will need to raise awareness about adult learning benefits and opportunities among both high and low-skilled adults. Consolidating information online through one-stop shop solutions can help individuals navigate their training options more easily (OECD, 2019[1]). However, to connect with lower-skilled adults a more targeted approach will be required that specifically reaches out to those with low levels of basic skills through a co-ordinated effort involving bodies that have direct contact with the adults concerned, such as employers and social partners (Windisch, 2015[32]).

In Lithuania, the overwhelming majority of adults actively seeking information on adult learning opportunities do so through the Internet: in a recent lifelong learning survey conducted between December 2019 and January 2020, 90% of adults surveyed who were actively seeking information did so online (Figure 3.7). The informational needs of adults searching are diverse. Of those adults who have studied in the last three years, 60% said that they wanted information on where to study, 57% wanted information on training costs, 40% wanted information on the benefits of training, and 38% wanted information on the quality of training (STRATA, 2020[34]). This means that there is a strong need for easily accessible and comprehensive information online for those interested in pursuing adult learning opportunities.

However, this information is not always readily available online. Currently, information relevant to adult learning is spread across numerous online portals (Table 3.3). Whilst it is relatively easy to find information on where to study, information on the costs and financing of learning, the benefits of training and the quality of courses is more difficult to find. The information that does exist online is not located in one place, meaning that adults interested in pursuing adult learning need to consult multiple portals and the websites of individual providers before being able to make an informed decision. Moreover, some information is lacking across all portals. For example, information about labour market trends that enable adults to identify which areas to reskill into, and indicators on the quality of the course (such as the relative earnings ratio and the employment rate of graduates or indicators on satisfaction with teaching) are largely non-existent. The benefits of learning for adults more widely are also not always clearly articulated.

Figure 3.7. Sources used by adults for information on adult education and training

Percentage of adults actively seeking information on training, by method



Source: STRATA (2020[34]), *Mokymasis visą gyvenimą. Įpročiai, patrauklumas, barjerai, naudos suvokimas: Gyventojų apklausos ataskaita [Lifelong learning habits, barriers and perceptions: population survey report],* https://strata.gov.lt/images/tyrimai/2020-metai/svietimo-politika/20200108-MVG.pdf.

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Lithuania should consider consolidating adult learning information into an online one-stop shop that enables adults to explore the benefits and opportunities of different training options in one online location. This will be crucial for the successful implementation of other recommendations in this chapter and to create an effective adult learning system.

An online one-stop shop should make clear how much training costs and the funding options available for individuals. In Northern Ireland, the Student Finance NI portal enables users to discover their financing possibilities in just a few clicks (Box 3.2). Such a portal should also enable users to compare not just basic course information (such as duration and entry requirements), but also indicators on the quality of the course, including labour market outcomes that graduates can expect, as is the case with Poland's graduate tracking system (*Ekonomicznych Losów Absolwentów*), (Box 3.2). Many of these portals in other countries focus predominantly on HE, but Lithuania should consider such tools for vocational and non-formal education too, where the data exist, and consider introducing new monitoring mechanisms where data are not available (see Opportunity 3). Providing quality labels for top performing training providers (see Opportunity 3) on the site would be another way to direct learners towards higher quality offerings. The success of this one-stop shop will depend on making information on the site user-friendly, clear and interactive, as other countries have done (Box 3.2).

Online one-stop shops are predominantly useful for adults already searching for information. This makes them an effective informational tool for high-skilled adults, but means that their impact is more limited among low-skilled adults: in Lithuania, 18.7% of adults with a tertiary education search for information on adult learning opportunities, compared to just 3.9% of adults with only upper secondary or post-secondary non-tertiary education (Eurostat, 2020[37]). Moreover, the total percentage of adults in Lithuania who seek information on adult education and training is one of the lowest in the EU (Figure 3.8).

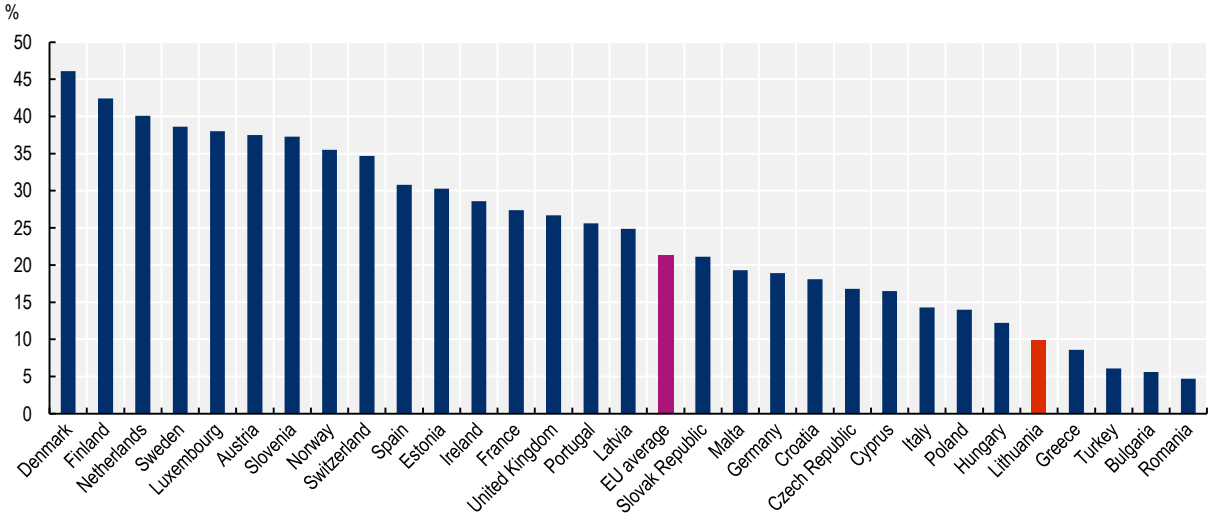
Table 3.3. Online portals with information about adult learning opportunities in Lithuania

Platform name	List of adult learning courses/providers	Financing information	Indicators on course quality/labour market trends	Information about adult learning benefits	Application/learning embedded in platform	Career guidance tools
Open Information, Counselling and Guidance System (AIKOS)	x					x
Association of Lithuanian Higher Education Institutions to organise general admissions (LAMA BPO)	x	x			x	
Public employment service (PES)	x	x	x			x
Karjera.lt			x			x
Euroguidance Lithuania						x
Studijos.lt	x			x		

Note: An x in each cell indicates that the online platform provides information relevant to this particular area of focus.
Source: Ministry of Education, Science and Sport (2020[22]), *Aikos online portal*, https://www.aikos.smm.lt/Puslapiai/Pradinis.aspx; LAMA BPO (2020[38]), *LAMA BPO Homepage*, https://bakalauras.lamabpo.lt/; Employment Service (2021[39]), *Employment Service (Užimtumo tarnyba) homepage*, https://uzt.lt/; Karjera.lt (2021[40]), *For Students and Graduates*, https://karjera.lt/web/guest/pradzia; EuroGuidance Lithuania (2021[41]), *EuroGuidance Lithuania: About Us*, http://www.euroguidance.lt/karjeros-planavimas; Studijos.lt (2021[42]), *Studijos.lt homepage*, https://studijos.tv3.lt/.

Figure 3.8. Percentage of adults seeking information on adult education and training

Percentage of adults aged 25-64 who actively searched for information on adult learning in the past year



Source: Eurostat (2020[37]), *Adult Education Survey 2016: Search for information on learning possibilities by type of learning and sex*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_182/default/table?lang=en.

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The fact that low-skilled adults are less likely to seek out information on adult learning necessitates a targeted engagement approach. Adults with weak basic skills often struggle to recognise their own skill deficiencies and therefore see no need to participate in additional education and training (Bynner and Parsons, 2006[43]). Moreover, low-skilled learners have frequently had a poor experience of school and can therefore find the idea of returning to classroom-based learning daunting, even if they are aware of the need to upskill (Windisch, 2015[32]). Strategies are thus needed to encourage the participation of low-skilled workers, and this should start with effective outreach efforts and awareness-raising initiatives (OECD, 2019[1]).

Awareness-raising initiatives can more efficiently target adults in need when organised at the regional/local level in partnerships with local stakeholders. Without a focus on local skills needs and labour market conditions, public awareness campaigns can be less effective at identifying and reaching low-skilled individuals (OECD, 2019[1]). Developing and implementing local awareness-raising initiatives will therefore require working with bodies and partners that have contact with low-skilled individuals, including employers, trade unions, social partners and charities, and Lithuania's PES (Windisch, 2015[32]). Co-ordinating local outreach efforts and awareness-raising initiatives could become the responsibility of adult learning co-ordinators, who are currently responsible for managing local initiatives, designing action plans, and allocating budgets for adult learning initiatives and programmes (Government of the Republic of Lithuania, 2016[13]).

Whilst social distancing measures remain in place because of COVID-19, emails, social media, radio and TV can all be effective ways to raise awareness among adults, as Belgium's PES has done (Box 3.2). When social distancing measures are lifted these methods can be supplemented by events (e.g. open days or drop-in sessions at the employer site supported by management) and testimonials from past learners. Career counselling for low-skilled adults should also form part of these initiatives. Creating a lifelong career guidance system is covered in Chapter 5. The appropriate awareness-raising measures should be based on local skills needs and the regional profile of low-skilled adults.

Box 3.2. Relevant international examples: Raising awareness about adult learning benefits and opportunities among individuals

Online portals: Examples from Northern Ireland (United Kingdom, UK) and Poland

In **Northern Ireland (UK)**, information on financing opportunities for students is clearly detailed on the Student Finance NI portal. Students are able to select their category of student (undergraduate or postgraduate, full-time or part-time) and see the options accordingly. It clearly details the residency and nationality requirements for funding, and divides funding by type of support so that students can see whether financial support is for the fees themselves or for related living subsidies such as childcare support. From the portal, adults can access more detailed documents on financing.

Poland's graduate tracking system (Ekonomicznych Losów Absolwentów) allows adults to compare courses by labour market statistics such as relative earnings, unemployment rate and time spent looking for a job. Users can create a ranking for all fields of study at Polish universities or for a selected subset, allowing them to see the top five performing courses for any particular indicator. The site also has a series of informative infographics on the labour market, and users can even create their own combining different statistics. For more in-depth analysis there is an "expert zone" with research articles and details on the labour market data used by the site.

Raising awareness about online training: An example from Belgium

The PES in **Brussels** has developed an active campaign on its website called *Confiné mais connecté! Suivez une formation en ligne* (Confined but connected! Follow an online training course), and is using its newsletter to advertise its training offers and encourage people to participate. The PES in Brussels uses its newsletter to disseminate information about COVID-19 related measures, with a focus on such online training. The campaign directs adults to a range of online platforms and courses of all levels, and emphasises basic digital skills and language training that can be undertaken online. This complements existing outreach efforts on Youtube, Twitter and other social media platforms to disseminate information about measures for jobseekers, including upskilling and reskilling opportunities.

Source: Northern Ireland Department for the Economy (2021[44]), *Student Finance NI,* https://www.studentfinanceni.co.uk/; Ośrodek Przetwarzania Informacji − Państwowy Instytut Badawczy (2021[45]), *Ekonomicznych Losów Absolwentów [graduate tracking system],* https://ela.nauka.gov.pl/pl; Actiris (2020[46]), *Confiné mais connecté ! Suivez une formation en ligne ! [Confined but connected! Follow an online training course],* https://www.actiris.brussels/fr/citoyens/details-d-une-news/5354-confine-mais-connecte-suivez-une-formation-en-ligne.

Recommendations for raising awareness about adult learning benefits and opportunities among individuals

2.1. **Consolidate and expand online information about adult learning benefits, opportunities and funding into a one-stop shop (portal).** This portal should merge existing information from various portals currently operating in Lithuania. The one-stop shop should also expand on previous efforts in order to include more comprehensive information on funding opportunities for adults and include indicators on the quality of courses and the direction of the labour market. It should also detail the benefits of engaging in learning throughout the life course. Lithuania might take inspiration from portals in other countries such as Northern Ireland's Student Finance NI and Poland's graduate tracking system (Ekonomicznych Losów Absolwentów) for guidance on how to present data in informative and user-friendly ways for adults.

2.2. **Introduce local awareness-raising initiatives through co-operation with local stakeholders to engage low-skilled adults in education and training.** These initiatives could consist of outreach via emails, social media, radio and TV, and through in-person events and testimonials from past learners. Awareness-raising initiatives should be tailored to local job market conditions and allow for flexibility in design and delivery. They would benefit from being organised with all relevant stakeholders including the PES, employers, trade unions and social partners. Adult learning co-ordinators could take the lead in overseeing the design and implementation of these awareness-raising initiatives.

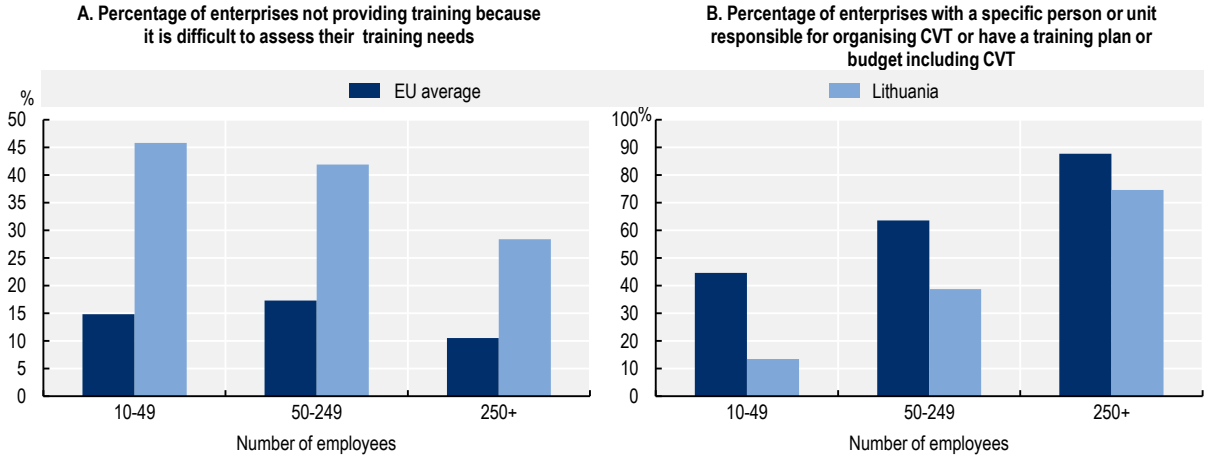
Enabling employers to understand their training needs

Low participation in adult education and training by employers (see section on Lithuania's performance) is partly the result of enterprises in Lithuania not knowing what training their employees need and as a result having no training plan in place. Difficulty assessing training needs is cited by enterprises not providing training as an important reason for the non-provision of adult education and training. Over 40% of all enterprises in Lithuania have challenges identifying their training needs, compared to just 15% of enterprises on average across the EU. This is particularly the case for SMEs in Lithuania (Figure 3.9). As

a result, even if financing conditions for firms are improved (See Opportunity 2), enterprises might not increase their provision of training unless they are better able to understand their training needs.

Once an enterprise has assessed its training needs, it then also needs to develop a training plan to enable the necessary training to take place over a suitable timeframe. A firm might hire a specific person (or unit for larger firms) to carry out this process, or devote a proportion of its annual budget to training assessment and planning, possibly bringing in external support. In Lithuania, very few enterprises undertake these types of measures. For all sizes of enterprise, fewer firms have a training plan, budget or team in place than the EU average (Figure 3.9). Nonetheless, the lack of provision is most noticeable among SMEs. Just 13.4% of small enterprises and 38.7% of medium-sized enterprises dedicate resources to planning training, compared to an EU average of 44.6% and 63.6% respectively.

Figure 3.9. Assessment of training needs and prevalence of training plans among firms in Lithuania and the EU



Source: Eurostat (2020[47]), *Continuing Vocational Training Survey 2015: Enterprises not providing training by reason for non-provision and size class - % of non-training enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_02s/default/table?lang=en; Eurostat (2020[48]), *Continuing Vocational Training Survey 2015: Enterprises with CVT planning by type of planning, type of training provided and size class - % of all enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_07s/default/table?lang=en.

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Unlike larger companies, SMEs often cannot afford to dedicate staff to assess training needs and design training plans for their employees, and lack the capacity to provide training directly. International evidence suggests that SMEs generally require tailored support if they are to make progress in assessing their adult learning needs (International Labour Organisation, 2017[49]). For instance, SMEs might benefit from free or subsidised skills and training needs assessments that help them to identify skills gaps in their workforce and develop training plans accordingly (Johanson, 2009[50]; OECD, 2019[51]).

Lithuania does not currently support enterprises to conduct training planning, but should consider doing so. This support could cover both the assessment of training needs and the development of training plans and/or budgets. Tools to help firms calculate the return on investment made by training their staff could also be provided. Whilst all employers in Lithuania could benefit from support with planning, resources would be most efficiently spent helping SMEs assess their needs. The EIM could facilitate the hiring of training specialists who could then be utilised by SMEs to conduct training needs assessments and develop training plans. Lithuania might consider subsidising the cost of these training specialists through the creation of a skills levy (see Opportunity 2), as has been successfully undertaken in Korea (Box 3.3).

Box 3.3. Relevant international example: Enabling employers to understand their training needs

Raising awareness of adult learning among SMEs: An example from Korea

In the mid-1990s, the Korean government introduced a training levy-grant scheme to fund training for firms. However, the take-up of training by SMEs remained low: only 4.7% of SMEs offered levy-supported training to their workers, compared to 77.6% of large enterprises. To address this challenge, in 2001 the Korean government piloted the Training Consortium Pilot Programme for SMEs, with the specific objective of raising awareness about adult learning benefits and opportunities among SMEs. The pilot organised SMEs (within the same sectors/industries) into a training consortium (TC). The TC was managed and run by two training specialists who were responsible for conducting a skills and training needs assessments of each member SME, planning training programme activities of member SMEs, and carrying out evaluation studies upon the completion of training courses. These measures enabled SMEs to overcome informational restraints and understand what training options were best suited to their employees. The scheme accelerated the take up of financial incentives by SMEs, with the proportion of member SMEs offering training for their workers increasing from 11% to 50% within a year of the pilot's implementation. As a result, the scheme was scaled up and rolled out nationally.

Source: OECD (2019[51]), *Adult Learning in Italy: What Role for Training Funds?,* https://doi.org/10.1787/9789264311978-en.

Recommendation for enabling employers to understand their training needs

2.3. **Support enterprises to undertake training needs assessments and develop training plans, starting with SMEs in economic sectors of strategic importance.** The EIM could support SMEs by hiring training specialists that SMEs can use to help them assess their training needs and design training plans. These measures could first be piloted for SMEs in sectors of strategic importance before being rolled out more widely. Funding for these support measures could come from the creation of a training levy (see Opportunity 2).

Opportunity 2: Removing barriers to participation in adult learning

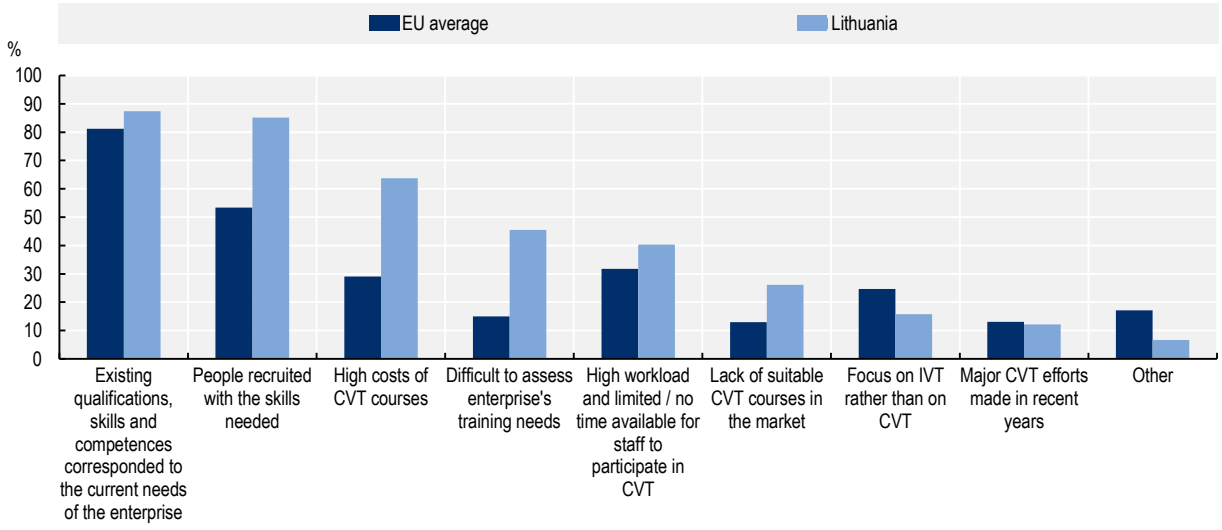
Raising awareness about adult learning benefits and opportunities can only effectively increase participation if other barriers that individuals and employers face are also minimised. For enterprises, barriers to participation in training generally relate to cost, the fear of poaching, lack of time and lack of adequate supply (International Labour Organisation, 2017[49]). For individuals, situational barriers such as financial and time constraints are some of the main reasons that adults do not participate in education and training across OECD countries (Desjardins, 2017[52]; OECD, 2017[53]). Even motivated adults will struggle to participate in adult learning if they cannot afford the training or have no time either because of work, children or other caring responsibilities.

Many enterprises in Lithuania do not perceive the need to engage in adult learning, citing the sufficiency of employees' skill levels. However, a disproportionate number of enterprises in Lithuania also list the high cost of continuous vocational training (CVT) and the difficulty of assessing training needs as reasons for not providing education and training opportunities for employees (Figure 3.10). Approximately 64% of firms

in Lithuania believe that the high cost of courses is preventing them from providing training to their employees, over double the proportion of EU firms, on average, who list similar concerns (29%). The high costs of training are a barrier for firms in Lithuania regardless of size. Among firms who do provide training, over 60% of small (10-49 employees), medium (50-249) and large (250+) enterprises cited high costs as a factor limiting provision (Eurostat, 2020[47]). This indicates a need to improve the availability of financial incentives for enterprises to facilitate training for employees, which should be combined with support for the assessment of training needs (see Opportunity 1).

Figure 3.10. Barriers to the provision of training for enterprises

Proportion of enterprises not providing training, by reason



Note: IVT (initial vocational training).
Source: Eurostat (2020[47]), *Continuing Vocational Training Survey 2015: Enterprises not providing training by reason for non-provision and size class - % of non-training enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_02s/default/table?lang=en.

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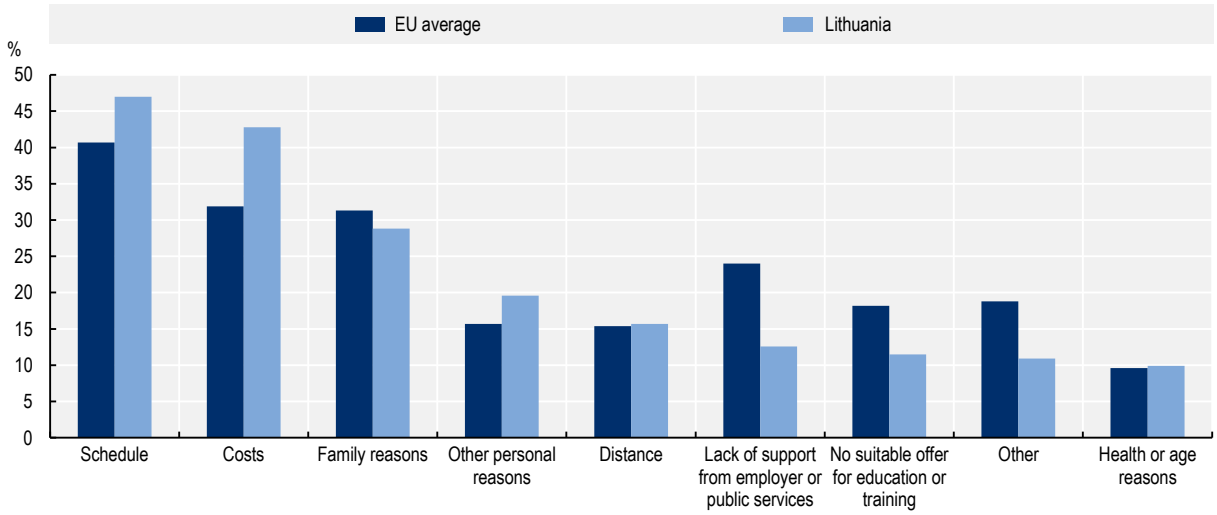
The high cost of participation in adult education and training is also a barrier for individuals. In Lithuania, 43% of adults who want to but do not participate in training cite cost as a reason for their non-participation, compared to an EU average of 32% (Figure 3.11). Improving financial incentives for individuals will be necessary to reduce the number of adults who want to but cannot afford to participate in training.

However, financial incentives alone are likely to be insufficient to reduce barriers to participation in adult learning. In Lithuania, “schedule” and “family reasons” are the first and third most important reasons given by adults who wish to but do not participate in education and training (Figure 3.11). These terms encapsulate a variety of time-related barriers, such as the inability to fit training around personal and work commitments. As a result, improving the flexibility of adult learning provision is crucial to improving access to adult learning opportunities. This is confirmed by international evidence, which suggests that flexibility in format (e.g. part time, on line) and design (modular, credit-based courses) helps overcome time-related barriers, especially for medium- to high-skilled workers (OECD, 2019[1]).

Figure 3.11. Barriers to participation in adult learning for individuals

Adults aged 25-64 wanting to participate in education and training, by reason for not participating



Source: Eurostat (2020[54]), *Adult Education Survey 2016: Population wanting to participate in education and training, by reason for not participating and sex*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_176/default/table?lang=en.

StatLink https://stat.link/rey7dx

Better using financial incentives to reduce barriers for employers

Evidence suggests that employers in Lithuania face financial barriers to investing in training opportunities, and that current financial incentives are not entirely successful in minimising these barriers.

Employers are key providers of training opportunities, although less so in Lithuania than in other EU countries (see section on overview of current arrangements). Employers benefit from upskilling employees, as education and training can lead to more motivated, adaptable and productive workers. Employers are well placed to connect with and encourage workers to engage in the upskilling process when they have assessed their training needs (see Opportunity 1) and have adequate funding in place. From the government's perspective, targeting funding at firms is likely to ensure that training is relevant for adults, as employers require upskilling to meet specific labour market needs (OECD, 2019[55]).

In recent years, Lithuania has expanded the number of funding instruments that firms can use to finance training, but the impact of these instruments has remained limited. The majority of these initiatives are funded through EU Structural Funds (Table 3.4). In line with other OECD countries, the majority of current incentives take the form of subsidies for training (OECD, 2017[53]). One of the most significant financial incentives that Lithuanian firms can now access are Competence Vouchers, which use financing from the European Social Fund (ESF) to subsidise training for firms. The measure, overseen by the EIM since March 2017, grants firms up to EUR 4 500 to purchase training services for employees. However, only 803 firms have benefitted from this funding so far, and the take-up of other financial incentives remains similarly limited.

Table 3.4. Main financial incentives for employers undertaking adult learning in Lithuania

Scheme	Type (subsidy/loan/ etc.)	Target group	Description	Total funding for the scheme	Number of firms that have received funding
Tax incentives	Tax incentives	Enterprises	Costs incurred while training of employees (with the exception of education leading to formal qualifications) can be deducted from payable taxes.	N/A	N/A
Human resources. Invest LT+ (Žmogiškieji ištekliai Invest LT+)	Subsidy	Foreign investors	Subsidies to support the training and professional development of employees of foreign firms investing in Lithuania.	European Structural Funds: EUR 7 168 469	49 firms
Training for staff of foreign investors (Mokymai užsienio investuotojų darbuotojams)	Subsidy	Foreign investors	Subsidies to support the training and professional development of employees of foreign firms investing in Lithuania.	European Structural Funds: EUR 25 881 098 Lithuanian state budget: EUR 2 600 000	112 firms
Competence voucher (Kompetencijų vaučeris)	Subsidy	Private or public for-profit enterprises	Subsidies for companies to purchase training for employees.	European Structural Funds: EUR 2 200 000	803 firms
Apprenticeships and improvements of qualifications at work (Pameistrystė ir kvalifikacijos tobulinimas darbo vietoj)	Subsidy	SMEs offering apprenticeships	The government will pay up to 40% of an apprentice's wage to encourage greater take up of apprentices by companies. Apprentices must be employees of the beneficiary company.	European Structural Funds: EUR 10 848 240 Lithuanian state budget: EUR 11 400 000	40 firms
Innotraining (Innomokymai)	Subsidy	SMEs engaged in research and development (R&D) activities	Provides funding for training of employees of innovative enterprises. Training to be carried out in foreign research and innovation centres/enterprises.	European Structural Funds: EUR 28 247	1 firm
Inno-fellowship (Innostažuotė)	Subsidy	SMEs engaged in R&D activities	Largely a follow-up to Innotraining. The aim is to increase the ability of employees to work with new technologies and provide opportunities to acquire the necessary skills in foreign research and innovation centres.	European Structural Funds: EUR 272 612	12 firms
Competencies LT (Kompetencijos LT)	Subsidy	Business associations, clusters	Subsidies to provide training on cross-cutting sectoral competences. The beneficiary is an association, which then organises training for the employees of its members.	European Structural Funds: EUR 19 691 036	59 associations

Source: Tax Information Department (2018[56]), *Sąnaudų priskyrimas leidžiamiems atskaitymams. Numatomi PMĮ pakeitimai nuo 2019 m [Allocation of costs and allowable deductions. Changes to the PMI are planned from 2019]*, https://www.vmi.lt/cms/leidiniai179; Ministry of Finance (2020[57]), *2014-2020 Operational Programme for the European Union Funds Investments in Lithuania: Patvirtintos priemonės [measures adopted]*, https://www.esinvesticijos.lt/lt//finansavimas/patvirtintos_priemones.

Current research suggests that time-consuming administrative requirements may be one reason for the limited take-up of existing incentives, particularly for Competence Vouchers (Visionary Analytics, 2018[58]). Firms need to provide evidence on the costs of training, fill in the report on who participated, justify the need for training, as well as complete other details. Burdensome administrative requirements mostly affect smaller firms who may lack the resources to devote to completing the application process. Going forwards,

Lithuania could consider simplifying the procedures to apply for Competence Vouchers and other financial support mechanisms, as well as providing free support to SMEs to complete the administrative requirements. This support could come from training specialists hired to help SMEs assess their training needs and produce training plans (see Opportunity 1).

In the longer term, Lithuania could consider supplementing current subsidies with additional financial incentives. Across OECD countries, a variety of financial incentives are used to expand the role of employers in funding and delivering skills policies (Table 3.5). In addition to subsidies, tax incentives, training levies, payback clauses and public procurement can also facilitate training among employers. Tax incentives and public procurement are relatively uncommon in OECD countries (OECD, 2017[53]). Payback clauses can be found in most European countries; however, it is not clear to what extent they are being used or enforced (OECD, 2017[53]).

Table 3.5. Mechanisms to increase employer engagement in skills policies

Incentive	Description	Potential advantages	Potential disadvantages
Subsidies	Schemes that decrease costs of participation through a direct transfer of money to the employer (e.g. through a voucher) or the training provider.	• Direct, as well as highly flexible (i.e. possibility of targeting specific groups or outcomes).	• Targeting generally increases administrative costs for government and participants. • Without targeting, deadweight losses can be high.
Tax incentives	Tax allowances (i.e. deductions from taxable income); tax exemptions (income that is exempted from the taxable base); tax deferrals (the postponement of tax payments); and tax relief (lower rates for some taxpayers or activities).	• Administration costs lower than other schemes due to reliance on existing tax infrastructure.	• Monitoring can be difficult and costly. • They tend to result in large deadweight losses as they are a relatively blunt measure.
Training levies/funds	Used in some countries as a way to pool resources from employers and earmark them for expenditure on education and training.	• Help overcome "poaching" concerns. • Allows increased contributions by employers.	• Buy-in from employers is critical for the success of levy-like schemes. • Large employers might benefit disproportionately. • Employers could spend money on training without too much thought, resulting in low-quality provision.
Payback clauses	Contractual arrangements that permit employers to recover at least part of their investment in training in the event that the trained employee leaves soon afterwards.	• Reduce the risk of a loss of investment in training.	• Well-suited for employees enrolling in formal education and training programmes, but not for those engaging in non-formal learning. • Less suitable for small companies that do not tend to invest in expensive training.
Public procurement	Making the award of public contracts to firms conditional on the provision of certain types of training.	• Not costly for the government to provide.	• Shifts the burden of training provision on to employers. • Might "distort" the procurement process in an unforeseen way.

Source: OECD (2017[53]) *Financial Incentives for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en.

Given Lithuania's reliance on external funding for financial incentives directed at employers, introducing a training levy could be an effective way of raising additional funds for training by employers. The introduction of a training levy could then finance the creation of regional or sectoral training funds. Training levies are collected from employers as a share of payroll and are then used to fund training for enterprises and possibly general training programmes (OECD, 2020[59]). Countries differ widely regarding the percentage of payroll that employers have to pay. In Italy, firms pay 0.3% of their payroll as a levy, whereas in the Netherlands the amount paid by firms can be as high as 2%. Many countries require different contributions depending on the size of the firm or the sector in which the firms operates (OECD, 2019[1]).

Money raised from a training levy on employers can be pooled to finance training for enterprises through a training fund. These are associations run by social partners that use resources collected through a training levy to finance training for enterprises, and are normally organised on a regional or sectoral basis

(OECD, 2019[51]). For example, firms in Italy pay their levy to one of 19 sectoral training funds and can then request funding to pursue training that is in line with the strategic priorities of the fund (Box 3.4).

Implementing a training levy to finance training via a fund has several notable advantages for Lithuania. First, a training fund can tailor the level of funding provided to firms based on size. This allows for the redistribution of funding from larger to smaller enterprises, which may face larger financial barriers to training (OECD, 2020[59]). Second, by setting objectives for training in their sector or region, funds can help ensure that firms are able to access the most labour market relevant training for their employees. Third, a common training agenda can help to reduce the fear of poaching when employers train their workforce (OECD, 2017[53]). Finally, training levies raise money specifically for adult learning that is ring-fenced for that purpose and cannot be used by other competing public sector needs. To ensure the successful participation of SMEs in training funds, it is important to include support for the assessment of training needs and the development of training plans (see Opportunity 1).

Implementing the training levy successfully will require employer buy-in for the scheme. A detailed review of training levy schemes by the World Bank has concluded that extensive consultations and consensus with employers is essential before introducing a levy scheme (Johanson, 2009[50]). Countries that allocate a leading role to employers tend to be successful, whereas excessive control by government can have deleterious results (Johanson, 2009[50]). Increasing employer involvement in skills policies is discussed in-depth in Chapter 5. Specifically, a training levy could form part of a tripartite funding agreement between enterprises, government and employee representatives, with the governance of the levy/fund overseen by a Tripartite Council (see Chapter 5 for further details).

Box 3.4. Relevant international examples: Better using financial incentives to reduce barriers for employers

Designing effective training funds: Examples from Ireland and Italy

Training funds have been implemented successfully in Ireland and Italy to increase participation in training. In Ireland, Skillnet operates as a facilitator and funding agency for enterprise-led training networks across the country, providing half the total cost for network activities. There are currently 65 Skillnet training networks active in Ireland. These are all funded through a mixture of government funding and the National Training Fund (NTF), which is financed through a levy on employers of 0.9% of the reckonable earnings of employees in certain employment classes. In 2016, 14 263 firms received employee training through Skillnet-funded networks. A survey of employers suggested that half of the training undertaken through the Skillnet networks would probably not have happened without the programme, and that the vast majority of employers would not have found training of similar quality.

In Italy, training funds were established by law in 2000 and have been operational since 2004. They are associations run by social partners that levy funds from companies to finance the organisation of training activities for the companies themselves or, more rarely, for individual workers. By law, firms are levied 0.3% of workers' payroll, and can decide to channel these resources into one of the training funds. The funds then deploy these resources to support companies' training activities, usually covering only a share (approx. 60-65%) of the total training cost. From 10 training funds in 2004 to 19 in 2017, training funds today cover almost 1 million firms with 10 million workers, a threefold increase in the number of firms covered by funds since 2004. With a combined budget of EUR 603 million in 2017, training funds are a crucial source of support for upskilling workers in Italy.

Source: OECD (2020[59]), *Increasing Adult Learning Participation: Learning from Successful Reforms*, https://doi.org/10.1787/cf5d9c21-en; OECD (2019[51]), *Adult Learning in Italy: What Role for Training Funds?,* https://doi.org/10.1787/9789264311978-en; OECD (2019[55]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en.

Recommendations for better using financial incentives to reduce barriers for employers

2.4. **Streamline the application process for Competence Vouchers and other existing financial incentives directed at enterprises.** The EIM should ease the administrative burden of applying for financial incentives as this can deter enterprises, especially SMEs, from applying. This could include providing free support to help SMEs understand and fulfil the requirements. The training specialists introduced to help SMEs assess their training needs and produce training plans (see Opportunity 1) might be well placed to provide this support to SMEs applying for financial incentives.

2.5. **Introduce regional or sectoral training funds financed through a training levy.** The EIM should consider moving to a more sustainable training funding model for enterprises by introducing a training levy that can raise money from employers specifically for adult education and training. This levy could be used to finance the creation of regional or sectoral training funds that would distribute training grants to firms in their sector or region in line with the fund's strategic priorities. Employer buy-in both for the design and implementation of this scheme will be crucial to its success. This could be facilitated through a tripartite funding agreement governed by a Tripartite Council (see Chapter 5).

Overcoming financial and time-related barriers for individuals

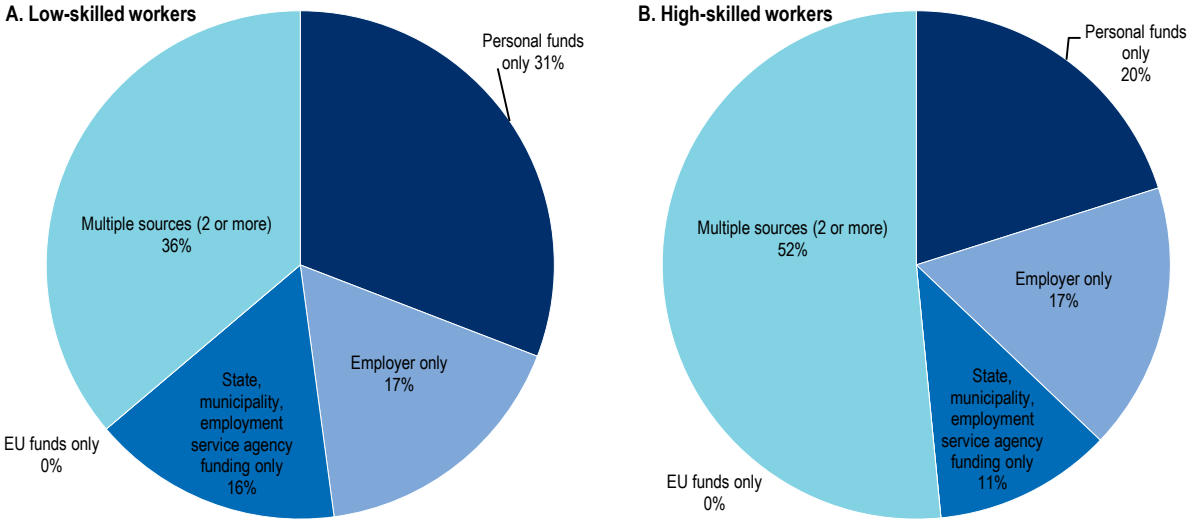
Even if financial incentives for employers are improved, adults will still need alternative and independent sources of funding for accessing education and training. Targeting financial incentives solely at employers may not be an effective way to reach disadvantaged workers, such as those who are low skilled, and may disproportionately fund firm-specific skills (OECD, 2019[55]). This is especially true for Lithuania, as only 13% of non-formal adult education and training activities takes place with employers, compared to 34% on average across the EU (see section on overview of the current adult learning system).

The cost of education and training is a larger barrier for adults in Lithuania than in other EU countries (Figure 3.11). Lithuania has recently conducted a survey on lifelong learning and found that 65% of adults aged 15-75 used personal finances to fund their learning opportunity (STRATA, 2020[34]). Whilst the majority of all learners (56%) covered the cost of learning from several sources of funding, some were reliant solely on their personal finances. Low-skilled workers are more likely to finance training only through state funding; however, they are also considerably more likely to have to rely on their personal finances to afford training (Figure 3.12). Low-skilled workers are also less likely than high-skilled workers to be able to combine funding from various sources to undertake training. Expanding state support for low-skilled workers' training in particular could reduce financial barriers and increase their motivation to participate in training.

Lithuania has relatively few financial incentives for individuals to engage in training; however, these options have expanded in recent years (Table 3.6). The most significant source of funding for learning opportunities is provided to unemployed and employed jobseekers by the Lithuanian PES. After registering a jobseeker, the PES carries out an assessment of the adult's employability before assigning them into groups of those needing high, medium or limited support. It then offers active labour market policies (ALMPs) accordingly, such as support for learning. Training is organised as either a tripartite agreement (between the PES, an employer and the jobseeker) or a bipartite agreement (between the PES and the jobseeker). The course of training is agreed to by the employer in a tripartite agreement and chosen by the individual (from a list of formal and non-formal vocational programmes in priority sectors) in a bipartite

agreement. Unemployed and employed jobseekers receive a subsidy (voucher) that covers the cost of the training, and unemployed jobseekers can also benefit from a training stipend, travel reimbursements and accommodation subsidies (Government of the Republic of Lithuania, 2016[17]). These vouchers have helped overcome financial barriers, particularly for unemployed adults, and improved the match between the supply of vocational courses and demand from jobseekers (OECD, 2018[60]).

Figure 3.12. Sources of funding for low- and high-skilled adults in employment undertaking learning opportunities



Source: OECD calculations based on STRATA (2020[34]), *Mokymasis visą gyvenimą. Įpročiai, patrauklumas, barjerai, naudos suvokimas: Gyventojų apklausos ataskaita [Lifelong learning habits, barriers and perceptions: population survey report]*, https://strata.gov.lt/images/tyrimai/2020-metai/svietimo-politika/20200108-MVG.pdf.

StatLink https://stat.link/ojuryt

Under the Law of Employment, which came into force in 2017, the only employed adults who can benefit from vouchers for vocational training are those planning to leave their current job. The law stipulates that employed individuals must be employed by another employer or take up self-employment within six months of the end of the vocational training to gain financial support (Government of the Republic of Lithuania, 2016[17]). Since the COVID-19 crisis began, the eligibility criteria for these vouchers have been expanded among employed adults. They can now be accessed for those upskilling within the same company if their contractual salary becomes at least 20% higher than their salary before training. Adults warned of dismissal can also now claim support for vocational training.

Other current incentives include tax incentives for initial education and financial support during training leave (Table 3.6). Nonetheless, cost has remained a barrier for individuals, particularly for low-skilled adults in employment (Figure 3.11 and Figure 3.12).

Table 3.6. Main financial incentives in Lithuania for individuals undertaking adult learning

Scheme	Type (subsidy/loan/etc.)	Target group	Description
Tax incentive to compensate for the costs of acquisition of formal qualifications (VET or HE)	Tax incentives	Permanent residents/ citizens	Adults can deduct up to 25% of their income for costs related to education and training when calculating income tax due. This only applies to adults acquiring their first vocational qualification and (or) the first HE degree, as well as first doctoral studies.
Study/training leave	Study/training leave	employees	According to the Labour Code, employees may be granted training leave for up to five working days per year to participate in non-formal adult education. Employees in formal education can also take study leave to prepare for examinations. During leave, employees are entitled to be paid at least 50% of their wage if they have worked at the company for over five years.
Vouchers	Subsidy/voucher	jobseekers	Since 2012, the PES has funded vocational training for all unemployed (and since 2017 for certain employed) adults through a voucher system where jobseekers use the voucher for training at a provider licensed by the SMSM.

Source: Government of the Republic of Lithuania (2016[17]), *užimtumo įstatymas (Law on Employment),* https://e-seimas.lrs.lt/portal/legalAct/en/TAD/5f0be3809c2011e68adcda1bb2f432d1; Government of the Republic of Lithuania (2016[61]), *Darbo kodeksas [Labour Code],* https://www.e-tar.lt/portal/lt/legalAct/f6d686707e7011e6b969d7ae07280e89/asr; Cedefop (n.d.[62]), *Lithuania: Tax incentive for individuals*,https://www.cedefop.europa.eu/FinancingAdultLearning/DisplayCountryDetails5688.html?countryName=Lithuania&instrumentType=tax%20incentive%20for%20individuals&instrumentID=tax%2Ballowance.

A range of financial incentives are used by other OECD countries to increase participation among individuals (Table 3.7). Training schemes that are attached to individuals (rather than to a specific employer or employment status) and which are accessible at various point along an individual's working life can broadly be categorised as individual learning schemes (ILS), and include subsidies (such as vouchers) and individual learning accounts (ILAs) (OECD, 2019[63]). The majority of ILS come in the form of subsidies (OECD, 2017[53]). ILAs have remained relatively uncommon, possibly because they can be costly to administer, frequently only provide limited financial support, and are disproportionately used by highly skilled individuals (OECD, 2017[53]). Other types of financial incentives for individuals include loans, tax incentives and training leave measures. Tax incentives and training leave are available in most countries, but their take-up and effectiveness vary substantially.

Lithuania could consider expanding existing financial incentives or introducing new financial incentives for individuals to overcome the cost of training. Expanding tax incentives to include retraining and upskilling opportunities, in addition to only covering initial qualifications (Table 3.6), might be one way to provide adults with additional financial incentives. However, tax incentives can be less effective at facilitating retraining and upskilling for low-skilled workers as it is difficult to steer the direction of training. Tax incentives are also less effective for adults with immediate liquidity restraints or who do not earn enough to pay a significant level of income tax (Table 3.7).

Expanding the existing voucher system, as has started to happen during COVID-19, or introducing new subsidies targeting low-skilled adults in employment might be a more effective way to reduce costs for education and training. Subsidies for individuals can also be a more efficient way to reach vulnerable adults than subsidies directed at employers (OECD, 2017[53]). Therefore, introducing new subsidies for adults would complement the expansion of financial incentives for enterprises (see previous section) and ensure that adults can train through their employer or independently.

Lithuania will need to carefully consider the trade-off between simplicity and greater targeting when designing subsidies for individuals. Subsidies that offer adults a voucher of the same amount benefit from being easy to apply for with reduced administration costs, but they risk increasing deadweight loss with more high-skilled than low-skilled adults applying. Subsidies targeted at specific groups (such as those who are low skilled) would reduce this deadweight loss; however, they would increase administration costs and make vouchers more difficult to apply for, potentially putting off some of the target group (OECD, 2017[53]).

Table 3.7. Financial incentives for individuals to participate in adult learning opportunities

Incentive	Description	Potential advantages	Potential disadvantages
Subsidies	Schemes that decrease costs of participation through a direct transfer of money to the individual (e.g. through a voucher). Subsidies can take the form of scholarships, grants, bursaries, allowances, vouchers and training cheques.	• Direct, as well as highly flexible (i.e. possibility of targeting specific groups or outcomes).	• Targeting generally increases administrative costs for government and participants. • Without targeting, deadweight losses can be high.
Individual learning accounts (ILAs)	Schemes where rights for training are accumulated over a certain period of time. Publicly financed, the account is virtual in the sense that the resources are only mobilised when training is actually undertaken and paid for.	• Linked to individual regardless of their labour market status – can be accessed throughout life.	• Relatively costly to administer and frequently only involve small amounts of money. • More likely to be used by high- than low-skilled individuals.
Tax incentives	Tax allowances (i.e. deductions from taxable income); tax credits (sums deducted from the tax due); and tax relief (lower rates for some taxpayers or activities).	• Tax incentives are part of the annual tax return process and therefore are relatively easy to access for individuals and cheap to administer.	• Difficult to use tax incentives to steer the direction of education and training (e.g. in areas of economic priority). • Individuals must generally wait until after the end of the tax year to be able to claim the incentives.
Loans	Include guarantees, interest rate subsidies, loan guarantees, income-contingent repayments, and student loan remission and/or forgiveness.	• Cost-efficient way of financing investments in skills. • Shift some of the cost of education and training to those who benefit the most, namely individuals.	• Can require a developed and expensive infrastructure for providing support to borrowers, administration and servicing. • Less effective for those on low incomes who are likely to be more averse to taking on debt.
Study/training leave	Schemes that give employees a right to study leave (and guarantee the right to return to their job after course completion) and reimburse employees/employer for the lost working time.	• Helps alleviate both financial and time-related barriers.	• Eligibility criteria to take leave can be limiting and can depend on employer consent. • Needs to work in tandem with other financial incentives (often insufficient on its own).

Source: OECD (2019[64]), Individual Learning Accounts*: Panacea or Pandora's Box?,* https://doi.org/10.1787/203b21a8-en; OECD (2017[53]), *Financial Incentives for Steering Education and Training*, https://dx.doi.org/10.1787/9789264272415-en.

Lithuania could take inspiration from how other countries have managed to design subsidies that incorporate targeting at specific groups. In Singapore, eligibility for training vouchers extends to all Singaporeans aged 25 and above, but the government also provides top-ups for specific target groups (Box 3.5). In Flanders, training vouchers, *Opleidingscheque*s, have stricter eligibility requirements: low- and medium-skilled employees are able to access vouchers for the full range of pre-approved training programmes, whereas high-skilled adults can only access them if the training is deemed necessary as part of a personal development plan drawn up during career counselling (Box 3.5).

Expanded financial incentives for individuals will need to be accompanied by a comprehensive information system. Information regarding financial incentives and the application process should be brought together under an online one-stop shop (see Opportunity 1). Financial incentives for low-skilled adults will also need to be supplemented by awareness-raising initiatives to ensure that individuals are aware of the new funding options available (see Opportunity 1).

Time-related barriers are another significant obstacle to adult learning for individuals (Figure 3.11). These can be overcome in various ways. First, processes to recognise and validate non-formal and informal learning can help to limit the time and costs needed to complete a formal credential (OECD, 2019[1]). Improving these processes for Lithuania is discussed in Opportunity 3. Second, statutory training leave can ensure that adults have time for learning around work commitments. Lithuania has already introduced a training leave policy with wage compensation (Table 3.4). Third, increasing the flexible delivery of

education and training through providing modular courses, part-time options and online and distance learning opportunities can be crucial to minimising time-related constraints (OECD, 2019[1]).

Increasing the flexible delivery of education and training has been a priority for the Lithuanian government in recent years. These efforts have so far focused predominantly on expanding modular education. The Action Plan for the Development of Lifelong Learning 2017-2020 made the development and implementation of vocational standards and modular vocational training programmes a key area to improve (Ministry of Education, Science and Sport, 2017[12]). The Qualifications and Vocational Education and Training Development Centre (KPMPC) is responsible for designing and updating national modular VET programmes, and in the last few years the design and uptake of modular education in VET has expanded rapidly (Cedefop, 2019[65]).

In the current climate, with the COVID-19 pandemic ongoing and social distancing measures in force for at least the near future, progress in modularity will need to be supplemented with an increased supply of online and distance courses. Online learning can be an effective way to open up vocational and HE to more students and to a broader range of socio-economic groups (OECD, 2019[66]). Distance learning is popular in Lithuania, and there have been extensive investments in distance learning infrastructure in recent years. A number of digital initiatives have also responded effectively to the COVID-19 crisis. The project *Prisijungusi Lietuva* (Connect Lithuania) has been providing digital skills courses in libraries across the country since 2018. Throughout COVID-19 it has compiled independent digital skills resources online for adults to access (Prisijungusi Lietuva, 2021[67]). Lithuania's PES also partnered with the massive open online course (MOOC) provider, Coursera, to provide free courses for unemployed adults during the summer and autumn of 2020. By 23 September 2020, Lithuania's PES had sent invitations to 35 041 unemployed adults to participate in free courses, with 15 619 people taking up the offer (Employment Service, 2020[68]).

Nonetheless, there is still an insufficient supply of online courses from vocational and HEIs delivered in the Lithuanian language. Reliance on off-the-shelf education platforms to provide training can exclude those without excellent secondary language skills. On Coursera, most training courses are in English, and there is a wide selection of Russian courses, but courses in Lithuanian are more limited (Employment Service, 2020[68]). The officials and stakeholders consulted during this OECD Skills Strategy project also indicated that Lithuanian vocational and HEIs do not currently provide extensive online offerings in either formal or non-formal courses.

Lithuania's SMSM should consider doing more to encourage institutions to develop their online and distance offerings. In particular, it could provide technical support to enable vocational and HEIs to deliver courses online cheaply and efficiently. The creation of an online learning platform that brings together courses from Lithuanian education institutions would be one way to enable the SMSM to help institutions build digital training materials, deliver programmes online and gather student feedback. For example, in Australia, TAFE Digital acts as a consolidated online learning platform that hosts courses from various vocational training institutes. The platform provides substantial methodological support to help institutions develop digital training materials that are consistent between providers (Box 3.5). An online learning platform could be hosted either independently or as part of an online one-stop shop that brings together online education and training with information on financing, the quality of courses and the benefits of learning (see Opportunity 1).

Box 3.5. Relevant international examples: Overcoming financial and time-related barriers for individuals

Targeting subsidies: Examples from Flanders (Belgium) and Singapore

In **Flanders (Belgium)**, the Opleidingscheques are training vouchers for employees. Before 2015, the vouchers were freely accessible by high-skilled individuals, with the result that almost half of participants were highly educated. Subsequently, the eligibility criteria was tightened. Highly skilled individuals can only access the vouchers for career-oriented education that is deemed necessary as part of a personal development plan drawn up during career counselling. Low- and medium-skilled employees can use these vouchers for any course in the Education Database for Flemish training incentives. The vouchers provide half the cost of the course, with the individual required to co-finance the remaining half. The full cost of courses is subsidised for certain courses such as those in basic literacy, numeracy or ICT skills, or courses in priority sectors. The full subsidy is also provided for any adult who does not have a secondary education diploma.

In **Singapore**, the SkillsFuture Credit gives every Singaporean aged 25 and above a training credit of SGD 500 (Singapore dollar) (approximately EUR 310) that can be topped up by the government at various intervals. These top-ups represent a way to channel additional funding to target groups. Currently an additional 500 of credit is available to adults aged 40 60. The voucher can be used for any type of training, whether formal (basic education, VET or HE) or non formal from a list of eligible programmes. The vouchers are one of many initiatives falling under SkillsFuture, a comprehensive adult learning initiative launched in late 2014, with the vouchers rolled out in 2016. SkillsFuture Credit was introduced to depart from the traditional employer-centric approach to training, and provide individuals with some autonomy in choosing their training. Crucial to this is an online portal from which adults can choose their courses. As every adult receives at least the basic subsidy, the awareness of the initiative throughout Singapore has been high, helping increase usage rates. In 2019, 86% of trainees surveyed by SkillsFuture Singapore using the Training Quality and Outcomes Measurement system indicated that they were able to perform their work better after training using SkillsFuture Credit.

Common learning virtual platforms: An example from Australia 2

In **Australia**, Technical and Further Education in New South Wales (TAFE NSW) is the largest vocational education and training provider. In 2017, the three individual online learning platforms from TAFE institutes were merged into a single digital delivery entity, TAFE Digital, to offer online courses from across TAFE's educational and training providers. The existence of one platform enables TAFE Digital to ensure that online course content is consistent across all locations and is easily accessible for students. As part of the merger, four teams work across institutions to provide an integrated service: the Digital Delivery team oversees student assessment, feedback and progression; the Digital Learning Lab consists of a group of learning analytics, innovative technology and immersive media specialists to trial new technologies for online programmes; Digital Design helps build the digital training materials; and Digital Project Management provides project support and digital advice. At the end of 2019, 50 014 students were enrolled in TAFE Digital across 250 different online courses. According to the 2018 National Student Outcome Survey, over 90% of students who completed their online studies would recommend TAFE Digital as a training provider, and over 89% were very satisfied with their experience.

Source: Vlaanderen.be (2021[69]), *Opleidingscheques voor werknemers [Training vouchers for employees]*, https://www.vlaanderen.be/opleidingscheques-voor-werknemers; OECD (2019[64]), *Individual Learning Accounts: Panacea or Pandora's Box?*, https://dx.doi.org/10.1787/203b21a8-en; SkillsFuture (2020[70]), *SkillsFuture Credit*, https://www.skillsfuture.gov.sg/credit; TAFE NSW (2020[71]), *About TAFE NSW*, https://www.tafensw.edu.au/about.

Recommendations for overcoming financial and time-related barriers for individuals

2.6. **Expand financial incentives for adults to participate in adult learning, focusing on target groups such as low-skilled workers.** The SADM, the SMSM, and the EIM should come together to determine which groups of adults would benefit from additional financial incentives for training (such as low-skilled adults in employment) and decide whether an individual learning scheme such as subsidies (vouchers) or financial mechanisms such as loans or tax incentives are most appropriate for reaching the target groups. Lithuania could either expand the coverage of existing tax incentives and vouchers or introduce new incentives, such as subsidies for target groups like low-skilled workers. Information on these financial incentives should be brought together in one place so that adults are able to easily understand their financing options (see Opportunity 1).

2.7. **Improve the supply of online adult learning in the Lithuanian language by providing technical support to vocational and higher education institutions.** Lithuania should build on its work so far to guarantee a sufficient supply of online courses during COVID-19 and into the future. The SMSM could consider providing vocational and HEIs with technical and methodological support to cheaply and efficiently design and deliver courses on line. As part of this support, Lithuania could consider creating a common online learning platform that would bring together online courses from Lithuanian education providers. This platform could be hosted independently or incorporated into an online one-stop shop that brings together for individuals in a clear and engaging manner the provision of online training and information on all aspects of the adult learning system (see Opportunity 1).

Opportunity 3: Strengthening the recognition and quality of non-formal adult education and training

In Lithuania, as in other OECD countries, the majority of structured adult learning takes place within non-formal education and training. Roughly 28% of adults in Lithuania participated in non-formal learning over the past 12 months, compared to just 3% who participated in formal learning and another 3% who participated in both non-formal and formal learning (OECD, 2019[72]). Non-formal learning forms a core part of the adult learning system because it is more flexible in duration and delivery than most formal learning. Non-formal courses are typically shorter than formal courses, enabling adults to take individual modules rather than full courses. These courses can take place via on-the-job training, open and distance education, courses and private lessons, seminars and workshops, as well as in vocational and HEIs (OECD, 2019[1]). The government has made strengthening the non-formal learning system a key objective over the next few years (Government of the Republic of Lithuania, 2020[10]).

The diversity of non-formal offerings can present a challenge to ensure that learning outcomes are recognised and that training is of high quality. Learning is most rewarding for individuals when their achievements are visible and understood by employers. This matters for skills acquired in both non-formal and informal learning environments. Recognising learning outcomes can be encouraged by certifying non-formal education and training and recognising non-formal and informal learning in national qualification frameworks (OECD, 2019[55]). This recognition of prior learning (RPL) can also mean adults are able to re-engage with formal learning by limiting the amount of time required to complete a qualification, which helps to overcome time-related barriers to participation in training for individuals (see Opportunity 2) (OECD, 2019[55]). For employers, having a better understanding of the skills of their employees can help to avoid skills mismatches and lead to higher productivity and reduced staff turnover (OECD, 2019[55]). Lithuania has taken important steps towards creating a national system of RPL over the past few years;

however, the quality of processes to recognise and validate non-formal and informal learning is still unequal between providers.

Ensuring the high quality of non-formal adult education courses can also be challenging (OECD, 2021[73]). Whilst Lithuania has robust quality assurance mechanisms for formal learning in both higher and vocational education, these are lacking in publicly funded non-formal adult education. Lithuania should consider strengthening *ex ante* and *ex post* quality assurance mechanisms to improve the quality of publicly funded non-formal education. Higher quality learning opportunities can lead to strengthened learning outcomes and increased motivation to participate in education, which is low in Lithuania (see Opportunity 1).

Improving the processes to recognise and validate non-formal and informal learning

Whilst Lithuania has taken significant steps in recent years to develop the legal framework for an RPL system, the quality of skills validation could still be improved by providing education institutions with clearer guidelines and standards for RPL processes.

Since 2016, the processes to recognise and validate non-formal and informal learning for vocational and HEIs have been developed through two orders from the SMSM. The Law on Employment has also made the recognition of competences acquired through non-formal and informal learning one of the learning support measures that the Lithuanian PES can provide to jobseekers (Employment Service, 2020[74]).

Currently the process to recognise and validate non-formal education for the purposes of acquiring a HE degree is outlined in the SMSM order: General Principles for the Assessment and Recognition of Non-formal and Informally Acquired Competences in Higher Education Institutions. This order sets out the four stages that individuals need to go through to have their competences recognised in line with European guidelines: 1) informing the individual about the process; 2) consulting with the individual to prepare the necessary evidence; 3) evaluating the portfolio; and 4) deciding which modules from the study programme can be credited in advance (Cedefop, 2015[75]; Ministry of Education, Science and Sport, 2017[76]).

The procedure to conduct RPL in vocational institutions is stipulated in the second SMSM order: Description of the Procedure for Crediting Prior Learning Achievements. This order details the types of documents considered as evidence by vocational institutions to recognise non-formal or informal learning (Ministry of Education, Science and Sport, 2018[77]). Vocational training diplomas, certificates and learning achievements from non-formal education can be used, as can recommendations from employers testifying to the development and use of skills in the workplace. An individual can have their learning recognised in preparation for undertaking a formal vocational programme or to simply have their existing non-formal training validated. Lithuania's PES provides a subsidy to unemployed adults wishing to engage in this process (Employment Service, 2020[74]).

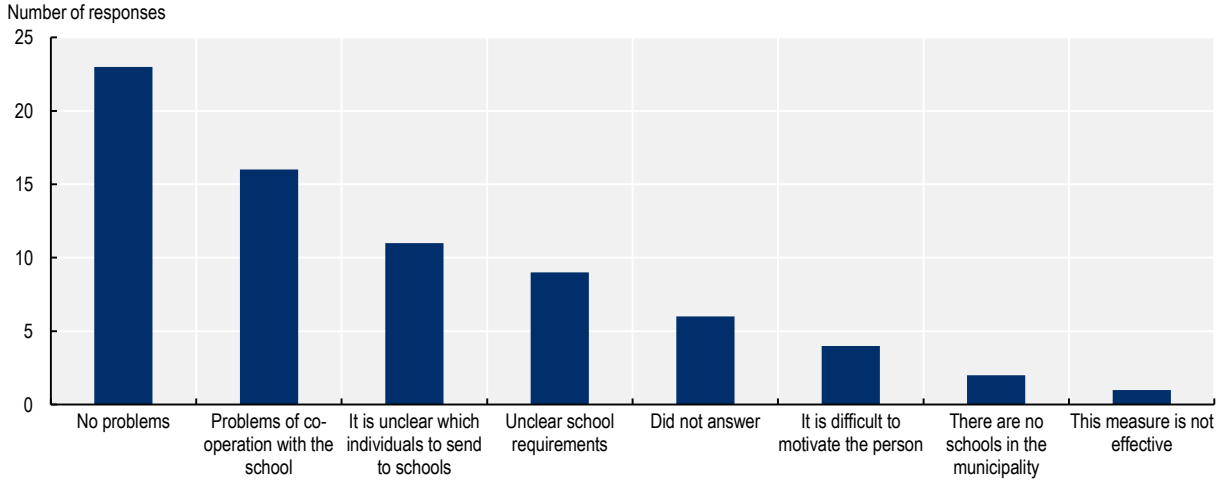
Nonetheless, the EC has found that there is insufficient validation reference material, methodologies and tools to help guide education institutions in the processes required to recognise and validate non-formal and informal learning, which is leading to differing validation quality between providers (Beleckiene, 2019[78]). This conclusion is supported by a recent survey led by KPMPC, which found unequal professional requirements, unequal processes and duration requirements, and other inconsistences in the validation process between providers (Kalvaitis, 2020[79]). For example, different vocational institutions require different levels of work experience as part of the skills certification process. The majority of institutions prefer one year of experience for a competency to be recognised, but some require more than two years and others have no minimum requirements (Kalvaitis, 2020[79]).

This creates two policy problems for Lithuania. First, it can make co-operation between stakeholders involved in the RPL system more difficult. Currently, local PES can refer jobseekers to education institutions to have their skills validated. The majority of these interactions proceed smoothly, but where problems occur these are related to co-ordination issues which stem, in part, from unclear RPL standards (Figure 3.13). In a recent survey of 66 local PES (out of 70 across Lithuania), 16 cited co-operation with

the VET provider as problematic, 11 reported that it is unclear which individuals are in need of RPL services, and a further 9 cited unclear school requirements. Second, it can mean that the quality of RPL provision differs depending on the provider and its use of validation methodologies and tools.

Figure 3.13. Barriers to recognising prior learning for local PES

The number of local PES that cited specific barriers to conducting the recognition of prior learning for those unemployed



Source: Kalvaitis, (2020[79]), *Suaugusiųjų neformaliuoju būdu įgytų kompetencijų vertinimas ir pripažinimas Lietuvoje: profesinio mokymo teikėjų ir Užimtumo tarnybos atstovų apklausos rezultatai [Recognition of prior learning in Lithuania: Results from the survey of professional training providers and local public employment services],* https://www.kpmpc.lt/kpmpc/wp-content/uploads/2020/06/PM-tyrimo-ataskaita_Albinas_Kalvaitis.pdf.

StatLink https://stat.link/pofj07

KPMPC is currently leading an EU funded project to improve the processes of recognising and validating non-formal and informal learning: Improvement of the System for Assessment and Recognition of Competences and Qualifications Acquired in Different Pathways (SKVC, 2020[80]). This project aims to improve the capacity of institutions to assess competences and qualifications acquired. The SMSM should build on the work of this project to develop a clear set of guidelines in conjunction with KPMPC, the Centre for Quality Assessment in Higher Education (SKVC) and education institutions that outline how to effectively recognise prior learning in Lithuanian education institutions. Lithuania could look at how other OECD countries, such as Norway, have developed guidelines that incorporate best practices, tools and methodologies to support the high-quality validation of skills across all providers (Box 3.6).

The success of this RPL system to recognise and validate non-formal and informal learning will also depend on raising awareness of skills validation as an option among adults. At the moment, publicly available information on validation options for adults, particularly in vocational institutions, is lacking (Beleckiene, 2019[78]). Improving the guidelines available to institutions should enable providers to more clearly state to adults the processes involved in having their skillset certified. Information about the RPL system could be included in an online one-stop shop and feature in awareness-raising initiatives (see Opportunity 1). Career guidance counsellors should be made aware of validation processes to effectively advise adults on whether and how to have their skills certified (see Chapter 5 for discussion on creating a lifelong career guidance system).

Lithuania could also consider developing digital tools for the recognition and validation of prior learning. Digital/open badges are a relatively new and promising way to harness technology to record and validate people's skills (OECD, 2019[55]). They can enable individuals to present their skills in a more flexible way than full qualifications, or to signal specific interests or knowledge (OECD, 2019[66]). First developed in 2011 by Mozilla and the MacArthur Foundation, open badges consist of a series of metadata such as the

recipient of the badge, the issuer of the badge and the criteria for earning the badge; this information together forms a verifiable claim (Ravet, 2017[81]). These badges can be stored online in digital "backpacks" and shared on social media platforms, incorporated into CVs or used to create and visualise meaningful learning pathways. The EC offers support for the creation of open badges through the use of the multilingual classification of European Skills, Competences, Qualifications and Occupations (Luomi-Messerer, 2019[82]).

Box 3.6. Relevant national and international examples: Improving the processes to recognise and validate non-formal and informal learning

Developing RPL guidelines: An example from Norway

Skills Norway is an agency of the Ministry of Education and Research that works on various aspects of adult learning policy. It has developed guidelines, one for vocational institutions and one for HEIs, on how to conduct RPL effectively. The guides first discuss the relevant domestic legal documents and European-wide initiatives before outlining processes for assessing prior learning and examples of methods and tools that institutions can use. Included are the necessary stages that an institution will need to follow, as well as tasks (to be delegated appropriately) that may be relevant to the applicant, administrative staff and academic staff at various stages of the process. The guides analyse various types of documentation that can be presented, discussing how they should be interpreted and the amount of evidence each is considered as offering, as well as providing a range of methodologies for assessment. A series of checklists are provided so that institutions can measure the extent to which they follow the procedures outlined in these documents. The guide for RPL in HE also provides a series of best practice on which institutions can base their assessment.

Designing digital badges: An example from Lithuania

Between 2015 and 2017, The Lithuanian Association of Non-Formal Education, in co-operation with the Lithuanian Confederation of Industrialists and international partners, developed a series of digital badge systems through an Erasmus+ initiative. In Lithuania, the achievement programme for the Youth Volunteer Service's initiative, Discover Yourself, was created. Discover Yourself was co-ordinated by the Department of Youth Affairs under the SADM and the Lithuanian Labour Exchange (now called the PES). It provided one to four months of voluntary service to any young person between the ages of 15 and 29 who was not in education, employment or training. The achievement programme created a series of badges that participants could receive throughout their volunteering. Eight key competences for lifelong learning such as cultural awareness, entrepreneurship and mathematical competence were identified, with each competency having its own 3-level badge. To achieve a Level 1 badge in a particular competency there was one mandatory task to complete, whereas to achieve a Level 3 badge a participant had to complete at least three. Badge earners could manage their achievements using a Badge Wallet application and choose which achievements to share, and where to share them. For example, the platform offered a feature to share badges and achievements with friends via social media accounts on Facebook, Twitter, Google+ or LinkedIn.

Source: Kompetanse Norge (2013[83]), Fritak for deler av universitets-/høyskolestudium på grunnlag av dokumentasjon av realkompetanse [exemption from university modules on the basis of RPL], https://www.kompetansenorge.no/contentassets/5f2020b0d0ab41bdb5dabe9eab0bfdd4/fritak_uhsektoren_veiledning2.pdf; Kompetanse Norge (2020[84]), *Opptak til høyere yrkesfaglig utdanning på grunnlag av realkompetanse [Admission to higher vocational education on the basis of prior learning]*, https://www.kompetansenorge.no/contentassets/58c112900db245a194cccfadfda83fd7/veileder_opptak_til_hoyere_yrkesfaglig_utdanning.pdf; Lithuanian Association of Non-formal Education (2018[85]), *Trusted Badge Systems: Building Trust and Recognition with Open Badges*, https://drive.google.com/file/d/0B8TgWdLuv6eTeUlaQlFxQ2MwSVE/view

Lithuania already has experience developing open badges. The Lithuanian Association of Non-Formal Education, in co-operation with the Lithuanian Confederation of Industrialists and international partners,

developed open badges for young adults volunteering with the Youth Voluntary Service (Box 3.6). Lithuania could leverage on this experience to develop open badges more widely across non-formal courses and informal learning experiences. As a starting point, expanding the supply of online learning opportunities from Lithuanian education institutions (see Opportunity 2) presents an opportunity to introduce open badges for online non-formal courses.

Recommendations for improving the processes to recognise and validate non formal and informal learning

2.8. **Develop guidelines to support Lithuanian education institutions in implementing high-quality recognition and validation processes for non-formal and informal learning.** The SMSM, in conjunction with the KPMPC, the SKVC, and vocational and HEIs, should develop guidelines and standards for the RPL system to ensure that all education institutions carrying out RPL have access to the methodologies, tools and reference materials needed to effectively certify prior learning. These guidelines could be informed by input from the ongoing project, Improvement of the System for Assessment and Recognition of Competences and Qualifications Acquired in Different Pathways. Adults will also need to be made aware of the RPL system and how they can have their skills recognised. This could be done via an online one-stop shop (see Opportunity 1) and through career guidance counsellors (see Chapter 5).

2.9. **Consider introducing digital/open badges for non-formal and informal learning.** The SMSM, the EIM and the SADM, in co-operation with representatives of the non-formal education sector and employers, should consider working with education institutions to develop open badges that would enable adults to visualise their skillset online. For example, the completion of non-formal courses could be awarded with a badge that adults can incorporate into online portfolios or CVs indicating the skills taught and developed on the programme. Lithuania could begin by introducing such badges for online non-formal courses delivered through a common learning virtual platform (see Opportunity 2).

Strengthening quality assurance mechanisms in non-formal adult education and training

In order to attract more adults and employers to engage in non-formal education and training, Lithuania will also need to ensure the high quality of publicly funded non-formal adult education. Good training quality is fundamental to guarantee that adult learning opportunities lead to the development of labour market relevant skills and the increased employability of participants (OECD, 2020[59]). An effective quality assurance regime can be broken down into three components: 1) *ex ante* recognition and certification of adult learning providers; 2) *ex ante* monitoring of adult learning providers; and 3) *ex post* monitoring of learning outcomes (Box 3.7). These work in tandem to guarantee that providers and courses are providing quality training opportunities and that adults are able to choose the education that most responds to their needs.

Quality assurance mechanisms are well-established in formal education. In HE, SKVC oversees external quality assurance policy. It provides *ex ante* recognition and certification of both providers and study programmes, and according to the Law on Higher Education and Research, only accredited courses can be taught (Government of the Republic of Lithuania, 2015[86]). HEIs are required to complete self-evaluation reports, and SKVC provides guidance to institutions on what these should include (SKVC, 2020[87]). Once a report has been submitted, SKVC forms an expert team to analyse the report, visit the institution and outline any follow-up activities that need to be undertaken to meet quality criteria. Accreditation of institutions factors in the effectiveness of internal quality assurance mechanisms, the management of the institute, and the impact of the institute on regional and national development (Ministry of Education, Science and Sport, 2019[88]).

Box 3.7. Key elements of a quality assurance system for adult education and training

A quality assurance regime for adult learning includes the following elements:

- ***Ex ante* recognition and certification of adult learning providers**: Introducing quality standards for the recognition, certification and accreditation of adult education programmes and/or institutions.
- ***Ex ante* monitoring of adult learning providers**: Assessing whether providers adhere to the quality standards through a combination of desk-based analysis and on-site audits, which may lead to follow-up measures in case of non-compliance.
- ***Ex post* monitoring of learning outcomes**: Tracking adult learners following course completion to assess whether learning opportunities lead to measurable skills gains, for instance through the use of administrative data and surveys.

Source: OECD (2021[89]), *Strengthening Quality Assurance in Adult Education and Training in Portugal: Implementation Guidance,* www.oecd.org/skills/centre-for-skills/Strengthening-Quality-Assurance-in-Adult-Education-and-Training-in-Portugal-Implementation-Guidance.pdf.

In formal vocational education, KPMPC is responsible for external quality assurance (KPMPC, 2020[19]). KPMPC establishes the procedure for the development, modification, evaluation and validation of formal vocational training programmes for initial and continuing vocational training. The procedure for this approval process is detailed in the Description of the Procedure for the Development and Validation of Formal Vocational Training Programmes. As with HE, vocational institutes are required to develop their own internal quality assurance mechanisms and self-evaluate. KPMPC provides methodological support in this regard (KPMPC, 2020[90]). KPMPC has also developed mechanisms to support the *ex post* monitoring of learning outcomes of formal vocational education through a set of questionnaires designed to measure the satisfaction of students, teachers, graduates and employers (KPMPC, 2020[90]).

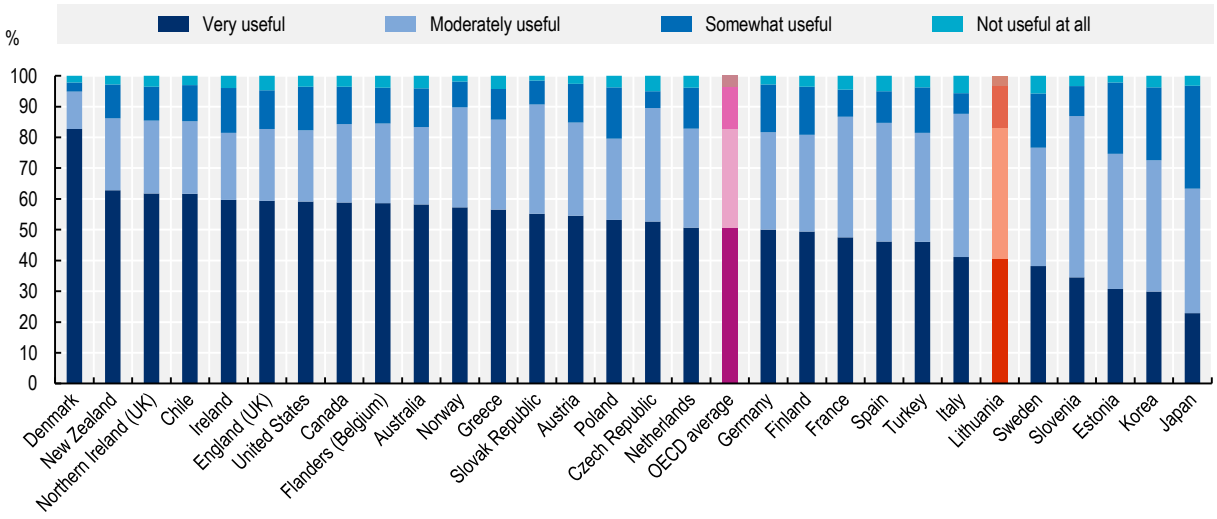
Regarding non-formal education, however, activities are not subject to comprehensive external regulation, with responsibility for quality largely down to the provider (Eurydice, 2018[91]). The main *ex ante* recognition and certification of providers is overseen by KPMPC which, as of 2019, registers non-formal vocational training programmes alongside formal programmes in its online database. Nonetheless, getting placed on this register of programmes is relatively easy, with few objective criteria required (Visionary Analytics, 2019[92]). Lithuania's PES also provides some *ex ante* recognition and certification by only financing jobseekers who wish to participate in non-formal adult education that corresponds to labour market needs (Employment Service, 2021[39]).

The *ex post* monitoring of both adult learning providers and learning outcomes in non-formal education is largely inexistent, as a recent evaluation of non-formal adult learning opportunities funded by the ESF found (Visionary Analytics, 2019[92]). ESF financing is used to fund training aimed at jobseekers, as well as the majority of training for firms (see Opportunity 2). The *ex post* monitoring of learning outcomes for ESF-funded non-formal learning is not systematically undertaken. There are no surveys or other forms of feedback collected from participants immediately upon finishing training, and as a result there is no system in place to allow the comparison of training quality between different providers. The training indicators that do exist fail to measure the impact of learning opportunities effectively, partly because they lack specificity and as a result are hard to measure (Visionary Analytics, 2019[92]).

Insufficient *ex ante* and *ex post* quality assurance mechanisms in non-formal education can lead to education that is not always relevant. In Lithuania, only 41% of adults found their training to be "very useful" (Figure 3.14). This is lower than the average across OECD countries (51%), and significantly below the top performers of Denmark (83%), New Zealand (63%) and Northern Ireland (62%).

Figure 3.14. Percentage who found education and training useful for their job

25-65 year-olds participating in formal or non-formal education and training for job related reasons



Source: OECD (2019[72]), *Survey of Adult Skills Database (PIAAC, 2012, 2015, 2018)*, http://www.oecd.org/skills/piaac/data/.

StatLink https://stat.link/wf5rpo

The EIM and the SMSM should consider strengthening the *ex ante* recognition and certification of non-formal adult education providers. To guarantee that training providers and programmes comply with minimum quality requirements, many countries have put in place certification mechanisms or quality labels. Quality labels can be a useful, often voluntary, way to signal the top-performing training providers according to the necessary certification and accreditation criteria defined by the state (OECD, 2021[73]). For example, in Switzerland the EduQua quality label is used to inform adults of training providers that provide quality learning experiences (Box 3.8). KPMPC could apply a quality label to non-formal courses on its register that meet a more stringent set of quality criteria, thus signalling to adults the top-performing training providers. Non-formal training providers could be required to meet this criteria in order to benefit from public funding.

Lithuania should also consider developing a more comprehensive *ex post* monitoring of learning outcomes for publicly funded non-formal adult education. This could be achieved through standardised and systematic post-participation surveys of participants that consist of a common set of indicators measuring labour market outcomes and satisfaction with the course. It could also be organised through the collection of administrative data about labour market outcomes from individuals in further education and work-based learning, as England does through Individualised Learner Records (ILR) (Box 3.8). Communicating outcome indicators to adults in an accessible way, for example through a systematic rating system, can then improve the quality of education by empowering individuals to judge courses according to outcomes that matter to them (OECD, 2018[60]). This could be undertaken via an online portal (see Opportunity 1) or by career guidance counsellors (see Chapter 5).

The process of developing more comprehensive *ex ante* and *ex post* monitoring of non-formal education should be a cross-ministry effort that actively seeks input from a range of stakeholders such as education institutions and employers. Facilitating ministerial co-operation and stakeholder engagement is discussed extensively in Chapter 5. Consensus should be sought on criteria for quality labels and the indicators to be included in a monitoring framework to ensure the success of these new quality assurance mechanisms across non-formal education in different sectors.

Box 3.8. Relevant international examples: Strengthening quality assurance mechanisms in non-formal adult education and training

Quality assurance labels: An example from Switzerland

In **Switzerland**, EduQua defines six criteria that are key to the quality of an adult education institution: 1) the course offer; 2) communication with clients; 3) value performance; 4) staff/educators; 5) learning success; and 6) quality assurance and development. EduQua stimulates quality development through issuing certification, on-site audit, certification reports and yearly intermediate audits, as well as through the renewal of the certification every three years. EduQua is the first Swiss quality label for adult education. It provides certified institutions with a considerable advantage in the eyes of their clients. The quality management also supports improvement through the certification process. The certification can be advantageous when dealing with the authorities, with an increasing number of cantons requiring the certification for public funding. The Swiss Conference of the Cantonal Educating Directors recommends that the cantons check "the quality of the providers in the education sector in all of Switzerland based on the same criteria and make national subsidies dependent on a proof of quality (EduQua)". EduQua is made up of over 1 000 schools, institutions and academies in the non-formal sector of the adult learning system, and has proved very successful in signalling the quality of non-formal education and training. Its main strengths lie in the fact that its scope is well defined and that it is managed by a well-respected main actor (the Swiss Federation for Adult Learning, SVEB), which represents the interests of all stakeholders involved.

Monitoring learning outcomes: An example from England

In **England**, the Individualised Learner Record (ILR) is the primary means of data collection about further education and work-based learning. Information about learners is collected from publicly funded colleges, training organisations, local authorities, employers and further education providers. The ILR is an electronic data return, submitted to the Education and Skills Funding Agency (ESFA), used to calculate funding for training providers. It also informs wider policy through the data collected. The ILR is an important part of the quality assurance system as it is used to monitor training delivery against funding allocations and as a pre-inspection analysis of performance. The data collected include the type of work experience/placement that learners engage in (if applicable), the number of study hours and student grades, as well as employment status monitoring. It does not, however, include more subjective criteria on participant satisfaction with courses.

Source: OECD (2021[73]), *Improving the Quality of Non-Formal Adult Learning: Learning from European Best Practices on Quality Assurance*, https://doi.org/10.1787/f1b450e1-en; OECD (2019[93]), *OECD Skills Strategy Latvia: Assessment and Recommendations*, https://doi.org/10.1787/74fe3bf8-en; Broek and Buiskool (2013[94]), *Quality in the Adult Learning Sector*, https://eurogender.eige.europa.eu/system/files/Quality%20of%20Adult%20Learning%20final.pdf; UK Education and Skills Funding Agency (2020[95]), *ILR specification, validation rules and appendices 2019 to 2020*, https://www.gov.uk/government/publications/ilr-specification-validation-rules-and-appendices-2019-to-2020.

Recommendations for strengthening quality assurance mechanisms in non-formal adult education and training

2.10. Establish quality labels for providers of non-formal adult education and training that exceed minimum certification requirements. To strengthen the *ex ante* recognition and certification of non-formal adult education and training providers, Lithuania should consider introducing quality labels for the best-performing providers in the certification process. Establishing quality labels should be a cross-ministry effort also involving the KPMPC, the SKVC, and other stakeholders such as education institutions. These labels could help to drive quality improvements by encouraging providers to exceed minimum requirements. Publicly funded non-formal providers could be required to meet this more comprehensive set of criteria.

2.11. Introduce a monitoring framework for the learning outcomes of publicly funded non-formal adult education and training. Ministries and stakeholders should together decide on standardised indicators for a monitoring framework across publicly funded non-formal adult education courses. These could consist of labour market outcomes as well as the satisfaction of participants with the provided training. The KPMPC and the SKVC could arrange this through post-participation surveys or through the collection of administrative data from training providers. The results of these learning outcomes should be communicated clearly to adults, perhaps through an online portal (see Opportunity 1).

Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Raising awareness about adult learning benefits and opportunities	
Raising awareness about adult learning benefits and opportunities among individuals	2.1. Consolidate and expand online information about adult learning benefits, opportunities and funding into a one-stop shop (portal).
	2.2. Introduce local awareness-raising initiatives through co-operation with local stakeholders to engage low-skilled adults in education and training.
Enabling employers to understand their training needs	2.3. Support enterprises to undertake training needs assessments and develop training plans, starting with SMEs in economic sectors of strategic importance.
Opportunity 2: Removing barriers to participation in adult learning	
Better using financial incentives to reduce barriers for employers	2.4. Streamline the application process for Competence Vouchers and other existing financial incentives directed at enterprises.
	2.5. Introduce regional or sectoral training funds financed through a training levy.
Overcoming financial and time-related barriers for individuals	2.6. Expand financial incentives for adults to participate in adult learning, focusing on target groups such as low-skilled workers.
	2.7. Improve the supply of online adult learning in the Lithuanian language by providing technical support to vocational and higher education institutions.
Opportunity 3: Strengthening the recognition and quality of non-formal adult education and training	
Improving the processes to recognise and validate non-formal and informal learning	2.8. Develop guidelines to support Lithuanian education institutions in implementing high-quality recognition and validation processes for non-formal and informal learning.
	2.9. Consider introducing digital/open badges for non-formal and informal learning.
Strengthening quality assurance mechanisms in non-formal adult education and training	2.10. Establish quality labels for providers of non-formal adult education and training that exceed minimum certification requirements.
	2.11. Introduce a monitoring framework for learning outcomes of publicly funded non-formal adult education and training.

References

Acemoglu, D. (1998), "Why Do New Technologies Complement Skills? Directed Technical Change and Wage Inequality", *The Quarterly Journal of Economics*, Vol. 113/4, pp. 1055-1089, https://www.jstor.org/stable/2586974. [4]

Actiris (2020), *Confiné mais connecté ! Suivez une formation en ligne ! [Confined but connected! Follow an online training course]*, https://www.actiris.brussels/fr/citoyens/details-d-une-news/5354-confine-mais-connecte-suivez-une-formation-en-ligne (accessed on 16 November 2020). [46]

Beleckiene, G. (2019), *European inventory on validation of non-formal and informal learning 2018 update: Lithuania*, https://cumulus.cedefop.europa.eu/files/vetelib/2019/european_inventory_validation_2018_Lithuania.pdf. [78]

Broek, S. and B. Buiskool (2013), *Quality in the Adult Learning Sector*, https://eurogender.eige.europa.eu/system/files/Quality%20of%20Adult%20Learning%20final.pdf. [94]

Bynner, J. and S. Parsons (2006), "New Light on Literacy and Numeracy", *National Research and Development Centre for Adult Literacy and Numeracy*, https://dera.ioe.ac.uk/22308/1/doc_3276.pdf. [43]

Cedefop (2019), *Kvalifikacijų ir profesinio mokymo plėtros centras [Vocational education and training in Europe: Lithuania 2018]*, https://cumulus.cedefop.europa.eu/files/vetelib/2019/Vocational_Education_Training_Europe_Lithuania_2018_Cedefop_ReferNet.pdf. [65]

Cedefop (2015), *European Guidelines for Validating Non-formal and Informal Learning*, http://dx.doi.org/10.2801/008370. [75]

Cedefop (n.d.), *Lithuania: Tax incentive for individuals*, https://www.cedefop.europa.eu/FinancingAdultLearning/DisplayCountryDetails5688.html?countryName=Lithuania&instrumentType=tax incentive for individuals&instrumentID=tax%2Ballowance (accessed on 22 November 2020). [62]

CVTS (2015), *Enterprises providing training by type of training, size class and NACE Rev. 2 Activity*, https://ec.europa.eu/eurostat/web/education-and-training/data/database (accessed on 2 July 2020). [28]

Dearden, L., H. Reed and J. Van Reenen (2006), "The impact of training on productivity and wages: Evidence from British Panel Data", *Oxford Bulletin of Economics and Statistics*, Vol. 68/4, pp. 397-421, http://dx.doi.org/10.1111/j.1468-0084.2006.00170.x. [5]

Desjardins, R. (2017), *Political Economy of Adult Learning Systems: Comparative Study of Strategies, Policies, and Constraints*, Bloomsbury, London, https://www.bloomsbury.com/uk/political-economy-of-adult-learning-systems-9781474273664/. [52]

Education, L. (2018), *Trusted Badge Systems: Building Trust and Recognition with Open Badges*, https://drive.google.com/file/d/0B8TgWdLuv6eTeUlaQlFxQ2MwSVE/view. [85]

Employment Service (2021), *Employment Service (Užimtumo tarnyba) homepage*, https://uzt.lt/ (accessed on 15 January 2021). [39]

Employment Service (2020), *Lithuanians' desire to learn is greater than that of their neighbors*, https://uzt.lt/news/lietuviu-noras-mokytis-didesnis-nei-kaimynu/ (accessed on 14 November 2020). [68]

Employment Service (2020), *Neformaliojo švietimo ir savišvietos būdu įgytų kompetencijų pripažinimas [Recognition of non-formal and informal learning competencies]*, https://uzt.lt/prof_mokymas/neformaliojo-svietimo-ir-savisvietos-budu-igytu-kompetenciju-pripazinimas/ (accessed on 10 November 2020). [74]

EuroGuidance Lithuania (2021), *EuroGuidance Lithuania: About Us*, http://www.euroguidance.lt/karjeros-planavimas (accessed on 10 February 2021). [41]

European Commission (2019), *2019 SBA Fact Sheet Lithuania*, https://ec.europa.eu/docsroom/documents/38662/attachments/18/translations/en/renditions/native. [29]

European Commission (2015), *An in-depth analysis of adult learning policies and their effectiveness in Europe*, http://dx.doi.org/10.2767/076649. [36]

Eurostat (2020), *Adult Education Survey 2016: Distribution of non-formal education and training activities by provider*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_170/default/table?lang=en (accessed on 15 November 2020). [24]

Eurostat (2020), *Adult Education Survey 2016: Participation rate in education and training by age*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_101/default/table?lang=en (accessed on 14 November 2020). [8]

Eurostat (2020), *Adult Education Survey 2016: Population by will to participate in education and training*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_175/default/table?lang=en (accessed on 25 October 2020). [27]

Eurostat (2020), *Adult Education Survey 2016: Population wanting to participate in education and training, by reason for not participating and sex*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_176/default/table?lang=en (accessed on 16 October 2020). [54]

Eurostat (2020), *Adult Education Survey 2016: Search for information on learning possibilities by type of learning and sex*, https://ec.europa.eu/eurostat/databrowser/view/trng_aes_182/default/table?lang=en (accessed on 20 October 2020). [37]

Eurostat (2020), *Continuing Vocational Training Survey 2015: Enterprises not providing training by reason for non-provision and size class - % of non-training enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_02s/default/table?lang=en (accessed on 12 October 2020). [47]

Eurostat (2020), *Continuing Vocational Training Survey 2015: Enterprises providing training by type of training and size class - % of all enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_01s/default/table?lang=en (accessed on 14 November 2020). [30]

Eurostat (2020), *Continuing Vocational Training Survey 2015: Enterprises with CVT planning by type of planning, type of training provided and size class - % of all enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_07s/default/table?lang=en (accessed on 5 October 2020). [48]

Eurostat (2020), *Continuing Vocational Training Survey 2015: Hours spent in CVT courses by size class – hours per 1000 hours worked in all enterprises*, https://ec.europa.eu/eurostat/databrowser/view/trng_cvt_21s/default/table?lang=en (accessed on 17 November 2020). [31]

Eurostat (2020), *Labour Force Survey 2019: Participation rate in education and training (last 4 weeks) by sex, age and educational attainment level*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_02/default/table?lang=en (accessed on 12 November 2020). [25]

Eurostat (2020), *Labour Force Survey 2019: Participation rate in education and training (last 4 weeks) by sex, age and labour status*, https://ec.europa.eu/eurostat/databrowser/view/trng_lfs_03/default/table?lang=en (accessed on 12 November 2020). [26]

Eurostat (2020), *Labour productivity per person employed and hour worked*, https://ec.europa.eu/eurostat/databrowser/view/tesem160/default/table?lang=en. [9]

Eurydice (2020), *Lithuania Adult Education and Training: Main Providers*, https://eacea.ec.europa.eu/national-policies/eurydice/content/main-providers-43_en (accessed on 2 July 2020). [23]

Eurydice (2019), *Adult Education: Distribution of Responsibilities*, https://eacea.ec.europa.eu/national-policies/eurydice/content/distribution-responsibilities-43_en (accessed on 12 November 2020). [21]

Eurydice (2018), *Lithuania: Quality Assurance*, https://eacea.ec.europa.eu/national-policies/eurydice/content/quality-assurance-38_en (accessed on 9 October 2020). [91]

Eurydice (2015), *Adult education and training in Europe*, https://op.europa.eu/en/publication-detail/-/publication/aaeac7ed-7bad-11e5-9fae-01aa75ed71a1/language-en. [35]

Government of the Republic of Lithuania (2020), *2021–2030 metų nacionalinis pažangos planas [National Plan for Progress 2021-2030]*, https://ministraspirmininkas.lrv.lt/uploads/ministraspirmininkas/documents/files/NPP%20planas.pdf. [11]

Government of the Republic of Lithuania (2020), *Aštuonioliktosios Lietuvos Respublikos Vyriausybės Programa [Programme of Government]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAP/3955e800388111eb8c97e01ffe050e1c. [10]

Government of the Republic of Lithuania (2017), *Lietuvos Respublikos profesinio mokymo įstatymo [The Law on Vocational Education and Training]*, https://www.e-tar.lt/portal/lt/legalAct/093a9010eb0b11e7acd7ea182930b17f/asr. [18]

Government of the Republic of Lithuania (2017), *švietimo įstatymo [Law on Education]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/eedc17d2790c11e89188e16a6495e98c?jfwid=qjs00elq1. [16]

Government of the Republic of Lithuania (2016), *Darbo kodeksas [Labour Code]*, https://www.e-tar.lt/portal/lt/legalAct/f6d686707e7011e6b969d7ae07280e89/asr. [61]

Government of the Republic of Lithuania (2016), *Neformaliojo suaugusiųjų švietimo ir tęstinio mokymosi [Development Programme for Non-formal Adult Education and Continuing Education 2016–2023]*, https://www.e-tar.lt/portal/lt/legalAct/3a34e780007811e6b9699b2946305ca6. [13]

Government of the Republic of Lithuania (2016), *užimtumo įstatymas (Law on Employment)*, https://www.e-tar.lt/portal/lt/legalAct/422c8b5042b811e6a8ae9e1795984391/FmjevKDdmA. [17]

Government of the Republic of Lithuania (2015), *Lietuvos Respublikos mokslo ir studijų įstatymo [Law on Higher Education and Research]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/548a2a30ead611e59b76f36d7fa634f8?jfwid=rp9xf47k7. [86]

Government of the Republic of Lithuania (2013), *Valstybinė švietimo 2013–2022 metų strategija [Lithuanian National Education Strategy 2013–2022]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.463390. [14]

Government of the Republic of Lithuania (2012), *Lithuania's Progress Strategy: Lithuania 2030 (Lietuva 2030)*, https://e-seimas.lrs.lt/rs/lasupplement/TAP/TAIS.423800/45a6c4cce8a3835f3c3f3b4625587aff/format/ISO_PDF/. [15]

International Labour Organisation (2017), *Upskilling SMEs: How governments fund training and consulting, Comparing experiences from Asia, Europe and North America*, https://www.voced.edu.au/content/ngv:79526. [49]

Johanson, R. (2009), *A Review of National Training Funds*, The World Bank: Social Protection & Labor, https://olc.worldbank.org/sites/default/files/Johanson%20(2009)%20-%20Training%20Funds%20(1).pdf. [50]

Kalvaitis, A. (2020), *Suaugusiųjų neformaliuoju būdu įgytų kompetencijų vertinimas ir pripažinimas Lietuvoje: profesinio mokymo teikėjų ir Užimtumo tarnybos atstovų apklausos rezultatai [Recognition of prior learning in Lithuania: Results from the Survey]*, KPMPC, https://www.kpmpc.lt/kpmpc/wp-content/uploads/2020/06/PM-tyrimo-ataskaita_Albinas_Kalvaitis.pdf. [79]

Karjera.lt (2021), *For Students and Graduates*, https://karjera.lt/web/guest/pradzia (accessed on 15 January 2021). [40]

Kompetanse Norge (2020), *Opptak til høyere yrkesfaglig utdanning på grunnlag av realkompetanse [Admission to higher vocational education on the basis of prior learning]*, https://www.kompetansenorge.no/contentassets/58c112900db245a194cccfadfda83fd7/veileder_opptak_til_hoyere_yrkesfaglig_utdanning.pdf. [84]

Kompetanse Norge (2013), *Fritak for deler av universitets-/høyskolestudium på grunnlag av dokumentasjon av realkompetanse [exemption from university modules on the basis of RPL]*, https://www.kompetansenorge.no/contentassets/5f2020b0d0ab41bdb5dabe9eab0bfdd4/fritak_uhsektoren_veiledning2.pdf. [83]

Konings, J. and S. Vanormelingen (2015), "The Impact of Training on Productivity and Wages: Firm-level evidence", *The Review of Economics and Statistics*, Vol. 97, pp. 485–497, http://dx.doi.org/doi:10.1162/REST_a_00460. [6]

KPMPC (2020), *About us*, https://www.kpmpc.lt/kpmpc/en/apie-mus/about-us/ (accessed on 14 November 2020). [19]

KPMPC (2020), *Profesinio mokymo kokybės vertinimas [Vocational training quality assessment]*, https://www.kpmpc.lt/kpmpc/profesinis-mokymas-3/profesinio-mokymo-kokybe/profesinio-mokymo-kokybes-vertinimas/ (accessed on 19 November 2020). [90]

LAMA BPO (2020), *LAMA BPO Homepage*, https://bakalauras.lamabpo.lt/ (accessed on 23 November 2020). [38]

Luomi-Messerer, K. (2019), *European inventory on validation of non-formal and informal learning 2018 update. Thematic report: How digital forms of assessment and self-assessment might place a new challenge and opportunity for assessment methodologies*, https://cumulus.cedefop.europa.eu/files/vetelib/2019/european_inventory_validation_2018_digital.pdf. [82]

Midtsundstad, T. (2019), "A review of the research literature on adult learning and employability", *European Journal of Education*, Vol. 54, pp. 13-29, https://doi.org/10.1111/ejed.12321. [3]

Ministry of Education Science and Sport (2020), *Aikos online portal*, https://www.aikos.smm.lt/Puslapiai/Pradinis.aspx (accessed on 2 July 2020). [22]

Ministry of Education, Science and Sport (2019), *Order on the Approval of the Procedure for the External Review of Higher Education Institutions and Branches of Foreign Higher Education Institutions, Evaluation Areas and Indicators*, https://www.skvc.lt/uploads/lawacts/docs/353_08812eaefbb9c8239fa36d95b4b857d6.pdf. [88]

Ministry of Education, Science and Sport (2018), *Ankstesnio mokymosi pasiekimų įskaitymo tvarkos aprašas [Description of the Procedure for Crediting Prior Learning Achievements]*, https://www.e-tar.lt/portal/legalAct.html?documentId=8a0e7d20833911e8ae2bfd1913d66d57. [77]

Ministry of Education, Science and Sport (2017), *Dėl neformaliojo ir savišvietos būdu įgytų kompetencijų, susijusių su aukštuoju mokslu, vertinimo ir pripažinimo aukštosiose mokyklose bendrųjų principų patvirtinimo [General principles for the assessment and recognition of non-formal learning]*, https://www.e-tar.lt/portal/lt/legalAct/b765dae028ca11e78397ae072f58c508. [76]

Ministry of Education, Science and Sport (2017), *Mokymosi visą gyvenimą plėtros 2017–2020 metų veiksmų planą [Action Plan for the Development of Lifelong Learning]*, https://www.e-tar.lt/portal/lt/legalAct/8d34ecd05c0411e79198ffdb108a3753. [12]

Ministry of Finance (2020), *Lithuania, 2014-2020 Operational Programme for the European Union Funds Investments in Lithuania: Patvirtintos priemonės [measures adopted]*, https://www.esinvesticijos.lt/lt//finansavimas/patvirtintos_priemones (accessed on 12 November 2020). [57]

Northern Ireland Department for the Economy (2021), *Student Finance NI*, https://www.studentfinanceni.co.uk/ (accessed on 26 October 2020). [44]

OECD (2021), *Improving the Quality of Non-Formal Adult Learning: Learning from European Best Practices on Quality Assurance*, OECD Publishing, Paris, https://doi.org/10.1787/f1b450e1-en. [73]

OECD (2021), *Strengthening Quality Assurance in Adult Education and Training in Portugal: Implementation Guidance*, OECD, Paris, https://www.oecd.org/skills/centre-for-skills/Strengthening-Quality-Assurance-in-Adult-Education-and-Training-in-Portugal-Implementation-Guidance.pdf. [89]

OECD (2020), *Increasing Adult Learning Participation: Learning from Successful Reforms*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/cf5d9c21-en. [59]

OECD (2019), *Adult Learning in Italy: What Role for Training Funds?*, OECD Publishing, Paris, https://doi.org/10.1787/9789264311978-en. [51]

OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264311756-en. [1]

OECD (2019), *Individual Learning Accounts : Panacea or Pandora's Box?*, OECD Publishing, Paris, https://dx.doi.org/10.1787/203b21a8-en. [63]

OECD (2019), *Individual Learning Accounts: Panacea or Pandora's Box?*, OECD Publishing, Paris, https://dx.doi.org/10.1787/203b21a8-en. [64]

OECD (2019), *OECD Skills Outlook 2019: Thriving in a Digital World*, OECD Publishing, Paris, https://dx.doi.org/10.1787/df80bc12-en. [66]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [55]

OECD (2019), *OECD Skills Strategy Latvia: Assessment and Recommendations*, OECD Publishing, Paris, https://doi.org/10.1787/74fe3bf8-en. [93]

OECD (2019), *Survey of Adult Skills Database (PIAAC, 2012, 2015, 2018)*, http://www.oecd.org/skills/piaac/data/. [72]

OECD (2018), *OECD Reviews of Labour Market and Social Policies: Lithuania*, OECD Reviews of Labour Market and Social Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264189935-en. [60]

OECD (2017), *Financial Incentives for Steering Education and Training*, Getting Skills Right, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264272415-en. [53]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [7]

OECD (2011), *PIAAC Conceptual Framework of the Background Questionnaire Main Survey*, http://www.oecd.org/skills/piaac/PIAAC(2011_11)MS_BQ_ConceptualFramework_1%20Dec%202011.pdf. [2]

Ośrodek Przetwarzania Informacji − Państwowy Instytut Badawczy (2021), *Ekonomicznych Losów Absolwentów [graduate tracking system]*, https://ela.nauka.gov.pl/pl (accessed on 15 November 2020). [45]

Prisijungusi Lietuva (2021), *Prisijungusi Lietuva webpage*, https://www.prisijungusi.lt/ (accessed on 16 February 2021). [67]

Ravet, S. (2017), *Open Badges: Recognising Informal Learning*, https://epale.ec.europa.eu/en/blog/open-badges-recognising-informal-learning. [81]

SkillsFuture (2020), *SkillsFuture Credit*, https://www.skillsfuture.sg/credit (accessed on 15 November 2020). [70]

SKVC (2020), *About us*, https://www.skvc.lt/default/en/about (accessed on 14 November 2020). [20]

SKVC (2020), *Current Projects*, https://www.skvc.lt/default/en/projects/current-projects#Improvement (accessed on 3 November 2020). [80]

SKVC (2020), *Order of the Director of the Centre for Quality Assessment in Higher Education on the Approval of the Methodology for Conducting Institutional Reviews of Higher Education Institutions*, https://www.skvc.lt/uploads/lawacts/docs/354_a4b1788e5db0667d8b830c666d5ab1af.pdf. [87]

STRATA (2020), *Mokymasis visą gyvenimą. Įpročiai, patrauklumas, barjerai, naudos suvokimas: Gyventojų apklausos ataskaita [Lifelong learning habits, barriers and perceptions: population survey report]*, https://strata.gov.lt/images/tyrimai/2020-metai/svietimo-politika/20200108-MVG.pdf. [34]

Studijos.lt (2021), *Studijos.lt homepage*, https://studijos.tv3.lt/ (accessed on 15 February 2021). [42]

TAFE NSW (2020), *About TAFE NSW*, https://www.tafensw.edu.au/about (accessed on 1 March 2020). [71]

Tax Information Department (2018), *Sąnaudų priskyrimas leidžiamiems atskaitymams. Numatomi PMĮ pakeitimai nuo 2019 m [Allocation of costs and allowable deductions. Changes to the PMI are planned from 2019]*, https://www.vmi.lt/cms/leidiniai179. [56]

UK Education and Skills Funding Agency (2020), *ILR specification, validation rules and appendices 2019 to 2020*, https://www.gov.uk/government/publications/ilr-specification-validation-rules-and-appendices-2019-to-2020 (accessed on 14 November 2020). [95]

Visionary Analytics (2019), *Europos socialinio fondo finansuojamų mokymų kokybės ir efektyvumo vertinimas [Evaluation of the quality and effectiveness of trainings financed by the European Social Fund]*, https://www.esinvesticijos.lt/lt/dokumentai/europos-socialinio-fondo-finansuojamu-mokymu-kokybes-ir-efektyvumo-vertinimas. [92]

Visionary Analytics (2018), *Atvejo studija: 2014–2020 m. ES fondų investicijų į mokymąsi visą gyvenimą tinkamumo ir suderinamumo vertinimas [Case study: 2014-2020 Assessing the suitability and compatibility of EU funds' investments in lifelong learning]*, https://www.esinvesticijos.lt/lt/dokumentai/atvejo-studija-2014-2020-m-es-fondu-investiciju-i-mokymasi-visa-gyvenima-tinkamumo-ir-suderinamumo-vertinimas. [58]

Vlaanderen.be (2021), *Opleidingscheques voor werknemers [Training vouchers for employees]*, https://www.vlaanderen.be/opleidingscheques-voor-werknemers (accessed on 15 February 2021). [69]

White, P. (2012), “Modelling the ‘learning divide’: predicting participation in adult learning and future learning intentions 2002 to 2010”, *British Educational Research Journal*, pp. 153-175, http://dx.doi.org/10.1080/01411926.2010.529871. [33]

Windisch, H. (2015), “Adults with low literacy and numeracy skills: A literature review on policy intervention”, *OECD Education Working Papers*, No. 123, OECD Publishing, Paris, https://dx.doi.org/10.1787/5jrxnjdd3r5k-en. [32]

4 Using people's skills more effectively in Lithuania's workplaces

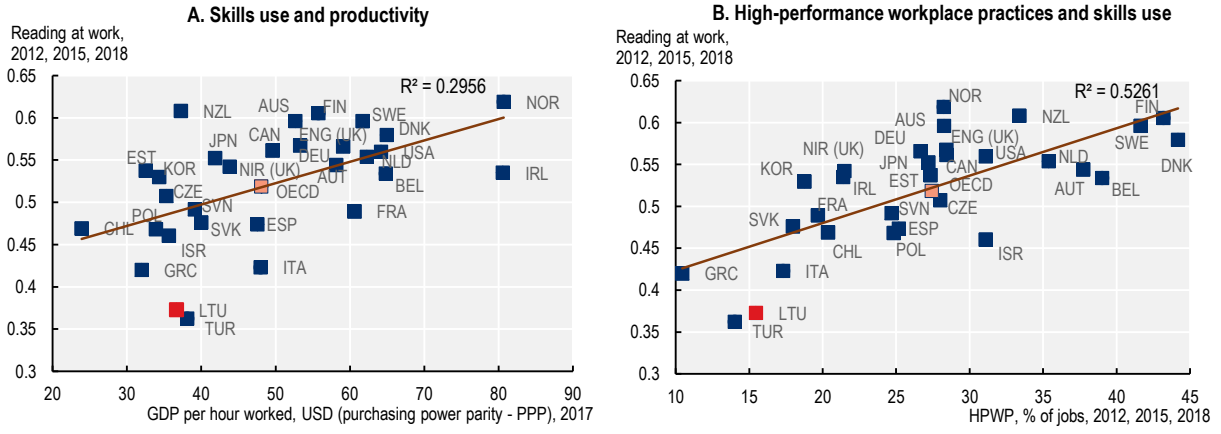
The effective use of skills in workplaces is essential to make the most of the skills that individuals possess. Better using skills can help to raise productivity and innovation for businesses, and help to increase wages and job satisfaction for employees. Public policy makers can work with employers to help create the conditions or provide direct support for strengthening skills use in workplaces. This chapter explains the importance of using people's skills more effectively, how this could support Lithuania in achieving its strategic objectives, and provides an overview of relevant policies and practices. It then explores three opportunities for Lithuania to use skills more effectively: 1) enhancing the use of skills by supporting businesses to adopt high-performance workplace practices (HPWP); 2) strengthening management and leadership skills to drive the transformation of workplaces; and 3) empowering and engaging the workforce to make better use of their skills.

The importance of using people's skills more effectively in Lithuania's workplaces

As described in the previous chapters, Lithuania has been making progress in developing strong skills among youth and adults. However, it should also strive to use these skills as intensively as possible in the economy, workplaces and society to take full advantage of this initial investment in skills. In addition to activating the skills of people by ensuring that they have jobs, there has been growing awareness that the effective use of skills in workplaces helps to make the most of the skills that workers possess (OECD, 2019[1]). This chapter will examine how Lithuania could strengthen the use of skills in workplaces by assessing the factors that help to drive better skills utilisation.

The effective use of skills (see Box 4.1 for definitions) positively affects the performance of employees. For instance, studies using data from the OECD Survey of Adult Skills (a product of the OECD Programme for the International Assessment of Adult Competencies, PIAAC) demonstrate that a higher intensity of skills use in workplaces is associated with higher job satisfaction, wages and productivity (Figure 4.1, Panel A) (OECD, 2016[2]; OECD/ILO, 2017[3]). As a consequence, this has many benefits for employers (e.g. businesses that more effectively use the skills of their workers have, on average, higher output and are more innovative), as well as the broader economy and society, including by driving economic growth.

Figure 4.1. Correlations between skills use, productivity and the adoption of high-performance workplace practices (HPWP) in OECD countries



Note: The skills use index ranges from 0 to 1, and is a computed average for the frequency with which workers use different related tasks at work (e.g. reading documents, instructions, memos, articles, e-mails and more for using reading skills at work). High-performance workplace practices include the following variables: choosing and changing the sequence of your tasks; the speed of work and how to do your work; organising your own time and planning your own activities; co-operating with others; instructing, teaching or training people; sharing information with co-workers; bonuses; participating in training; and flexible working hours.
Source: OECD (2019[4]), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://dx.doi.org/10.1787/1f029d8f-en.

StatLink https://stat.link/8mw5gc

The organisation of workplaces is arguably the most important determinant of skills use. Practices known to positively affect the performance of employees and businesses are referred to as high-performance workplace practices (HPWP). These include work flexibility and autonomy, teamwork and information sharing, training and development, and career progression and performance management (Figure 4.1, Panel B) (see Box 4.1 for definitions). However, various other factors matter indirectly for skills use and the adoption of HPWP. For instance, skills use is affected by external factors such as the general economic context, local or regional skills landscapes, management capabilities, and the broader value chain

(OECD/ILO, 2017[3]). Moreover, the extent to which skills supply is aligned with skills demand in the labour market is important for skills use: to optimally use skills, employees need to have the right skills for the job.

Box 4.1. Definitions and measurements of skills use and HPWP

Skills use in workplaces

The OECD Skills Strategy Framework (OECD, 2019[1]) and its pillar on "using skills effectively" describes skills utilisation in both the labour market (also referred to as "activation") and in workplaces. This chapter will solely address the latter interpretation of skills use. The Survey of Adult Skills (PIAAC) is one of the main sources used to analyse the use of information processing skills in workplaces. These skills include reading, writing, numeracy, information and communication technology (ICT), and problem solving. The approach used in the Survey of Adult Skills (PIAAC) follows the job requirements approach (JRA) by enquiring about the frequency with which tasks relevant to each skill are carried out. For example, the survey measures the frequency (from 1 "never carried out" to 5 "carried out every day") of ICT-related tasks such as the use of email, spreadsheets and programming languages, which result in a composite variable for the use of ICT skills. To assess the "effectiveness" of skills use, these frequency indicators need to be analysed in combination with actual skill levels. The method has some limitations, including: 1) the measures are developed on self-reported data and could be affected by workers' skills and perceptions; and 2) the measures are based on task frequency and thereby may not capture the full list and complexity of tasks for skill types (OECD, 2016[2]).

High-performance workplace practices (HPWP)

Despite considerable literature on HPWP, there is no consensus on the exact definition (Posthuma et al., 2013[5]; UKCES, 2009[6]). There is no universal list of HPWP that can be applied to any organisation as their effect can depend heavily on organisational context. Organisations should implement a system of practices that complement and reinforce each other and that fit the specific organisation. A number of authors have tried to identify specific practices and different categories of HPWP, for example Posthuma et al (2013[5]) and Sung and Ashton (2006[7]), and a definition of HPWP has been developed based on analysis of data from the Survey of Adult Skills (PIAAC) (OECD, 2016[2]). These taxonomies differ in both depth and breadth. The OECD Centre for Skills applies a pragmatic approach and has identified the following four broad categories of HPWP based on existing taxonomies and driven by available data on underlying indicators:

1. **Flexibility and autonomy:** Including flexibility in working time and tasks, involvement in setting tasks, planning activities, and applying own ideas.
2. **Teamwork and information sharing**: Including receiving support from colleagues, working in a team, and sharing work-related information with colleagues.
3. **Training and development:** Including participation in continuing vocational training and on-the-job training.
4. **Benefits, career progression and performance management**: Including bonuses, career advancement, performance appraisal and competency profiles.

Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://dx.doi.org/10.1787/9789264313835-en; OECD (2016[2]), *Skills Matter: Further Results from the Survey of Adult Skills*, https://dx.doi.org/10.1787/9789264258051-en; UKCES (2009[6]), *High Performance Working: A Synthesis of Key Literature*, www.ukces.org.uk; Posthuma et al. (2013[5]), *A High Performance Work Practices Taxonomy: Integrating the Literature and Directing Future Research*, https://dx.doi.org/10.1177/0149206313478184; Sung and Ashton (2006[7]), *High Performance Work Practices: Linking Strategy and Skills to Performance Outcomes*, www.longwoods.com/articles/images/High%20Performance%20Work%20Practices_UKReport2011.pdf.

For Lithuania, the more effective use of skills and their effect on productivity, overall business performance, growth and innovation, could help to address the challenges linked to megatrends, as described in Chapter 1. To start, it could help to address the challenge of a shrinking working age population in Lithuania, which makes productivity growth, rather than a growing workforce, an increasingly important driver of future economic growth. In the longer term, enhanced business performance resulting from the better use of skills could be one of the drivers for raising the demand for skills by helping Lithuania to create jobs in more high value-added activities, remain internationally competitive, and re-position itself in the global economy (e.g. by participating more and moving up in global value chains) (OECD, 2017[8]). The better use of skills could also support the adaptation of the economy to the challenge of climate change by supporting the growth of "green" economic sectors that mostly comprise high value-added and labour-intensive services (OECD, 2017[9]). Better using skills could also support the transition to jobs that are less vulnerable to automation. This is particularly relevant for Lithuania as 63% of jobs have a high or significant risk of being automated – one of the largest shares in the OECD (Nedelkoska and Quintini, 2018[10]).

The need to optimally benefit from the skills of workers has become even more relevant in the context of COVID-19. After an expected mild economic contraction of around 2% in 2020 (OECD, 2020[11]), the better use of skills could contribute to the economic recovery of Lithuania from the COVID-19 crisis through its effect on productivity and business performance. COVID-19 has already created a major challenge for the use of skills in workplaces as businesses had to rapidly reorganise their workplaces to contain the spread of the virus. The resulting expansion of teleworking, with 37% of Lithuanian employees working from home in April and May 2020 (Eurofound, 2020[12]), likely helped to strengthen the use of some types of skills (e.g. digital skills, team collaboration). However, it probably also temporarily negatively affected the use of other types of skills as changing working arrangements created new challenges for workers and managers.

This chapter examines the role of skills use and the transformation of workplaces in raising Lithuania's overall skills performance. It also considers the role of more effectively using skills to achieve wider policy objectives – thus complementing skills development policies (as described in Chapters 2 and 3) – including improving business performance, moving towards more high value-added activities, and moving up in global value chains. These are highlighted in strategic documents such as the National Plan for Progress 2021-2030 (Nacionalinis pažangos planas [NPP]), Lithuania 2030 (*Lietuva 2030*), and the Draft Lithuanian Programme 2021-2027, which sets the direction of European Union (EU) funding for the period 2021-2027 (Table 4.1).

Overview and performance of skills use in Lithuania

Overview of arrangements to use people's skills effectively in workplaces

Relevant government ministries and organisations

Given the many factors directly or indirectly affecting skills use and workplace practices, a broad range of policies need to be considered, including those pertaining to industry, innovation, economic development and human capital development policy. As a result, most ministries are involved in the development of relevant policies, but two ministries could be considered most important. The Ministry of the Economy and Innovation (Ekonomikos ir inovacijų Ministerija [EIM]) has the leading role in creating a supportive business environment (e.g. human resource [HR] development, support for small and medium-sized enterprises [SMEs]), investment (e.g. attracting foreign direct investment [FDI]) and innovation (e.g. cluster policy). In addition, the Ministry of Social Security and Labour (Socialinės apsaugos ir darbo ministerija [SADM]) has broad responsibilities for labour and employment, social integration, families, gender equality, and more. For skills use, the Labour Law unit within the SADM is particularly relevant through its work on labour relations, illegal work, undeclared work and remuneration.

Table 4.1. Lithuania's strategic goals related to skills use

Strategy	Year	Description	Objectives relevant to skills use
National Plan for Progress (NPP) 2021-2030	2020	The NPP outlines 10 strategic goals for Lithuania over the upcoming decade to ensure progress in social, economic, environmental and security policies.	Strategic goal 1: Move towards sustainable economic development based on scientific knowledge, state-of-the-art technologies and innovations; increase the country's international competitiveness. • Strengthen human resources and skills for high-level science and science-based technologies. • Promote the development of science related business and co-operation between science and business. • Develop an entrepreneurial culture in science and study institutions.
Programme of the Government of the Republic of Lithuania	2020	Identifies key priorities for Lithuania's progress that will help strengthen the country and its people, and make it more resilient.	Mission: High value-added economy • A strong innovation ecosystem. • Deregulation and a better business climate. • Optimal system of public enterprises and public governance. Mission: Culture changing the quality of personality and society • Social strengthening of culture and art, and full entrepreneurship.
Lithuania's Progress Strategy "Lithuania 2030" ("*Lietuva 2030*")	2012	Lithuania 2030 is a national strategy document that outlines the vision of Lithuania's future up to 2030. The strategy has three main progress areas: smart society, smart economy, and smart governance.	Smart society: • Strengthen community leaders and support civic initiatives. • Develop national programmes unlocking learners' potential and talents, as well as systems for talent identification development and academic mobility. • Create an environment favourable for science and research, ensuring Lithuania's appeal to top researchers and scientists. Smart economy: • Create an open, transparent and rational institutional business environment. • Simplify the business environment and remove excessive, cumbersome and non-transparent regulation in the areas of business and business development that are most restricted. • Create state-of-the-art information technologies and digital infrastructure. Smart governance: • Develop leadership and management skills in central and local authorities and communities. • Promote uniform performance and management standards across the public sector. • With a view to ensuring the effective provision of services, use the latest technologies, including electronic service delivery.
Draft Lithuanian Programme 2021-2027	2020	This draft of the Lithuanian Programme, describes five policy objectives for Lithuanian funding from the EU for the period 2021-2027.	Policy objective 1 – A smarter Europe: 1.1. Enhance research and innovation capacities and the uptake of advanced technologies. 1.2. Reap the benefits of digitisation for citizens, companies and governments. 1.3. Enhance the growth and competitiveness of SMEs. 1.4. Develop skills for smart specialisation, industrial transition and entrepreneurship. Policy objective: 3 – A more connected Europe 3.1 Improve digital connectivity.

Source: Government of the Republic of Lithuania (2012[13]), *Lithuania's Progress Strategy Lithuania 2030 (Lietuva 2030)*, https://e-seimas.lrs.lt/rs/lasupplement/TAP/TAIS.423800/45a6c4cce8a3835f3c3f3b4625587aff/format/ISO_PDF/; Seimas of the Republic of Lithuania (2020[14]), *Nutarimas Dėl Lietuvos Respublikos Vyriausybės programos [Ruling on the Program of the Government of the Republic of Lithuania]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAP/3955e800388111eb8c97e01ffe050e1c; Government of the Republic of Lithuania (2020[15]), *National Plan for Progress 2021-2030 (Nacionalinis pažangos planas, NPP)*, https://www.esinvesticijos.lt/uploads/main/documents/files/Post%202020/2_%20LRVK_NPP.pdf; Ministry of Finance (Forthcoming[16]), *Draft Lithuanian Programme 2021-2027*.

Responsibilities for the provision of support for businesses in Lithuania are spread over several organisations. The government agencies Enterprise Lithuania and Invest Lithuania, which are under the responsibility of the EIM, are particularly relevant for strengthening workplace and business performance, and therefore could play a vital role in strengthening skills use in Lithuania (Table 4.2). Other agencies and organisations that affect the demand for skills (e.g. by strengthening innovation in workplaces) could also be relevant for strengthening skills use.

Table 4.2. Government agencies with responsibilities for the provision of business support

Organisation	Description
Enterprise Lithuania	Enterprise Lithuania supports entrepreneurship and business development with a focus on SMEs. Among its activities is the organisation of the National Mentors' Network; running the Spiečius' co-working spaces, which support young SMEs by providing working spaces, training, consulting, etc.; co-ordination of the Start-up Lithuania community – a one stop shop for Lithuanian start-ups; and an Export Leaders Programme to strengthen competitiveness in foreign markets.
Invest Lithuania	Invest Lithuania is the FDI and business development agency that helps foreign businesses set up their activities in Lithuania by supporting the decision-making process (e.g. with in-depth analysis), establishment (e.g. introducing stakeholders) and development (e.g. helping to find employees).
Agency for Science, Innovation and Technology (Mokslo, inovaciju ir technologiju agentura – MITA)	MITA is the main organisation in Lithuania that implements innovation policy. It co-ordinates initiatives related to research, technologies, innovation and financial schemes, which are both national (e.g. innovation vouchers, cluster policies) and international (e.g. HORIZON 2020).
INVEGA	INVEGA is a financial entity for SMEs that provides financial services and implements support measures, including soft loans (e.g. Business Angels Co-Investment Fund), loan guarantees, global grants (e.g. competence vouchers) and venture capital funds.
Lithuanian Innovation Centre (LIC)	LIC provides innovation support services (e.g. consultations, training, missions) to businesses and research institutions on a project basis. It support the search for innovation partners, technology transfers, consulting on funding, capacity building and campaigns (e.g. Innovation Awards).
State Labour Inspectorate (Valstybinė Darbo Inspekcija – VDI)	VDI plays a crucial role in promoting the provisions of the Labour Code through consultations, campaigns, and targeted seminars for employees, employers and social partners.

Source: Government of the Republic of Lithuania (2020[17]), *OECD Skills Strategy for Lithuania Questionnaire*.

Relevant employer and employee organisations

Business confederations play a vital role in representing the business sector in Lithuania. They support skills use by contributing to a stronger business environment where good workplace practices are shared across the business sector. Some of the largest confederations are the Lithuanian Business Confederation (Lietuvos verslo konfederacija – LVK), which unites 32 business associations and over 3 500 businesses; the Lithuanian Employers' Confederation (Lietuvos darbdaviu konfederacija – LDK), which represents primarily SMEs; and the Lithuania Confederation of Industrialists (Lietuvos pramonininkų konfederacija – LPK), which is an umbrella organisation that unites 51 branches and 5 regional associations comprising over 3 000 medium and large industrialists and employers. There are also a number of chambers of commerce active in Lithuania, such as the Association of Lithuanian Chambers of Commerce, Industry and Crafts, and the Chamber of Agriculture of the Republic of Lithuania. The Investors Forum (Investuotoju forumas), which is a business association, brings together the major investors in Lithuania.

Employees are represented by a large number of trade unions. Some of the largest labour organisations in Lithuania are the Lithuanian Trade Union Confederation (Lietuvos profesinių sąjungų konfederacija – LPSK), which is the largest trade union centre in Lithuania representing over 25 unions; the Lithuanian Trade Union "Solidarumas"; and the Lithuanian Trade Union "Sandrauga".

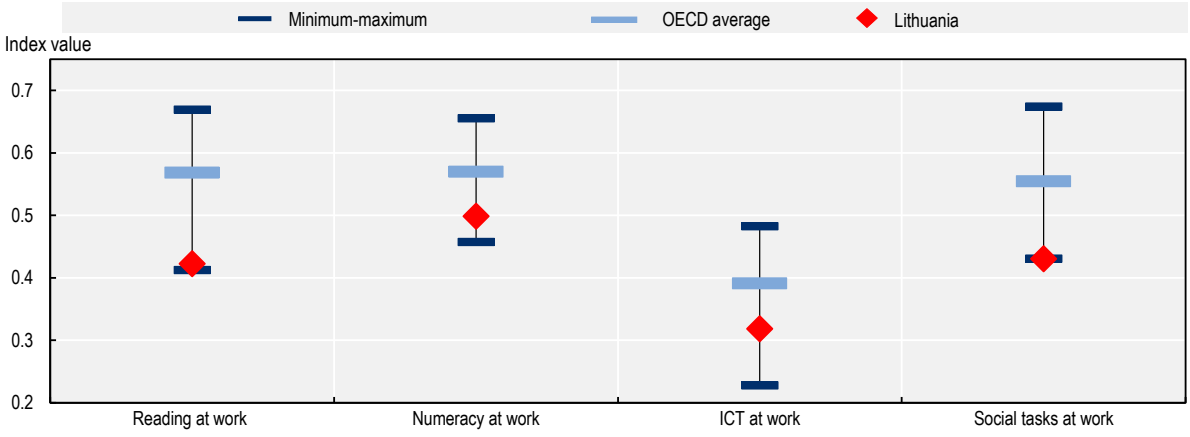
These employer and employee organisations are also all members of the Tripartite Council (Lietuvos Respublikos trišalė taryba), which is the main tripartite body that provides advice on socio-economic and labour matters. There are also a number of other councils and committees that affect policies aiming to raise demand for skills and strengthen workplace practices. These include the Human Resources Working Group of the National Platform Industry 4.0 (Nacionalinės platformos Pramonė 4.0 Žmogiškųjų išteklių darbo grupė), which aims to increase and strengthen HR competitiveness and productivity by integrating digital solutions and technology; the Science, Technology and Innovation Council (Mokslo, technologijų ir inovacijų taryba), which prepares insights, visions, plans and proposals for science, technology and innovation; and the SME Council (Lietuvos smulkiojo ir vidutinio verslo taryba), which aims to strengthen co-operation between SMEs and the government to create a favourable business environment.

Lithuania's performance

The use of skills in workplaces

There is evidence that employers could do more to effectively use the skills of workers in Lithuanian workplaces. According to the Survey of Adult Skills (PIAAC), Lithuania is using the skills of its workers less intensively than most OECD countries. For all types of skill measured (e.g. reading, ICT, numeracy), their use in workplaces is below the OECD average, and the use of social interaction skills in Lithuania (e.g. sharing information, working with colleagues, giving presentations) is the lowest among all OECD countries (OECD, 2019[18]) (Figure 4.2).

Figure 4.2. Skills use indicators, by type of skill, 2012, 2015, 2018



Note: The index ranges from 0 to 1 and is a computed average for the frequency with which workers use different tasks at work. See Box 4.1 in the report *Skills Matter: Additional Results from the Survey of Adult Skills* (OECD, 2019[4]) for a full description of the methodology.
Source: OECD (2019[4]), *Skills Matter: Additional Results from the Survey of Adult Skills*, https://dx.doi.org/10.1787/1f029d8f-en.

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There are indications that the low use of skills is driven by the inadequate skills of workers (see also Chapter 2 and Chapter 3 for more discussions on the skills of workers). The frequency of skills use is naturally restricted by the skills that adults possess, and as a result, low-skilled adults (who are often low-educated and relatively old) are using their skills in general less intensively than those with higher skills. Many employees do not have the right skills for their job in Lithuania: 23% of employees in Lithuania report that they would need more skills to cope well with their duties, compared to an EU average of 14% (Eurofound, 2019[19]), and 64% of employees believe that it is (very) likely that their skills will be outdated in the next five years – one of the largest shares in the EU (Cedefop, 2014[20]). While foundational skills (e.g. literacy, numeracy) are slightly above the OECD average, other skill types that are increasingly needed in digital working environments could be strengthened. Problem-solving skills are low, and digital skills could be enhanced, especially for older workers: more than one in three adults aged between 45 and 65 have low digital skills in Lithuania (Eurostat, 2019[21]). To raise the skills use of a large share of the workforce, adult learning is crucial (see Chapter 3 on how to strengthen adult learning) (OECD, 2016[2]).

However, even when people have high levels of skills, these skills are not always effectively used in workplaces. For instance, there is a discrepancy between the performance in skills development and use in Lithuania: while the use of reading skills is near the bottom of the OECD ranking, the literacy skills of adults are comparable with the OECD average (OECD, 2019[18]). This is an indication of a large untapped potential of skills supply in Lithuania.

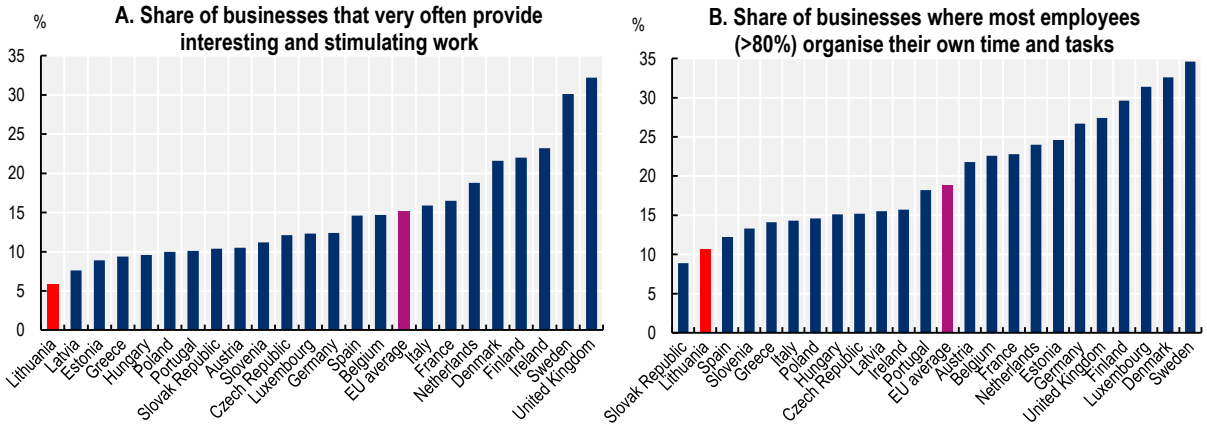
There is large variation in the use of skills between different firms and sectors – for example, ICT skills are likely to be less needed in construction than in the financial sector. Skills use is also correlated with firm size – larger firms use the skills of their employees more intensively, on average, than SMEs (with the exception of the smallest businesses). This is largely the result of the particular difficulties that SMEs face in adopting HPWP, often due to an inadequate HR function (OECD/ILO, 2017[3]). As a consequence, the aggregated use of skills in workplaces is largely shaped by the sectoral composition and distribution of firm sizes in a country. For Lithuania, the weak performance in skills use could be partly attributed to the comparatively large share of business with fewer than 10 employees (OECD, 2020[22]).

The adoption of high-performance workplace practices

The low use of skills in Lithuanian workplaces is largely the result of a low adoption of HPWP – about 15% of jobs have adopted HPWP, compared with 26% on average across the OECD, and only Turkey and Greece have a lower share (OECD, 2019[18]). Looking at specific types of HPWP, practices related to employee engagement, work autonomy, and HR and people management could in particular be enhanced.

Employee engagement is considered to be one of the main determinants of skills use and productivity, and helps to drive the performance of employees (OECD/ILO, 2017[3]). However, various studies show that Lithuanian organisations could improve the involvement and engagement of employees. For example, Lithuania is near the bottom of the EU ranking in terms of the share of employees who feel involved and engaged in improving the work organisation or work processes of the department or organisation – 35% indicate feeling involved always or most of the time, compared with an EU average of 49% (Eurofound, 2019[19]). Moreover, many organisations in Lithuania are characterised by overall top-down management, and only a small share of employees state that they have interesting and stimulating work (Figure 4.3, Panel A) (Eurofound, 2020[23]).

Figure 4.3. HPWP related to employee engagement and autonomy, 2019



Source: Eurofound (2020[23]), *European Company Survey 2019*, https://www.eurofound.europa.eu/surveys/european-company-surveys.

StatLink https://stat.link/uodklz

Autonomy and flexibility for workers are also both essential HPWP that help to enhance skills use and employee performance. In 2019, only a comparatively small share of employees had a job where the workers independently organised their own time and scheduled their own tasks (Figure 4.3, Panel B) (Eurofound, 2020[23]). The OECD Survey of Adult Skills (PIAAC) and other Eurofound surveys also show limited autonomy for workers in Lithuanian organisations, including limited influence on their working time and few possibilities to apply their own ideas or choose and change tasks at work (Eurofound, 2019[19]).

Various trends and developments have likely already helped to strengthen worker autonomy and flexibility in recent years. For instance, the amendments of the Labour Code in 2017 supported more flexible working time arrangements and helped to strengthen the adoption of HPWP linked to autonomy. Also, the expansion of teleworking following the COVID-19 pandemic created the need for businesses to adapt their workplace practices to allow for flexibility and autonomy by workers, which are both a natural consequence and a requirement for effective teleworking. A recent survey by the SADM showed that 49% of respondents indicated that their workplace offers flexible working hours and forms of work (Ministry of Social Security and Labour, 2020[24]). The rapid adoption of teleworking during the COVID-19 pandemic could also help to strengthen broader workplace performance. Studies show that employee flexibility through teleworking (depending on conditions) is generally having a positive impact on worker performance (OECD, 2020[25]). A recent study in Lithuania showed that a majority (almost 70%) of employees who started working from home would like to continue teleworking after the lockdown, and more than 50% indicated that they have learned to use teleworking tools (Spinter Research, 2020[26]).

The adoption of HPWP linked to HR and people management could be further enhanced, such as career planning, performance review and performance-based bonuses (OECD, 2019[18]). For instance, only 21% of firms have performance appraisals for all employees, compared with 45% across the EU (Eurofound, 2019[19]). This low adoption of performance management practices is likely to drive the overall weak prospects of career advancement – only 28% of employees in Lithuania think that their career prospects are good, with only Italy having a lower share in the EU (Eurofound, 2019[19]). Furthermore, indications of low mobility are also reflected in the very small share of employees who indicate that they saw a change in salary, tasks and/or duties in the last 12 months. However, performance-based bonuses are more common in Lithuania – a relatively large share of employees has extra variable pay based on both individual performance following management appraisal and performance of the team, group or department (OECD, 2020[25]).

Other factors that drive skills use

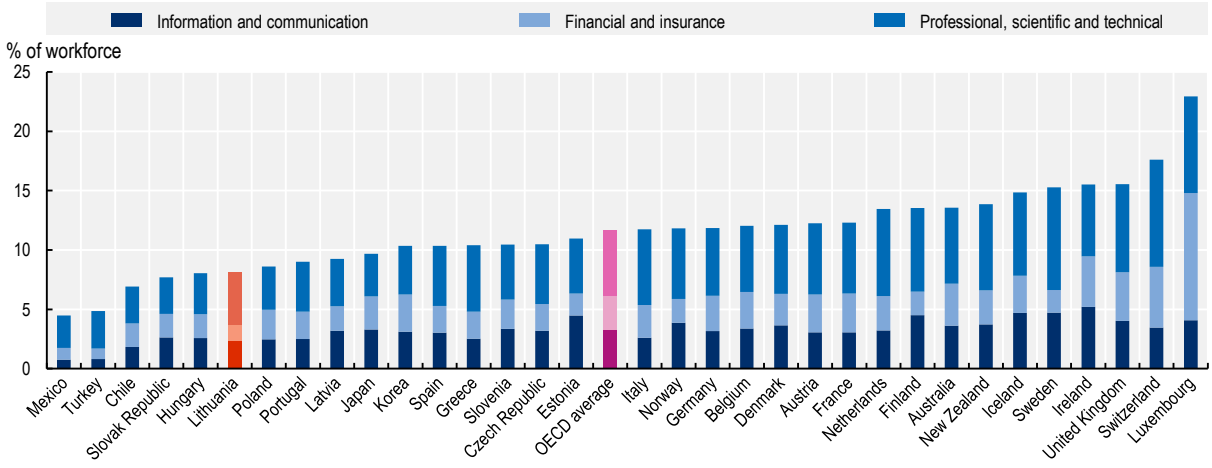
The low use of skills is partly driven by a low demand for skills in the labour market. Lithuania has a comparatively large share of the workforce that is over-qualified (i.e. a higher qualification than required for the job) and over-skilled (i.e. higher skills than required for the job) (Eurofound, 2020[23]; OECD, 2016[2]). This shows that employees often cannot find jobs where they can optimally use their skills.

A low demand for skills is partly driven by a small share of businesses characterised by high value-added activities with high levels of productivity and competitiveness. High value-added sectors and jobs represent only a small share of the total economy – in 2018, only 8% of the workforce was active in the information and communication, finance and insurance, and professional scientific and support services sectors, compared with 12% across OECD-EU countries (Figure 4.4) (OECD, 2020[27]; Ministry of Economy and Innovation, 2019[28]). The small size of the high-tech sector is considered a main weakness for the adoption of technologies and industrial innovation in Lithuania (Adlyte, Valanciene and Krusinskas, 2015[29]). And while sectors with medium levels of technology in Lithuania grew between 2001 and 2017, the contribution of frontier businesses (i.e. the most technologically advanced businesses) still remained unchanged (National Productivity Board, 2019[30]).

There are, however, positive developments that are already helping to strengthen the demand for skills in some specific high value-added sectors in recent years. For instance, by reducing FDI regulatory restrictiveness – Lithuania is currently among the most open economies for investment in the OECD – Lithuania and Invest Lithuania successfully managed to attract FDI in sectors such as information technology (IT) and finance and accounting, often in the form of service centres (OECD, 2020[11]; OECD, 2020[31]). This inflow of FDI, combined with a variety of public interventions that helped to create favourable conditions for businesses ecosystems (e.g. favourable regulations promoted by the Bank of Lithuania), helped to turn Lithuania into a hub for financial technology (fintech). In Vilnius in particular there has been

a rapid growth of operation centres and offices of international businesses and new start-ups in this sector. As discussed in Chapters 2 and 3, the development of skills to support the growth of these high value-added sectors has been, and will remain, essential for the creation of these jobs. However, high value-added sectors still represent only a small share of total output, and inward FDI as a share of gross domestic product (GDP) still remains comparatively low (36%, compared with 57% across the EU) (OECD, 2020[32]).

Figure 4.4. Share of workforce in occupations characterised by high value-added activities, 2018



Note: Sectors with high value-added activities are defined here as sectors with the highest average output and earnings per hour worked across the EU in 2018 (Eurostat, 2021[33]).
Source: OECD (2020[27]), *Employment by activities and status (ALFS)*, https://stats.oecd.org/Index.aspx?DataSetCode=ALFS_EMP.

StatLink https://stat.link/jr481q

Another driver of the low use of skills is the weak adoption of digitalisation in workplaces. The adoption and use of digital tools has the potential to further enhance efficiency of work processes, and thereby help to drive skills use. However, despite the improvements acknowledged by the officials and stakeholders consulted during this skills strategy project (project participants), there is still room to further strengthen digitalisation in Lithuanian workplaces. For example, less than one in five employees use a computer in 59% of Lithuanian businesses (compared with 25% in the EU), only a small share of business could be considered highly digitalised (11% vs. 26% in the EU), and only 11% of enterprises provide training to employees to develop ICT skills (the EU average is 23%) (Eurofound, 2020[23]; Eurostat, 2020[34]). Moreover, 14% of businesses analyse big data, which is slightly above the EU average (12%), but below that of top-performers such as the Netherlands (22%) and Ireland (20%) (Eurostat, 2019[35]). These data also hide large regional differences, with digitalisation being highly centralised in Vilnius. In addition, digitalisation in Lithuanian business is often characterised by high levels of robotisation rather than a broader adoption of computers and IT solutions in workplaces. According to a survey by Eurofound, digitalisation emphasises the “high use of robots and other digital technology, but limited computer use” in 41% of Lithuanian business, compared with only 20% across the EU (Eurofound, 2020[23]). Technological innovations therefore appear to be strongly focused on automating existing tasks instead of on developing the digital edge that could help to drive the creation of new high value-added, technology intensive jobs.

The dominance of low value-added activities and the low adoption of digital technologies are also reflected in the weak average performance of Lithuanian businesses. Lithuania has more than doubled labour productivity in the past two decades, but it still remains relatively low (75% of the EU average) and shows room for improvement. For example, labour productivity growth has been largely driven by the performance of the Vilnius region, which is almost 145% of the national average, and the productivity gap between urban and rural areas is widening (Invest Lithuania, 2020[36]; National Productivity Board, 2019[30]). Moreover,

with wages growing faster than productivity over the past few years, overall competitiveness has been declining (OECD, 2020[11]). Business growth is also often weak – only 2.6% of enterprises are considered to have high-growth (at least 20% growth), compared with an OECD average of 4.7% (OECD, 2018[37]). These challenges need to be faced in the context of COVID-19. In the short term, the drop in demand in many sectors will make it difficult to realise strong growth, and in the medium to long term COVID-19 is expected to affect business performance by reinforcing existing megatrends, such as by accelerating the process of digitalisation. As a result, unless Lithuania responds effectively and growth and innovation are stimulated, there is a risk of falling into the middle-income trap (Invest Lithuania, 2020[36]). Better using skills and adopting HPWP could be a vital part of the required policy response.

Opportunities to use people's skills more effectively in Lithuanian workplaces

To improve Lithuania's skills performance, the country should aim to make better use of employees' skills to strengthen business performance in both the short and long term. A range of factors should be considered to achieve this. However, three critical opportunities for improvement have been identified based on a review of literature, desktop analysis, and data and input from officials and stakeholders consulted in conduct of this project.

The OECD considers that Lithuania's main opportunities for improvement in the area of using people's skills more effectively in workplaces are:

1. Enhancing the use of skills by supporting businesses to adopt HPWP.
2. Strengthening management and leadership skills to drive the transformation of workplaces.
3. Empowering and engaging the workforce to make better use of their skills.

Opportunity 1: Enhancing the use of skills by supporting businesses to adopt HPWP

Lithuania is already very aware of the challenges faced by the business sector, as described in the performance section, and several strategic documents aim to address these challenges. Moving towards more high value-added activities is one of the main objectives of the Draft Lithuanian Programme 2021-2027 (Ministry of Finance, 2020[38]), and the digitalisation of businesses is the main topic of the Digitalisation Agenda 2010-2020 (and in the forthcoming follow-up agenda for 2020-2030) and the Lithuanian Industry Digitisation Roadmap 2019-2030 (Ministry of Economy and Innovation, 2019[28]). However, to achieve these objectives, skills policies play an important role, and in addition to strengthening the development of skills (as discussed in Chapters 2 and 3), Lithuania could more actively consider the role of skills use in its policy response. As previously mentioned, better using skills by adopting HPWP has the potential to improve productivity, growth and innovation, and could therefore be considered when supporting the move towards better business performance and more high value-added activities.

Lithuania has already made great progress in supporting businesses to achieve better performance through a range of programmes and initiatives run by government ministries or agencies (Table 4.3). These programmes and initiatives cover a broad variety of topics, ranging from support to start-ups and young businesses (e.g. co-working spaces "Spiecius" [Bendradarbystės centras "Spiečius"]) and developing innovative products or services (e.g. Regio Invest LT+), to adopting technologies and digital solutions (e.g. Regional Potential LT [Regio Potencialas LT]) and strengthening exports (e.g. the Export leaders programme "SPARNAI" [Eksporto lyderių programa "Sparnai"]) (Government of the Republic of Lithuania, 2020[17]). To enhance digitalisation in businesses, Lithuania also implemented digital innovation hubs, which are one-stop shops to support the adoption of technologies (European Commission, 2020[39]). However, a stronger emphasis on support targeted at the level of workplaces could further strengthen and complement the current policy response to transform the business sector (OECD/ILO, 2017[3]).

Table 4.3. Business support programmes in Lithuania

Programme	Organisation	Description
Business Consultant LT (Verslo konsultantas LT)	EIM	Provides SMEs with information, consulting, and other guidance on business start-up, sources of financing, new technologies and other business organisation issues.
Regio Invest LT+ (Regio Invest LT+)	EIM	Encourages SMEs to invest in the development of innovative production and (or) innovative services and thereby creates conditions for labour productivity growth and growth and development of regions.
KET Industry LT+ (DPT pramonei LT+)	EIM	Encourages traditional industry transformation by introducing technologies important for industrial innovation and economic growth – key enabling technologies in SME production processes.
E-business LT (E-verslas LT)	EIM	Encourages SMEs to implement e-business solutions aimed at optimising business processes for the production, services and activities of the organisation, to facilitate SME productivity growth.
Process LT (Procesas LT)	EIM	Encourages SMEs to adopt innovative management methods and management systems in accordance with national, international and European standards, to facilitate productivity growth.
Design LT (Dizainas LT)	EIM	Encourages business to invest in product (service) design solutions to increase the attractiveness of the company's products (services), as well as the demand and productivity of the company.
Regional Potential LT (Regio Potencialas LT)	EIM	Encourages SME investment in the implementation of modern technologies to enable them to adapt existing and create new production capacities for new and existing products. This could help create the conditions for the faster development and growth of Lithuanian regions.
Eco Consultant LT (Eco konsultantas LT)	EIM	Provides SMEs with the necessary information, advice and other support on resource efficiency, natural resource conservation, eco-innovation and similar issues, thereby encouraging SMEs to invest in eco-innovation and other resource efficient technologies.
Industrial Digitisation LT (Pramonės skaitmeninimas LT)	EIM	Encourages SMEs to carry out technological audits to help them assess the potential of digitalising production processes. This helps to ensure the efficiency and benefits of investments in digitalisation, and creates conditions for labour productivity growth and the transformation of SMEs.
Co-working spaces "Spiecius" (Bendradarbystės centras "Spiečius")	Enterprise Lithuania, municipalities	Offers young SMEs (operating for less than five years) business development environments for co-operation and development. The co-working spaces are available only in the regions, focus on digital and creative industries, and provide entrepreneurs with free workstations with equipment, business development consulting, mentor sessions, business development training, and more.
National Mentors' Network	Enterprise Lithuania	Links experienced business representatives with new entrepreneurs through a virtual platform. Over 100 businesses get help from mentors who share their experience, knowledge and skills.
Enterprise Lithuania consultations	Enterprise Lithuania	Provides businesses with free of charge consultations by Enterprise Lithuania on starting and running businesses, e.g. on business forms, business plans, taxes and financial support.
Startup Lithuania pre-acceleration programme	Enterprise Lithuania	Facilitates a national start-up ecosystem, including fast growing business, venture capital funds, accelerators, start-up friendly enterprises, and the government, and provides a pre-acceleration course on planning, testing, and funding business ideas, and going to the market.
Export leaders programme "SPARNAI" (Eksporto lyderių programa "Sparnai")	EIM, Enterprise Lithuania	Provides young people with a two-year export leaders programme, to acquire knowledge in export process management, management and consulting, and to take part in the implementation of international projects. The programme is part of a partnership between government and businesses to promote Lithuania's competitiveness in foreign markets and to specialise in high-level exports.
Inostart (Inostartas)	MITA	Supports product ideas/concept development, product or service development, and employment of researchers in SMEs by providing subsidies up to EUR 49 000, with varying support intensities by region.

Source: Government of the Republic of Lithuania (2020[17]), *OECD Skills Strategy for Lithuania Questionnaire*.

Lithuania could enhance skills use by better supporting businesses to adopt HPWP in order to achieve the strategic objectives of moving towards better businesses performance, higher levels of digitalisation and more high value-added activities. To this end, Lithuania should raise awareness of the relevance of skills use and related HPWP, provide accessible and targeted business support to adopt HPWP, and leverage employer networks and collaboration at the sectoral level to promote the adoption of HPWP.

Raising awareness of the relevance of effective skills use and HPWP

Participants in this project often referred to a lack of awareness and limited motivation in businesses, most notably SMEs, as a barrier for strengthening skills use and adopting strong workplace practices. Policies that aim to make businesses aware of the relevance and benefits of effective skills use and HPWP could be a relevant first step towards improving the performance of businesses in Lithuania. In this context, to support organisational change the adoption of soft regulation (non-binding persuasive policy intervention) could be especially effective (Alasoini, 2016[40]).

To start, the Lithuanian Government could play a vital role in ensuring that all businesses have access to relevant information on how to organise their workplaces and strengthen business performance to optimally use the skills of their employees. However, based on discussions in the consultations, a great deal of information and resources for businesses on practices (including some HPWP) and support programmes already exists, and improvements have been made (e.g. the website of Enterprise Lithuania brings together a lot of relevant information for SMEs); however, information still appears to be rather fragmented. As a result, it can be difficult for businesses to find accessible and relevant information, and it can be complicated to understand the large number of available programmes, projects and support mechanisms (as presented in Table 4.3). By consolidating information resources, Lithuania could make the fragmented provision of information more accessible.

Online government portals for businesses are often used as a tool to centralise relevant information, such as guides and tools on skills use, adopting HPWP, improving business performance, and business support programmes. Many OECD countries have already set up variations of such platforms, but in Lithuania there is currently no central point with information for the business sector. For many project participants, a central portal was considered one of the most important ways to strengthen skills use and the adoption of HPWP in Lithuanian businesses. However, another group of participants expressed that there is already sufficient information available and considered a central portal not necessarily effective, and a potentially expensive proposal. There is certainly some validity to these concerns as various countries do face difficulties with ensuring the active use of these portals by businesses. For example, Northern Ireland (United Kingdom) has a comprehensive portal for businesses, nibusinessinfo.co.uk, but only a small number of employers actively use the website (about 1% of employers regularly use the portal).

The OECD recommends that a central portal could be helpful for Lithuania, but only with certain conditions. First, the portal should be especially useful for, and targeted at, the businesses most in need of support, i.e. SMEs. It should include targeted information for these businesses on how to adapt workplaces and improve business performance and should be presented in a business-friendly way, for example with concise information on good practice, success stories and simple guides on implementing HPWP.

Second, the portal could play a crucial role in informing, guiding and supporting employers to participate in business support programmes through the inclusion of diagnostic tools (see Box 4.2 for an example). These tools are an increasingly common way to support SMEs and are especially suitable for providing basic business advice (OECD, 2018[41]). The tools could help businesses identify their business needs, challenges and opportunities through benchmarking their performance, and provide direct links to relevant HPWP and/or business support programmes. Enterprise Lithuania is currently developing such a self-diagnosis tool for SMEs and sees diagnostic tools as a necessary step in the application process for public support, especially financial aid, by informing businesses about the relevance and benefits of programmes and by providing an opportunity for the impact evaluation of programmes (e.g. by comparing findings from diagnostic tools with the actual outcomes of programmes).

Third, the portal should be supported by strong governance structures that help to provide clarity and to position it as the only central portal for business support. To this end, the portal should have a clear owner, and there should be a clear system for the provision of information as well as clear links to other relevant sources. The OECD also proposes linking or integrating the portal with the portal on adult learning, as proposed in Chapter 3. Potentially, a regional, sectoral and/or business ecosystem approach could be applied to promote the portal. For example, participants in this project noted the potential role of a planned “centre of competencies” consisting of experts and bodies that supply regional development councils with research, analysis, forecasting and consulting services (Seimas of the Republic of Lithuania, 2020[42]).

Furthermore, since the provision of information will only partially help to raise the low motivation in many businesses to adopt HPWP and improve business performance, Lithuania might want to introduce additional measures to incentivise businesses. For instance, to complement the dissemination of information, the Lithuanian Government and stakeholders (e.g. Enterprise Lithuania) might want to expand

initiatives to raise motivation through targeted campaigns on transforming workplaces, which could be promoted on the proposed portal. This could, for instance, involve high-quality and well co-ordinated campaigns in business media to raise general awareness of the need to adopt HPWP, accompanied by outreach by relevant government agencies and employer organisations to their users, members and partners. These campaigns could complement existing campaigns in Lithuania, such as the Innovation Awards by the Lithuanian Innovation Centre (LIC), by focusing on adopting HPWP.

Box 4.2. Relevant international example: Digital business diagnostic tools

Diagnostic tools – Singapore

In Singapore, there are a number of online assessment tools for businesses. For instance, the Holistic Industry Productivity Scorecard Calculator helps SMEs to understand their performance across ten indicators and shows how they compare to SMEs in other percentiles of the firm distribution. The Scorecard subsequently links to further support provided by the Singaporean Government. The Singapore Smart Industry Readiness Index scores SMEs against eight criteria across three dimensions (process, technology and organisation). The resulting performance profile helps SMEs to prioritise and implement improvements in smart industry readiness. Finally, the self-assessment tool 2SHERPA focuses on supporting SMEs that aim to internationalise. The tool highlights the strengths and weaknesses in the SME's export capability and potential.

Source: OECD (2018[41]), Leveraging Business Development Services for SME Productivity Growth: International Experience and Implications for United Kingdom Policy, http://www.oecd.org/industry/smes/Final%20Draft%20Report_V11.pdf.

Recommendation for raising awareness of effective skills use and HPWP

3.1. **Create a central portal with user-friendly information for businesses on HPWP and related support programmes, including diagnostic tools, potentially as part of a broader awareness-raising campaign.** The EIM, or one of its agencies, should centralise the currently fragmented provision of information for businesses in a single portal, with more emphasis on skills use and the adoption of HPWP. This portal should be especially useful for, and targeted at, SMEs that are most in need of support, and information should be presented in a business-friendly manner, e.g. by presenting concise information on good practice and success stories, as well as simple guides on how to implement specific HPWP. The portal could also play a crucial role in informing, guiding and supporting employers with benchmarking the performance of their business and finding relevant support programmes by including diagnostic tools that will help them to identify their business needs, challenges and opportunities. The portal should be supported by strong governance structures and could be part of a broader awareness-raising campaign for businesses on adopting HPWP and transforming workplaces (e.g. in business media and through outreach by government agencies and employer organisations).

Providing relevant, targeted and accessible support to businesses on adopting HPWP

Promoting HPWP by raising awareness of its relevance can facilitate the adoption of HPWP in workplaces. However, this may not be sufficient as for many businesses, especially SMEs, it is not a lack of motivation

and awareness that prevents them from adopting HPWP, but insufficient resources and limited know-how (OECD/ILO, 2017[3]). Participants in this project expressed that the capacity of businesses to transform workplaces is one of the main weak points of the Lithuanian business sector. Therefore, to improve the use of skills and the adoption of HPWP, governments should also provide more active, targeted and accessible support to all businesses in need of support.

To start, Lithuania should take steps to introduce and/or expand existing measures to support the adoption of HPWP. The adoption of HPWP in Lithuania is comparatively low, as described in the performance section, and there are indications that businesses have been moving away from innovative new measures to improve the organisation of workplaces – e.g. the share of businesses implementing non-technological organisational innovations decreased by a third in recent years (Strata, 2020[43]). In addition to driving skills use, strengthening workplace performance through the adoption of HPWP has the additional advantage of driving innovation. Applying a more bottom-up approach to innovation, as in some Scandinavian and other Northern European countries (see Box 4.3 for an example), by promoting measures for the adoption of HPWP and broader workplace innovations could potentially be beneficial for Lithuania. This workplace-focused approach is also supported by the Draft Lithuanian Programme 2021-2027, which highlights the need to transform SMEs through organisational innovation and improved business models and processes (Ministry of Finance, 2020[38]).

Despite clear benefits and signs that the performance of workplaces could be enhanced, few of the current support programmes (as listed in Table 4.3) affect activities at the level of the workplace. One example of a programme that does have, to some extent, an emphasis on HPWP is Process LT (Procesas LT), which encourages SMEs to adopt innovative management methods and management systems to strengthen productivity. Lithuania could potentially consider expanding such programmes, making support for improving workplace practices part of existing programmes, or introducing new programmes targeting HPWP and workplaces. To ensure that these programmes have a strong impact on workplaces and their performance, Lithuania should consider a number of factors, as explained in the following sections.

To start, in the context of the digital transformation, Lithuania should emphasise digitalisation in the business support programmes aimed at strengthening workplace performance. In addition to developing the right skills for digital workplaces (as described in Chapters 2 and 3), Lithuania should continue to strengthen the adoption of technologies and the use of digital skills (as described in the performance section). A variety of sectors have already successfully adapted and expanded digital activities – Lithuania even successfully managed to create a competitive advantage in the digital and technology intensive Fintech sector – but a large share of the business sector is still lagging behind. Participants in this project indicated that many businesses are in need of stronger support measures to adapt their workplaces to digital trends. To this end, Lithuania should consider introducing digitalisation in programmes that target workplaces and build on existing initiatives (e.g. digital innovation hubs) to strengthen support for the adoption of digital technologies.

To raise the impact of business support programmes that target the workplace through the adoption of HPWP, Lithuania should aim to make these programmes targeted and tailored to the needs of employers. Different types of business (e.g. by firm size, age, stage of development and sector) require different types of support, and a differentiated approach to business support could take this into account. For instance, while larger businesses could benefit most from more tailored and specialist advice, smaller businesses could benefit more from getting the basics right, including management best practice and the adoption of new low-risk technologies in their workplaces (OECD, 2018[41]). Therefore, Lithuania could potentially reserve more intensive and specialised support for the larger (often internationally operating) businesses, and offer more widespread and basic support on adopting HPWP to smaller (often locally operating) businesses (see Box 4.3 for an example) (OECD, 2018[41]). For example, in Ireland there is a clear division in support for businesses, with small businesses primarily receiving support provided by local enterprise offices, and larger businesses with export potential primarily receiving support provided by Enterprise Ireland (OECD, 2019[44]).

While participants in this project were supportive of a differentiated approach to business support, some participants noted that differentiation should not be primarily based on the size of the firm, but on the challenges they face. While challenges are often correlated with firm size, there are many exceptions. For example, businesses of different sizes often have comparable issues (e.g. the adoption of HPWP is a challenge in both smaller and larger businesses), and businesses of the same size can be very diverse and face different challenges (e.g. there is large heterogeneity in the group of young and small businesses). To some extent, Lithuania has already aimed to create differentiation in business support for the latter example. A law from 2019 makes a distinction between start-ups and other starting companies, where the former is defined by not only being young (less than five years) and small, but also by performing innovative activities and having the potential for innovation. These start-ups often face similar challenges to larger businesses, and by making the distinction clear by law Lithuania can promote and provide tailored support to these young, fast growing businesses with high value-added potential.

Addressing the challenge of fragmented responsibilities across organisations and mechanisms could help to achieve such a differentiated approach. As mentioned, the fragmented nature of the available business information is largely the result of a deeper fragmentation of business support responsibilities (Table 4.2). As an example, science, technology and innovation policies are spread over nine agencies and institutions in Lithuania, with each organisation having rather narrow goals, and without a single organisation or body overseeing these initiatives (Invest Lithuania, 2020[36]). This structure results in potential co-ordination challenges, overlapping responsibilities, as well as institutional and administrative inefficiencies. Consolidating programmes across a single or smaller number of organisations could help to overcome these issues (Invest Lithuania, 2020[36]). The Lithuanian Government has already launched initiatives in the past with this objective (e.g. the Lithuanian Innovation Reform), and it plans to consolidate business and innovation support agencies under a unified agency that will provide financial services for small firms (OECD, 2020[11]). These consolidation efforts could also help to achieve a differentiated approach to business support by reorganising the organisations to address the needs of different groups of businesses. Strong monitoring and evaluation systems for business support programmes will be essential to guide this consolidation process (e.g. by providing insights on overlapping actions and impact).

Lithuania could also consider expanding access to mentoring and coaching for businesses to strengthen their adoption of HPWP. Mentoring and coaching programmes are by nature tailored, and are often successful in changing organisational practice by supporting and guiding the responsible management in adopting HPWP (OECD/ILO, 2017[3]). Mentors and coaches could bring the required specialised, technical expertise on work organisation, job design, and HR development practices to the company, help to ensure employer buy-in, and positively affect change. Lithuania could already build on, and possibly expand, various existing mentorship programmes. Enterprise Lithuania, for instance, runs the National Mentorship Network, which is a virtual platform where over 100 businesses get help from experienced mentors.

Finally, to raise the impact of support measures that help to strengthen the adoption of HPWP, Lithuania should reduce the administrative barriers that prevent businesses from participating in existing programmes. Participants in this project considered administrative burdens to be a significant barrier for businesses, and in the context of innovation policies, business representatives see the administrative burden as a main barrier to obtaining funding (Invest Lithuania, 2020[36]). The Lithuanian Government has already launched various initiatives to reduce the administrative burden and bureaucracy, such as a proposed innovation fund to reduce bureaucracy, and it is mentioned in its strategic documents such as the Programme of Government, but there still appears to be room for improvement.

Lithuania could undertake several actions to further reduce administrative barriers. First, it should review existing legislation to identify excessive and overlapping regulations, and subsequently consolidate and streamline these regulations (Invest Lithuania, 2020[36]). In this context it will be important to minimise the occurrence of situations where EU standards (since many programmes are funded by EU structural funds) are complemented by unnecessarily stringent national legal standards. To co-ordinate these efforts, Lithuania could consider establishing an independent regulatory oversight agency.

Second, enhanced digitalisation in the public sector could help to reduce administration. Much of the requested information in application procedures already exists in administrative databases (e.g. tax declarations), and better integrating governmental information systems could help with the access and use of this information. In addition, ministries and agencies that run programmes check all applications, often manually, which results in long procedures and regular delays. More automated checks (e.g. for more high-risk groups) have the potential to speed up these application processes. To incentivise innovation in the public sector, Lithuania could consider introducing a public governance innovation fund to help finance the implementation of innovative methods and technologies in the public sector (Invest Lithuania, 2020[36]). The Draft Lithuanian Programme 2021-2027 and Programme of Government already put a strong emphasis on the digitalisation of public services (Ministry of Finance, 2020[38]).

Third, to reduce administration, Lithuania could introduce measures to improve the relationship between business recipients and business support providers. Participants in this project expressed that the current relationship is characterised by a lack of trust, which drives extensive admission procedures and monitoring. Enhancing trust will help to reduce these procedures and could facilitate the introduction of more automated checks in the admission process, as described above. Some project participants indicated that government organisations that provide business support should change their role from "inspector", which is characterised by a top-down controlling of business activity, to more of a "competence centre". In such a role, the business support provider actively supports and works together with businesses to identify their needs and experiments with new support tools.

Finally, Lithuania could consider providing more active support to businesses to help them with administrative procedures, especially SMEs that do not always have the required capacity or resources (OECD/ILO, 2017[3]). In this project, some participants noted that associations and clusters could have a more active role in supporting businesses with administrative procedures. For instance, a specific point of contact within these organisations could potentially help businesses with support applications.

Box 4.3. Relevant international examples: Programmes and support targeting workplaces

TYKE(S) and Business Finland – Finland

The **Finnish programmes TYKE (1996-2003) and TYKES (2004-10)** aimed to promote the introduction of organisational innovations, thus contribute to workplace productivity and the quality of working life. More than 1 800 projects were funded, involving nearly 350 000 employees and some EUR 106 million of public funding. The most common areas of focus for the development projects were work processes, the organisation of work, and the development of HR management and supervisory work. Project implementation was in close co-operation between management and employees, and external experts were involved in each project. A majority of managers and staff expressed that the projects had positive impacts on the operational performance of the workplace and the quality of work. The programmes were especially successful in raising public awareness of the importance of workplace change and innovation; in boosting development activity among a large group of workplaces, including SMEs; and in strengthening expertise in workplace development and research on working life.

Currently, **Business Finland** is the Finnish Government organisation for innovation funding and trade, travel and investment promotion. Business Finland's 600 experts work in 40 offices globally and in 16 regional offices around Finland. Business support in the form of funding and expert services in a plethora of programmes has a clear separation between support programmes for start-ups and SMEs, and those for large-scale enterprises and research organisations. The idea is that businesses will gain access to different and more services as they progress on their growth path according to their goals.

Source: OECD/ILO (2017[3]), *Better Use of Skills in the Workplace: Why It Matters for Productivity and Local Jobs*, https://dx.doi.org/10.1787/9789264281394-en; Business Finland (2020[45]), *Business Finland website*, https://www.businessfinland.fi/en/.

Recommendations for providing relevant, targeted and accessible support to businesses on adopting HPWP

3.2. **Encourage the greater adoption of HPWP by expanding existing and/or introducing new business support programmes that target workplace practices.** The Lithuanian Government and agencies with responsibilities in business support could put more emphasis on workplace practices in support programmes. This could be achieved by enhancing the reach and/or scope of existing programmes (e.g. Process LT [Procesas LT]), or by introducing new programmes that affect activities at the level of the workplace. In this context, Lithuania should direct public support to promoting digitalisation in workplaces, including by building on existing initiatives (e.g. digital innovation hubs) and good examples (e.g. its success in developing the digital and technology intensive Fintech sector).

3.3. **Ensure that public support for the adoption of HPWP is differentiated and targeted at employers' needs, for example through personalised mentoring and coaching services.** To raise the impact of existing and potential new support programmes that help to strengthen workplace performance, the Lithuanian Government and related agencies with relevant responsibilities should aim to target these programmes at employers' needs. To this end, Lithuania could apply a differentiated approach to business support, whereby programmes are targeted at groups of businesses that face comparable challenges related to the adoption of HPWP. To achieve this, Lithuania should implement its plans for consolidating programmes to overcome fragmented responsibilities across organisations and mechanisms, and reorganise programmes to address the needs of different groups of businesses. In addition, developing official typologies of groups of firms based on the challenges they face, with programmes adapted to address their challenges, could help to facilitate differentiated support. Lithuania could also expand mentoring and coaching programmes, which are by their nature targeted and tailored to the needs of the employer, by building on and possibly expanding existing programmes such as the National Mentorship Network.

3.4. **Minimise the administrative burdens on businesses taking advantage of support programmes by, for example, streamlining procedures and improving guidance.** The Lithuanian Government, and the EIM in particular, should limit the administrative burden linked to programmes that will support the adoption of HPWP by reviewing and minimising the occurrence of situations where regulations overlap or are excessive and unnecessarily stringent. The ministry could also seek to simplify and accelerate application procedures by better integrating different information systems to allow automated checks. To facilitate this, Lithuania should aim to improve the relationship between service providers and business recipients. Service providers should become more like "competence centres" that actively support and work together with businesses, rather than "inspectors". Associations and clusters could potentially play a more prominent role in helping businesses to overcome administrative barriers by guiding them through administrative procedures (e.g. by introducing a specific point of contact for support).

Leveraging employer networks and supporting collaboration at the sector level to promote the adoption of HPWP

Providing support to businesses through collaborative networks could be an effective way to raise the impact of programmes that help to strengthen skills use and the adoption of HPWP. Evidence suggests that approaches which leverage employer networks or collaboration at the sectoral level are cost efficient and more effective at catalysing change in workplaces than centralised approaches (OECD/ILO, 2017[3]).

These collaborative networks can take a number of forms, ranging from informal networking to formal networks with a central hub organisation and formal governance arrangements.

Clusters could be considered a type of formal support network where businesses are interconnected, often in the same sector and with a strong geographic concentration. In Lithuania, MITA is the main organisation responsible for cluster policy. Clusters were developed initially in 2004-2010, and Lithuania has since been working on strengthening their growth, maturity and internationalisation (Ministry of the Economy and Innovation, 2020[46]). In 2019, MITA identified 57 clusters in Lithuania, almost all of which bring together businesses from different sectors (MITA, 2019[47]). The project InoLink by MITA, in collaboration with LIC, offers expert consultation and information and matchmaking events to encourage businesses to form clusters that will strengthen their maturity and promote their growth and international co-operation (MITA, 2020[48]). There are also various other types of collaborative networks in Lithuania. For example, science and technology parks provide infrastructure for collaborative innovation in businesses, and Invest Lithuania runs 78 global business services centres where international businesses work together. (Ministry of the Economy and Innovation, 2020[49]; Invest Lithuania, 2020[50]). Lithuania also has several research, higher education and business valleys, where higher education institutions (HEIs) and research centres collaborate, as well as territorial organisations, incubators, technology transfer centres, and private business centres (e.g. Quadrum).

Lithuania should continue to strengthen clusters and other types of collaborative networks, which could help to raise the impact of initiatives to improve skills use and the adoption of HPWP. While participants in this project noted that the networks and clusters are generally strong, they also expressed that they could be strengthened in several ways. For clusters specifically, only a small share are at the stage of maturity, providing sufficient room for policy makers to further strengthen them (MITA, 2019[47]). To ensure that networks become more naturally operating business ecosystems, the Lithuanian Government should especially support them in the early stages.

To start, Lithuania should aim to enhance trust between members of collaborative networks. For clusters, a lack of mutual trust among members is considered to be one of the main reasons why many have not reached high levels of maturity (MITA, 2019[47]). Active collaboration between members could help to create trust, and cluster co-ordinators need to have access to sufficient resources (including funding) to achieve this. However, there are indications that Lithuania currently lacks sufficient support aimed directly and specifically at clusters and their development, and more emphasis is needed on initiatives designed to facilitate co-operation between members of clusters.

Collaboration and co-ordination between the many collaborative networks could also be improved to help spread good practice related to skills use and the adoption of HPWP. Project participants indicated that there is not always a culture of collaboration between the various platforms. Better co-ordination between collaborative networks could potentially help to address this challenge. To this end, Lithuania could potentially create new initiatives, either formal (e.g. a body with representatives of different networks) or informal (e.g. networking events with networks), to strengthen links between collaborative networks. For example, for collaboration between science and businesses specifically, some project participants expressed that focal points could be needed to help businesses develop and adapt efficient value-oriented business models and to co-ordinate the strategic priorities of these networks with industry needs.

Participants in this project also emphasised that collaborative networks could play an important role in facilitating knowledge spillovers between stronger and weaker performing businesses. Project participants noted the relevance of supporting the adoption of HPWP and stronger business cultures in state-owned companies, which could share these practices in their broader business ecosystems and thereby help drive innovation and growth. International businesses, the number of which is increasing in Lithuania, often bring a different set of skills and practices to countries, which could be spread across small, local businesses. There is evidence of a positive relationship between a country's openness and economic growth, which is often attributed to knowledge spillovers – i.e. the foreign multinational creates positive

productivity externalities to domestic firms. These spillovers appear in different forms, including direct knowledge transfers through partnerships, and opportunities to observe and learn the technologies of foreign firms (Alfaro and Chen, 2013[51]). Lithuania could make better use of the presence of large foreign enterprises and intensify the transfer of technological knowledge and expertise to local businesses, including by stimulating co-operation between these businesses, especially within their supply chains (OECD, 2019[52]) (see Box 4.4 for an international example).

To effectively catalyse change in Lithuanian workplaces, the government should not only utilise collaborative networks to spread good workplace practices, but also target specific sectors to optimise the impact of policies and programmes on the adoption of HPWP. Identifying and targeting support at strategic priority sectors could help to direct support programmes to the sectors that would benefit the most from the adoption of better workplace practices, and could help to build competitive advantages in specific sectors (see Box 4.4 for an international example of such an approach). Lithuania already specialises in a number of specific fields, for example finance (especially Fintech), IT services, innovative biotechnology, laser manufacturing, and photonics, and while the relative size of these sectors is still small, they provide a good starting point for further specialisation (Invest Lithuania, 2020[53]; 2020[36]).

For the upcoming Smart Specialisation Strategy, which sets out the funding priorities of the EU Structural and Investment Funds for the period 2021-2027, Lithuania will identify priority areas that correspond to broader areas of specialisation. In the previous cycle, the Smart Specialisation Strategy priorities covered sectors such as energy and sustainability, health and bio-technologies, agro-innovation, and food technologies. However, Invest Lithuania has indicated that the smart specialisation priority sectors have been too broad and do not ensure that the limited state resources are channelled to the sectors with the highest growth potential (Invest Lithuania, 2020[36]). Therefore, within the priorities set in the Smart Specialisation Strategy, Lithuania should identify more narrowly defined priority sectors of specialisation.

Furthermore, for each of the priority sectors, Lithuania should apply an integrated approach with long-term strategies, which could also involve prioritised and targeted business support for these sectors (see Box 4.4 for international examples). Potentially, Lithuania should create central bodies within its government or one of its agencies for each of the priority sectors. Such bodies could bring together relevant representatives from the government, private sector, research institutes and more, to co-ordinate and target business support for the sector. Moreover, as part of its strategic approach, Lithuania should aim to align skills development policies with the skills needed in these specialised sectors.

Box 4.4. Relevant international examples: Knowledge spillovers and sectoral approaches

Matching SMEs with larger businesses – Japan

SME Support Japan runs the initiative J-Good Tech, an online business matching site that connects SMEs with larger domestic and foreign companies. The aim is to support the creation of strategic partnerships between businesses and facilitate the exchange of knowledge. The service is free to use, and companies are screened before they are listed on the site. 18 thousand companies use the service, resulting in hundreds of SMEs and large companies exchanging ideas and collaborating on products.

Cluster Innovation Programme – Norway

The Cluster Innovation Programme by the Norway Innovation Agency is an initiative that has driven an increase in demand for business advice by SMEs. The initiative identifies SMEs in six key clusters and offers them subsidised business advice and mentoring, which is provided by other actors in their cluster, including firms, research institutes and higher education institutions. Its intended outcome is to help SMEs start or accelerate change processes that will renew their products, services, processes and business models. Some 2 700 companies are currently supported in 30 clusters.

Top sector approach – The Netherlands

Since 2011 the Dutch Government has applied the top sectors approach, whereby industrial policy targets its resources at specific sectors, and the co-ordination of activities in these areas is promoted. The nine areas chosen represent strong economic sectors, such as agri-food, high tech and logistics. Industry representatives co-ordinate the process, and the government, private sector, universities and research centres work together in top sector alliances for knowledge and innovation that look for ways to get innovative products or services to the market. The government develops sector-specific cross-departmental policies and aims to reduce regulatory burdens. It also oversees other related initiatives, such as the National Icons Competition and the Innovation Expo.

Source: J-Good Tech (2019[54]), *J-Good Tech website*, https://jgoodtech.jp/pub/ja/; OECD (2018[41]), *Leveraging Business Development Services for SME Productivity Growth: International Experience and Implications for United Kingdom Policy*, http://www.oecd.org/industry/smes/Final%20Draft%20Report_V11.pdf; OECD (2014[55]), *"Overall Assessment and Recommendations"* in *OECD Reviews of Innovation Policy: Netherlands*, https://doi.org/10.1787/9789264213159-4-en.

Recommendations for leveraging employer networks and supporting collaboration at the sector level to promote the adoption of HPWP

3.5. **Facilitate the adoption of HPWP by strengthening business clusters and other collaborative networks that spread good practice and facilitate knowledge spillovers.** To catalyse change in Lithuanian workplaces, the EIM, and the Agency for Science, Innovation and Technology (MITA) in particular, should aim to further strengthen collaborative networks, facilitate more sector-specific interventions, and spread good practice and knowledge across the Lithuanian business sector. This could involve facilitating knowledge spillovers on HPWP and broader business practices between strong performing businesses (e.g. international businesses and large state-owned enterprises) and small (more locally operating) businesses. Lithuania should also introduce measures that help to strengthen collaboration and trust between members of collaborative networks, including providing sufficient resources to achieve this, and to promote more co-operation between the networks.

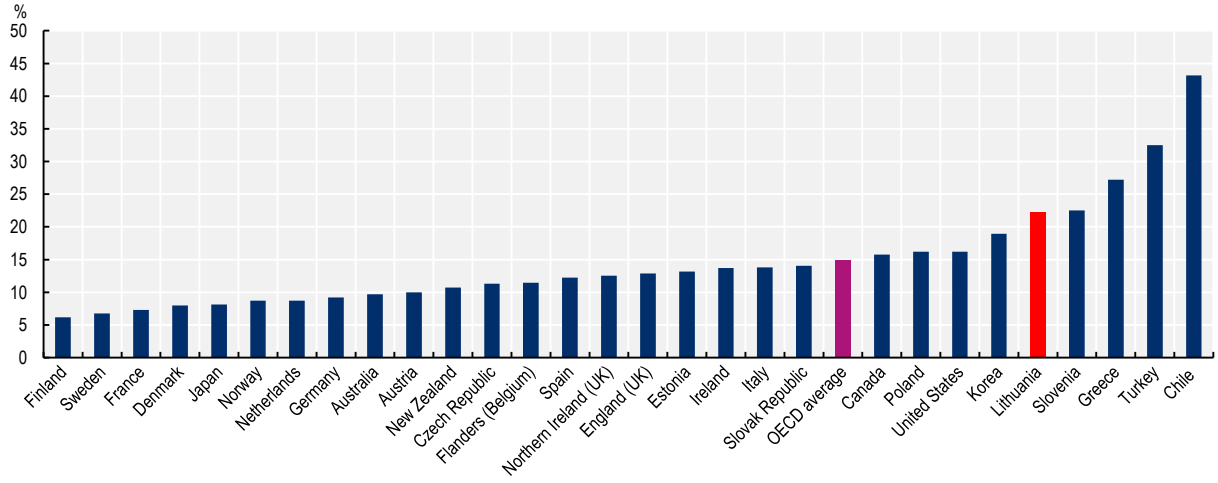
3.6. **Strategically target HPWP support for businesses and collaborative networks at narrowly defined priority sectors in order to maximise the impact of this support.** The Lithuanian Government and the EIM in particular, should identify and target support for the adoption of HPWP at strategic priority sectors to raise the impact of support programmes and to strengthen specialisation in fields with higher value-added activities. Building on the broader priorities set out in the Smart Specialisation Strategy, the more narrowly defined sectors could include finance (especially Fintech), information technology services, innovative biotechnology, laser manufacturing and photonics. For these sectors, Lithuania should develop long-term strategies and consider prioritised and targeted business support.

Opportunity 2: Strengthening management and leadership skills to drive the transformation of workplaces

Strong and effective management and leadership has many benefits for businesses, including higher levels of employee engagement, more innovation and higher productivity (Bloom et al., 2019[56]; UKCES, 2014[57]). As a result, strong management and leadership skills can support the transformation of workplaces to better use skills, strengthen business performance, and support the move towards more high value-added activities.

There are indications that management and leadership skills can be improved in Lithuania. While managers' skills, as measured by the Survey of Adult Skills (PIAAC), are higher than average skill levels in the population, they are below that of their peers in other OECD countries. For example, 22% of managers have low skill levels, compared with 15% across the OECD (Figure 4.5). The share of managers with low levels of problem solving skills is especially high in international comparison (OECD, 2019[18]).

Figure 4.5. Share of managers with low literacy and/or numeracy, 2012, 2015, 2018



Source: Calculations based on OECD (2019[18]), *Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database)*, www.oecd.org/skills/piaac/.

StatLink https://stat.link/7aoyst

The low skills are reflected in the comparatively low overall quality of management in Lithuania. The need to improve management quality is evidenced by the fact that many businesses do not yet rely on professional management (i.e. selected on merit and qualifications), a large share of employees give a low score for the overall quality of management, and there is evidence that the management style is generally top-down (World Economic Forum, 2019[58]; Eurofound, 2020[23])s. Moreover, participants in this project noted several other challenges related to management, including broad shortages of skilled managers, especially middle managers, and a public sector that faces difficulties in filling some senior positions. However, since internationally it has been observed that larger businesses and high value-added sectors tend to have more highly skilled managers and rely more often on professional management, the comparatively weak performance by Lithuania can partly be explained by its comparatively large share of business with fewer than 10 employees and the small share of businesses in high value-added sectors (as described in the performance section) (OECD, 2020[22]).

To strengthen management and leadership skills, Lithuania should raise the profile of management and leadership skills, strengthen the initial development of management and leadership skills, and promote adult learning opportunities to strengthen management and leadership skills.

Raising awareness of the importance of management and leadership skills for maximising skills use and business performance

For participants in this project, strengthening management and leadership skills in businesses was considered one of the most important factors for increasing skills use and improving workplace practices. Participants generally agreed with the perception that the skills of managers need to be improved, and considered skilled management a precondition for several other opportunities to raise skills use. However, despite clear room for improvement and broad support in consultations, the topic of management and leadership skills has not been addressed in strategies by the Lithuanian Government – apart from management skills in the public sector, as discussed in both the National Plan for Progress (NPP) 2021-2030 and Lithuania 2030.

For Lithuania, it could be beneficial to develop a strategic vision, accompanied by an action plan, for management and leadership. This could help to raise awareness of the challenge, put the topic on the policy agenda, provide a co-ordinated approach by involving stakeholders, and provide clarity on the direction, objectives, and actions needed to strengthen performance. Project participants noted that such a strategic vision could especially be important for Lithuania by contributing to more systemic change for organisations and by bringing more co-ordination to the existing measures for management and leadership. Project participants stressed the need for a real action plan with concrete measures. These measures, as will be explained in subsequent sections of this opportunity, could include specific actions on a range of relevant topics, such as management education, training for experienced managers and dissemination of information. Furthermore, the OECD recommends that this vision, or at least elements of it, are part of a broader skills strategy for Lithuania (as proposed in Chapter 5). To support the implementation, the action plan could be supported by the inclusion of quantitative and measurable targets that are understood and supported by all stakeholders to strengthen monitoring and evaluation.

The vision could also play an important role in identifying the skills that managers and leaders in Lithuanian organisations should develop. In addition to strengthening foundational skills (as shown in Figure 4.5), various studies show that managers and leaders should have diverse skills sets, with strong leadership and entrepreneurial skills especially important for good management practice (BIS, 2015[59]). During consultations with stakeholders, the need to strengthen entrepreneurial skills and the entrepreneurial mindset in particular was discussed. While Lithuanians do have a positive view of entrepreneurship and are willing to start a business, many are reluctant because they think that they do not have the right skills and a high fear of failure (GEM Consortium, 2014[60]). Other relevant skills for management and leadership that should be addressed are the ability to build teams, motivate, communicate, mentor, think strategically and assess risk (OECD, 2011[61]; OECD, 2010[62]).

It is important to take into account the changing context that affects management and leadership. For instance, COVID-19 and the related expansion of remote working creates a new range of challenges for managers and requires management approaches with more emphasis on motivating employees, building trust and open communication. Furthermore, project management approaches and concepts (e.g. agile working, Lean Six Sigma) already applied in many Lithuanian businesses also require new skills and attitudes by management and leadership. In this context, project participants noted the relevance of 21st century skills, as well as attitudes, broader behaviours and managers' ability to change.

Recommendation for raising awareness of the importance of management and leadership skills for maximising skills use and business performance

3.7. Develop a strategic and shared vision for strengthening management and leadership skills in Lithuania's workplaces, accompanied by an action plan. The Lithuanian Government – especially the EIM – should develop a strategic vision for management and leadership skills as part of a broader National Skills Strategy (see Recommendations 4.1). This vision could help to make these management and leadership skills a higher policy priority, create momentum for co-ordinated action, and clarify the types of skills that need to be developed. The vision could be accompanied by an action plan with concrete measures (as explained in subsequent recommendations) that could set out the direction, objectives and actions needed to strengthen leadership and management in Lithuanian workplaces. The government should actively involve stakeholders, especially employers, in the development of the vision and action plan to build a common understanding of the objectives and build commitment to provide support and resources for implementing these actions.

Strengthening the initial development of management, leadership and entrepreneurial skills

Managers and leaders need to have the right skills and attitudes to seize the potential opportunities for improving workplace practices that might arise from the COVID-19 crisis and ongoing megatrends (e.g. enhanced digitalisation). These include opportunities related to increased skills use and HPWP. To ensure the development of the right management and leadership skills, a long-term approach is needed, with interventions across the life course.

As part of a long-term and lifelong approach to learning, it is essential to start early in life (OECD, 2019[1]). Building strong foundations in the early years will support a lifetime of learning (as also discussed in Chapter 2), where learning at every stage of the lifecycle builds on learning outcomes from previous stages. The education system could help to develop the skills needed to strengthen future management and leadership. For Lithuania, the development of management and leadership skills in initial education could be improved in two specific areas: 1) entrepreneurship education in schools; 2) business and management education in HEIs.

Entrepreneurship education can help to strengthen overall management and leadership performance. Entrepreneurial skills are an important driver of strong management practice, as discussed in the previous section (BIS, 2015[59]). The entrepreneurial skills developed as part of entrepreneurship education cover both a variety of soft skills (e.g. persistence, networking and self-confidence) and hard skills (e.g. business planning and managerial skills) that are all relevant, and often essential, for strong management and leadership performance. The objective of entrepreneurship education is not solely to strengthen the capacity and raise motivation to start businesses, but to develop a set of skills that benefit society more broadly. Various studies provide evidence of the relevance of this approach. For instance, there is a strong correlation between the early development of entrepreneurial skills and positive effects on job creation, economic success and innovation (OECD, 2015[63]).

Entrepreneurship education is not a new phenomenon for Lithuania; it is already part of the Lithuanian school system, and since 2003, Lithuania has been including entrepreneurship education in its education strategies. For example, the Entrepreneurship Action Plan of Lithuania for 2014-2020 included various actions to ensure the consistent growth of entrepreneurship, and the National Education Strategy for

2013-2022 also highlights entrepreneurship as a topic that needs to be included at all levels of education (EACEA National Policies Platform, 2018[64]; Seimas of the Republic of Lithuania, 2013[65]). Entrepreneurship education is also part of the curricula in both primary and secondary education – for example, the subject "Economics and Entrepreneurship Education" (grades 9-10) is compulsory, and in the new curricula (see Chapter 2 for a discussion on the implementation of the current curricula reform), entrepreneurship education is discussed under the competency of creativity and socio-emotional skills. The recent Programme of Government also addresses the need to raise children's entrepreneurship skills (Seimas of the Republic of Lithuania, 2020[14]). While there are different providers of entrepreneurship education, Junior Achievement Lithuania (JAL) (Box 4.5) could be considered the most significant organisation as most programmes in secondary schools are in co-operation with JAL.

Despite this progress, entrepreneurship education in general education could still be strengthened. In Lithuania, 25% of adults indicate having taken part in a course or activity at school related to entrepreneurship. While this share is above the EU average of 23%, it is still far below that of top-performers such as Finland (39%) and the Netherlands (36%) (European Commission, EACEA and Eurydice, 2016[66]). Although from 2014, the Global Entrepreneurship Monitor shows comparatively weak performance in entrepreneurship education in Lithuanian schools (GEM Consortium, 2014[60]). Participants in this project also mentioned that the overall quality of entrepreneurship education could be improved, and that JAL is not active in all schools. There appears to be broad support in Lithuania to strengthen entrepreneurship education in schools.

To strengthen entrepreneurship education, project participants stressed that entrepreneurial skills should be expanded and become an even more important part of the curricula, i.e. not just one course. There is the need for a more common approach in schools, where entrepreneurship education is more consistently applied as a competence within a broader introduction to practical learning in schools (see also the discussion on curricula in Chapter 2). In this context, Lithuania should build on existing good examples, in particular JAL, strengthen the monitoring of current programmes, and ensure that educators have the right skills and access to the right tools to teach entrepreneurship education (e.g. by creating training courses and developing methodological tools) (Invest Lithuania, 2020[36]). The need to learn from international best practice was also highlighted by project participants (see Box 4.5 for an example). These various opportunities to improve entrepreneurship education require a more strategic approach. To this end, as part of the vision and action plan for management and leadership skills, Lithuania should introduce a clear plan of action for entrepreneurship education that describes the actions needed to meet Lithuania's ambitions for entrepreneurship education across all levels of education. This plan of action should also be supported by a common institutional framework and centralised implementation (Invest Lithuania, 2020[36]).

Lithuanian HEIs also have an important role to play in developing management and leadership skills. Management and business education is considered to be well-developed overall, and a comparatively large share of students are enrolled in management and business fields – in 2018, 25.6% of graduates finished a business study, slightly above the OECD average of 24.8%. However, management and business education in HEIs could still be improved in a number of ways (OECD, 2020[67]).

Studies in management and business are offered by 33 HEIs, but there appears to be a gap between the study offer and market needs (Vaiginienė et al., 2018[68]). According to chief executive officers and HR managers, management and business education could be enhanced by updating teaching practices and putting more emphasis on international methods and experiences. Furthermore, project participants noted a shortage of management programmes in the vocational education sector, and that there are large differences in the quality of business and management courses between institutions. While the responsiveness of education (as also discussed in Chapter 2) is driven by many factors (e.g. funding incentives), more collaboration between businesses and HEIs – for instance in the form of partnerships, internships, mobility and research – could potentially help to address this challenge (Vaiginienė et al., 2018[68]). Stronger collaboration between the private sector and HEIs that offer management and business education could help to ensure that teaching methods and topics are aligned with current needs.

Participants in this project noted that business representatives are already involved in the co-ordination of programmes at HEIs, but that more and better communication between businesses and HEIs is needed.

The development of management and leadership skills could also be a more broadly applied objective of HEIs. To this end, HEIs could make business and management courses more widely available and accessible to students not studying management or business. They could potentially deliver these courses and programmes in optional modules or as a "parallel" study form. Entrepreneurship programmes, which could introduce students to various aspects of running a business, are generally not included in higher education studies outside of business schools. While some HEIs offer optional courses on business and entrepreneurship (see Box 4.5 for an international example), project participants considered this offer not very well developed, and somewhat fragmented (EACEA National Policies Platform, 2018[64]). HEIs could also consider embedding management and leadership skills, as well as entrepreneurial skills, across the curriculum of different study programmes – i.e. not as a standalone subject, but as part of other subjects.

Box 4.5. Relevant national and international examples: Entrepreneurship and business education

Junior Achievement Lithuania (Lietuvos Junior Achievement)

Junior Achievement Lithuania (JAL), established in 1993 and part of the global Junior Achievement network, is a non-profit organisation that offers economic education and entrepreneurship education programmes. The mission of JAL is to inspire and educate young Lithuanians to value free enterprise, to understand business and economics, and to develop entrepreneurial and leadership skills. Every year, programmes by JAL reach about 20 000 students from more than 350 schools; over 500 teachers are trained by JAL, and students gain practical experience in over 240 training companies. Several business leaders are involved to consult, mentor and provide internship opportunities.

Entrepreneurship education strategies – Estonia

In Estonia, the 2010 strategy for entrepreneurship education, Be Enterprising!, aims to raise awareness of entrepreneurship education, train teachers, provide teaching materials and allocate resources. Concrete actions include awareness-raising activities via events and social networks, the development of materials and instructions for courses (both students and teachers), and an evaluation system. The strategy includes a map of entrepreneurial learning outcomes and focuses on integrating these into curricula. Entrepreneurship education is explicitly referred to in the curricula as a general skill, is a cross-curricular objective at various levels, and is taught in optional and compulsory subjects.

EnterpriseTech – United Kingdom

At the University of Cambridge, the Judge Business School has offered the programme EnterpriseTECH since 2018, which allows undergraduate and postgraduate students to learn the basic concept of entrepreneurship, and touches on the all the basic topics of an MBA. As part of the programme, participants put theory into practice by helping local early-stage companies or researchers with early-stage technologies to estimate their business feasibility for the inventors and founders. The programme aims to equip the student, but also researchers at PhD and postdoctoral level, with real-world enterprise skills and concepts, and to increase their entrepreneurial capacity for generating ideas and help them build the necessary skills to bring these ideas to fruition.

Source: Junior Achievement Lithuania (2020[69]), Junior *Achievement Lithuania website*, https://lja.lt/; European Commission, EACEA and Eurydice (2016[66]), *Entrepreneurship Education at School in Europe,* http://dx.doi.org/10.2797/301610; University of Cambridge (2020[70]), *EnterpriseTECH website*, https://www.jbs.cam.ac.uk/entrepreneurship/programmes/enterprisetech/.

Recommendations for strengthening the initial development of management, leadership and entrepreneurial skills

3.8. **Expand and improve the quality of entrepreneurship education in schools in the context of the current update of school curricula, and set out a plan for further action.** To strengthen entrepreneurship education, Lithuania should utilise the final stages of the current update of the school curricula to make entrepreneurship skills more prominent across subjects (see also Chapter 2 for a discussion on curricula). As part of the vision and action plan for management and leadership skills (as recommended in the previous section), Lithuania could also develop a plan that describes the actions needed to meet Lithuania's ambitions for entrepreneurship education across all levels of education. The plan should build on existing programmes and actions in the Entrepreneurship Action Plan of Lithuania for 2014 2020, and include actions to expand the role of Junior Achievement Lithuania, better evaluate and monitor the outcomes of entrepreneurship education, and learn from both national and international best practice. These actions should also be supported by a common institutional framework and centralised implementation.

3.9. **Strengthen the development of management and leadership skills in higher education by making relevant modules and subjects more accessible and enhancing collaboration with businesses.** Lithuania could make management and business courses at HEIs, as well as entrepreneurship courses, more widely available and accessible to students from other programmes. For instance, HEIs could offer these courses as optional modules or "parallel" study forms. HEIs could also consider embedding management and leadership skills, as well as entrepreneurial skills, across the curriculum of different studies – i.e. not as a standalone subject, but as part of other subjects. Furthermore, to better align the study offer and teaching methods with the needs of the market, Lithuania could strengthen collaboration between the business sector and HEIs (see also Chapter 2), for instance in the form of partnerships, internships, mobility and research.

Promoting adult learning opportunities to strengthen management and leadership skills

In addition to starting early with developing the right skills and attitudes, managers and leaders need to continue learning throughout life to increase overall skill levels and to adapt to changing skills requirements over time. In the context of a rapidly changing society and economy due to megatrends and COVID-19, lifelong learning by managers and leaders will likely become even more relevant for businesses to adapt to and potentially reap the benefits of these developments.

The participation of Lithuanian managers in adult learning shows room for improvement: 62% of Lithuanian managers participated in formal and non-formal adult education and training in the last 12 months, compared with an average of 67% across the OECD (Figure 4.6) (OECD, 2019[18]), and looking at participation in the last four weeks in 2019, only 13.6% of managers participated, compared with an average of 18.1% across the EU (Eurostat, 2020[71]). Participants in this project expressed that for managers, the adult learning situation reflects the broader adult learning situation in Lithuania (see Chapter 3 for a full assessment) – low participation and low motivation, and room for improvement on both the supply and demand side – and that continued learning is likely a bigger challenge than initial management education.

Figure 4.6. Participation by managers in formal and/or non-formal training, 2012, 2015, 2018

Source: Calculations based on OECD (2019[18]), *Survey of Adults Skills (PIAAC) (2012, 2015, 2018) (database)*, www.oecd.org/skills/piaac/.

StatLink https://stat.link/m9b1vk

There are indications that the supply of learning opportunities that help to strengthen management and leadership skills could be improved. Participants in this project indicated that the scope of learning opportunities appears to be relatively small, and mainly in the private sector, the quality is not monitored, and the groups most in need are not well-targeted (e.g. SMEs in low value-added sectors). While some project participants expressed that the government and its agencies could do more on the supply side (e.g. by helping to ensure the good supply of training opportunities and executive training units), there generally appears to be limited interest in expanding existing or introducing new public programmes for management and leadership skills. There are, however, various examples from other countries where government agencies are actively engaged in the provision of training for managers (Box 4.6).

To raise participation, Lithuania should ensure that targeted and relevant learning opportunities are available to different types of managers (e.g. for different firm size, sectors and management level). To start, Lithuania should locate the gaps in the current provision of learning by assessing which groups of managers do not have access to relevant training opportunities. Participants in this project, for example, highlighted a lack of opportunities to train middle management. Subsequently, Lithuania should aim to fill these gaps by creating incentives for private sector providers to deliver relevant courses, or by introducing new programmes by government agencies. As for broader business support, a differentiated approach for the provision of learning opportunities could be beneficial, as managers from different types of businesses need different types of learning opportunity (OECD, 2018[41]). For example, business owners from small, local SMEs will likely need programmes on more basic managerial skills, whereas managers in larger (often international) businesses might need more specialised managerial support. Courses and programmes offered by HEIs could potentially help to fill some of the gaps in the provision of learning opportunities by making these courses and programmes more widely accessible through optional, ideally part-time, modules (as discussed in the previous section) for adults who have left the education system.

For managers, the most significant barriers to participation in training are related to the time and location of the training offer – e.g. 45% of managers who did not participate in training gave the reason that they were too busy at work (OECD, 2019[18]). To this end, Lithuania should aim to make learning opportunities even more accessible for managers by expanding the flexible training offer. This was strongly supported by participants in this project. COVID-19 and the related expansion of online learning (as also discussed in Chapter 3) provide a great opportunity to raise flexibility by reducing both financial and time-related barriers to participation (OECD, 2019[72]; Kshirsagar et al., 2020[73]). Building on this development,

Lithuania could assess if available online courses for developing management and leadership skills could be expanded. In addition, for online learning to be valued, Lithuania should ensure that there are effective testing methods and certificates, and establish quality assurance mechanisms to ensure that online courses provide value for money/time to participants (OECD, 2020[74]). These actions could be included in the proposed strategic vision and action plan on strengthening managerial and leadership skills (as recommended earlier in this opportunity).

Low participation in learning by managers also appears to be largely driven by low motivation. For two out of three Lithuanian managers who did not participate in education or training, the reason given was that they did not want to participate (OECD, 2019[18]). There are, however, indications that the motivation to participate in training has improved in recent years. First, the recent arrival of international businesses has brought a different set of management standards to Lithuania. The spillover effects of managerial skills and practices through collaborative networks or across the supply chain (as discussed in Opportunity 1) have already helped to raise awareness of the need to upskill among many managers in Lithuania. Second, COVID-19 has also helped to raise awareness of the need to upskill as it is forcing managers to rethink their practices, organisation and managerial behaviours (e.g. how to manage remote working employees). Enterprise Lithuania has experienced a lot of interest in the webinars it organised in response to COVID-19.

To build on this foundation, and to further strengthen the culture of learning for managers in Lithuania, soft measures could play an important role. A targeted campaign on the benefits of strong management and leadership skills, which potentially shares success stories (most notably from the international businesses), could help to raise awareness and change the mindsets of managers. These efforts could be supported by the effective dissemination of information on training, including by sharing information on the training offer, good practices, the benefits of training and by helping them to assess their skill needs. This information could be disseminated or linked to the proposed central portal with information on practices and programmes to support businesses (as recommended earlier in this chapter), and included in the strategic vision and action plan for strengthening management and leadership skills.

Ensuring that the skills acquired through non-formal learning are also recognised could help to raise the overall motivation of learners (OECD, 2019[1]). For managers who are not formally trained as managers, the recognition of the skills they have acquired through experience and other types of non-formal learning could help to motivate them to learn more and could allow them to access learning opportunities for which certain qualifications are required (see also Chapter 3 regarding the recognition of prior learning). Lithuania, like most OECD countries, could benefit from adopting a broader perspective of learning, where not only learning in formal education, but also non-formal and informal learning (e.g. business missions, internal coaching, networking) is considered and valued. In this context, as discussed in Chapter 3, the use of “alternative credentials” such as micro-credentials and digital badges could be considered, which could help adults to signal the skills they already have, as well as the skills they acquire in courses and programmes (Kato, Muros and Weko, 2020[75]).

Finally, for some groups of managers, more active measures (e.g. financial support and incentives) might be needed to enhance the motivation to participate in learning (see also Chapter 3 on adult learning). Lithuania stands out by having a comparatively large share of managers who did not participate in learning because education or training was too expensive – 24% of non-participating managers, compared with 9% across OECD-PIAAC countries (OECD, 2019[18]). There was strong support among participants in this project for providing more financial support for training. Project participants also raised the idea of expanding the scope of the competence voucher (see Chapter 3 for a recommendation on streamlining the application process of these vouchers) to allow them to be used for the development of higher skills, including bachelor’s and master’s degrees, and thereby cover management and leadership programmes. Enterprise Lithuania, which administers the competence vouchers funded by the European Social Fund (ESF), supports this proposal, and highlighted the relevance of this measure for SMEs, as well as the need to cover programmes linked to adopting HPWP and workplaces cultures.

Box 4.6. Relevant international examples: Upskilling programmes for managers

Manager programmes by the Polish Agency for Enterprise Development (PARP)

PARP has a number of programmes targeting managers. For instance, the SME Manager Academy finances training and advisory support for managerial staff in SMEs in the area of business management, including human resources. The academy aims to: 1) diagnose the needs of SMEs and the skills gaps of owners and managers; and 2) train managers of enterprises from the SME sector. Financial support covers up to 80% of the project, while the remaining 20% is covered by the SME. PARP has also introduced the PARP Academy, which is an e-learning platform that offers 50 free-of-charge online training sessions tailored to the needs of SME sector. The sessions are in four thematic areas related to setting up and running a business (e.g. "managerial and personal skills"). Since 2006, over 180 000 participants have benefited from PARP Academy training.

Skillnet Ireland

In Ireland, the national agency, Skillnet Ireland, promotes training and upskilling for Irish companies. It designs tailored training programmes for companies and is overseen by a board consisting of representatives from the Department of Education and Skills and key industry stakeholders. A core part of the programme is aimed at upskilling managers. The "management development programme" offers courses for a wide variety of managerial needs. Managers can improve their leadership and communication skills and foundational skills and learn the techniques necessary for managing teams, as well as learn specific skills required in sectors such as retail. Courses are subsidised, and in 2018, 56 182 people were trained from 16 462 member companies.

Source: PARP (2019[76]), Polish Agency for Enterprise Development website, https://en.parp.gov.pl/; Skillnet Ireland (2019[77]), Skillnet Ireland website, www.skillnetireland.ie/.

Recommendations for promoting adult learning opportunities to strengthen management and leadership skills

3.10. Ensure the availability of relevant and flexible learning opportunities for different types of managers by assessing and filling gaps in the current provision and promoting online learning. To ensure that different types of managers and leaders (e.g. for different firm size, sectors, management level) have access to relevant learning opportunities, Lithuania should locate the gaps in the current provision of learning and aim to fill these gaps by creating incentives for private sector providers to deliver relevant courses, or by introducing new programmes by government agencies. There could be an enhanced role for HEIs by making their offer of management and leadership courses more accessible to adults, for example by stimulating modular, flexible and part-time learning opportunities. Lithuania should ensure that the training offer for managers is easily accessible by raising flexibility through the enhanced provision of online learning. Lithuania should also assess if available online courses for developing management and leadership skills could be expanded, ensure effective testing methods and certificates, and establish quality assurance mechanisms.

3.11. Enhance the willingness of managers to participate in learning through targeted awareness raising, information on the training offer, recognition of prior learning and financial support. The Lithuanian Government and related agencies should consider a targeted campaign on the benefits of lifelong learning for managers, which is supported by the effective dissemination of information on learning opportunities. These could both be combined with the central portal and awareness-raising campaign on adopting HPWP and transforming workplaces, as recommended in Opportunity 1. In addition, the management and leadership skills acquired through experience and other types of non-formal learning should be better recognised (as discussed in Chapter 3), which could help to motivate managers to learn more (e.g. by reducing the time required to achieve a formal qualification). Lithuania should also aim to provide more financial support for learning by managers (see Chapters 3 and 5 for discussions on funding mechanisms for adult learning). This could potentially be achieved by expanding the scope of the competence voucher to allow it to be used by more high-skilled workers, thereby supporting participation in management and leadership programmes.

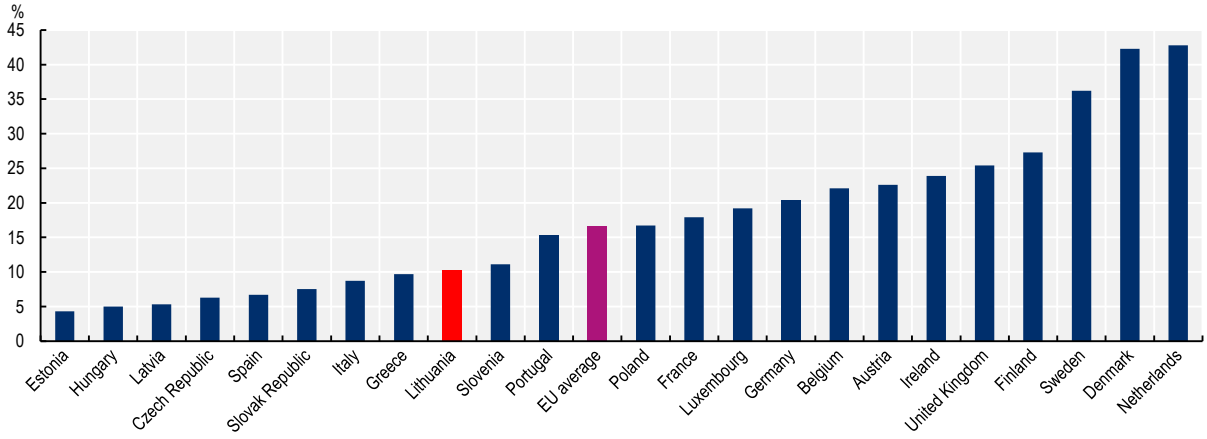
Opportunity 3: Empowering and engaging the workforce to make better use of their skills

In addition to the skills and attitudes of management and leadership, empowering and engaging the broader workforce also needs to be considered when transforming workplaces to use skills more effectively (OECD/ILO, 2017[3]). Engaged employees display higher organisational and citizenship behaviours, more proactive innovative behaviour, lower absenteeism levels, as well as report higher job satisfaction and personal well-being (OECD/ILO, 2017[3]). An empowered workforce that is motivated and willing to actively contribute to the success of businesses could play an important role in strengthening skills use by tapping into the full potential of their skills.

There are various indications that the empowerment and engagement of the workforce in Lithuania could be improved. As mentioned in the performance section, Lithuania is near the bottom of the EU ranking in terms of the share of employees feeling involved and engaged in improving the work organisation or work processes (Eurofound, 2019[19]). Furthermore, only 10% of employers express that their employees are very motivated, compared with an average of 17% across the EU, and 43% in top-performing countries such as Denmark and the Netherlands (Figure 4.7). Various levers that could help to drive employee motivation are not widely adopted by businesses. For instance, only a small share of employers communicate visions and missions that help to provide meaning to work, and only 6% of employers indicate providing interesting and stimulating work to motivate and retain employees very often, which is the lowest share of all EU countries (Eurofound, 2020[23]).

A changing business environment creates additional challenges for employee engagement. First, empowering employees is even more important in times of COVID-19. Employees need to adapt to a situation where teleworking becomes a more systemic part of working life, and this will require approaches with more emphasis on motivating employees, building trust and open communication. Second, new workplace methods such as agile practices and techniques require other methods to engage and empower employees, including a greater role for raising the motivation at the individual level, as well as more coaching and mentoring, autonomy and work transparency (Macionytė, 2020[78]).

Figure 4.7. Share of employers indicating that their employees are very motivated, 2019



Source: Eurofound (2020[23]), *European Company Survey 2019*, https://www.eurofound.europa.eu/data/european-company-survey.

StatLink https://stat.link/4ikb5v

In this project, participants showed strong support for opportunities related to employee empowerment and engagement. Some project participants even indicated that many Lithuanian employers still see the engagement and empowerment of employees as a burden. As a result, Lithuania should aim to improve the empowerment and engagement of employees in both the private and public sector through a range of measures. While the broad adoption of HPWP in businesses is already discussed in Opportunity 1, this opportunity will assess the adoption of HPWP more specific to employee engagement and empowerment, as well as related policies and practices.

Empowering and engaging employees in the business sector

A cultural change is often needed in businesses to strengthen the engagement and empowerment of the workforce. Employers should aim for so-called "high-road strategies", where employees and their skills are viewed as an integral part of a business' competitive advantage, rather than "low-road" strategies, where labour is considered a commodity and a cost to be minimised (OECD/ILO, 2017[3]). In Lithuania, an increasingly large share of businesses appear to be moving in the direction of high-road strategies. Shortages in various sectors due to emigration and the growth of the economy have helped to make employers more aware of the need to invest in the workforce, and managers indicate that their most challenging issues are related to HR management, including attracting, recruiting and maintaining employees (Vaiginienė et al., 2018[68]). However, despite these positive signals, the lack of engagement and low overall motivation of employees, as shown by Figure 4.7, indicate that many employers still have not yet adopted these high-road strategies.

To empower and engage the workforce there are specific types of HPWP that businesses should consider taking on. To start, businesses should adopt various types of HR practices and people management approaches to motivate employees, including practices for performance measurement (e.g. performance reviews), work flexibility and autonomy (e.g. possibility for remote working), as well as financial incentives to improve performance (e.g. performance-based bonuses). As discussed in the performance section, apart from a broad adoption of the latter type of practice (i.e. bonuses), the adoption of these HR and people management practices is comparatively weak in Lithuania (Eurofound, 2020[23]).

The role of pay systems should also be considered to empower and engage the workforce. In addition to incentive pay, such as performance-based bonuses, it is important that the skills acquired on the job are both recognised (as discussed in Chapter 3) and rewarded with appropriate salaries. Data from the OECD Survey of Adult Skills (PIAAC) show that the effect of skills proficiency (both literacy and numeracy) on

hourly wages, over and above the effect of education levels, is comparatively weak in Lithuania, and that the contribution of work experience to variation in hourly wages is the smallest of all OECD countries (OECD, 2016[2]; OECD, 2019[4])s. These are indications that skills acquired on the job are not sufficiently rewarded, or at least less so than in other OECD countries. This could negatively affect the motivation to both gain new and use existing skills. When developing a more advanced system to recognise prior learning (see Chapter 3), Lithuania should also aim for the adoption of remuneration and pay systems in businesses where these recognised skills are rewarded. Some participants in this project also noted that the Lithuanian Government could do more to promote related practices and support businesses to adopt these remuneration and pay systems.

Workplace practices that promote and support mobility in businesses could empower employees by helping them to move to jobs better matched to their skills sets. In addition to upward mobility, the allocation of skills could be improved through horizontal mobility within the organisation (i.e. to a job at a comparable level). Several workplace practices could support mobility, for example: job shadowing, where an employee can spend time learning through watching others perform a job; stretch assignments, where the employee performs tasks beyond existing expertise; and supervision of employees over time, for instance in the form of talent programmes. The fact that only a comparatively small share of Lithuanian workers indicate having good prospects of career advancement – only Italian workers state having weaker prospects in the EU – is an indication that the adoption of these practices could be enhanced (Eurofound, 2019[19]).

To promote the adoption of these different types of HPWP, pay systems and practices for mobility in organisations, various soft measures need to be considered. Raising awareness of the relevance of empowering and engaging the workforce – through the adoption of these advanced HR practices and people management approaches, remuneration and pay systems, and practices for mobility – could stimulate a broader cultural change in businesses. To this end, good practices and the benefits of valuing and encouraging staff for business performance and growth could be emphasised in campaigns (OECD/ILO, 2017[3]). For example, emphasising the strong performance of selected businesses in these campaigns could encourage employers to change their mindsets and help to create peer pressure. Moreover, the dissemination of information on good examples and guides on how to adopt these practices and pay systems could also contribute to greater awareness of the need to empower the workforce, and guide managers with the implementation of these measures. This information could be included in the central portal on HPWP and related support programmes, as recommended in Opportunity 1. The campaign on empowering and engaging the workforce could be part of the broader awareness-raising campaign on adopting HPWP and transforming workplaces.

Furthermore, Lithuania could potentially put more emphasis on accredited standards, charters and pledges to change workplace cultures. There are various examples of accredited standards for people management (see Box 4.7 for an example) that help to raise awareness of adopting strong management practices and approaches, and that give businesses the opportunity to be recognised for strong performance. Moreover, Lithuania could raise awareness of employee engagement and empowerment by introducing charters or pledges for businesses, where individual businesses or employer organisations formally endorse principles concerning employees and their working conditions. In Scotland, for instance, the Scottish Business Pledge gives businesses the incentive to improve workplace and job quality by signing up to a number of pledges linked to fairness, equality and sustainable employment (Scottish Government, 2020[79]).

Legislation for employers and employees plays a vital role in promoting and steering practices in workplaces. The Labour Code of Lithuania (Government of the Republic of Lithuania, 2020[17]) has been important in this context, as amendments have already helped to improve workplace practices in recent years. The OECD welcomes these amendments, which have supported more flexible working time arrangements, new forms of employment contracts, new regulations for fixed-term employment contacts, better work-life balance, and learning opportunities (OECD, 2018[80]). Studies that aimed to monitor the impact of the Labour Code revisions have shown its positive effects on workplace practices, and these

results have informed several amendments that entered into force on 1 August 2020. Lithuania should ensure that the Labour Code will continue to support the adoption of these practices that help to strengthen employee engagement and empowerment by monitoring and evaluating the impact of new amendments of the Labour Code based on a selection of indicators and objectives, including for skills use and HPWP.

In addition to adopting HPWP, pay systems and practices for mobility, businesses should also involve the workforce in decision-making processes to further empower and involve employees. The collective representation of workers and collective bargaining could help to raise the involvement of employees, including by contributing to improving working conditions (OECD, 2018[80]). Institutions with strong collective bargaining and unionisation are associated with a higher utilisation of workers' skills in the workplace (OECD/ILO, 2017[3]).

Lithuania appears to perform relatively well already in providing employees the opportunity to be involved in decision-making processes. In 2019, 44% of organisations indicated having a recognised body for employee representation, which is far above the EU average of 26% (Eurofound, 2020[23]). Moreover, almost two out five employees are represented by appointed representatives (i.e. trade union, work councils, trustee), and a relatively large share of enterprises indicate that employee representation can influence management decisions on work processes to a (fairly) large extent. Finally, largely as a result of the revised Labour Code which introduced changes in the area of employee representation (e.g. works councils) and collective bargaining, the coverage of collective agreements is rapidly increasing, from 7% in 2015 to 15% in 2019 (Government of the Republic of Lithuania, 2020[17]).

For Lithuania, it will be essential to build on these strong recent reforms and continue to further strengthen employee representation. Participants in this project proposed various actions on how to improve the current system, with several focusing on the capacity of employees to be actively involved, i.e. ensuring that representatives have the right skills, information, time and resources for effectively representing workers. To this end, the Lithuanian Government and employers could potentially improve information for employees on how to effectively participate in the various forms of employee representation (works councils, trade unions and trustees). There are already some initiatives with this objective, including an EU funded project by the State Labour Inspectorate that involves the various trade union confederations. This project, named Pattern of Co-operation between Trade Unions and Employers through Social Dialogue, aims to promote and monitor co-operation between trade unions and employers, and includes capacity building and training activities for social partners (State Labour Inspectorate, 2020[81]).

Finally, for the engagement and empowerment of employees, and to raise their motivation to actively participate in employee representation, participants in this project expressed that a cultural change and shift in the mindset of workers is needed. There is a need to create an environment where proactive behaviours are stimulated through a broad awareness of the advantages of being empowered, for both individual careers and the community. Lithuania should aim to make citizens more self-confident and active members of communities. As a result of being more actively engaged and aware that an individual can make a difference, the attitudes and behaviours of adults in workplaces will be positively affected. In addition to expanding and strengthening the role of entrepreneurship education (as discussed in the previous opportunity), the education system has an important role to play in terms of empowerment by focusing not only on developing knowledge, but also on core values such as self-confidence, responsibility and being active members of a community.

Box 4.7. Relevant international example: Business accreditation

Investors in People (IIP)

IIP is an accredited standard for people management. It originally started as an initiative by the UK Government in 1991 and is now an international standard applied in over 80 countries in more than 30 languages. The latest framework focuses on three key areas (leading, supporting and improving) each covering nine performance indicators. Organisations are assessed against these indicators using a performance model made up of four levels: developed, established, advanced and high-performing. Standard, silver, gold and platinum levels are then awarded for one of three years. IIP has accredited over 50 000 organisations, and its "we invest in people" accreditation could be considered the global benchmark for people management.

Source: Investor in People (2020[82]), *Investors in People website*, https://www.investorsinpeople.com.

Recommendations for empowering and engaging employees in the business sector

3.12. **Encourage businesses to effectively engage and empower employees by promoting the adoption of advanced HR practices and people management approaches, pay systems and practices for job mobility.** The EIM and the SADM, as well as related agencies, should consider various soft measures that could help to facilitate a cultural change in businesses where employees are more empowered and engaged. These measures could include the promotion of advanced HR practices and people management (e.g. performance appraisals), remuneration and pay systems where skills acquired on the job are rewarded, and practices that help to enhance mobility in businesses (e.g. job shadowing and talent programmes). To this end, Lithuania could publicise good practices by Lithuanian businesses and the benefits of these practices for employee performance in the central portal and a related awareness-raising campaign on adopting HPWP and transforming workplaces (recommended in Opportunity 1). Lithuania could also introduce and/or expand measures that help to recognise and raise awareness of employers that successfully improve workplace cultures (including, but not limited to, accredited standards, charters and pledges).

3.13. **Facilitate the active engagement of employees in workplaces by ensuring that employees have the capacity and motivation to be involved.** The Lithuanian Government, and the SADM in particular, should continue to strengthen various forms of employee representation (e.g. works councils, trade unions and trustees) in workplaces. To this end, Lithuania should ensure that employees have the right skills, knowledge and motivation to actively and effectively be involved. Lithuanian employees should have access to high-quality information on the benefits of employee representation and on how to effectively participate, which can be disseminated on websites targeted at employees and their work conditions and distributed by organisations such as trade unions and the State Labour Inspectorate.

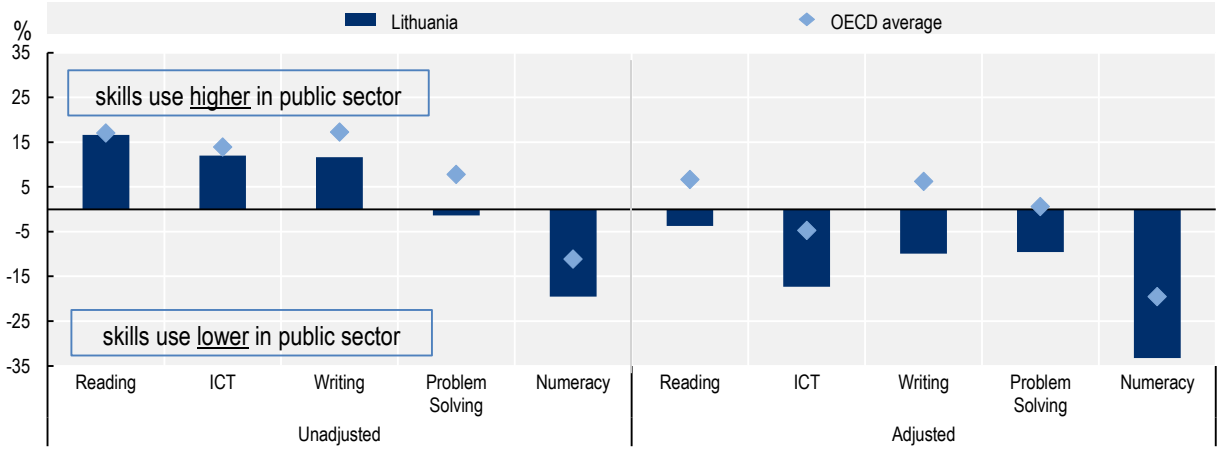
Empowering and engaging employees in the public sector

Several project participants stressed the importance of improving skills use, workplace practices and employee engagement in the public sector. There are several good reasons to make practices in the public sector a policy priority. To start with, the better use of skills, increased adoption of HPWP, and more engaged and empowered civil servants could improve the effectiveness, quality and efficiency of government. Moreover, better practices in the public sector could show strong leadership and strategic direction, and the public sector could set a good example and potentially spread and promote good practices by adopting them.

Data show that the use of skills in the public sector could be improved. For example, Lithuania is the only OECD country where the use of problem-solving skills is lower in the public sector than in the private sector. Regarding the use of numeracy skills, although this is lower in the public sector in most OECD countries, for Lithuania the difference is relatively large (see Panel A, Figure 4.8) (OECD, 2019[18]). These findings remain valid even when correcting for relevant factors (e.g. skills levels and hours worked), and when doing so, the intensity of use of all types of skills in the public sector ends up below that of the private sector (see Panel B, Figure 4.8). For reading skills, Lithuania is the only country across the OECD where the adjusted use is lower in the public sector than in the private sector (OECD, 2019[18]).

Figure 4.8. Information-processing skills used at work, private-public sector differences, 2012, 2015, 2018

Adjusted and unadjusted differences between the public and private sector in the mean use of skills



Note: Adjusted estimates are based on ordinary least squares (OLS) regressions with controls for skills, hours worked and occupation dummies.
Source: OECD (2019[4]), *Skills Matter: Additional Results from the Survey of Adult Skills,* https://dx.doi.org/10.1787/1f029d8f-en.

StatLink https://stat.link/8vd1ga

There are also other indications that Lithuania could strengthen the overall performance of the public sector. For instance, the World Economic Forum ranks Lithuania 83rd in a global competitiveness ranking (out of 141 countries) for policy stability, and 90th for the government's long-term vision (World Economic Forum, 2019[58]). The Lithuanian Government also does not perform strongly in the adoption HPWP, and it is a challenge for the government to attract and retain talent (Ministry of the Interior, Strata, 2020[83]).

The Lithuanian Government aims to enhance public sector performance, and this is highlighted as an objective in the Programme of Government (Seimas of the Republic of Lithuania, 2020[14]). Lithuania 2030 highlighted the need to enhance leadership and management skills and standards, and the National Plan for Progress 2021-2030 discusses the efficiency of the public administration. A recent

strategic document by Invest Lithuania (2020[36]) also sees strengthening state institutions as one of the four main strategic directions.

Lithuania has introduced reforms in recent years to address some of the challenges within the public sector. For the civil service specifically, a new Law on the Civil Service entered into force in 2019 and aims to increase the competitiveness of the civil service, attract the most talented employees, and increase its efficiency. In addition to various changes regarding the regulation of civil servants' salaries, the law strengthened the adoption of various HPWP. For instance, it introduced regulations for remote working, the mentoring institute, and it streamlined procedures for evaluating civil servants (Ministry of the Interior, Strata, 2020[83]). The Lithuanian Government has also prepared draft amendments for the Civil Service Law, developed a strategy for remuneration increases until 2025, and has stated an ambition to reduce fragmentation and unify the remuneration system in the public sector (Ministry of the Interior, Strata, 2020[83]). Furthermore, several other relevant initiatives are being implemented in the civil service, including competency based human resource management (HRM) that includes an assessment tool that allows for the objective assessment of managerial, leadership and general skills.

Lithuania should now build on these initiatives (especially the Law on the Civil Service) and continue to further strengthen the adoption of HPWP and improve the overall performance of the civil sector. In particular, Lithuania should continue to strengthen HRM and other workplace practices, and possibly expand practices implemented in the civil service across other public sector organisations and agencies. Lithuania should ensure that all public sector organisations provide clear career paths that are supported by performance reviews, skills mapping and professional development to transform the organisational culture and better attract and retain talent (Invest Lithuania, 2020[36]). Monitoring and evaluating the impact of these efforts will be essential to ensure that the initiatives have the desired impact. A survey of public sector employees could possibly help to inform policies and to evaluate the engagement and empowerment of employees in the public sector (see Box 4.8 for an example). Potentially, all these measures could be combined in a comprehensive public administration reform to improve the effectiveness, quality and efficiency of government.

As for the whole Lithuanian society, a culture of lifelong learning could also be strengthened in public sector organisations to help raise the use of skills by reducing imbalances and to further enhance the capacity of the public sector (Ministry of Finance, 2020[38]). There are several indications that this culture of lifelong learning could be enhanced in the public sector. For instance, in the last four weeks of 2019, the participation rate in the public administration was 16.7%, which is comparable with the EU average, but far below that of top-performers such as Sweden (43.1%) and Estonia (42.8%) (Eurostat, 2020[84]). Moreover, participants in this project indicated that the quality of training greatly varies.

Lithuania has already made an effort to create a culture of lifelong learning in recent years. In 2019, the Law on the Civil Service helped to reorganise in-house training by decentralising civil service training. At the moment, civil servants can participate in national and international training programmes, and approximately 0.5% of the annual appropriations set for the salaries of civil servants are allocated for the improvement of skills (Ministry of the Interior, Strata, 2020[83]). In recent years, the Civil Service Department under the Ministry of the Interior also implemented three EU-funded projects to train civil servants: 1) professional ethics and anti-corruption training, in which 3 000 civil servants have been trained so far; 2) training to strengthen the strategic competences of middle-level managers, heads of unit of state and municipal institutions, including to strengthen their leadership skills, strategic thinking and workload planning; and 3) training for strengthening leadership for top managers and heads of institutions (109 participants so far), including the sharing of experience, personal training with a private company of trainers, and discussions on how to improve performance. Furthermore, some online training is already provided in the public sector (e.g. on civil security) (Ministry of the Interior, Strata, 2020[83]), and it is encouraging that Lithuania is developing an online portal with information on training for civil servants and the possibility to undertake online training. According to project participants, this information is definitely needed, as a lack of guidelines and support on skills and training was mentioned as a main challenge.

However, despite these improvements, Lithuania appears to lack a more long-term, strategic approach to skills development in the public sector, which could potentially be part of a more comprehensive public administration reform. Lithuania should set clear objectives on how to raise participation, better assess and evaluate what skills need to be developed (potentially informed by the survey among public sector employees – as mentioned above), ensure that there are sufficient training opportunities, and provide incentives to employees to participate (e.g. by linking training to performance appraisal and career pathways). COVID-19 creates a new momentum for remote and self-learning (as also discussed in Chapter 3), and online learning is likely to become an even more central part of this approach.

Box 4.8. Relevant international example: Raising skills and performance in the public sector

NICS People Strategy for 2018-2021 and Civil Service People Survey – Northern Ireland (United Kingdom)

The **Northern Ireland Civil Service People (NICS) Strategy** for 2018-2021 presented a shared view of the people priorities across the NICS under four themes: 1) a well-led NICS, including targeted actions to support managers and leaders; 2) an outcome-focused NICS, including actions on how the NICS engages with staff and their contribution to the delivery of outcomes; 3) a high-performing NICS, including actions on new and flexible ways of working, strategic workforce planning, and recruitment and vacancy management; and 4) an inclusive NICS, including actions to drive balance and inclusion. The strategy is also supported and informed by outcomes of the annual **Civil Service People Survey**, which looks at civil servants' attitudes to and experience of working in government departments. Each year, the government publishes a civil service benchmark report, a summary of main department scores, and publishes the underlying aggregate datasets, including the People Survey results split by diversity characteristics. As part of the survey, an Employee Engagement Index is calculated based on a range of underlying indicators to quantify and summarise engagement sentiments.

Source: NICS (2018[85]), *NICS People Strategy 2018-21*, https://www.finance-ni.gov.uk/publications/nics-people-strategy-2018-21.

Recommendations for empowering and engaging employees in the public sector

3.14. **Continue to strengthen workplace and HR practices in the public sector through the broad adoption of good practices across the public sector and by building on the new Law on the Civil Service.** Lithuania should further increase HPWP and improve the overall performance of the public sector by ensuring that all public sector organisations provide clear career paths, performance reviews, skills mapping and professional development. This could help to transform the organisational culture and better attract and retain talent. Potentially, these measures could be combined in a comprehensive public administration reform to improve the effectiveness, quality and efficiency of government. Lithuania could also more widely adopt initiatives implemented by the Law on the Civil Service across the public sector (i.e. also outside the civil service), including initiatives to reduce fragmentation and unify the remuneration system in the public sector. This approach should be supported by a system to monitor and evaluate public sector programmes. In this context, Lithuania could consider introducing a survey for employees in the public sector on their attitudes and experiences of working within a public sector organisation.

3.15. Build a culture of lifelong learning in public sector organisations by adopting a more long-term, strategic approach to skills development and by strengthening learning opportunities. To strengthen the culture of lifelong learning for all employees in the public sector, Lithuania should adopt a more long-term, strategic approach to skills development in public sector organisations as part of a National Skills Strategy (see Recommendation 4.1). Such an approach could include clear objectives on how to raise participation, as well as a better assessment and evaluation of what skills need to be developed (possibly informed by the survey of public sector employees – as mentioned above). Moreover, the Lithuanian Government should ensure that there are sufficient training opportunities (with a particular emphasis on online learning) and provide incentives to employees to participate (e.g. by linking training to performance appraisal and career pathways).

Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Enhancing the use of skills by supporting businesses to adopt HPWP	
Raising awareness of the relevance of effective skills use and HPWP	3.1. Create a central portal with user-friendly information for businesses on HPWP and related support programmes, including diagnostic tools, potentially as part of a broader awareness-raising campaign.
Providing relevant, targeted and accessible support to businesses on adopting HPWP	3.2. Encourage the greater adoption of HPWP by expanding existing and/or introducing new business support programmes that target workplace practices. 3.3. Ensure that public support for the adoption of HPWP is differentiated and targeted at employers' needs, for example through personalised mentoring and coaching services. 3.4. Minimise the administrative burdens on businesses taking advantage of support programmes by, for example, streamlining procedures and improving guidance.
Leveraging employer networks and supporting collaboration at the sector level to promote the adoption of HPWP	3.5. Facilitate the adoption of HPWP by strengthening business clusters and other collaborative networks that spread good practices and facilitate knowledge spillovers. 3.6. Strategically target HPWP support for businesses and collaborative networks at narrowly defined priority sectors in order to maximise the impact of this support.
Opportunity 2: Strengthening management and leadership skills to drive the transformation of workplaces	
Raising awareness of the importance of management and leadership skills for maximising skills use and business performance	3.7. Develop a strategic and shared vision for strengthening management and leadership skills in Lithuania's workplaces, accompanied by an action plan.
Strengthening the initial development of management, leadership and entrepreneurial skills	3.8. Expand and improve the quality of entrepreneurship education in schools in the context of the current update of school curricula, and set out a plan for further action. 3.9. Strengthen the development of management and leadership skills in higher education by making relevant modules and subjects more accessible and enhancing collaboration with businesses.
Promoting adult learning opportunities to strengthen management and leadership skills	3.10. Ensure the availability of relevant and flexible learning opportunities for different types of managers by assessing and filling gaps in the current provision and promoting online learning. 3.11. Enhance the willingness of managers to participate in learning through targeted awareness raising, information on the training offer, recognition of prior learning and financial support.
Opportunity 3: Empowering and engaging the workforce to make better use of their skills	
Empowering and engaging employees in the business sector	3.12. Encourage businesses to effectively engage and empower employees by promoting the adoption of advanced HR practices and people management approaches, pay systems and practices for job mobility. 3.13. Facilitate the active engagement of employees in workplaces by ensuring that employees have the capacity and motivation to be involved.
Empowering and engaging employees in the public sector	3.14. Continue to strengthen workplace and HR practices in the public sector through the broad adoption of good practices across the public sector and by building on the new Law on the Civil Service. 3.15. Build a culture of lifelong learning in public sector organisations by adopting a more long-term, strategic approach to skills development and by strengthening learning opportunities.

References

Adlyte, R., L. Valanciene and R. Krusinskas (2015), "Investment to technologies strengths and weaknesses: Lithuania in the context of EU", *Journal of Economics, Business and Management*, Vol. 3/6, pp. 633-638, https://pdfs.semanticscholar.org/b5b3/74841156e187812d4eb4f0982983ecae6d75.pdf. [29]

Alasoini, T. (2016), *Workplace Development Programmes as Institutional Entrepreneurs: Why They Produce Change and Why They Do Not*, Aalto University Helsinki. [40]

Alfaro, L. and M. Chen (2013), *Market Reallocation and Knowledge Spillover: The Gains from Multinational Production*, George Washington University, http://www.gwu.edu/~iiep. [51]

BIS (2015), "Leadership and Management Skills in SMEs: Measuring Associations with Management Practices and Performance", No. 224, Department for Business, Innovation and Skills. [59]

Bloom, N. et al. (2019), *What Drives Differences in Management Practices?*, American Economic Association, http://dx.doi.org/10.1257/aer.20170491. [56]

Business Finland (2020), *Business Finland website*, https://www.businessfinland.fi/en/. [45]

Cedefop (2014), *Skills Panorama: Skills Obsolescence*, https://skillspanorama.cedefop.europa.eu/en/indicators/skills-obsolescence. [20]

EACEA National Policies Platform (2018), *Development of Entrepreneurship Competence: Lithuania*, https://eacea.ec.europa.eu/national-policies/en/content/youthwiki/38-development-entrepreneurship-competence-lithuania (accessed on 19 June 2020). [64]

Eurofound (2020), *European Company Survey 2019*, https://www.eurofound.europa.eu/surveys/european-company-surveys. [23]

Eurofound (2020), *Living, Working and COVID-19 Data*, https://www.eurofound.europa.eu/nl/data/covid-19 (accessed on 29 June 2020). [12]

Eurofound (2019), *European Working Conditions Survey (EWCS) 2015*, https://www.eurofound.europa.eu/data/european-working-conditions-survey?locale=EN&dataSource=EWCS2016&media=png&width=740&question=y15_Q88&plot=euBars&countryGroup=linear&subset=agecat_3&subsetValue=All (accessed on 29 April 2019). [19]

European Commission (2020), *Digital Innovation Hubs (DIHs) in Europe*, https://ec.europa.eu/digital-single-market/en/digital-innovation-hubs (accessed on 29 June 2020). [39]

European Commission, EACEA and Eurydice (2016), *Entrepreneurship Education at School in Europe*, Publications Office of the European Union, Luxembourg, http://dx.doi.org/10.2797/875134. [66]

Eurostat (2021), *Mean hourly earnings by sex, age and economic activity*, https://ec.europa.eu/eurostat/databrowser/view/earn_ses18_13/ (accessed on 24 February 2021). [33]

Eurostat (2020), *Enterprises that provided training to develop/upgrade ICT skills of their personnel*, http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=isoc_ske_ittn2&lang=en (accessed on 29 April 2020). [34]

Eurostat (2020), *Participation rate in education and training (last 4 weeks) by sex, age and NACE Rev. 2 activity (trng_lfs_08b)*, https://ec.europa.eu/eurostat/databrowser/view/TRNG_LFS_08B__custom_266220/default/table?lang=en (accessed on 12 August 2019). [84]

Eurostat (2020), *Participation rate in education and training (last 4 weeks) by sex, age and occupation*, https://ec.europa.eu/eurostat/databrowser/view/TRNG_LFS_04__custom_265968/default/table?lang=en (accessed on 25 November 2020). [71]

Eurostat (2019), *European ICT usage surveys: ICT usage in enterprises*, https://ec.europa.eu/eurostat/cache/metadata/en/isoc_e_esms.htm (accessed on 27 March 2019). [35]

Eurostat (2019), *Individuals' level of digital skills*, https://ec.europa.eu/eurostat/web/products-datasets/-/isoc_sk_dskl_i (accessed on 13 September 2019). [21]

GEM Consortium (2014), *Global Entrepreneurship Monitor: Lithuania*, https://www.gemconsortium.org/economy-profiles/lithuania-2. [60]

Government of the Republic of Lithuania (2020), *National Plan for Progress 2021-2030 (Nacionalinis pažangos planas, NPP)*, https://www.esinvesticijos.lt/uploads/main/documents/files/Post%202020/2_%20LRVK_NPP.pdf. [15]

Government of the Republic of Lithuania (2020), *OECD Skills Strategy for Lithuania Questionnaire*. [17]

Government of the Republic of Lithuania (2012), *Lithuania's Progress Strategy Lithuania 2030 (Lietuva 2030)*, https://e-seimas.lrs.lt/rs/lasupplement/TAP/TAIS.423800/45a6c4cce8a3835f3c3f3b4625587aff/format/ISO_PDF/. [13]

Invest Lithuania (2020), *Fintech Landscape in Lithuania Report 2019-2020*, https://investlithuania.com/downloads/research/all-sectors/. [53]

Invest Lithuania (2020), *Global Business Services in Lithuania*, https://investlithuania.com/key-sectors/gbs/ (accessed on 29 June 2020). [50]

Invest Lithuania (2020), *Lietuvos ekonomikos transformacija: 4 strateginės kryptys [Lithuania Economy Transformation: 4 Strategic directions]*, https://www.investlithuania.com/wp-content/uploads/Lietuvos-ekonomikos-transformacija-2020.pdf (accessed on 20 November 2020). [36]

Investors in People (2020), *Investors in People website*, https://www.investorsinpeople.com/ (accessed on 17 November 2019). [82]

J-Good Tech (2019), *J-Good Tech website*, https://jgoodtech.jp/pub/ja/ (accessed on 19 September 2019). [54]

Junior Achievement Lithuania (2020), *Junior Achievement Lithuania website*, https://lja.lt/ (accessed on 24 November 2020). [69]

Kato, S., V. Muros and T. Weko (2020), "The emergence of alternative credentials", *OECD Education Working Papers*, No. 216, OECD, Paris, https://doi.org/10.1787/b741f39e-en (accessed on 14 November 2020). [75]

Kshirsagar, A. et al. (2020), *Adapting Workplace Learning in the Time of Coronavirus*, McKinsey, https://www.mckinsey.com/business-functions/mckinsey-accelerate/our-insights/adapting-workplace-learning-in-the-time-of-coronavirus. [73]

Macionytė, A. (2020), *Factors of Team Member's Work Engagement in Traditional and Agile IT Projects in the International Financial Organisation*, Vilnius University Business School. [78]

Ministry of Economy and Innovation (2019), *Lithuanian Industry Digitisation Roadmap 2019-2030*, https://industrie40.lt/wp-content/uploads/2019/03/Lithuanian-Industry-Digitisation-Roadmap-2019-2030_final.pdf. [28]

Ministry of Finance (2020), *Draft Programme for the EU funds' Investments in 2021-2027*. [38]

Ministry of Finance (Forthcoming), *Draft Lithuanian Programme 2021-2027*. [16]

Ministry of Social Security and Labour (2020), *Public Opinion Survey on the Corporate Social Responsibility*. [24]

Ministry of the Economy and Innovation (2020), *Innovation Networks*, http://eimin.lrv.lt/en/sector-activities/innovation/innovation-networks (accessed on 29 June 2020). [46]

Ministry of the Economy and Innovation (2020), *Innovation Support Infrastructure*, http://eimin.lrv.lt/en/sector-activities/innovation/innovation-support-infrastructure (accessed on 29 June 2020). [49]

Ministry of the Interior, Strata (2020), *Viešojo Sektoriaus Ataskaita 2016–2019 [Public Sector Report 2016-2019]*, https://strata.gov.lt/images/tyrimai/2020-metai/geresnis-valdymas/202009_viesojo_sektoriaus_ataskaita.pdf (accessed on 14 November 2020). [83]

MITA (2020), *InoLink*, Science, Innovation and Technology Agency (MITA), https://mita.lrv.lt/en/projects/inolink (accessed on 29 June 2020). [48]

MITA (2019), *Lietuvos klasterizacijos studija 2019 [Lithuanian Clustering Study 2019]*, http://klaster.lt/wp-content/uploads/2020/01/Klasterizacijos-studija_2019.pdf (accessed on 19 January 2021). [47]

National Productivity Board (2019), *Lithuania's Labour Productivity Assessment*, http://eimin.lrv.lt/en/sector-activities/business-environment/lithuanias-labour-productivity-assessment-national-productivity-board. [30]

Nedelkoska, L. and G. Quintini (2018), "Automation, skills use and training", *OECD Social, Employment and Migration Working Papers*, No. 202, OECD Publishing, Paris, https://dx.doi.org/10.1787/2e2f4eea-en. [10]

NICS (2018), *NICS People Strategy 2018 - 21*, Northern Ireland Civil Service (NICS), https://www.finance-ni.gov.uk/publications/nics-people-strategy-2018-21 (accessed on 11 December 2019). [85]

OECD (2020), *Employment by activities and status (ALFS)*, https://stats.oecd.org/viewhtml.aspx?datasetcode=ALFS_EMP&lang=en (accessed on 29 June 2020). [27]

OECD (2020), *Enterprises by business size* (indicator), https://dx.doi.org/10.1787/31d5eeaf-en (accessed on 29 June 2020). [22]

OECD (2020), *FDI restrictiveness* (indicator), https://dx.doi.org/10.1787/c176b7fa-en (accessed on 29 June 2020). [31]

OECD (2020), *FDI stocks* (indicator), https://dx.doi.org/10.1787/80eca1f9-en (accessed on 19 November 2020). [32]

OECD (2020), *OECD Economic Surveys: Lithuania 2020*, OECD Publishing, Paris, https://dx.doi.org/10.1787/62663b1d-en. [11]

OECD (2020), *Productivity Gains from Teleworking in the Post COVID-19 Era: How Can Public Policies Make it Happen?*, OECD, Paris, http://www.oecd.org/coronavirus/policy-responses/productivity-gains-from-teleworking-in-the-post-covid-19-era-a5d52e99/. [25]

OECD (2020), *Tertiary graduates by field (indicator)*, https://doi.org/10.1787/9af26c71-en (accessed on 24 November 2020). [67]

OECD (2020), *The Potential of Online Learning for Adults: Early Lessons from the COVID-19 Crisis*, OECD Publishing, Paris, https://www.oecd.org/coronavirus/policy-responses/the-potential-of-online-learning-for-adults-early-lessons-from-the-covid-19-crisis-ee040002/ (accessed on 14 November 2020). [74]

OECD (2019), *OECD Economic Surveys: Slovak Republic 2019*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-svk-2019-en. [52]

OECD (2019), *OECD Skills Outlook 2019 : Thriving in a Digital World*, OECD Publishing, Paris, https://dx.doi.org/10.1787/df80bc12-en. [72]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264313835-en. [1]

OECD (2019), *Skills Matter: Additional Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/1f029d8f-en. [4]

OECD (2019), *SME and Entrepreneurship Policy in Ireland*, OECD Studies on SMEs and Entrepreneurship, OECD Publishing, Paris, https://dx.doi.org/10.1787/e726f46d-en. [44]

OECD (2019), *Survey of Adults Skills (PIAAC) (2012, 2015, 2019) (database)*, http://www.oecd.org/skills/piaac/ (accessed on 25 February 2019). [18]

OECD (2018), *Leveraging Business Development Services for SME Productivity Growth: International Experience and Implications for United Kingdom Policy*, OECD, http://www.oecd.org/industry/smes/Final%20Draft%20Report_V11.pdf. [41]

OECD (2018), *OECD Economic Surveys: Lithuania 2018*, OECD Publishing, Paris, https://dx.doi.org/10.1787/eco_surveys-ltu-2018-en. [37]

OECD (2018), *OECD Reviews of Labour Market and Social Policies: Lithuania*, OECD Reviews of Labour Market and Social Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264189935-en. [80]

OECD (2017), *Employment Implications of Green Growth: Linking Jobs, Growth and Green Policies*, OECD, Paris, https://www.oecd.org/environment/Employment-Implications-of-Green-Growth-OECD-Report-G7-Environment-Ministers.pdf (accessed on 14 November 2020). [9]

OECD (2017), *OECD Skills Outlook 2017: Skills and Global Value Chains*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264273351-en. [8]

OECD (2016), *Skills Matter: Further Results from the Survey of Adult Skills*, OECD Skills Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264258051-en. [2]

OECD (2015), *Entrepreneurship in Education: What, Why, When, How*, Entrepreneurship360 Background Paper, https://www.oecd.org/cfe/leed/BGP_Entrepreneurship-in-Education.pdf. [63]

OECD (2014), "Overall Assessment and Recommendations", *in OECD Reviews of Innovation Policy: Netherlands 2014*, https://doi.org/10.1787/9789264213159-4-en (accessed on 24 November 2020). [55]

OECD (2011), *Skills for Innovation and Research*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264097490-en. [61]

OECD (2010), *The OECD Innovation Strategy: Getting a Head Start on Tomorrow*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264083479-en. [62]

OECD/ILO (2017), *Better Use of Skills in the Workplace: Why It Matters for Productivity and Local Jobs*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264281394-en. [3]

PARP (2019), *Polish Agency for Enterprise Development website*, Polish Agency for Enterprise Development, https://en.parp.gov.pl/ (accessed on 18 September 2019). [76]

Posthuma, R. et al. (2013), "A high performance work practices taxonomy: Integrating the literature and directing future research", *Journal of Management*, Vol. 39/5, pp. 1184-1220, http://dx.doi.org/10.1177/0149206313478184. [5]

Scottish Government (2020), *Scottish Business Pledge*, https://scottishbusinesspledge.scot/ (accessed on 2 April 2020). [79]

Seimas of the Republic of Lithuania (2020), *Lietuvos Respublikos regioninės plėtros įstatymo Nr. VIII-1889 pakeitimo įstatymas*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ab78cdf0b15c11ea9a12d0dada3ca61b?jfwid=-sdmh1t6jf. [42]

Seimas of the Republic of Lithuania (2020), *Nutarimas Dėl Lietuvos Respublikos Vyriausybės programos [Ruling on the Program of the Government of the Republic of Lithuania]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAP/3955e800388111eb8c97e01ffe050e1c. [14]

Seimas of the Republic of Lithuania (2013), *Dėl Valstybinės švietimo 2013-2022 metų strategijos patvirtinimo [Lithuanian National Education Strategy 2013–2022]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/TAIS.463390. [65]

Skillnet Ireland (2019), *Skillnet Ireland website*, https://www.skillnetireland.ie/ (accessed on 19 September 2019). [77]

Spinter Research (2020), *Tyrimo Rezultatai Atskleide Priezastis [Result of survey on reasons for returning]*, https://spinter.lt/site/lt/vidinis_noslide/menutop/9/home/publish/MTMwODs5Ozsw. [26]

State Labour Inspectorate (2020), *Profesinių sąjungų ir darbdavių bendradarbiavimo modelis vystant socialinį dialoga [Pattern of Cooperation between Trade Unions and Employers through Social Dialogue]*, https://www.vdi.lt/Forms/Tekstas1.aspx?Tekstai_ID=1091 (accessed on 24 November 2020). [81]

Strata (2020), *Overview of Lithuanian Innovation Ecosystem [Lietuvos inovacijų ekosistemos apžvalga]*, https://osp.stat.gov.lt/services-portlet/pub-edition-file?id=34380. [43]

Sung, J. and D. Ashton (2006), *High Performance Work Practices: Linking Strategy and Skills to Performance Outcomes*, DTI in association with CIPD, https://www.longwoods.com/articles/images/High%20Performance%20Work%20Practices_UKReport2011.pdf (accessed on 5 July 2019). [7]

UKCES (2014), *The Labour Market Story: Skills Use at Work*, UK Commission for Employment and Skills, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/343457/The_Labour_Market_Story-_Skills_Use_at_Work.pdf (accessed on 25 May 2018). [57]

UKCES (2009), *High Performance Working: A Synthesis of Key Literature*, UK Commission for Employment and Skills, Wath-upon-Dearne, http://dera.ioe.ac.uk/id/eprint/9239. [6]

University of Cambridge (2020), *EnterpriseTECH website*, https://www.jbs.cam.ac.uk/entrepreneurship/programmes/enterprisetech/. [70]

Vaiginienė, E. et al. (2018), “Management and leadership development needs: The case of Lithuania”, *Business and Society*, pp. 115-135, https://link.springer.com/chapter/10.1007/978-3-319-78855-5_7. [68]

World Economic Forum (2019), *The Global Competitiveness Report 2019*, http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf. [58]

5 Strengthening the governance of skills policies in Lithuania

Effective governance arrangements are enabling conditions for improving Lithuania's performance in developing and using people's skills. They facilitate co-ordination across the whole-of-government, support the effective engagement of stakeholders, and enable the development of integrated information systems and co-ordinated skills financing arrangements. This chapter reviews current practices and the performance of Lithuania's skills governance. It then explores three opportunities to strengthen the governance of Lithuania's skills policies: 1) increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system; 2) enhancing skills information and career guidance systems and practices; and 3) ensuring well-targeted, sustainable and shared funding of Lithuania's skills policies.

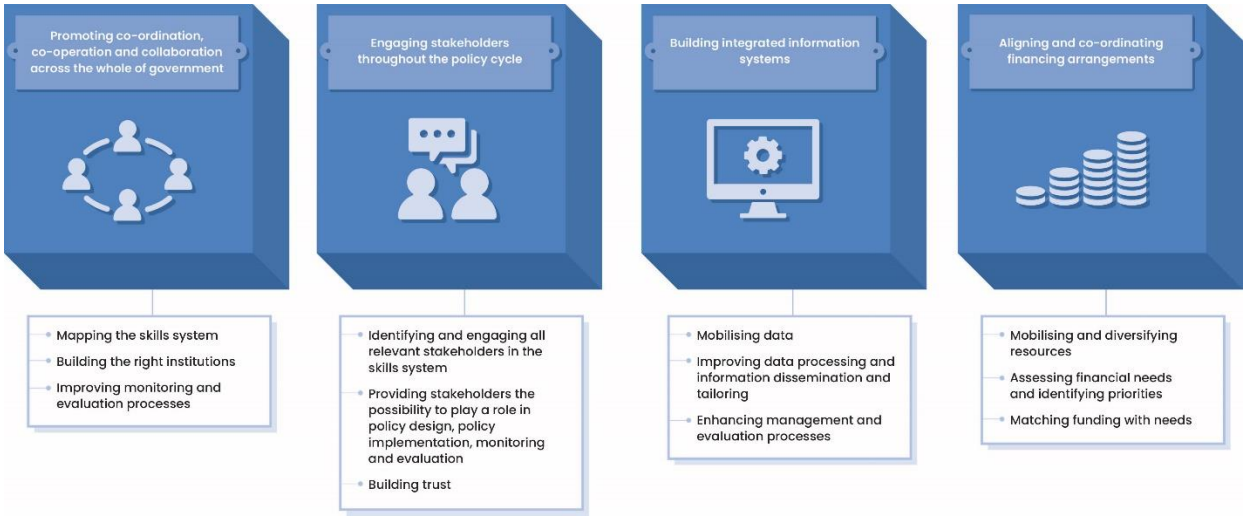
The importance of strengthening the governance of Lithuania's skills system

Well-functioning governance arrangements are essential for effective skills policies and to create an economically, socially and financially sustainable skills system. Policies designed to equip young people with skills for work and life, raise adults' and enterprises' participation in learning, and use people's skills more effectively in workplaces require supportive governance arrangements to achieve their full potential impacts. The importance of well-functioning governance arrangements is highlighted in Lithuania's National Plan for Progress (NPP) 2021-2030, which aims to increase the efficiency and quality of public administration and publicly provided services. In addition, the Progress Strategy "Lithuania 2030" has identified creating "smart governance" arrangements as a priority. Achieving short-term skills policy goals, such as responding to the economic crisis resulting from the COVID-19 (coronavirus) pandemic, requires strong governance arrangements. However, setting-up well-functioning skills governance arrangements can be challenging.

Governance structures for skills policies are complex as they involve a wide variety of actors in the provision, financing, reform and day-to-day administration of skills policies. These actors range from different levels of government to stakeholders such as employers and their associations, employees and trade unions, experts and researchers, non-governmental organisations (NGOs), education and training providers, and students. In addition, skills policies lie at the intersection of more "traditional" policy fields and so implicate ministries responsible for education, labour market, innovation, industrial and other policy domains. Furthermore, skills policies are designed in the context of uncertainty and change, especially in the face of rapid technological change, globalisation, demographic and climate change, and more recently the COVID-19 pandemic. These trends continue to spur structural economic change (e.g. automation, boosting online trade and business practices, increased domestic business and tourism), which can have consequences for skill needs.

In order to tackle these complex dynamics, the OECD Skills Strategy (OECD, 2019[1]) identifies four pillars on which well-functioning skills governance arrangements are built (Figure 5.1).

Figure 5.1. The four pillars for strengthening the governance of skills policies



Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://doi.org/10.1787/9789264313835-en.

The first pillar emphasises the importance of co-ordination across the whole of government ("whole-of-government approach"). This includes "vertical" co-ordination between different levels of government (such as the municipal level, the county level and the central government), as well as "horizontal" co-ordination between different ministries of government that are either directly responsible for skills policy or have an impact on skills policies, such as via funding arrangements (i.e. Ministry of Finance). The second pillar emphasises the importance of stakeholder engagement in skills policies. These non-governmental stakeholders include employers and their associations, trade unions, education and training providers, students, and civil society. Engagement can range from opportunities for these stakeholders to voice their concerns to a more wide-reaching delegation of governance tasks. The third pillar notes that integrated information systems on skills needs and outcomes are necessary to cope with the inherent complexity and uncertainty present in skills policy. Such systems help government and individuals, as well as associated stakeholders, to make informed decisions, which leads to better outcomes. The final pillar underscores the necessity of aligning and co-ordinating financing arrangements within skills policy. This includes the need to respond to financial challenges, such as the potential reallocation of funding commitments across different sectors of the skills system, dedicated funding commitments for strategic goals, and making the most efficient use of external funding (e.g. the European Social Fund).

These four pillars (OECD, 2019[1]) can be seen as enabling conditions for the other three priority areas discussed in this report. For example, without integrated skills information systems informing the supply of and demand for learning programmes, youth and adults may not develop the skills most in need in work and life, which could perpetuate skills imbalances. Similarly, without sufficient stakeholder engagement, policies aimed at young individuals, adults and improving skills use in the workplace might not be sufficiently tailored to the diverse needs of employers in Lithuania. Without co-ordination across the whole of government, different ministries' policies aimed at expanding adult learning and improving workplace practices may result in policy overlaps and gaps that lead to an inadequate and inefficient use of financial resources. Finally, without sustainable funding arrangements, policies in all priority areas might be discontinued before their full-potential can be realised.

This chapter will first provide an overview of Lithuania's skills governance system and performance. It will then identify opportunities that can help Lithuania to strengthen the governance of its skills system, based on desk research and discussions with officials and stakeholders consulted during this skills strategy project (project participants).

Overview and performance of Lithuania's skills governance

Overview of Lithuania's skills governance

Governance arrangements in skills policies are not only inherently complex, but also differ greatly between locations, depending on historical, cultural and socio-economic factors (Thelen, 2004[2]). Consequently, when learning from international practice it is essential for Lithuania to take its own historical and institutional context into account, as "one-size-fits-all" approaches for strengthening the governance of skills systems can be inadequate (OECD, 2019[3]). Lithuania is often considered as having a "transitional" skills system (Le Deist and Tutlys, 2012[4]) that has moved away from its soviet heritage after independence. On the one hand, this transitional system incorporates elements of a "liberal" (Anglo-American) tradition, characterised by the importance placed on general as opposed to vocational education, and relatively high tuition fees in higher education (HE) for around one third of all students (Ilkevičiūtė, 2020[5]). On the other hand, these elements have been combined with more "co-ordinated" continental European characteristics since its accession to the European Union (EU). This first and foremost includes promoting stakeholder engagement through institutionalised mechanisms of "social partnership" (Kaminskienė, 2009[6]).

Governance structure of Lithuania's skills system

Today, the state still plays an important role in the governance of Lithuania's skills system, both in general and vocational education. Only around 3% of all pupils across all school types in Lithuania are enrolled in private schools (Shewbridge et al., 2016[7]). In the governance of the skills system, a variety of governmental and non-governmental stakeholders seek to co-operate, as responsibilities are widely distributed across different ministries, municipalities, educational providers, and various stakeholder engagement bodies involving social partners and civil society.

At the national level, the Government Strategic Analysis Center (STRATA), four ministries and their various semi-autonomous bodies co-ordinate the governance of Lithuania's skill system. These include the Ministry of Education, Science and Sport (SMSM) and its various semi-autonomous bodies (National Agency for Education, Qualifications and Vocational Training Development Centre [KPMPC], Centre for Quality Assessment in Higher Education [SKVC], Education Exchanges Support Foundation), the Ministry of Social Security and Labour (SADM), the Ministry of the Economy and Innovation (EIM), and the Ministry of the Interior (VRM) (Table 5.1).

Table 5.1. Main high-level governmental actors in skills policy in Lithuania

Department name	Function (with regard to skills)
Ministry of Education, Science and Sport (SMSM)	• Co-ordination of policy implementation and distribution of school funding with municipalities. • Lead responsibility for vocational education and training (VET) schools. • Regulation of universities and colleges. • Lead responsibility for developing the lifelong learning system and non-formal education (in co-ordination with other ministries). • Responsibility for the National Agency for Education for general education, the Qualification and Vocational Training Development Centre, the Centre for Quality Assessment in Higher Education, and the Education Exchanges Support Foundation with a focus on lifelong learning and Erasmus+.
Ministry of Social Security and Labour (SADM)	• Regulation of active labour market policy (ALMP) for the unemployed and employed of all age groups (e.g. non-formal education, upskilling programmes, apprenticeships). • Management of the Lithuanian Employment Service (implements ALMPs, monitors the national and regional labour market). • Management of the Department of Youth Affairs.
Ministry of the Economy and Innovation (EIM)	• Responsibility for enterprise support. • Responsibility for human resource development policy for the working population (including apprenticeships). • Partial responsibility for Lithuanian qualifications system (implementation, development, assessment of competences).
Ministry of the Interior (VRM)	• Responsibility for migration policy and regional development policy, which includes skills policy. • Responsibility for regional development councils (until 2020).
The Government Strategic Analysis Center (STRATA)	• Provision of information for evidence-informed decision making in the area of education, science, innovation and human resource policies to all ministries, municipalities and Government. • Provision of data collection, research and evaluation. Provision of statistical data and advice on strategic issues of skills policies.

Source: Ministry of Education, Science and Sport (2021[8]), *Ministry of Education, Science and Sport website*, https://www.smm.lt/web/en/; Ministry of Social Security and Labour (2021[9]), *Ministry of Social Security and Labour website*, https://socmin.lrv.lt/en/; Government of the Republic of Lithuania (2021[10]), *Nutarimas Dėl Lietuvos Respublikos ūkio ministerijos nuostatų patvirtinimo*, https://www.e-tar.lt/portal/lt/legalAct/TAR.3CE5C3AA17FB/asr; Ministry of the Interior (2021[11]), *Ministry of the Interior website*, https://vrm.lrv.lt/en/; STRATA (2021[12]), *Government Strategic Analysis Center website*, https://strata.gov.lt/en/; consultations with participants in the project.

In the governance of Lithuania's skills system, these actors at the national level also have to co-ordinate with various subnational and non-governmental stakeholders, with whom they partially share responsibilities for skills polices. Since independence, Lithuania has decentralised its skills system to some extent, handing over certain responsibilities to municipalities and counties (Table 5.2). Educational providers also enjoy a certain autonomy in Lithuania, albeit to varying degrees depending on the specific type of educational provider. General education schools, together with their founder (mostly municipalities), are responsible for the quality of education and have competences regarding teacher management (e.g. teacher salaries, appointment, promotion and dismissal), curriculum policies and the assessment of student learning (no external moderation of grading) (Shewbridge et al., 2016[7]). The autonomy of (upper-secondary level) vocational education and training (VET) schools and (tertiary-level) HE institutions has changed in recent years. In contrast to general education, VET schools are subject to the external assessment of student learning by accredited institutions (see further below) (OECD, 2017[13]). All VET schools have had "public entity" (*Viešosios įstaigos*) status since 2019, which gives them greater flexibility in the management of finances and property. This means that VET schools are increasingly governed jointly with stakeholders (including regional and municipal governments, private employers and industry representatives), for example concerning the supervision and evaluation of study programmes or the organisation of student placements. Similar changes are also visible in universities and HE colleges. Changes to the Law on Higher Education and Research in 2009 and 2016, as well as the "public entity" status of HE colleges, has narrowed the responsibilities of the SMSM, expanded the self-regulation of HE institutions concerning personnel policies, financial management, fee-setting authority, and the capacity to introduce new study programmes, and included external stakeholders in their governance (OECD, 2017[13]). Tuition fees are also set by higher education institutions.

Table 5.2. Subnational levels of government responsible for skills policies

Subnational level of government	Function (with regard to skills)
Counties (10)	New Regional Development Act (1st September 2020) transforms regional development councils at the county level from an advisory body to a legal entity established by municipalities of a specific county. They are responsible for regional development policy, including the management of certain regional public service delivery systems, which cover the following responsibilities concerning education: • Approval of regional development plans. • EU-funded project selection. • Decisions on number of state-funded VET places. • Delegation of VET school council representatives. • Additional responsibilities might be transferred to the county level during the implementation of the new Regional Development Act.
Municipalities (60)	Responsibilities in the governance of general education schools: • Founders of primary and secondary schools. • Supervision of quality of education (jointly with schools). • Teacher management (jointly with schools). • Responsibility for long-term objectives of school development. • Organisation of local education councils.

Source: OECD (2017[13]), *Education in Lithuania. Reviews of National Policies for Education*, https://doi.org/10.1787/9789264281486-en; Seimas of the Republic of Lithuania (2020[14]), *Lietuvos Respublikos regioninės plėtros įstatymo Nr. VIII-1889 pakeitimo įstatymas*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ab78cdf0b15c11ea9a12d0dada3ca61b?jfwid=-sdmh1t6jf; Shrewbridge et al. (2016[7]), *Reviews of School Resources: Lithuania 2016*, https://doi.org/10.1787/24133841.

Lithuania has increasingly attempted to follow a more "co-ordinated" approach to stakeholder engagement in the governance, provision and funding of skills policies (Kaminskienė, 2009[6]). Beyond the involvement of stakeholders in the governance of learning providers (see above), ministries and semi-autonomous bodies either co-ordinate with stakeholder engagement bodies designed to establish mechanisms of "social partnership", or directly include stakeholders in various governance bodies. For example:

- The Tripartite Council (national level) advises the parliament and government on socio-economic and labour matters, and consequently skills policy. It includes representatives from employer associations, trade unions and government.
- The Education Council of Lithuania provides legal counsel and consultation on questions of national education and priority areas for funding to the parliament, government, the president, the SMSM, municipal institutions and education providers. It includes representatives from employer associations, educational providers, teacher unions and student organisations.
- Accredited competence assessment institutions (*kompetencijų vertinimo įInstitucijos*) are responsible for student assessment in some sectors of VET. They include industry representatives (e.g. chambers, associations, public training centres) (OECD, 2018[15]; Cedefop, 2014[16]). Sectoral professional committees co-ordinate strategic issues of VET and the Lithuanian qualifications system in specific sectors.
- In regional development councils, stakeholders (social and economic partners, civil society) have been included in recent years (National Regional Development Council, 2017[17]). In this process, tripartite vocational training councils (*Lietuvos profesinio mokymo tarybos*) responsible for strategic issues and co-ordination in VET were dissolved, with some tasks taken over by regional development councils.
- Other issue-specific advisory councils include the National Youth Council and the Youth Research Network, the Higher Education Council, the Science, Technology and Innovation Council, the Human Resources Working Group of the National Platform Industry 4.0, and the SME council.

Information systems

In 2017, Lithuania began to restructure and transform the Research and Higher Education Monitoring and Analysis Centre (MOSTA, previously located at the SMSM) into a new Government Strategic Analysis Center (STRATA), which is directly subordinate to the government. STRATA now fulfils general functions regarding evidence-informed policy making across all policy fields, as well as several tasks exclusive to the field of skills policy (OECD, forthcoming[18]). First, its general function is to provide the government and all ministries and municipalities with support regarding evidence-informed policy making, including advice, methodological guidance and support (in particular for more sophisticated data analysis), analytical support (e.g. analytical support to individual ministries as required), and the quality assurance of *ex ante* and *ex post* evaluations. It also offers support in the preparation, implementation, monitoring and evaluation of high-level planning documents (e.g. State Progress Strategy, National Progress Plan). Second, with regard to skills policy in particular, it provides all ministries with the information needed for evidence-informed decision making in the areas of education, science, innovation and human resource policies. The functions that STRATA retained from MOSTA's historic mandate include providing strategic advice, collecting data from other primary sources for analysis, performing research and evaluation, partially collecting own primary data as part of specific surveys, and distributing data and analysis to individual ministries.

In 2016, Lithuania introduced its National Monitoring of Human Resources system (*Nacionalinė žmogiškųjų išteklių stebėsena*, NŽIS), which aims to integrate all available data on individuals from different information systems, in particular administrative data, into one platform. It includes data on the qualifications and education of individuals, their professions and wages, their employers, and other demographic and socio-economic variables. All state authorities are obliged by law to use the results of the system in decision making in the fields of labour market, education and human resource development.

An inter-institutional commission, composed of vice-ministerial level representatives of the SMSM, SADM, EIM, VRM, the Office of the Government and STRATA, co-ordinates the implementation and organisation of the NŽIS and aims to create a culture of evidence-informed decision making. Various other individual datasets and skills assessment and forecasting reports exist, but not all are integrated into the NŽIS. For example, research on human resources of foreign capital, innovative and exporting companies; the Educational Supply Forecasting Research Report; "group reviews of study fields" that provide information on student numbers, study and labour market performance; the overview of the Lithuanian innovation ecosystem; and labour market statistics from the employment service on participation in active labour market policy (ALMP) are excluded.

Concerning information and guidance for the career choices of individuals, career guidance in Lithuania is the responsibility of three different ministries. The SMSM is responsible for career guidance policy for pupils, HE students and adults (euroguidance, 2020[19]). As noted in Opportunity 2, career guidance is provided in VET and general education schools by staff members, mostly teachers and psychologists, only rarely via full-time positions of career counsellors and co-ordinators. VET schools also provide vocational guidance with respect to the choice of vocational study. Most higher education institutions have career centres. The SADM (and consequently the public employment service, PES) is responsible for career guidance policy related to jobseekers (adults as well as youth) (euroguidance, 2020[19]). The EIM organizes the dissemination of results from future skills needs forecasts.

Funding arrangements

While municipal governments are the main final purchaser of educational services in Lithuania, the initial source of funding is mostly the central government (OECD, 2020[20]), as municipalities have only limited taxation powers. In 2018, school funding was adapted with the introduction of the "class basket" scheme, which aims to better take into account that teaching costs for schools are dependent on the number of classes schools have, and not necessarily on the number of students, which was the main determinant in the previous "student basket" funding model (OECD, 2017[13]). According to the new formula, 80% of funding is now allocated according to the number of classes and class size, and a smaller part is calculated according to the number of pupils (Eurydice, 2019[21]). Furthermore, specific variants of a "student basket" funding scheme are applied to early childhood education and care (ECEC), higher education, and non-formal learning (OECD, 2017[13]). This assigns a certain value per student, and consequently allocates funds largely according to the number of students, with municipalities partially being able to supplement funding depending on educational sector. Lithuania also relies heavily on external funding, most notably European Union structural funds. This is particularly visible in apprenticeship schemes (Cedefop, 2015[22]) and ALMP (OECD, 2018[15]). According to participants in this project, the European Social Fund (ESF) also funds the creation of new information systems on current and future skills needs for individuals (e.g. career counselling) and for policy makers (e.g. data and analytics).

In Lithuania, individuals contribute via general taxation to the funding of the skills system, and via tuition fees in tertiary education. While household expenditure on primary to non-tertiary post-secondary training is below the OECD average, household expenditure on tertiary education is above the OECD average (OECD, 2020[20]). The government offers state-funded HE places without tuition fees to higher achieving graduates of gymnasia and VET schools, but those who do not meet these criteria or go to private universities have to pay relatively high tuition fees. While the share of students paying tuition fees has been decreasing in recent years and is currently around 30%, the level of the fees have been increasing (Ilkevičiūtė, 2020[5]). Tuition fees are particularly high in private HE, although only around 9% of students are enrolled in such institutions, which is below the OECD average of 20-30%, depending on the specific definition used (OECD, 2020[20]). There is also a relatively high level of private tutoring used to secure higher levels of attainment in *matura* examinations, with over 50% of students in the final year of secondary level schooling using private tutoring (Shewbridge et al., 2016[7]). Employer contributions to the development of skills can be considered low to average. Non-household, private expenditure on education,

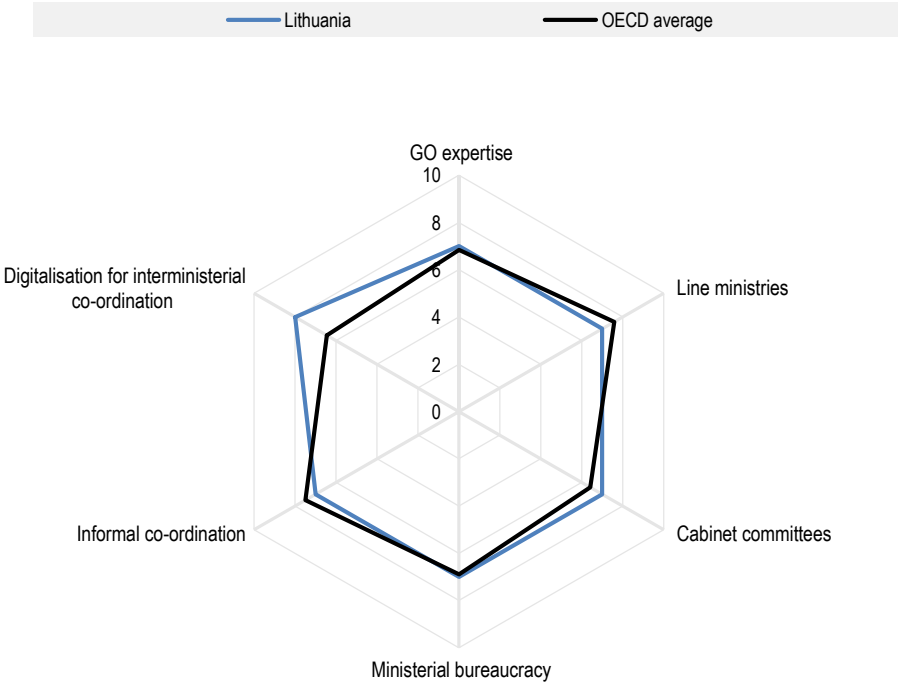
which includes firm and NGO expenditure, is around the OECD average from primary to post-secondary non-tertiary education, and below average for tertiary education (OECD, 2020[20]). Participation in shared school- and work-based programmes is very low (Cedefop, 2015[22]). Concerning the percentage of firms with a specific person or unit responsible for organising adult education and training, or with a training plan or budget including adult education and training, Lithuania is below the EU average (Eurostat, 2015[23]), indicating comparatively weak employer contributions to skill formation.

Lithuania's performance

Whole-of-government co-ordination and stakeholder engagement

Horizontal co-ordination between the four ministries (SMSM, SADM, EIM, VRM) as well as the various semi-autonomous bodies active in skills policies, proves to be challenging in practice in Lithuania, despite the various co-ordination mechanisms in place. While not limited to skills policies, the Bertelsmann Foundation's 2019 Sustainable Governance Indicators (SGI) rates Lithuania's performance in inter-ministerial co-ordination as average (Figure 5.2). For example, co-ordination is found to be lacking beyond the planning phase, including in the implementation, monitoring and evaluation phases (Nakrošis, Vilpišauskas and Jahn, 2019[24]).

Figure 5.2. Lithuania's performance regarding inter-ministerial co-ordination



Note: 0 is lowest, 10 is highest rating. Government office expertise: Does the government office/prime minister's office (GO/PMO) have the expertise to evaluate ministerial draft bills substantively? Line ministries: To what extent do line ministries involve the GO/PMO in the preparation of policy proposals? Cabinet committees: How effectively do ministerial or cabinet committees co-ordinate cabinet proposals? Ministerial bureaucracy: How effectively do ministry officials/civil servants co-ordinate policy proposals? Informal co-ordination: How effectively do informal co-ordination mechanisms complement formal mechanisms of inter-ministerial co-ordination? Digitalisation for inter-ministerial co-ordination: How extensively and effectively are digital technologies used to support inter-ministerial co-ordination.
Source: Bertelsmann Stiftung (2019[25]), *Sustainable Governance Indicators*, https://www.sgi-network.org/2019/Governance.

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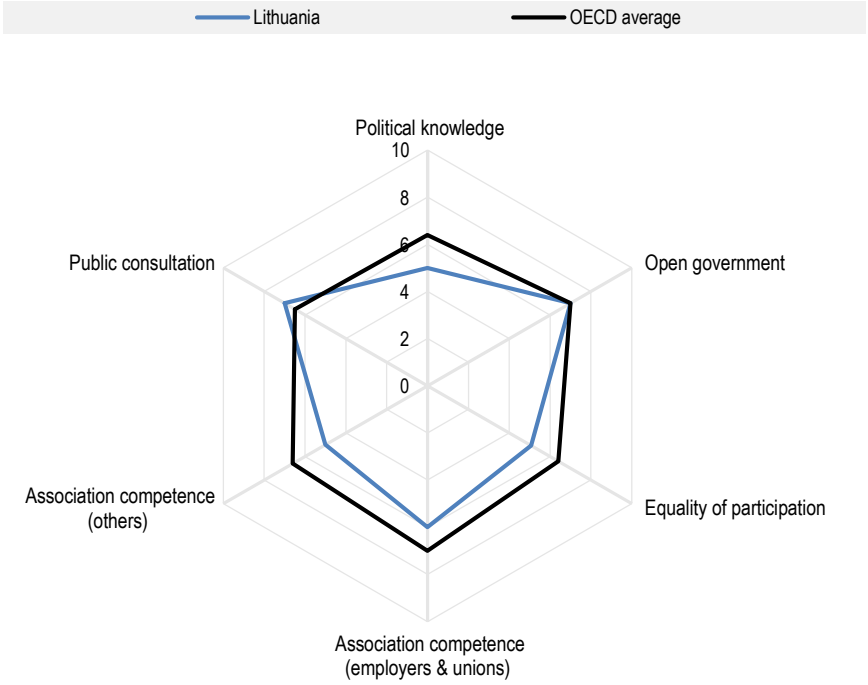
Despite improvements in inter-ministerial co-ordination in recent years (see Opportunity 1 below for details), participants in this project acknowledged limited co-ordination between ministries and a lack of clear responsibility for skills policies, leading to a very fragmented skills system. This fragmented skills system can be visible in apprenticeship policies and adult learning policies, with the different ministries separately implementing policies in these fields with a lack of shared goals and vision.

Concerning vertical co-ordination between the subnational level and central government, earlier reports (OECD, 2017[13]) identified a lack of supervision and guidance in the steering of the whole skills system from national and municipal institutions regarding educational providers (for details, see Opportunity 1). This was widely confirmed by participants in this project. In particular, the capacities of municipalities and regional development councils for self-management and the management of their education providers were said to be not fully developed (for details, see Opportunity 1).

Lithuania's recent attempts to improve stakeholder engagement in skills policy seems to be at least partially successful. The inclusion of external stakeholders (such as municipal governments, private employers and industry representatives) in the governance of educational providers due to the "public entity" status (*Viešosios įstaigos)* of HE colleges and VET schools was supported by various participants throughout the OECD's consultations. According to the SGI 2019, Lithuania scored slightly above average concerning government consultation with stakeholders (Figure 5.3) Ambitions to establish mechanisms of social partnership in skills policies at a national level were also acknowledged as beneficial by various participants in this project.

Figure 5.3. Lithuania's performance regarding stakeholder engagement



Note: 0 is lowest, 10 is highest rating. Public consultation: Does the government consult with economic and social actors in the course of policy preparation? Political knowledge: To what extent are citizens informed of public policies? Open government: Does the government publish data and information in a way that strengthens citizens' capacity to hold the government accountable? Equality of participation: What percentage of the people have voiced their opinion to a public official in the last month? Association competence: To what extent are economic interest associations (e.g. employers, industry, labour) capable of formulating relevant policies?
Source: Bertelsmann Stiftung (2019[25]), *Sustainable Governance Indicators*, https://www.sgi-network.org/2019/Governance.

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However, as described in detail in Opportunity 1, Lithuanian citizens and interest associations (employer associations, trade unions, NGOs) often do not seem to have sufficient capacity to effectively engage in policy making (Nakrošis, Vilpišauskas and Jahn, 2019[24]). This assessment was also supported by participants in this project with respect to skills policies. While most participants emphasised that there are formally many stakeholder engagement bodies aimed at engaging employer associations, trade unions and civil society in policy making, these bodies are not fully equipped to influence policy making. Participants in OECD consultations, as well as a report by Bertelsmann (Nakrošis, Vilpišauskas and Jahn, 2019[24]), suggest that this missing capacity is due to a lack of information and preparation time given to stakeholders, as well as a lack of stakeholder expertise in social partnership more generally. Participants also emphasised a lack of transparency and feedback on how stakeholder input is used in policy making.

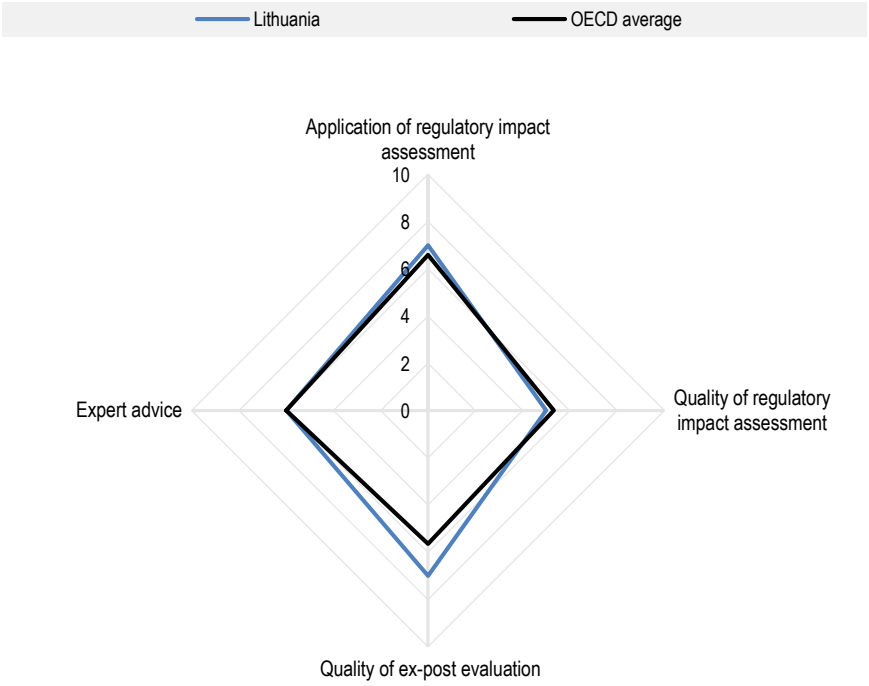
More recently, practices of stakeholder engagement in Lithuania have showed some elements of incoherence (for details, see Opportunity 1). Regional development councils, which can be expected to become more important during the implementation of the new Regional Development Act, include social and economic partners. However, while they include members of employers' associations, they do not include representatives of trade unions.[1] Furthermore, the Council of Non-formal Adult Education (*Suaugusiųjų švietimo taryba*) under the SMSM was introduced in 2014 to advise on the strategic direction of non-formal adult education and continuing learning in Lithuania. It was composed of representatives from state and municipal organisations, non-formal education providers and social partners. According to participants in this project, it became inactive as its members felt a lack of influence of their advice in policy making. Its dissolution ultimately led to missing leadership and guidance for co-ordinators at the municipal level.

Information systems

Lithuania has made substantial progress in the area of evidence-informed policy making and connected skills assessment and anticipation tools. For example, it set up NŽIS in 2016 and STRATA in 2019, which supply the government and ministries with data for evidence-informed policy making. However, most participants in this project still emphasised a lack of such evidence-informed policy making in Lithuania. The capacity and willingness of decision makers to actively use data was seen as a problem, and has led to low demand for evidence on the side of ministries (see Opportunity 2 for details). This feedback from stakeholders is also supported by a report by Bertelsmann (Nakrošis, Vilpišauskas and Jahn, 2019[24]). Participants related this to a lack of evidence that can effectively support policy making. For example, participants, as well as an OECD report (OECD, forthcoming[18]), emphasised that STRATA's mandate is too extensive, leading to limited capacity to supply the evidence needed to ministries. Furthermore, while Lithuania scores relatively well in the extent of the *ex post* evaluations it conducts across all policy fields (Figure 5.4.), in the area of skills policy these efforts were identified as unsystematic (see also Opportunity 3 for details).

Concerning information systems for guiding individuals' career choices, consultations with participants in this project indicated that not all individuals in Lithuania have equal access to career guidance. There seem to be discrepancies in the provision of career guidance services between schools, in particular across economically stronger and weaker regions, thereby limiting young people's access. Career guidance offerings for employed adults are limited, and for unemployed adults, career counsellors at the PES are often overburdened, which is reinforced by high unemployment due to the COVID-19 crisis (OECD, 2018[26]). Successful projects in further developing career guidance were often not continued due to a lack of funding, with new projects aimed at similar target groups being built in parallel, leading to cost inefficiencies.

Figure 5.4. Lithuania's performance regarding using evidence in policy making



Note: 0 is lowest, 10 is highest rating. Application of regulatory impact assessment: To what extent does the government assess the potential impacts of existing and prepared legal acts (regulatory impact assessments, RIA)? Quality of regulatory impact assessment: Does the RIA process ensure participation, transparency and quality evaluation? Quality of *ex post* evaluation: To what extent do government ministries regularly evaluate the effectiveness and/or efficiency of public policies and use results of evaluations for the revision of existing policies or development of new policies? Expert advice: Does the government regularly take into account advice from non-governmental experts during decision making?
Source: Bertelsmann Stiftung (2019[25]), *Sustainable Governance Indicators*, https://www.sgi-network.org/2019/Governance.

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Funding arrangements

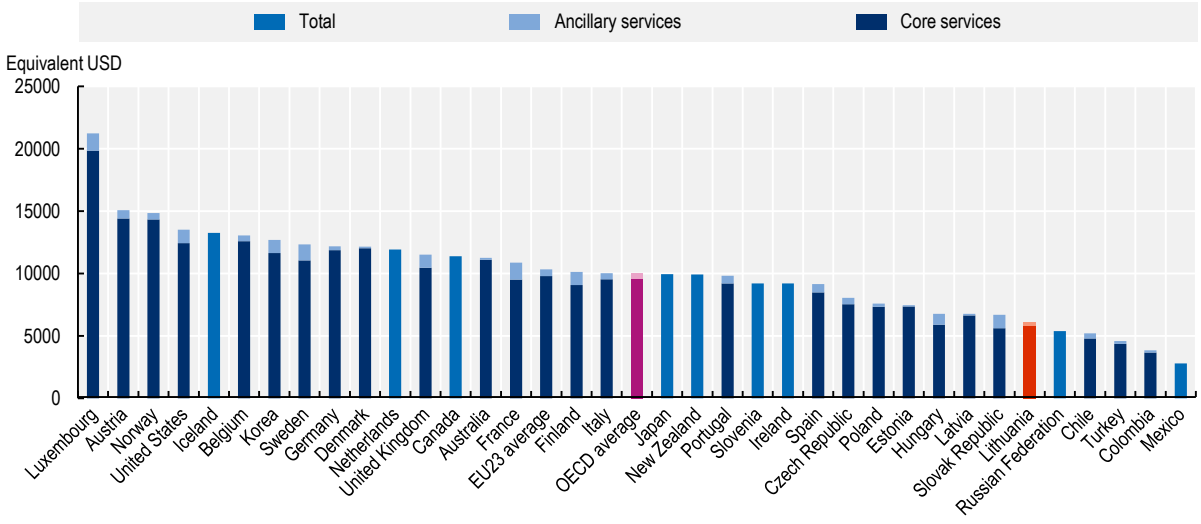
Public expenditure on skills development in Lithuania is relatively low by international standards. While expenditure per student, on average, has grown between 2012 and 2017, this is due to the number of students decreasing more quickly than total expenditure (OECD, 2020[20]). Funding for ALMP is also low by international comparison, and has typically been allocated in a pro-cyclical manner, leading to a decrease of funding per capita as the labour market situation worsened (OECD, 2018[26]). By international comparison, Lithuania's expenditure on education is very modest, both in terms of per student spending (Figure 5.5) and as measured in terms of GDP (Eurostat, 2020[27]). This reflects several factors, including relatively low teacher salaries in Lithuania, especially before 2019 (see Chapter 2), total educational expenditure declining with declining student numbers (unlike in most OECD countries), and declining expenditure per student in post-secondary non-tertiary and tertiary education (International Standard Classification of Education [ISCED] levels 4-8) (OECD, 2020[20]).

Low public spending on skills development could be partially offset by the well-targeted spending of available funds, as well as potential cost sharing between different stakeholders. For example, earlier reports (OECD, 2017[13]) emphasised that public secondary level and higher education institutions had one of the lowest student/teacher ratios in the OECD, largely due to demographic change. This points towards the possibility of redirecting at least some of these funds towards other skills priorities. Concerning cost sharing, efforts to increase employer participation in the funding of skills development, for example through

apprenticeships, have only shown very limited success (OECD, 2018[15]; Cedefop, 2015[22]). Furthermore, Lithuania's skills system is highly dependent on funding from the ESF. Participants in this project commented that this dependence raises problems for the continuity of programmes, consistent with findings from earlier OECD reports (OECD, 2018[15]; OECD, 2017[13]). Consequent challenges include the fact that institutional mechanisms of employer participation in dual apprenticeships cannot be set up in the short term, that funding for many projects is often discontinued after contributions from the ESF end, and that funding changes as ESF priorities change.

Figure 5.5. Primary, secondary and post-secondary non-tertiary expenditure on educational institutions per full-time equivalent student

By type of service (2017)



Note: Ancillary services are services provided by educational institutions that are peripheral to their main educational mission, mainly student welfare (meals, health services, transportation, etc.).
Source: OECD (2020[20]), *Education at a Glance 2020: OECD Indicators*, https://doi.org/10.1787/69096873-en.

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Opportunities to strengthen the governance of Lithuania's skills policies

Improving the governance of skills policies is crucial to ensure that these policies are effective, efficient and socially and financially sustainable. Three critical opportunities for improvement have been identified based on a review of literature, desktop analysis, and data and input from officials and stakeholders consulted in conduct of this project.

The OECD considers that Lithuania's main opportunities for improvement in the governance of skills policies are:

- Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system.
- Enhancing skills information and career guidance systems and practices.
- Ensuring well-targeted, sustainable and shared funding of Lithuania's skills system.

Opportunity 1: Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system

In well-functioning skills systems, all actors should have sufficient opportunity to co-ordinate, as responsibilities for skills policies are dispersed. First, this necessitates co-ordination at a national level between ministries and their various semi-autonomous bodies active in all sectors of skills policies. Skills policies should be guided by common goals and a shared vision across all relevant stakeholders and decision makers, and should be implemented and designed to be complementary, i.e. mutually reinforcing (OECD, 2019[3]), all of which could be improved in Lithuania. Individual ministries or semi-autonomous bodies should not pursue their own skills policies without co-ordination with other relevant ministries and governmental bodies, necessitating co-ordination across the "whole-of-government".

Second, co-operation between governmental and non-governmental actors, in particular social partners, is essential. Since its independence, Lithuania has invested substantial resources into building up a system of social partnership. This infrastructure should be leveraged in the future, as stakeholder engagement is more successful if it goes beyond ad hoc consultations towards the long-term institutionalisation of consultations (OECD, 2019[3]). Furthermore, well-functioning stakeholder engagement depends on stakeholders themselves perceiving their involvement as meaningful and consequential, which participants in the project described as partially lacking in Lithuania.

Finally, at a subnational level, governmental and non-governmental actors should have sufficient capacities to fulfil their responsibilities in policy making, including required personnel (and therefore also financial resources) and expertise (which also necessitates sufficient guidance from the central government). While decentralising decision-making power to subnational governments can help to respond to the unique needs of each region, the benefits of decentralisation in Lithuania will be only realised if the central government also equips subnational decision-making bodies with sufficient capacity to fulfil their respective responsibilities in the field of skills policies.

Strengthening strategic planning and oversight in the Lithuanian skills system

In Lithuania, responsibilities for skills policies are widely dispersed across ministries (see assessment in this chapter), as well as partially overlapping and unclear in some areas. This necessitates a clear strategy that sets the goals and responsibilities of governmental actors, as well as co-ordination across the whole-of-government to counterbalance the potential fragmentation of responsibilities across different ministries.

According to participants in this project, the unclear and widely dispersed responsibilities are evident in various uncoordinated skills policies. For example, while SMSM has lead authority for developing an adult education system, adult-education measures are implemented and funded mostly by other ministries (EIM, SADM). According to stakeholders, the adult education system is very fragmented as measures focus on different priorities, which also signals the lack of an overarching vision for adult education. Similar dynamics are also visible in other areas of skills policy. According to participants, various institutions are responsible for skills policies as part of innovation policy, giving rise to co-ordination challenges and additional administrative burdens. Similarly, various ministries have set goals and targets for young people's skills in apparent isolation, leading to overlaps between goals, policies and programmes, and a lack of buy-in by education stakeholders to a vision for young people's skills. Finally, in the VET system, three different ministries (SMSM, SADM, EIM) are responsible for different types of apprenticeship programmes, albeit directed at different target groups. This is the result of the dissolution of the Lithuanian Labour Market Training Authority during the economic crisis of 2008, which led to a split of responsibilities for apprenticeships (OECD, 2018[15]). Such an uncoordinated approach is not only potentially more costly, but can also lead to confusion among individuals and employers concerning what apprenticeships stand for, which undermines the reputation of these schemes and consequently their take-up rate, as emphasised in a previous report on Lithuania's apprenticeship system (Cedefop, 2015[22]).

Tackling the problem of unclear responsibilities and the lack of a common vision, strategies and action plans can help to set common goals across stakeholders, clarify responsibilities and subsequently increase the co-ordination of actors in the skills system. Strategies and action plans help to raise awareness of challenges requiring co-operation, identify priority targets, and allocate responsibility and foreshadow accountability arrangements (OECD, 2019[28]). Lithuania has several strategy papers in place for skills, for example the National Plan for Progress (NPP) 2021-2030, the Progress Strategy "Lithuania 2030", and the previous National Education Strategy for 2013-2022. The new government programme of 2020 furthermore prioritises a range of skills policy goals, including lifelong learning, VET, HE, research, and school and teaching quality. However, among these strategies and action plans, skills policy is either only one of many policy areas, or is not understood holistically, therefore only targeting some (but not all) educational sectors. According to consultation with stakeholders, a shared, strategic and overarching vision that addresses all sectors of Lithuania's skills system is still missing. Earlier OECD reports have similarly identified a lack of shared vision for general, vocational and higher education (OECD, 2017[13]) with respect to the quality and direction of Lithuania's skills system. According to the Lithuanian Law on Strategic Governance, such a cross-sectoral strategy could take the form of a "national agenda" – a long-term planning document that includes multiple policy fields and provides strategic objectives, targets and high-level indicators (Seimas of the Republic of Lithuania, 2020[29]).

Furthermore, when implementing strategies (not only in the area of skills policy, but also more broadly), participants and previous studies emphasised that co-ordination is lacking beyond the planning phase, including the implementation, monitoring and evaluation phases (Nakrošis, Vilpišauskas and Jahn, 2019[24]). Consequently, a future skills strategy should clearly define responsibilities for following up on the strategic goals and priority areas identified, which necessitates the creation of "programming level" planning documents (Seimas of the Republic of Lithuania, 2020[29]) on the side of ministries in specific sub-fields of skills policy. For example, with respect to the development of young people's skills, several participants consulted during the assessment consultations stated that Lithuania still lacks a shared vision between experts, educators, employers and other stakeholders for the skills that young Lithuanians need for the 21st century. In particular, some experts consulted during this project stated that there is no clear vision or education philosophy behind the process of updating curricula (see Chapter 2). The creation and implementation of such planning documents that tackle specific sub-fields of skills policy is essential, but also must be conducted in a co-ordinated manner.

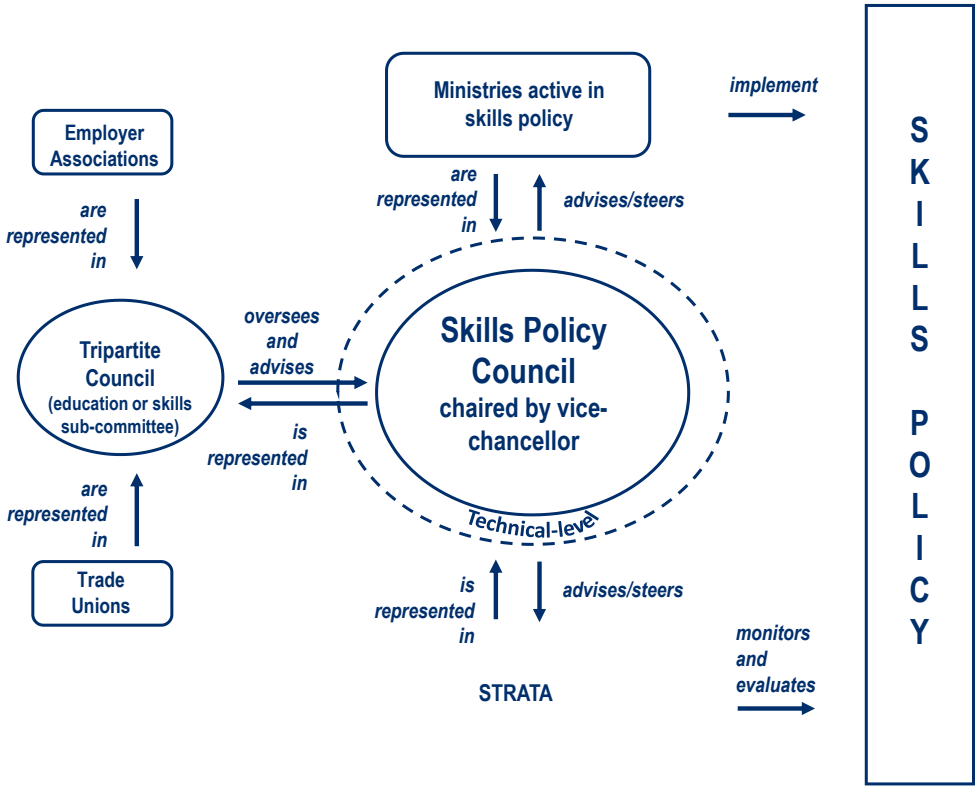
Co-ordinating bodies can play a vital role in supporting cross-sectoral and inter-ministerial co-operation in systems with widely dispersed responsibilities, and can facilitate the implementation of a comprehensive skills strategy and its follow-up "programming level" planning documents. Such oversight bodies can help to communicate current activities in skills policy making, thereby co-ordinating their activities in policy design and implementation in order to align skills policies to work in a complementary manner, e.g. being mutually reinforcing (OECD, 2019[3]). Currently, co-ordination between the different institutions is supported by various inter-ministerial working groups and the co-ordinating roles of SMSM in some policy fields (e.g. adult education). According to some participants in this project, clear progress in inter-ministerial co-ordination has been visible in recent years, for example via a newly implemented inter-ministerial National Commission for the Co-ordination of Human Resources Monitoring (*Lietuvos Respublikos Vyriausybės komisija nacionalinei žmogiškųjų išteklių stebėsenai koordinuoti*, NŽISK). It was created in 2016 as an inter-ministerial commission at the vice-minister level, headed by the vice chancellor and involving representatives of all ministries active in skills policy. However, its official tasks are restricted to the co-ordination of the organisation, implementation and revision of Lithuania's NŽIS (see Opportunity 2 for details), and consequently to the area of skills assessment and anticipation (SAA) tools (see also the example of Latvia, Box 5.1). Therefore, most participants in this project emphasised the necessity of a leading institution/oversight body to be responsible for skills policy as a whole. Various participants emphasised the potential of transforming the NŽISK into a permanent Skills Policy Council that addresses all sectors of skills policy. For example, participants stressed the need for better co-operation in the design of adult learning policies between ministries, which this council could facilitate, in addition to co-ordination

in other sectors of skills policy. Such a council could then oversee the implementation of a future skills strategy for Lithuania, as in Norway (Box 5.1). Figure 5.6 provides an overview of how such a new Skills Policy Council could fit into Lithuania's governance system.

Another challenge for the strategic oversight of Lithuania's skills policies relates to the potential decision-making capacities of oversight bodies. While pure co-ordination bodies simply aim to facilitate joint planning, delivery and information exchange, policy- or decision-making bodies have clear authority to set national priorities in skills policy making. According to consultations with experts, legally binding decisions in Lithuania can only be taken by the responsible ministers, the government and parliament. Consequently, this would limit the potential decision-making capacity of a Skills Policy Council. One solution would be to include high-level political representatives in the oversight body (as in the case of the NŽISK), as they have more influence over the government agenda. However, there can be also downsides to such an arrangement. For example, limiting membership to the political (minister or vice minister) level can lead to a prioritisation of politics rather than promoting in-depth debates on specific policies (OECD, 2019[3]). Multiple participants in this project have highlighted that the current structure of the commission does not allow for consultation and co-ordination at a technical level, e.g. between heads of divisions, department directors and career civil servants. While political level meetings could determine the strategic direction of skills policies and ensure political buy-in, more frequent technical-level meetings could complement this by providing a space for in-depth discussions on specific policy issues and implementation.

Finally, a potential Skills Policy Council could vary with regard to the represented stakeholders, which could range from ministries to semi-autonomous bodies, and may even involve representatives of employers/employees, as seen in Norway. However, the involvement of non-governmental stakeholders is also subject to trade-offs. For example, including too many members might impede the cross-departmental co-ordination function that such a council should fulfil. Consequently, a better fit for Lithuania could be a close collaboration between the existing national Tripartite Council (and its sub-committees) and a future Skills Policy Council (see next section in this Opportunity and Figure 5.6).

Figure 5.6. Potential structure of new governance arrangements for skills policy in Lithuania



Box 5.1. Relevant international examples: Whole-of-government co-ordination mechanisms

A comprehensive skills strategy overseen by a skills policy council: An example from Norway

Norway is generally regarded as one of the leading countries in terms of developing and using the skills of its people. The Norwegian Strategy for Skills Policy 2017-2021 is a binding agreement that commits strategy partners to common priorities to "ensure that individuals and businesses have the skills that give Norway a competitive business sector, an efficient and sound public sector, and an inclusive labour market." The strategy was signed by the Norwegian government represented by the prime minister, as well as the Ministry of Labour and Social Affairs, the Ministry of Local Government and Modernisation, the Ministry of Education and Research, and the Sami Parliament representing the Sami indigenous people. Social partners (including trade unions and employer associations) and certain third sector organisations also signed the agreement. A new whole-of-government co-ordination body has been introduced as part of this strategy in order to support implementation. The Skills Policy Council follows up on the strategy and continues to promote co-operation between the involved stakeholders. The governmental stakeholders include all ministries involved in skills policy, as well as Skills Norway, an arms-length body specialised in lifelong learning. The Skills Policy Council has 15 members including non-governmental stakeholders (e.g. social partners). The council's activities include regular discussions and advice on current skills policy issues, regular reports on the strategy partners' own policy measures to implement the strategy, as well as potential revisions to the strategy if needed.

In practice, the Skills Policy Council acts as an advisory body to all involved stakeholders, with the goal of co-ordinating and improving existing and new policy measures in the field of (public as well as non-public/social-partner provided) skills policy. The Minister of Education chairs the council, thereby providing the opportunity for all stakeholders to influence policy making at a very high level. High-level discussions at the ministerial level are supplemented by working-level discussions of civil servants, thereby ensuring that skills are on the agenda of decision makers, and that concrete outputs in terms of policy making are met. As of 2019, the council has not had a decision- or policy-making function, and has only given non-binding advice. The council meets three to four times a year in sessions that last around two hours. One main benefit of the Skills Policy Council is that it oversees and applies a holistic approach to a previously very fragmented policy area. It can therefore identify overarching challenges and help to develop more comprehensive policy solutions, instead of addressing just specific parts of the system.

Improving horizontal co-ordination: An example from Latvia

In Latvia, the Adult Education Governance Council (AEGC) was created in early 2017 to implement and monitor the Plan on Adult Education Governance Model 2016-20. It was created to avoid the historical fragmentation of responsibility in adult education, and to establish a clear division of functions, information exchange and regular communications among the stakeholders involved. The AEGC is an inter-institutional body with representatives from sectoral ministries, municipalities, private companies, educational institutions, adult education centres and NGOs, under the supervision of the Ministry of Education and Science. The State Education Development Agency provides the secretariat and the analytical unit functions of the AEGC. The main functions of the AEGC are to: 1) review and approve priorities for adult education, taking into account labour market information and sectoral expert councils, labour force forecasts, and demand and supply disparities in the labour market; 2) determine the priority adult education target groups and sectors; 3) confirm the content of the training to be implemented, including the complementarity of the training between the different target groups; 4) decide on the principles for allocating funding; and 5) conduct a regular evaluation of the results of the implementation of adult education.

Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*,https://doi.org/10.1787/9789264313835-en.

Recommendations for strengthening strategic planning and oversight in the Lithuanian skills system

4.1 **Develop a shared, overarching vision for developing and using skills by creating a comprehensive skills strategy for Lithuania**. First, this strategy could be granted the status of "national agenda" under the Lithuanian Law on Strategic Governance, as this enables a cross-sectoral approach addressing all sectors of the skills system and providing strategic objectives, targets and high-level indicators. Second, the strategy should clarify the main roles and responsibilities of governmental actors (e.g. ministries, semi-autonomous bodies, subnational administrative units and learning providers), as well as non-governmental stakeholders (see the next section "Fostering national-level social partnership and stakeholder engagement in skills policy") and thereby define clear accountability for results. This accountability could also be translated into law. Third, this strategy should also be accompanied by concrete "programming level" planning documents, as foreseen in the Lithuanian Law on Strategic Governance. This enables the identification of clear measures to fulfil the strategic objectives of the national agenda in the respective sub fields of skills policy, to be co-ordinated by a future Skills Policy Council (see Recommendation 4.2). This should include, for example, a clear, comprehensive and shared plan for developing young people's skills in Lithuania (see Chapter 2). Finally, a Lithuanian skills strategy should base its objectives on the best available skills evidence (see Opportunity 2) and should include common funding priorities and potential cost-sharing agreements (see Opportunity 3).

4.2 **Improve inter-ministerial co-ordination by creating a designated, inter-ministerial body with lead authority and responsibility for skills policy.** The current National Commission for the Co-ordination of Human Resources Monitoring (Lietuvos Respublikos Vyriausybės komisija nacionalinei žmogiškųjų išteklių stebėsenai koordinuoti, NŽISK) could be transformed into a "Skills Policy Council" to oversee all sectors of the skills system. High-level political meetings (e.g. with vice-ministers) should provide strategic guidance and make political decisions. These meetings should be complemented by more frequent, lower-level technical meetings (e.g. among career civil servants), reserved for in depth discussions on concrete policy issues, implementation and data needs (see Opportunity 2). The Skills Policy Council should also oversee the implementation of the abovementioned skills strategy for Lithuania. This includes co-ordination across the various programming level planning documents of the different sub fields of skills policy, and proposals for revisions of the skills strategy. The Skills Policy Council could also be responsible for overseeing high-level indicators and progress towards strategic objectives and targets identified in the skills strategy, while the monitoring of lower-level indicators of programming level planning documents remains the responsibility of individual ministries. The Skills Policy Council should work in close collaboration with the national Tripartite Council (see the section "Fostering national-level social partnership and stakeholder engagement in skills policy").

Fostering national-level social partnership and stakeholder engagement in skills policy

In the last two decades, Lithuania has made significant attempts to set up a system of social partnership, aiming to follow the examples of various continental European and Nordic countries such as Germany, Norway and the Netherlands (Box 5.2). Lithuania's 2030 strategy highlights the importance of increasing the participation of non-governmental stakeholders (such as employers, employees and their associations) to help the education system meet labour market needs. At a national level, the Lithuanian National

Tripartite Council (*Lietuvos Respublikos trišalė taryba)* is the main mechanism of social partnership. It is comprised of representatives of trade unions, employer associations and the government (stakeholder engagement at the subnational level will be addressed in the next section, while the issue of employer engagement at the level of specific policies are addressed in Chapters 2, 3 and 4). The National Tripartite Council advises the parliament and the government on labour, economic and social matters, including skills policy. It works through a number of standing or temporal commissions and committees (including an education committee) that try to reconcile the interests of social partners and the government on various issues (Tripartite Council of the Republic of Lithuania, 2018[30]).

Lithuania also has several issue-specific stakeholder engagement bodies that involve social partners in a tripartite manner, as well as education providers, municipalities, civil society and specialised business groups. These include the Education Council of Lithuania (which involves employer organisations, educational providers, teacher unions and student organisations); the now inactive Council of Non-formal Adult Education (*Suaugusiųjų švietimo taryba*, for details see below); the National Youth Council and the Youth Research Network; the Higher Education Council; the Science, Technology and Innovation Council; the Human Resources Working Group of the National Platform Industry 4.0; and the SME council.

While the Tripartite Council does not have de jure decision-making capacities, members consulted by the OECD deemed that their inclusion in skills policy making, as well as current developments in social partnership in general, was positive. Several new practices in social partnership were supported by participants in this project, including the increased importance of bilateral decisions between employer associations and trade unions, and the participation of the Minister of Social Security and Labour in the Tripartite Council (OECD, 2018[15]).

Successful stakeholder engagement depends on the long-term institutionalisation of its governance structures, which should be acknowledged in the further development of Lithuania's skills system. Therefore, the process of setting up and implementing a new skills strategy, as well as the functioning of a new whole-of-government co-ordination body responsible for the implementation of the strategy (see previous section for details), will be most effective if embedded in Lithuania's existing system of social partnership. This is because interactions in social partnership are based on mutual trust, which takes time to build , as formal as well as informal networks between stakeholders only grow over time (OECD, 2019[3]). The Tripartite Council is already a well-functioning mechanism of stakeholder engagement with (for Lithuanian standards) a long history. Therefore, it should be leveraged to engage social partners in Lithuania's new skills strategy and the potential decisions of a future Skills Policy Council. Furthermore, internationally comparative research has shown that building new, dedicated parallel structures of stakeholder engagement is not only expensive for other countries, but also puts such new structures in competition with pre-existing bodies of social partnership (OECD, 2019[3]). Lithuania should therefore avoid setting up parallel stakeholder engagement bodies to the Tripartite Council to prevent potential confusion concerning their mandates.

In consultations with stakeholders, some emphasised that more responsiveness to their advice is needed after policies pass parliament, e.g. in assessing whether policies meet the needs of employers and employees. After the introduction of new policies, stakeholders commented that they are not provided with opportunities to discuss potential areas for improvement and possible future revisions. Close co-operation between a future inter-ministerial Skills Policy Council and the Tripartite Council could help to improve the accountability of policy makers to social partners throughout the whole policy cycle (Figure 5.6). Lithuania has historically followed the advice given by the Tripartite Council to a varying extent, making the functioning of social partnership in Lithuania still fragile. For example, while some decisions in the previous decade were taken without any consultation of the Tripartite Council, recent practice is to follow the advice based on bilateral agreement by the social partners (Petrylaite, 2017[31]). In recent years, government representatives with decision-making capacities were sent to the Tripartite Council. However, this has not always been the case, as government representatives without decision-making powers were sent to the council before 2017. In order to establish mutual trust between involved stakeholders, and consequently

continue to foster Lithuania's system of social partnership and tripartite bargaining in the area of skills policy (and more broadly), good practice such as sending government representatives with decision-making powers or following advice based on bilateral agreement by the social partners should be continued.

While participants in this project highlighted the value of the National Tripartite Council, many commented on the lack of impact of some other, issue-specific stakeholder engagement bodies (see above) and consultation processes. Participants argued that as many stakeholder engagement bodies do not have any real decision-making capacity, the incentives for stakeholders to participate are limited. Furthermore, participants emphasised a lack of transparency and feedback on how their input is used in policy making. One example given by participants is the now inactive Council of Non-formal Adult Education (*Suaugusiųjų švietimo taryba*), which was introduced in 2014 to advise on the strategic direction of non-formal adult education and continuing learning in Lithuania, and was composed of representatives from state and municipal organisations, non-formal education providers and social partners. According to participants in this project, a major factor in it becoming inactive was a lack of influence in policy making, and consequently low incentives for stakeholders to participate. However, giving such issue-specific stakeholder engagement bodies effective decision-making capacity may not be ideal, as their capacities (expertise, time, personnel, financial resources) are often lacking in Lithuania, and the potential for undue influence by narrow interests could be increased (OECD, 2019[1]). Softer mechanisms of accountability to stakeholders would therefore be more advisable. In reaction to earlier criticism of stakeholder consultation processes (OECD, 2015[32]), public consultation guidelines have been created in Lithuania. These, for example, specify a minimum amount of time to be allocated for consultation and preparation, as well as mandatory feedback to stakeholders on how their advice is used (Government of the Republic of Lithuania, 2019[33]). While some reports (Nakrošis, Vilpišauskas and Jahn, 2019[24]) argue that the guidelines have not yet led to a sufficient public consultation standard, it might be too early to judge. However, these guidelines only regulate the formalised "open public consultation" mechanism as part of the legislative cycle, but do not apply to the advisory functions that various stakeholder engagement bodies fulfil in Lithuania. Establishing minimum criteria for stakeholder engagement bodies would therefore be advisable, for example via releasing mandatory feedback from the respective government authorities to the advice given by these bodies (OECD, 2019[3]), as is envisaged in open public consultations, according to the abovementioned public consultation standard.

Box 5.2. Relevant international example: Mechanisms of social partnership

Mechanisms of social partnership: An example from the Netherlands

The Social and Economic Council of the Netherlands (SER) advises the Dutch government and parliament on key points of social and economic policy (upon request or at its own initiative). This also includes education and its relationship to the labour market, and consequently skills policy more broadly. For example, the council has advised the Dutch government on policies concerning HE, VET, adult learning, and ALMP. The SER also has an administrative role, undertakes activities arising from governance tasks and self-regulatory matters, and functions as a platform for discussions of social and economic issues. In addition, it helps the government enforce the Works Councils Act (*Wet op de ondernemingsraden*). The SER has set up a large number of committees and working parties to carry out its tasks and prepare its advisory reports. Established in law by the Social and Economic Council Act (*Wet op de Sociaal-Economische Raad*), the SER is financed by industry and is wholly independent of the government. The council consists of independent Crown-appointed members (including academia), employers and employees (33 members in total).

Source: OECD (2019[1]), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, https://doi.org/10.1787/9789264313835-en; Social and Economic Council of the Netherlands (2021[34]), *What* is the SER, www.ser.nl/en/SER/About-the-SER/What-is-the-SER.

Recommendations for fostering national-level social partnership and stakeholder engagement in skills policy

4.3 **Ensure close collaboration between a future Skills Policy Council and Lithuania's current Tripartite Council**. This would include regular communication between the proposed Skills Policy Council and the social partners represented in the Tripartite Council. Members of the Skills Policy Council could be part of a sub-committee within the Tripartite Council, for example the education sub-committee or a newly created sub-committee for skills. The Skills Policy Council should thereby inform social partner representatives of the Tripartite Council in a timely manner on planned future draft legislation and seek their advice, as well as ask Tripartite Council members for feedback on already implemented programmes and potential future revisions. In order to foster this system of social partnership, Lithuania should continue to honour unanimous decisions by employer associations and trade unions within the Tripartite Council. Furthermore, the current practice of sending government representatives (e.g. ministers) with decision-making powers to the Tripartite Council should be continued to establish mutual trust between social partners and the government, and ensure the accountability of government to decisions taken by the council.

4.4 **Increase the impact of issue-specific stakeholder engagement bodies by guaranteeing government accountability regarding given advice.** Minimum criteria for consultation with stakeholder engagement bodies should be implemented to ensure the sufficient quality of communication between these bodies and government, and create greater incentives for stakeholders to actively participate in consultation processes. For example, transparency in how stakeholders' advice is used should be ensured, which might include mandatory written responses from the respective ministries to any advice given.

Increasing the capacity of governmental institutions and social partners at the subnational level

Capacity building is central to ensure a well-governed skills system in Lithuania, not only at the level of the national government (see Opportunity 2 and Chapter 4), but also at the subnational level (e.g. municipal, county or sectoral). Improving the capacity of subnational actors (e.g. regional development councils, municipalities and sectoral professional committees) and their co-ordination with central government could help to foster more sustainable growth across Lithuania's regions, which is one of the priorities of Lithuania's new government programme. Subnational actors include municipalities and counties, as well as non-governmental stakeholders, particularly social partners, involved in the subnational governance of Lithuania's skills system. Lithuania's 2030 strategy emphasises such participation of local communities and non-governmental stakeholders in the management of public affairs. Increasing the capacity of subnational stakeholders can also help to make education more responsive to labour market needs, as addressed in Chapter 2.

Since independence, Lithuania has decentralised responsibilities for skills policy (OECD, 2017[13]), giving several responsibilities to municipalities, educational providers, stakeholder engagement bodies and, most recently, counties, where some municipal public service administration powers (including education) will potentially be transferred to the regional development councils (Seimas of the Republic of Lithuania, 2020[14]) (see overview section for more detail). Social and economic partners such as business representatives have been included in regional development councils in recent years, in addition to representatives of municipalities of the respective county (National Regional Development Council, 2017[17]). At the sectoral level, sectoral professional committees that co-ordinate strategic issues of VET

and the Lithuanian qualifications system include representatives from ministries, social partners, VET and higher education institutions.

There is evidence that the capacity of various governmental and non-governmental subnational actors to fulfil their responsibilities in a decentralised system is lacking, particularly regarding municipalities, regional development councils and sectoral professional committees. First, many municipalities are seen as lacking the capacity to fulfil the responsibilities delegated to them by central government. A previous report (OECD, 2017[13]) and participants in this project have identified that national and municipal institutions do not offer sufficient supervision, guidance and planning, for example in setting long-term objectives and action plans to improve school quality and the student performance of educational providers (as the founders of primary and general secondary education schools), or in reorganising their school network. In non-formal adult education, municipal stakeholders lack methodological guidance on specific on-the-ground practices (e.g. guidelines to draft and implement local non-formal education plans and organise advisory councils), as well as strategic guidance for the future development and priorities of the system. Participants related this to municipalities lacking expertise in skills policy making and the personnel for skills policy, thus reflecting a lack of financial resources.[2] Currently, the Ministry of Education, Science and Sport often takes over the functions of municipalities when they are unable to fulfil their responsibilities. Furthermore, lack of expertise might seriously constrain the ability of municipalities to voluntarily cluster together into functional economic development zones and strengthen inter-municipal co-operation in educational service provision, as envisaged in the new Regional Development Act (see Opportunity 3 for details).

Second, similar to municipal institutions, participants in this project emphasised that regional development councils lack the time and capacity to focus on issues of skills policy (e.g. VET, non-formal education). Expertise and the personnel needed for skills policy making in regional development councils is relatively limited, as skills policy has not been a main task of these bodies until recent reforms. These challenges may increase after the implementation of the new Regional Development Act, which may give regional development councils additional responsibilities and decision-making powers in the area of skills policy.

Finally, participants in this project emphasised that sectoral professional committees responsible for the development and updating of vocational standards as part of the Lithuanian qualifications system lack the financial capacity and expertise to update/create new occupational standards in the face of rapid technological change, for example in the information and communications technology (ICT) sector. Consequently, private education providers sporadically fill the void in sectors where the public VET system cannot keep up with technological change, potentially resulting in a fractured and segmented system that lacks uniformity (Busemeyer and Trampusch, 2012[35]).

In sum, many subnational actors often lack personnel, financial capacity and expertise, as well as receive insufficient guidance from central government. The increased provision of training workshops in skills policy making, supplemented with consistent strategic and methodological guidance (e.g. drafting and implementing local non-formal education plans, state education policy), could help these actors fulfil their responsibilities. Examples include the “Lernen vor Ort” programme in Germany, a recent ESF-funded programme to strengthen social partnership in Lithuania, as well as the practice of updating occupations within the Swiss VET system (Box 5.3). Concerning municipalities and potentially regional development councils, participants in this project argued that the SMSM and its various semi-autonomous bodies (the National Education Agency, KPMPC, SKVC and the Education Exchanges Support Foundation) could jointly implement such capacity building activities. The new Regional Development Act also regulates competence centres that will consist of independent experts and bodies authorised by the government (Seimas of the Republic of Lithuania, 2020[14]). These competence centres are supposed to supply regional development councils with the research, analysis, forecasting and consulting services required for the preparation or implementation of regional development plans, therefore potentially also engaging in capacity building exercises.

Concerning the updating of vocational standards within the Lithuanian qualifications system, KPMPC could actively support sectoral professional organisations with clear strategic and methodological guidelines, as well as training workshops. In order to tackle the problem of insufficient personnel and financial capacity, central government should assess the possibility of granting sectoral professional councils additional funding, especially in sectors particularly affected by technological change. This could also be financed as part of a tripartite funding agreement (see Opportunity 3). Concerning municipalities, additional financial means could be raised by the expedited consolidation of Lithuania's educational network (see Opportunity 3 for details).

One issue specific to the expanded role of regional development councils is the limited capacity of trade union representatives to participate in the governance of the VET system. After the abolishment of the tripartite vocational training councils (*Lietuvos profesinio mokymo tarybos*), which included representatives of central government, municipalities, employers and employees, the regional development councils took over some of their functions (e.g. decisions on number of state-funded VET places, delegation of VET school council representatives). While trade union representatives were permanent members of the VET councils, this is not the case for the regional development councils, where one third of all members must be representatives nominated by social and economic partners and appointed by the respective regions. According to participants in this project, trade unions nominated candidates in all regions, but no region appointed them as members. This is a break with the mechanisms of social partnership that Lithuania has strived to implement in recent decades. Research has also emphasised that the engagement of trade unions in the governance of VET systems as a counterbalance to business interests might make training more transferable and therefore more attractive for individuals (Busemeyer and Trampusch, 2012[35]; Emmenegger, Graf and Trampusch, 2019[36]). A recently reached compromise with the Lithuanian Government, which agrees to give trade unions an advisory/observatory seat in regional development councils (should they not be appointed as regular members), is a first step in the right direction and should be fully implemented; however, it does not yet establish parity between employer and employee representatives (as is usually practiced in social partnership).

Box 5.3. Relevant national and international examples: Capacity building at the subnational level

Capacity building for local governments: An example from Germany

The federal programme "*Lernen vor Ort*" (Learning at the Local Level) ran from September 2009 to August 2014. It brought together 46 educational foundations to help communes manage their education programmes and build networks for knowledge transfers across regions. The programme supported local governments in building capacity for education monitoring and management, as well as creating sustainable networks between local administrations and civil society actors. The programme provided a total of EUR 100 million to support local districts and municipalities in setting up network structures and developing capacities. Districts and municipalities had to compete for funding and their participation was entirely voluntary. Following the end of the programme, the German Federal Ministry of Education and Research established eight regional transfer agencies across the country as part of the transfer initiative local education management (*Transferinitiative Kommunales Bildungsmanagement*). These transfer agencies provide advice to local authorities, support their education management and spread best practices. They help local authorities analyse their current situation, facilitate local dialogue between different actors and stakeholders, offer advice about relevant tools and instruments, and offer capacity building and professional development.

Capacity building for intermediary associations: An example from Switzerland

One major goal of the 2002 Swiss VET reform was to make the VET system fit for technological change. It introduced a standardised process for designing training ordinances and curricula and introduced a mandatory revision of all occupations within the Swiss VET system in order to keep up with rapid technological change. This led to a fundamental increase in pedagogical requirements and administrative workload for the intermediary associations tasked with creating the occupational profiles and training regulations, which are employer associations, craft or occupational employee associations, as well as mixed forms of the aforementioned types. In order to enable these intermediary associations to fulfil their responsibilities, the Centre for the Development of Occupations within the Swiss Federal Institute for Vocational Education and Training offers methodological and pedagogical support for the development and renewal of occupations that is specifically targeted at these intermediary associations. The 2002 reform has been widely considered as a success, with the Swiss VET system being successfully updated to technological change.

Capacity building for social partners: An example from Lithuania

In Lithuania, an ESF-funded project for strengthening co-operation between trade unions and employers in social partnership (*Profesinių sąjungų ir darbdavių bendradarbiavimo modelis vystant socialinį dialogą*) was implemented from 2017 to 2020. The project was implemented by the Ministry of Social Security and Labour in co-operation with employer associations and trade unions. It supported joint activities by employers and trade unions, developed the skills of social partners, and analysed the performance of social partnership in Lithuania. At the company level, the project included round table discussions and consultations on collective bargaining, employee information and consultation, and employee participation in management. It also produced public information campaigns on social partnership, aimed to strengthen social partnership in districts and sectors where it is traditionally weak, organised training for employer and employee representatives, as well as the public, and organised exchange activities with other social partner institutions in Europe. However, the focus of the project was on issues of collective bargaining, and not necessarily skills policy.

Source: Busemeyer and Vossiek (2015[37]), *Reforming Education Governance Through Local Capacity-building: A Case Study of the "Learning Locally"*, https://dx.doi.org/10.1787/5js6bhl2mxjg-en; OECD (2019[28]), *OECD Skills Strategy Poland: Assessment and Recommendations*, https://doi.org/10.1787/b377fbcc-en; Santiago, P. et al. (2017[38]), *OECD Reviews of School ReSource: Chile 2017*, https://dx.doi.org/10.1787/9789264285637-en; SFIVET (2020[39]), *Review and revision of professional activities*, https://www.sfivet.swiss/cdo-our-services; Baumeler, Engelage, and Strebel (2018[40]), *Creation, Maintenance, and Disruption: Occupational Associations and Their Heterogeneous Institutional Work after the Swiss VET Policy Reform*, https://zenodo.org/record/1319630#.YEJSt05xflU; Socialinis Dialogas (2020[41]), *Uzdaviniai, tikslai, dalyviai*, https://www.socdialogas.lt/uzdaviniai-tikslai-dalyviai/.

Recommendations for increasing the capacity of governmental institutions and social partners at the subnational level

4.5 **Increase the capacity of municipalities, regional development councils and sectoral professional committees to fulfil their responsibilities in the governance of Lithuania's skills system**. In order to increase the expertise of subnational actors in skills policy, Lithuania's ministries and/or semi-autonomous bodies responsible for the policy fields in question should ensure the sufficient provision of training workshops for municipalities, regional development councils and sectoral professional committees, combined with strategic and methodological guidance for skills policy making. Potential providers of these capacity building activities could include the SMSM, the National Education Agency, the KPMPC, the SKVC, and the Education Exchanges Support Foundation. For regional development councils, the newly created competence centres could engage in similar capacity building activities. Lithuania should also increase the human and financial resources of municipalities, regional development councils and sectoral professional committees. Financial resources could be raised via better targeting the funding in Lithuania's skills system (which could lead to cost savings on the side of municipalities) and/or the creation of a tripartite funding agreement (see Opportunity 3).

4.6 **Strengthen social partnership at the subnational level by including trade unions in regional development councils**. The Lithuanian Government should implement legislation that establishes a certain balance of power between employer and employee representatives in regional development councils, particularly if these councils gain more authority as part of the further implementation of the new Regional Development Act. While an advisory/observatory seat for trade unions in regional development councils can be a first step, the Lithuanian Government could also consider giving each social partner a fixed minimum number of seats in order to establish parity between employer and employee representatives.

Opportunity 2: Enhancing skills information and career guidance systems and practices

Comprehensive information systems on current skills policy outcomes and future skills needs, as well as on the career opportunities connected to current and future skills needs, are an essential building block of well-governed skills systems (OECD, 2019[1]). The importance of such information systems is also acknowledged in Lithuania's 2030 strategy, which emphasises the benefits of evidence-informed policy making as part of "smart governance".

First, skills assessment and anticipation tools can help supply policy makers with sufficient evidence to guide their decisions, although there is a need to draw on a variety of data sources and methodologies, including qualitative information (OECD, 2017[42]). For example, qualitative "foresight" exercises might help policy makers consider the fundamental uncertainties of future skill demands, with skills systems subject to rapid technological change meaning that changes in skills requirements are hard to predict and not fully identifiable via quantitative analysis. Furthermore, co-ordination across the whole of government can facilitate the communication of ministries' individual data needs and gaps. As well as the importance of the availability of such information, policy makers need sufficient capacity (in terms of personnel and expertise) to use this information in evidence-informed policy making. Information on current and future skill needs and outcomes are relevant for individuals as well as policy makers, as they can profit from career guidance that provides them with information to make future career choices (OECD, 2019[1]). At a young age, career guidance helps individuals make initial education and career decisions that are aligned with labour market needs (Mann, Denis and Percy, 2020[43]). But also throughout the life course career guidance can equip

individuals with the knowledge to optimise and adapt their career and education choices in the face of a changing world of work (OECD, 2019[44]). Consequently, such career guidance should be available to the whole population, regardless of age, employment status and place of residence.

Improving Lithuania's ability to use evidence in skills policy making

In recent years, Lithuania has substantially improved its tools for evidence-informed policy making, including skills assessment and anticipation. For example, a variety of quantitative information exists (for more detail, see overview section). Most recently, Lithuania introduced its comprehensive National Monitoring of Human Resources (NŽIS, for detailed information, see Box 5.4). A rich, open skills assessment and anticipation database was also provided via the *Žmogiškųjų išteklių prognozavimo sistema* (ŽIPS) model, accessible online (zips.lt). However, this site has not been updated with new data since 2018, although STRATA is working on an updated version based on newly available data from NŽIS, which is estimated to be available at the end of 2021. Lithuania has made progress in developing information systems that can support ministries active in skills policy; however, there are still opportunities for improvements with respect to how the data demands of ministries are communicated and how information is used by ministries to effectively support evidence-informed policy making.

According to many participants in this project, Lithuania lacks a culture of evidence-informed policy making. Some participants emphasised that ministries do not sufficiently use data and evidence for policy making, despite the availability of data. This is also consistent with a recently released report on the public sector in Lithuania (Ministry of the Interior and STRATA, 2020[45]) and a previous OECD report (OECD, forthcoming[18]), both of which recommend strengthening evidence-informed policy making and increasing the capacity of civil servants. According to participants, the low use of evidence is often related to the limited capacity of ministries for evidence-informed policy making, especially with respect to the expertise of civil servants. This includes a lack of technical expertise in some ministries to use statistical data, on knowing which specific kind of data is needed (e.g. for effective *ex ante* and *ex post* evaluations), and on how to time data requests (e.g. early enough in the decision-making cycle). These factors prevent policy makers from effectively using and analysing existing data. Participants also highlighted that ministries often have limited financial leeway to hire a sufficient number of adequately trained personnel for evidence-informed policy making (see Opportunity 3). To mediate these issues in the short term, training workshops for evidence-informed policy making in skills policies could be co-ordinated by STRATA. In the long term, as emphasised by the OECD report (OECD, forthcoming[18]), Lithuania could implement a specific analytical track within the civil service. This track should particularly target young graduates with backgrounds in empirical research, and offer competitive salaries and upwards career mobility. Finally, the Lithuanian Government should assess if individual ministries and STRATA currently have sufficient financial capacities to fulfil their responsibilities.

Participants in this project highlighted the existence of gaps in skills assessment and anticipation tools that limit evidence-informed policy making. The limited use of data might therefore be partly explained by an insufficient provision of data. While Lithuania generates and uses a wide variety of administrative data, participants emphasised that it does not generate new primary data and forecasts to a sufficient extent. Most importantly, participants emphasised the need to generate more data on medium-term skills needs in order to avoid potential mismatches between skills supply and demand, particularly in high value-added sectors that offer substantial growth potential to the Lithuanian economy. More specifically, regularly updated medium-term data on skill needs at the occupational and regional level were identified as lacking, with the latter also being a result of missing data on (regional) labour emigration. Currently, mostly short-term forecasts are available. The need to increase demographic forecasts was highlighted as a way of generating more medium- and long-term forecasts. Data to evaluate the impact (e.g. concerning job progression) of non-formal education policies was also deemed as lacking.

Box 5.4. Relevant national example: Integrated skills assessment and anticipation tools

Integrated skills assessment and anticipation tools: an example from Lithuania

In 2016, Lithuania introduced its National Monitoring of Human Resources (*Nacionalinė žmogiškųjų išteklių stebėsena*, NŽIS). This system includes data on the qualifications and education of individuals, their professions and wages, their employers, and their age categories. It does this by integrating all available data on individuals, in particular administrative data, from different information systems into one platform (e.g. State Social Insurance Fund, State Tax Inspectorate, Public Employment Service, Centre of Registers, Education Management Information System, Residential Register, State Patient Fund). The system also integrates two previous systems: the "qualification map" (how graduates from VET and tertiary education integrate into the labour market) and a "human resource monitoring and forecasting system" (the medium-term demand of human resources based on Labour Force Survey data). All state authorities are obliged to use NŽIS results in decision making in the fields of labour market, education and human resource development. It is particularly relevant for the Ministry of Education, Science and Sport when planning and funding educational programmes, evaluating higher education institutions, forecasting specialists demand, and providing guidance and counselling.

Table 5.3. Advantages and disadvantages of forecast and foresight methods and tools

Type of approach	Approach	Advantages	Disadvantages
Forecast	Projections and quantitative models at the national level.	Comprehensive (typically, covers all sectors), consistent, transparent and explicit.	Data demanding and costly. Not everything is quantifiable and may give a false impression of precision/certainty.
Forecast	Surveys of employers asking about skill deficiencies and skill gaps.	Direct "user/ customer" involvement. Easy to set up and carry out.	May be very subjective and inconsistent, with too much focus on marginal and ephemeral situations.
Foresight	Focus groups/round tables, Delphi style methods, scenario development.	Holistic (considers a broader range of factors than just economic). Direct "user/customer" involvement.	Can be non-systematic, inconsistent, and/or subjective.
Combined	Sectoral/ occupational/regional studies and/or observatories (using both quantitative and qualitative evidence).	Holistic (for the sector). Partial (ignores other sectors). Strong on sector and other specific labour market dynamics.	May introduce inconsistency across sectors.

Source: Adapted from Wilson et al. (2004[46]), *Developing a National Skills Forecasting Tool for South Africa*; OECD (2016[47]), *Getting Skills Right. Assessing and Anticipating Changing Skill Needs*, https://doi.org/10.1787/9789264252073-en.

Multiple participants in this project highlighted data gaps in qualitative information. Participants emphasised the need to adopt "foresight" approaches to future skills needs alongside the abovementioned "forecast" approaches. As there are "inherent strengths and weaknesses with every type of skill needs data source", the OECD also emphasises the need to draw on a variety of sources and methodologies, both quantitative and qualitative (OECD, 2017[42]). In contrast to forecast, foresight (OECD and ILO, 2018[48]) draws heavily on qualitative data (primarily or in addition to quantitative data), with methods such as focus group discussions, brainstorming exercises, expert discussion and interviews, Delphi-style methods, or scenario development used at the national, subnational or sectoral-level. Participants emphasised that forecasts are subject to a certain path dependency, whereby future scenarios are projected based on the skill demands of the current economic profile of Lithuania, thereby underestimating the potential for more radical change. In contrast, foresight exercises are based on stakeholder and expert assessments of potential future skills scenarios, and identify opportunities for actively influencing trajectories for skill demands via priority setting and vision building, and the actions to fulfil these goals.

Foresight approaches take into account the fundamental uncertainties of the future in the area of skills, such as rapid technological change and associated changes in skills requirements. This includes essential trends such as progress in artificial intelligence and automation or developments in green technologies. Lithuania's National Plan for Progress (NPP) 2021-2030 and the 2030 strategy highlight the importance of establishing the infrastructure and skills necessary for sustainable economic development in state-of-the-art technologies and innovations, for example information and communication technologies, life sciences and engineering industries. Foresight exercises might help Lithuania fulfil these strategic goals, drawing upon stakeholder and expert suggestions for the proactive actions required to influence skills demand and supply in these sectors. Future reforms of formal school curricula and non-formal learning programmes, as discussed in Chapter 2, could benefit from such foresight approaches that identify the skills that young people need for success in work and life. Furthermore, skills foresight exercises might help Lithuania's skills system increase its resilience to external shocks, such as the COVID-19 crisis, by developing and creating potential actions for multiple plausible scenarios that are not (yet) reflected in quantitative evidence. Lithuania should therefore further expand its own activities in the area of skills foresight, drawing on international examples such as Ireland (Box 5.5).

Lithuania's skills governance system should also be able to fulfil the data needs of policy makers in the long term. Participant comments that existing information and evidence on skills policy does not necessarily meet their demands points towards problems in effectively communicating data needs. This assessment is supported by another report that highlights Lithuania's challenges of accessing and sharing data across institutional boundaries (OECD, forthcoming[18]). In Lithuania, various different players are responsible for data collection and analysis. STRATA is responsible for providing the government, ministries and municipalities with information for evidence-informed decision making. It mostly draws on primary data from other sources, performs research and evaluation, and distributes data and analysis to individual ministries. However, primary data collection is undertaken to a significant extent by individual ministries and their semi-autonomous bodies, as STRATA only partially collects its own data (e.g. as part of specific surveys).

In order to assess, monitor and improve data, indicators and the potential application of information, Lithuania's government launched an inter-ministerial commission on HR monitoring (NŽISK, see also Opportunity 1). The tasks of this commission include assessing and providing proposals to improve data, indicators and the potential application of information, as well as the financial and administrative burdens connected to data collection. In the long term it aims to create a culture of evidence-informed decision making. Participants in this project emphasised that this commission is a forum for communicating the data needs of ministries. However, it was also frequently emphasised that the high-level nature of the commission (involving the respective vice ministers) currently prevents more specific, detailed discussions (see also Opportunity 1). A lower, technical-level working group of the commission, including for example heads of divisions, department directors and career civil servants, could meet on a more frequent basis and ensure that the respective data needs are communicated. Such a lower-level working group could also help to increase ministries' commitment to use evidence in policy making. Political-level meetings could subsequently decide which actor (ministry, semi-autonomous body, STRATA, etc.) should be obliged to follow up on specific data needs, ensuring the sufficient provision of data in the long term.

According to participants in this project, STRATA has limited capacity to supply the evidence needed to ministries. This is partly due to its far-reaching mandate that goes beyond skills policy, including guidance and support for *ex ante* and *ex post* evaluations in all policy sectors, and its functions regarding high-level planning documents (see assessment section). If STRATA continues to perform this "dual" mandate, as well as being responsible for specific data distribution and analysis in the field of skills policy, the Lithuanian Government should assess if it possesses the necessary means in terms of financial resources and personnel to fulfil these responsibilities. Participants in the project highlighted current talks to potentially reduce STRATA's role in supplying ministries with evidence, with some responsibilities being transferred to individual ministries and/or their semi-autonomous bodies. A recent report on evidence-informed policy

making in Lithuania also recommends transferring STRATA's responsibilities exclusive to skills policy back to the SMSM (OECD, forthcoming[18]). With regard to applying a whole-of-government approach to skills policy, such a reorganisation could risk losing the synergies created when one dedicated institution is responsible for providing a sound evidence-base in skills policy. However, a well-functioning communication channel to exchange data needs could counteract such tendencies, which emphasises the importance of a well-functioning inter-ministerial commission on HR monitoring (as recommended above). Giving ministries more responsibilities also further highlights the need to increase their ability to use evidence in policy making, which appears to be insufficient even without any change in responsibilities.

Box 5.5. Relevant international example: Skills foresight approaches

Skills foresight approaches: An example from Ireland

Ireland's Expert Group on Future Skills Needs, established in 1997, gives strategic advice to the Irish government on current and future skills needs of the economy. It is composed of business representatives, experts, trade unions and policy makers. In co-operation with the SOLAS Skills and Labour Market Research Unit, it conducts its own research using a wide variety of quantitative and qualitative methods for skills anticipation. It carries out sector-specific foresight exercises using an approach that draws on interviews and focus groups with sectoral experts and actors involved in developing and using skills, including sectors such as green and digital economies. For example, the "Future Skill Needs for Enterprise within the Green Economy" project explored sub-sectors of the "green economy" identified as having substantial export growth and employment potential. It aimed to provide information on the current size and skills profile of companies in the green economy; the economic, social and environmental drivers of change towards the green economy; future skills demands for occupational groups in these sectors; the adequacy of currently supplied skills; and the anticipation of future skills shortages and proactive actions required to ensure a sufficient future supply of skills. The project was based on a structured telephone survey, several workshop discussions with companies and a wider group of stakeholders, and in-depth case studies on specific companies (including company visits and structured face-to-face interviews on skill gaps and future skill needs).

Source: OECD and ILO (2018[48]), *Approaches to anticipating skills for the future of work*, https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_646143.pdf; EGFSN (2010[49]), *Future Skill Needs for Enterprise within the Green Economy*, http://www.skillsireland.ie/media/egfsn101129-green_skills_report.pdf; EGFSN (2021[50]), *About us*, http://www.skillsireland.ie/about-us/.

Recommendations for improving Lithuania's ability to use evidence in skills policy making

4.7 **Improve the identification, communication and response to ministries' data needs through regular, inter-ministerial technical-level meetings**. The inter-ministerial National Commission for the Co-ordination of Human Resources Monitoring (NŽISK) and a future Skills Policy Council (see also Opportunity 1) should intensify efforts to identify and follow-up on the data needs expressed by ministries. Meetings of this body at a higher, political level (e.g. vice ministers) could be complemented by more frequent, lower-level technical meetings (e.g. career civil servants, heads of divisions and department directors to facilitate the communication of respective data needs and create commitment by ministries to use evidence in policy making. Political-level meetings should subsequently decide which actor should be obliged to follow up on specific data needs, thus ensuring the sufficient provision of data in the long term.

4.8 **Continue to improve skills needs assessment and anticipation in Lithuania, particularly in the areas of quantitative skills forecasting and qualitative skills foresight**. In order to avoid skills mismatches, Lithuania (and in particular NŽISK) should first assess and address the most immediate data needs in the field of skills forecasting, in particular the need for regularly conducted medium-term forecasts on future skills supply and demand across occupations, with an emphasis on high value-added sectors. Second, Lithuania should better supplement quantitative forecasts with qualitative data from stakeholders and experts. In order to design effective skills development measures in the face of ongoing megatrends and/or current uncertainties resulting from the COVID-19 crisis, the Government Strategic Analysis Centre (STRATA) and/or individual ministries and their semi-autonomous bodies (in potential collaboration with research institutes, universities and colleges) should increase skills foresight exercises (Box 5.5).

4.9 **Increase the capacity of ministries and STRATA to fulfil their functions in supporting and undertaking evidence-informed policy making**. In the short term, STRATA together with individual ministries should co-ordinate and carry out training workshops to increase knowledge of and sharing of best practices for evidence-informed policy making in the area of skills policies. In the long term, Lithuania should consider implementing a specific analytical track within the civil service that offers competitive salaries and upwards career mobility, thereby attracting highly skilled analysts. The Lithuanian Government should also assess and ensure that individual ministries and STRATA currently have sufficient financial and human resources (see Opportunity 3) to fulfil their respective responsibilities in the area of evidence-informed skills policy making.

Implementing a system of lifelong career guidance for individuals of all ages

Well-governed skills systems supply individuals with information on the skill needs of the economy, and consequently future career opportunities, so that they can make well-informed choices. In practice, career guidance in Lithuania is provided in a very fragmented manner, which leads to cost inefficiencies and gaps for different target groups. Career guidance services are fragmented across regions (with more provision in economically stronger regions), age groups and employment status (with more focus on youth and the unemployed), as well as across projects (with multiple programmes targeting similar groups). Furthermore, there is no common professional standard for career counsellors, leading to a fragmentation of standards between different providers, and consequently fluctuations in quality (euroguidance, 2020[19]). However, effective career counselling is crucial for young people's decisions regarding what, where and how to learn, and helps students make study and employment choices aligned with labour market needs (Mann, Denis and Percy, 2020[43]). Effective counselling in lower secondary schools could support students and their families to better understand upper secondary educational offerings, while effective counselling in upper secondary schools could help with the choice between post-secondary VET, professionally oriented colleges or universities. Career guidance is also crucial to encourage participation in adult learning, as it helps individuals understand their skillset and navigate available learning opportunities, which increases their employment prospects and career progression throughout the life course and minimises skills mismatch in the wider economy (OECD, 2019[44]). This highlights the importance of also promoting counselling services among adults, both employed and unemployed alike.

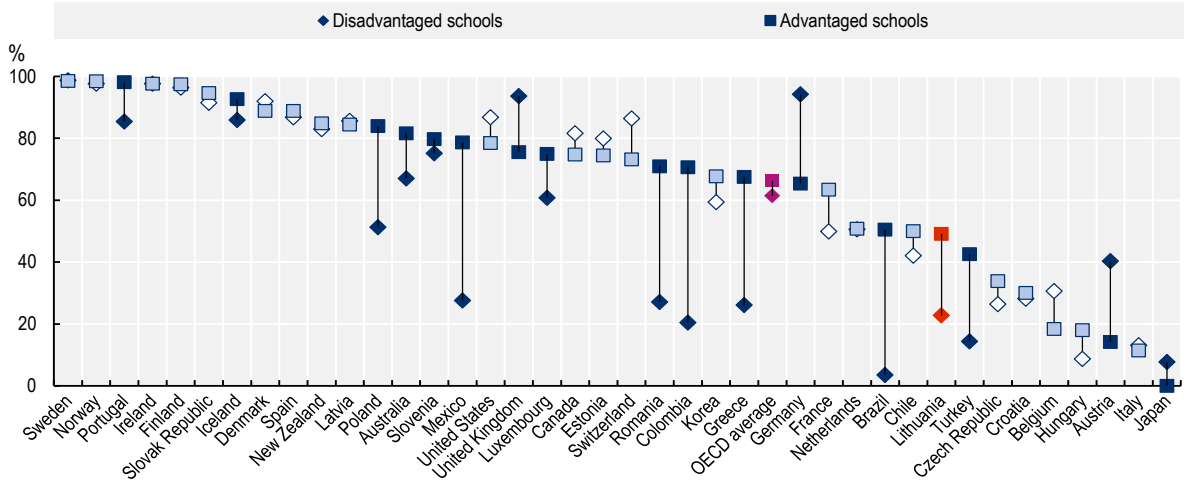
Career guidance services are often not available to the same standard throughout Lithuania. In the school system (both VET and general education), career guidance is only rarely provided via full-time positions of career counsellors and co-ordinators (euroguidance, 2020[19]). Consequently staff members, such as teachers and psychologists, mostly take on these functions. According to participants, schools in economically strong regions are especially able to provide career guidance to a sufficient extent. For

example, a recent EU-funded project introduced dedicated career counsellors in schools, but since funding stopped, only a minority of schools have secured continued funding for such services, and these schools were mostly in economically stronger municipalities.

High disparities in career provision between schools are thus visible, as illustrated in Figure 5.7. In Lithuania only 30% of 15-year-old students are in schools where career guidance is formally scheduled into the students' time, the lowest of all OECD countries except Slovenia (OECD, 2019[51]). About 87% of students are in schools where teachers have the responsibility for career guidance (no specific guidance counsellors), which is above the OECD average of 60% (OECD, 2019[51]). Furthermore, VET schools seem particularly disadvantaged regarding career counselling, as almost four times as many students in general programmes have access to specific guidance counsellors than students in VET programmes, the largest gap in the OECD behind Greece (OECD, 2019[51]).

Figure 5.7. Advantaged/disadvantaged schools where one or more dedicated counsellor provides career guidance

Percentage of students in schools that provide career guidance



Note: Statistically significant differences are marked in a darker tone.
Source: OECD (2019[51]), *PISA 2018 Results (Volume II): Where* All *Students Can Succeed*, https://doi.org/10.1787/b5fd1b8f-en.

StatLink https://stat.link/ynq9td

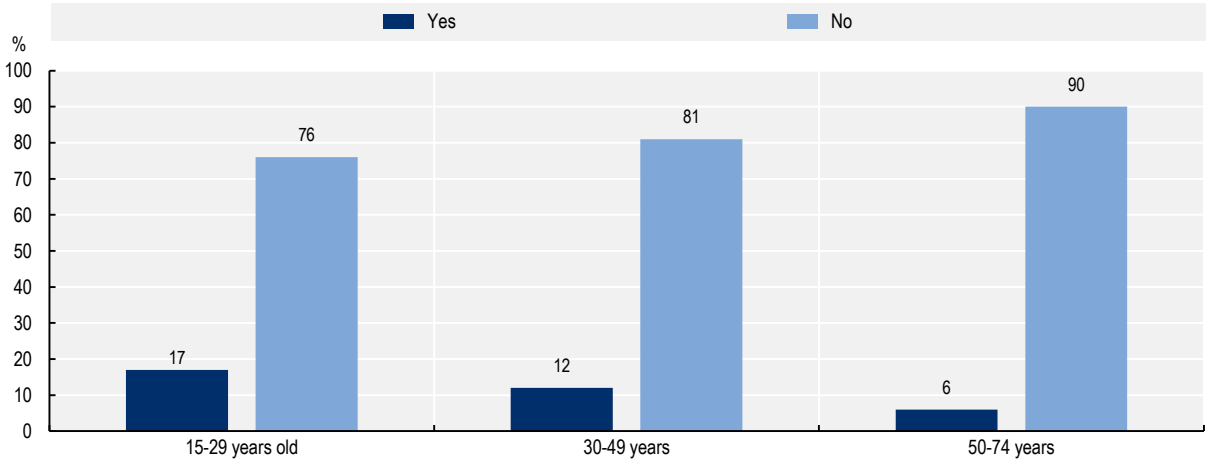
Outside of schools, youth job centres, which exist in most municipalities, have offered career guidance and other services to youth since 1999, when they were established by the PES. These one-stop shops inform young individuals (age 16-29) about programmes available to integrate them into the labour market. The centres also have partnerships with employers, municipalities and universities, regularly organise vocational guidance activities in schools, and increasingly communicate with school career counsellors. All young people are eligible without registration. Lithuania has recently set-up a one-stop shop career guidance centre for young people in the Alytus region (Box 5.6). The model for this is planned to be expanded across multiple regions of Lithuania. Similar one-stop shops for adults do not yet exist.

Access to career guidance services for adults is even more limited. The Action Plan for the Development of Lifelong Learning 2017-2020 included the goal of providing quality career services for adults in physical and virtual environments. In Lithuania, participation in career guidance decreases with age, as shown in Figure 5.8. While this is not surprising given that older adults typically have more stable jobs than younger adults, it still reveals potential for improvement. In addition, efforts have been concentrated mostly towards jobseekers, which is the responsibility of the PES. However, when considering changing labour

market needs due to structural trends such as digitalisation and automation, participants also expressed the importance of changing/adjusting career paths throughout the life course, irrespective of an individual's current employment status.

Figure 5.8. Communication with career counsellors/career guidance specialists according to age

Percentage of respondents that communicated with a career counsellor/career guidance specialist in the last year



Source: STRATA (2020[52]), *Mokymasis visą gyvenimą. [pročiai, patrauklumas, barjerai, naudos suvokimas: Gyventojų apklausos ataskaita. Priedai [Lifelong learning habits, barriers and perceptions: population survey report. Appendix]* https://strata.gov.lt/images/tyrimai/viesi_duomenys/MVG-2020/STRATA_MVG_Priedai.xlsx.

StatLink https://stat.link/fsjvzn

Box 5.6. Relevant national example: One-stop shop career centres

Career centre "Karjeras": An example from Lithuania

Karjeras was opened in the Alytus City municipality in 2019 as a career guidance centre based on the one-stop shop principle. It was launched by the Alytus City municipality, the Employment Service and the Department of Youth Affairs within the SADM. It operates in the premises of the Alytus Youth Job Centre, thereby drawing on existing infrastructure. It is open from Monday to Thursday and its primary aim is to encourage young people to pay more attention when choosing their future career path and profession, highlighting both opportunities as employees as well as the prospects of becoming future entrepreneurs. The centre provides career counselling sessions by professionals, career tests, individual consultations, and volunteering and internship opportunities – all in co-operation with schools, the staff of youth job centres, psychologists and socially responsible enterprises. The centre is currently unique in Lithuania as it combines the provision of all services necessary for career guidance under one roof, and has strong co-operation with private sector companies. It is a pilot project currently granted for two years, to be potentially expanded to all regions throughout Lithuania if successful. However, it is currently only aimed at those between the ages of 14 and 29, therefore excluding older participants who wish to seek career guidance.

Source: Employment Service (2021[53]), *Karjeras webpage*, https://uzt.lt/karjeras/.

Career counselling for adult jobseekers in Lithuania has also faced limitations. According to their specific needs, jobseekers can be given counselling and vocational guidance (OECD, 2018[26]). However, even before COVID-19, counsellors at the PES were overburdened with high caseloads, which limited the ability

for tailored and intensive career counselling. The caseload per frontline staff was 150 in 2016, 50% higher than the level in 2007 (OECD, 2018[26]). Rising unemployment levels connected to the COVID-19 crisis are likely to increase the pressure on PES counsellors for the foreseeable future.

According to participants in this project, measures aimed at improving career guidance in Lithuania are fragmented into a number of similar projects that target similar groups. This can be seen in the projects mentioned in this section, such as the EU-funded career counsellor project, the network of youth job centres, and the model of the Alytus Career Guidance Centre. The lack of an integrated and unified approach potentially leads to an inefficient use of resources. For example, an EU-funded project introduced dedicated career counsellors in schools, but since external funding ended, only a minority of schools could secure funding to continue these services. In parallel, the PES expanded the network of youth job centres targeted at jobseeking youths across Lithuania until 2016. Similarly, the model of the Alytus Career Guidance Centre targeted at young individuals is currently planned to be expanded across multiple regions of Lithuania, also with the PES in lead responsibility. The implementation of such partially overlapping, similar projects can lead to an inefficient use of financial resources, which are already scarce in Lithuania in international comparison (see Opportunity 3).

Lithuania should consequently expand and pool resources of existing career guidance services across all age groups and regions, instead of setting up new programmes and institutions for each target group. In order to keep costs in check, while at the same time guaranteeing equal quality and accessibility, Lithuania could implement a single, comprehensive system of career guidance, with modes of delivery that build on existing infrastructure. For example, Scotland has taken an innovative approach to integrating career guidance across the life course (Box 5.7). In practical terms, Lithuania could implement common professional standards for career counsellors and quality standards for career guidance. Furthermore, common information tools could be set up (for example based on data from NŽIS, see previous opportunity) that equip counsellors with the most recent available labour market intelligence, enabling them to give upto-date advice. In the mid to long term, Lithuania could follow a similar approach to Scotland, designating a single agency responsible for providing career guidance across all age groups and modes of delivery, but building on existing competencies within the PES.

Lithuania should harness technology to increase the supply of online career guidance services, in particular by strengthening and consolidating existing digital modes of delivery. This would be a cost-efficient way of relieving overburdened counsellors, addressing the target groups who have received less attention thus far (e.g. youth in schools in economically weaker regions, employed adults), and implementing social distancing practices due to the COVID-19 pandemic (OECD, 2021[54]). For example, the PES has already moved aspects of its career counselling online since the start of the COVID-19 crisis, just as many other OECD countries have done. However, participants consulted during this project indicated that current efforts could be improved. Career guidance in Lithuania will consequently need to utilise phone, email, social media and video call tools to connect to target groups across all age groups and regions and help guide them towards training options. These digital tools also allow counsellors to cope with higher caseloads by enabling group counselling and informational webinars, thereby reducing pressure on overburdened counsellors (particularly in the PES). Virtual options for career guidance ensures that counselling can be continued during social distancing measures. Digital tools can also lead to more personalised services (Box 5.7). These tools could be standardised across Lithuania's career guidance system, achieving cost savings and enabling the sharing of best practices between counsellors.

Lithuania is currently assessing whether to expand the one-stop shop model of the Alytus Career Guidance Centre (Box 5.6) as "regional career centres" across multiple regions, with the PES as lead responsibility. This expansion would increase the number and coverage of physical career guidance services across regions. However, it is important that such an expansion does not reproduce existing service gaps (e.g. for employed adults) or overlap with other programmes/services targeting similar groups (e.g. youth job centres). First, the potential expansion of regional career centres to all regions of Lithuania should be based on the existing infrastructure of youth job centres (i.e. following the example of the Alytus Career Centre). Current plans focus on potentially transforming youth jobs centres into regional career centres wherever possible, and/or closing some youth job centres after regional career centres are introduced. Existing resources could thereby be pooled in order to achieve an efficient delivery of services. Second, in addition to the digital modes of delivery mentioned previously, regional career centres could address the target group of employed adults, regardless of their employment status, when expanded across all regions of Lithuania. When expanding the reach of regional career centres and digital tools, Lithuania should also raise awareness about these new offerings through social media and the Internet as part of a more general effort to increase awareness about adult learning (see Chapter 3). Finally, Lithuania should assess if the agency given responsibility for career guidance (whether the PES or another agency) has sufficient capacity to fulfil its role in the context of the pandemic, given that existing career guidance services appear to be stretched. Such capacities include financial resources, but also the expertise to meet the specialised needs of new target groups. For example, employed adults are likely to expect different types of advice (e.g. career progression, changing jobs) to unemployed adults and youth (OECD, 2021[54]).

As part of a new career guidance model, Lithuania should ensure the accessibility of career guidance services to youth in all types of school and region. Expanding the model of the Alytus Career Guidance Centre across all of Lithuania's regions could provide more students with access to higher quality career guidance services. For example, as suggested by participants, staff from regional career centres together with local employers could engage in outreach activities in schools, thus preparing students for the world of work. Similarly, schools and teachers could be encouraged and supported to schedule class excursions to the closest regional career centre. These visits should ideally be followed up by additional counselling sessions; however, this might be hard to achieve for schools and students not in direct proximity to a regional career centre. Students could therefore use digital tools to access these career guidance services from school.

Box 5.7. Relevant international examples: Career guidance

Integrated career guidance: An example from Scotland

Scotland has a well-developed and comprehensive system of career guidance. The Scottish government funds a national public body, Skills Development Scotland (SDS), to deliver career information, advice and guidance (CIAG). The all-age service is delixvered in schools and via a network of local high street centres and in local partnership and outreach premises. The SDS universal CIAG offer ensures the delivery of a non-targeted all-age career guidance service in Scotland, free to anyone at the point of need. While most customers will predominantly receive assisted or self-directed support through My World of Work, an award-winning career information and advice website, all the face-to-face services offered through SDS careers centres are available to any customer according to their current need. There is also the choice of using a dedicated telephone helpline, demonstrating the integrated, multi-channel delivery of the CIAG service. The skills planning model used by SDS allows career practitioners to be equipped with the most recent available labour market intelligence, provided in an easily accessible format. This includes information on industry demand at both a regional and sectoral basis, with a focus on the needs of priority and growth areas such as the science, technology, engineering and mathematics sectors. They also have up-to-date information on the full range of routes and pathways that can be taken into these careers, including options for work-based learning. It is recognised that some customers require more support than others to make a successful transition to work or further learning. To increase equality of opportunity for all, SDS CIAG services target resources at those customers who require the most support. A "needs matrix" is used to suggest the level of support need for each customer and the corresponding service offer they might receive. This need is then validated to confirm the service offer entitlement. Scotland recognises that "career guidance is a distinct, defined and specialist profession which demands a unique set of core skills and expects all career guidance practitioners to be professionally qualified" and fulfil a minimum of 21 CPD hours annually.

Digitising career guidance: An example from Estonia

The PES in Estonia has had extensive experience providing remote career guidance and counselling via email, phone, and Skype for several years. Originally implemented to overcome obstacles that prevent people from reaching PES offices, and to provide guidance to those who wish to remain anonymous, these digital services have also enabled Estonia's PES to respond quickly to COVID-19. The demand for distance career guidance services rose at least seven-fold between January and March 2020, and the PES was able to upscale digital services accordingly. Adults can now schedule a meeting on the PES's self-service portal for a Skype chat. Counselling via phone, email or Microsoft Teams, which is used for both individual and group consultations, are also options. To complement online career guidance, the Estonian PES has fully automatised several of its processes successfully, such as registering jobseekers and processing unemployment insurance benefits. This allows the whole process of support for the unemployed to be undertaken online, enabling the PES to deal with much higher caseloads from a safe distance. The PES has also organised an international online job fair in response to COVID-19, promoting the online event through public television and radio, advertisements on social media and private web pages, and mass mailing of all the partner-employers of the PES.

Source: Musset and Kureková (2018[55]), *Working it Out: Career Guidance and Employer Engagement*, https://doi.org/10.1787/51c9d18d-en; OECD (2020[56]), *Public employment services in the frontline for jobseekers, workers and employers*, https://www.oecd.org/coronavirus/policy-responses/public-employment-services-in-the-frontline-for-employees-jobseekers-and-employers-c986ff92/; Holland and Mann (2020[57]), *How Estonia is delivering online career guidance during the coronavirus crisis*, https://oecdedutoday.com/estonia-online-career-guidance-during-coronavirus-crisis/.

Recommendations for implementing a system of lifelong career guidance for individuals of all ages

4.10 **Strengthen career guidance in Lithuania by establishing an integrated, comprehensive lifelong career guidance system to serve all regions and age groups, with multiple modes of delivery**. For example, Lithuania could create common professional and quality standards for career guidance and set up common information tools that equip counsellors with labour market intelligence (for example based on data from NŽIS). Lithuania could potentially appoint a dedicated agency responsible for providing and managing career guidance across all age groups and modes of delivery, building on existing competencies within the PES. Lithuania should also build the specific modes of delivery of such an integrated system on existing infrastructure. For example, one-stop shop regional career centres (such as the Alytus Career Guidance Centre) should be built on youth job centres wherever possible, and the use of digital tools for career guidance could be strengthened by building on existing efforts of the PES to adapt career guidance in the context of the pandemic. All career guidance providers in Lithuania should increase their provision of remote guidance services (e.g. via phone, email, social media and video call) to achieve better coverage across Lithuania's regions. The government should encourage providers to use the same digital tools (e.g. video call software) in order to enable local career guidance counsellors to exchange best practices, improve the compatibility of services across different providers and clients and achieve cost savings.

4.11 **Expand the supply, awareness and uptake of career guidance services for adults to support their job searches and their efforts to upskill and reskill**. Regional career centres and digital modes of delivery (see Recommendation 4.10), when expanded, should also serve the target group of adults, regardless of their employment status. Awareness about these new offerings could be raised via specific information campaigns directed at adults using social media and the Internet as part of a more general effort to increase awareness about adult learning (see Chapter 3). Lithuania should assess if the PES (or a future dedicated agency responsible for career guidance, see previous recommendation) has sufficient capacity to meet the needs of new target groups of regional career centres and digital modes of delivery (e.g. employed adults), including financial resources and expertise.

4.12 **Ensure the accessibility of career guidance services for school students of all age groups, regardless of school type and geographical location**. Regional career centres, when expanded, should provide schools across all of Lithuania's regions access to high-quality career guidance services. Staff from regional career centres, jointly with local employers, should engage in outreach activities in schools. Similarly, schools and individual teachers should be encouraged and supported to provide scheduled class excursions to nearby regional career centres, if possible considering pandemic trends. These visits could be followed up by additional counselling sessions at the regional career centres. These sessions could be face to face or virtually with students in schools to mitigate the health concerns associated with the current pandemic. Virtual sessions would also reach more schools and students in remote locations.

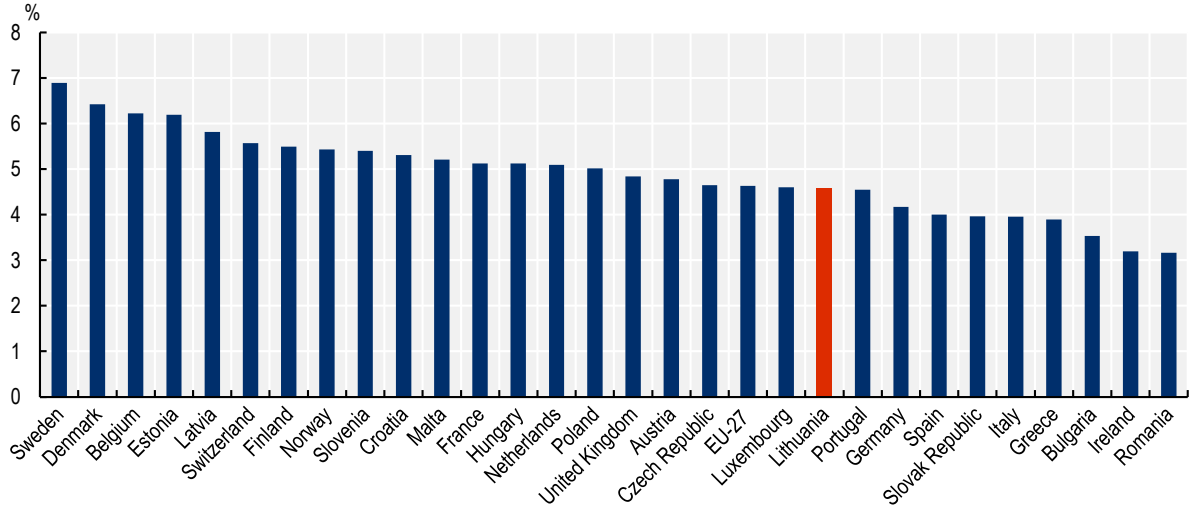
Opportunity 3: Ensuring the sustainable, well-targeted and shared financing of Lithuania's skills system

Sufficient funding for skills formation is essential to make societies resilient to external shocks (such as COVID-19) and adjust to technological change that alters skill requirements. As individuals and employers tend to underinvest in skills due to uncertain future payoffs from training (Johansen, 2002[58]; Streeck, 1992[59]), governments are in a key position to resolve such market failures with public financial incentives (OECD, 2017[60]). Lithuania's 2030 strategy, the National Plan for Progress 2021-2030 and the new Programme of Government highlight the importance of improving the quality of public services such as education, necessitating clear commitments for sustainable funding. However, Lithuania's spending on skills remains relatively low by international comparison. Lithuania should consequently ensure that investments for skills are not only well targeted, but that the costs are shared across a variety of stakeholders. Beyond increasing public expenditure, literature also highlights more innovative mechanisms for raising the respective financial resources necessary for sustainable skills policy (OECD, 2019[1]). For example, cost sharing mechanisms between central government, employers and potentially employees can help to raise the resources necessary for future-proofed skills provision (OECD, 2017[61]). Furthermore, spending on skills policies should be allocated in a well-targeted manner, which often involves prioritisation and the reallocation of funds that have limited impact (OECD, 2019[1]). This could, for example, concern the distribution of funding across different educational sectors (e.g. primary and secondary level education, higher education, the adult learning system and ALMPs), but also within their networks of educational providers. Similarly, the well-targeted allocation of funding (also from external sources such as EU structural funds) includes the prioritisation of (pilot) projects that have proven particularly successful in systematic evaluations (OECD, 2019[1]).

Ensuring well-targeted and shared investments across the skills system

By international comparison, Lithuania´s expenditure on skills policies is relatively modest. For example, public expenditure on education is relatively low, as shown in Figure 5.9.

Figure 5.9. Public expenditure on education as a percentage of GDP (2018)



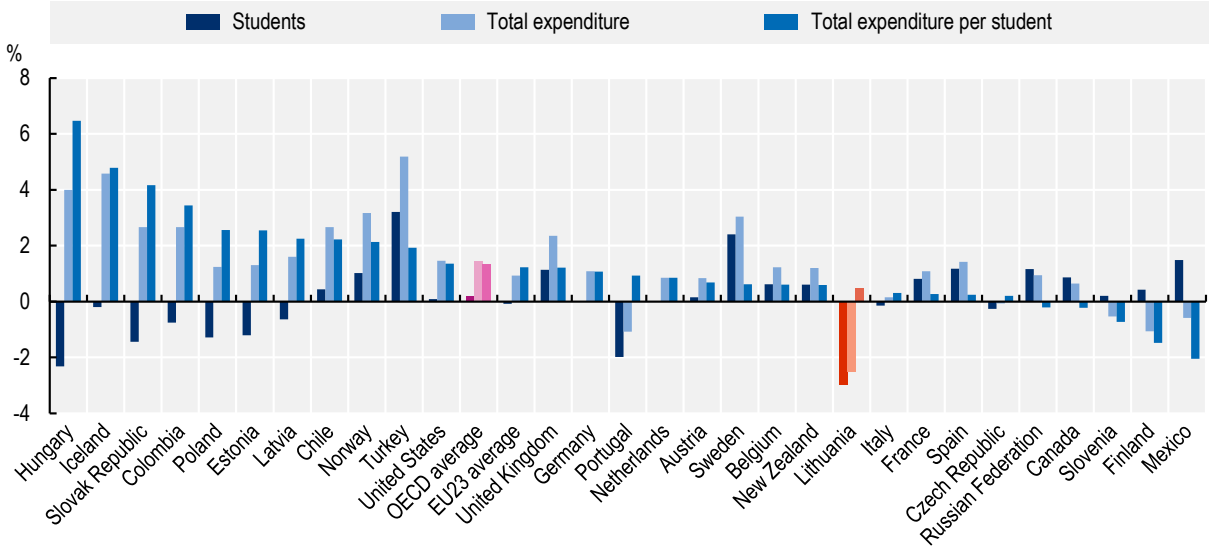
Source: Eurostat (2020[27]), *Government expenditure on education* (2018), http://ec.europa.eu/eurostat/product?code=gov_10a_exp&language=en&mode=view.

StatLink https://stat.link/3pegqk

While some countries such as Germany and Japan also spend below the OECD average on education as a share of GDP, employers contribute significantly to skilling the workforce in these countries, for example via dual vocational education and training systems (Busemeyer and Trampusch, 2012[62]), and their expenditure per student is substantially higher (OECD, 2017[13]).

In Lithuania, public expenditure on education per student is also far below the OECD average for primary, secondary and tertiary education (OECD, 2020[20]). Compared to its Baltic neighbors, Lithuania spends the least per student for primary, secondary and non-tertiary post-secondary education. It spends less than Estonia and only slightly more than Latvia for tertiary education. Furthermore, while educational expenditure from primary to tertiary education per student has grown on average between 2012 and 2017, this can be mostly related to a decreasing number of students, with total expenditure actually decreasing (Figure 5.10).

Figure 5.10. Average annual growth in total expenditure on primary to tertiary educational institutions per full-time equivalent student, 2012-2017



Source: OECD (2020[20]), *Education at a Glance 2020: OECD* Indicators, https://dx.doi.org/10.1787/69096873-en.

StatLink https://stat.link/wbakhy

For ALMPs, Lithuania's spending relative to its GDP is also low by international comparison (OECD, 2018[15]). As a share of total GDP, training expenditure as part of ALMPs are not only lower than the OECD average, but also lower than in Estonia and Latvia (OECD, 2019[63]). In terms of ALMP expenditure per unemployed person, Lithuania ranks below Estonia but above Latvia (OECD, 2019[44]). During the 2008 global financial crisis, ALMP spending per unemployed person was procyclical, and consequently decreased as labour market conditions worsened and when additional funding was most needed (OECD, 2018[15]).

Lithuania's 2030 strategy emphasises that the quality of public services, explicitly including education, is still inadequate in Lithuania. It highlights a potential connection between quality and low government spending, and proposes establishing a consensus on priority services. The National Plan for Progress (NPP) 2021-2030 highlights the importance of improving the quality of public services such as education, and investing in education and retraining to support a shift to a digital and knowledge-based economy. The 2020 Programme of Government also prioritises a range of skills policy goals, including the

improvement of lifelong learning, VET, HE, research, and school and teaching quality. In order to reach these goals, Lithuania will likely need to increase public educational expenditure.

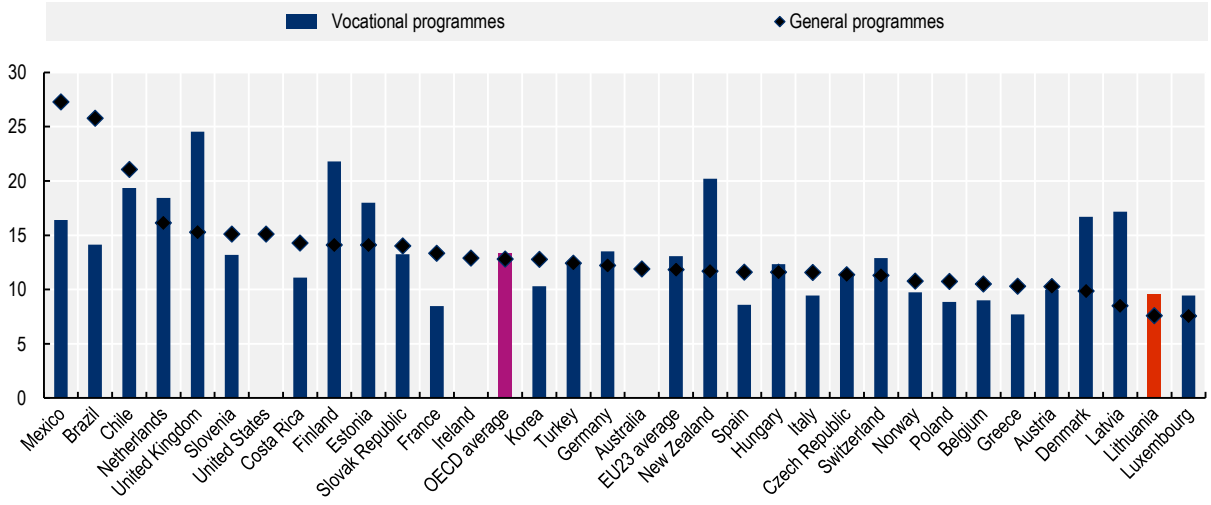
However, increasing public expenditure is not the only mechanism through which Lithuania could raise additional resources for skills policies. Existing expenditure could be spent in a more targeted manner by potentially reallocating resources across different parts of the skills system, and/or sharing financing burdens across a multitude of stakeholders. First, the central government might choose to reallocate resources within the skills system. Earlier reports (Shewbridge et al., 2016[7]) and some participants in this project emphasised that in higher education, Lithuania has a particularly dense network of tertiary institutions by international comparison. The central government could further consolidate (e.g. merge) institutions to free funds for different priorities. Many tertiary institutions face falling enrolments, leading not only to inefficiencies due to underused facilities, but also quality problems due to difficulties in achieving "the critical mass of researchers, facilities, and research infrastructure" (OECD, 2017[13]).

In addition to the state, employers and potentially employees could contribute more systematically to skills development in Lithuania, thereby financing the skills system in a tripartite manner. A tripartite funding agreement between these actors could establish the necessary commitment of all actors to raise contributions to skills development (Box 5.8). As highlighted in the overview and performance section, employer contributions to skills development are relatively low in Lithuania. For example, financial incentives from government to increase employer participation in apprenticeships have shown very limited success (OECD, 2018[15]; Cedefop, 2015[22]). The COVID-19 crisis has raised the importance of cost sharing, but will also make such agreements particularly challenging due to cost constraints on the side of employers. Various participants consulted during the project indicated strong support for increased employer contributions to skills policies via a tripartite skills fund/levy, where employers and potentially employees pay mandatory contributions (for details on a training levy solution, see Chapter 3). Such a skills fund could be part of a tripartite funding agreement signed by government, employer and employee representatives. As part of the tripartite funding agreement, the government could pledge to increase its own funding for a broad variety of skills policies in order to reach consensus with employer and employee representatives and secure their agreement to implementing a skills fund/training levy. Ultimately, the fund could finance a variety of education and training programmes and support tripartite actors in the governance of the training system,[3] with the specific funding priorities and amount of contributions jointly decided by the Tripartite Council and a potential future Skills Policy Council (for example within a specific sub-committee for skills in the Tripartite Council, see Opportunity 1).

Resources could also be raised at lower levels of government. Other reports, such as by the OECD (2020[64]), have stressed the need for Lithuania to reallocate resources across the skills system, especially given the dense network of secondary level schools and falling student numbers. Through the consolidation of existing secondary level institutions, additional funds could be raised at the municipal level and distributed to different priorities. While some literature suggests that low class sizes in schools might be beneficial for learning outcomes (Fredriksson, Öckert and Oosterbeek, 2013[65]), current empirical research in Lithuania did not find a significant relationship between class size and outcomes (OECD, 2020[64]). Rather, educational outcomes are weaker in smaller schools in Lithuania (OECD, 2020[64]), most likely as larger schools might offer benefits via broader curricula, specialised courses and more interactions between and among students and teachers (Shewbridge et al., 2016[7]). Lithuania has achieved progress concerning school consolidation in recent years, while simultaneously reducing its potentially negative effects by expanding school transport arrangements (Shewbridge et al., 2016[7]). However, Lithuania still has one of the lowest student/teacher ratios in secondary education across all OECD countries, indicating at least partial leeway for additional cost-saving measures (see Figure 5.11). As municipalities are currently responsible for consolidating the school network, incentives should be targeted at them to expedite such consolidation. Currently, municipalities receive direct targeted subsidies from central government to finance their school networks. Municipalities that consolidate their school network could be allowed to keep the current level of subsidies, which would otherwise decrease as the school network grows smaller. This

could be a step in the right direction, but Lithuania should make sure that such money allocated to municipalities remains ring fenced to tasks related to skills policy. In turn, such resources might be used to increase the capacities of municipalities in skills policy making (see Opportunity 1) and increase teachers' skills (see Chapter 2).

Figure 5.11. Ratio of students to teaching staff in upper secondary education, by programme orientation, 2018



Source: OECD (2020[20]), *Education at a Glance 2020: OECD Indicators*, https://dx.doi.org/10.1787/69096873-en.

StatLink https://stat.link/sg7rbc

Cost savings within the skills system could also be achieved by encouraging inter-municipal co-operation in service provision, using a shared infrastructure and service provision network, and/or transferring responsibilities to higher levels of government (for an international example see Box 5.8). A recent report on the public sector in Lithuania proposed that municipalities should review and evaluate their responsibilities, potentially transferring some to other levels of government if deemed efficient and useful to the community (Ministry of the Interior and STRATA, 2020[45]). The new general plan for the territorial development of Lithuania (Seimas of the Republic of Lithuania, 2020[66]) also creates opportunities for municipalities and regions to voluntarily cluster together into regions based on real co-operation needs. According to the new Regional Development Act (Seimas of the Republic of Lithuania, 2020[14]), such functional economic development zones (10-15 regions including larger cities and their surrounding rural areas) have economic or social ties and/or a shared infrastructure and/or service network, the development of which is provided in the regional development plan or in the development plans of several regions. The new Regional Development Act proposes the transfer of some municipal public service administration powers to regional development councils. These councils (see also Opportunity 1) could consequently constitute a forum to discuss inter-municipal co-operation in service provision that might lead to cost savings within skills policies, including facilitating the consolidation of the school network and the higher education network.

Box 5.8. Relevant international examples: Funding arrangements

Tripartite funding agreements: An example from the Netherlands

The *Techniekpact* (Technology Pact) is a nationally co-ordinated strategy to ensure technology and technical skills training for the jobs of tomorrow for children, young adults and adult learners. *Techneikpact* is funded by more than 60 partners, including national ministries, the education sector, the five regions, industry and employer organisations, and labour unions. An investment fund was created in which central government, employers and the regions each contributed EUR 100 million towards public-private education partnerships within the region. Implementation of the *Teckniekpact* programme takes place at the regional level, thus allowing regions to adapt more directly to the needs of their labour market and worker population. Each of the five regions of the Netherlands has its own Technology Pact. The initiative is steered by the National Technology Pact Co-ordinating Group (*Landelijke Regiegroep Techniekpact*), which co-ordinates, tracks and monitors the implementation of the strategy at the regional and sectoral level. The co-ordinating group is composed of representatives from the five regions, central government, employers, workers, the top sectors and the education community.

Inter-municipal co-operation: An example from Finland

Finland's multi-level governance reforms have driven collaboration between local areas and regions on education and training services. The PARAS (Kunta- ja palvelurakenneuudistus) reform in Finland was a multi dimensional reform that included municipal mergers, inter municipal co operation for service provision (in particular in the areas of healthcare and education), and better governance in urban regions. Legislation introduced quantitative thresholds for healthcare and education provision. Municipalities or inter municipalities authorised to provide basic education services had to have at least 50 000 inhabitants. The local authorities involved could agree that the functions of co management areas would be conducted jointly or by one local authority on behalf of one or more other local governments. Municipalities and urban regions had to submit their reports and implementation plans to central government by the end of August 2007. In 2008, central government evaluated the reform progress based on supplementary information submitted by municipalities. The reform was implemented between 2009 and 2012. As decisions were voluntary, each municipality/urban region implemented (or not) its plans at its own pace. The establishment of quantitative thresholds for education services drove collaboration and was supported by a joint project by the Ministry of Education and Culture and education providers to ensure structural and economic support for education and training across regions.

Source: OECD (2017[67]), *Multi-level Governance Reforms: Overview of OECD Country Experiences*, https://doi.org/10.1787/9789264272866-en; OECD (2019[28]), *Skills Strategy Poland: Assessment and Recommendations*, https://doi.org/10.1787/b377fbcc-en.

Recommendations for ensuring well-targeted and shared investments across the skills system

4.13 **Increase public investment in skills policies as part of a tripartite funding agreement.** As public expenditure for skills policies is still low in international comparison, the government should pledge to increase its expenditure as part of a tripartite funding agreement for skills policies, signed by government, employer and employee representatives. The resources provided by government as part of this agreement could be used for a broad range of activities, for example to increase the capacity of ministries, STRATA and subnational actors (see Opportunities 1 and 2, and Chapter 4), to guarantee continued funding for well-functioning European Social Fund (ESF) projects (see the next section "Enabling sustainable funding for well-functioning, externally-financed skills policies"), as contributions to a skills fund/levy and/or individual learning scheme (see Chapter 3 and Recommendation 4.14), as well as for other recommendations identified in this report.

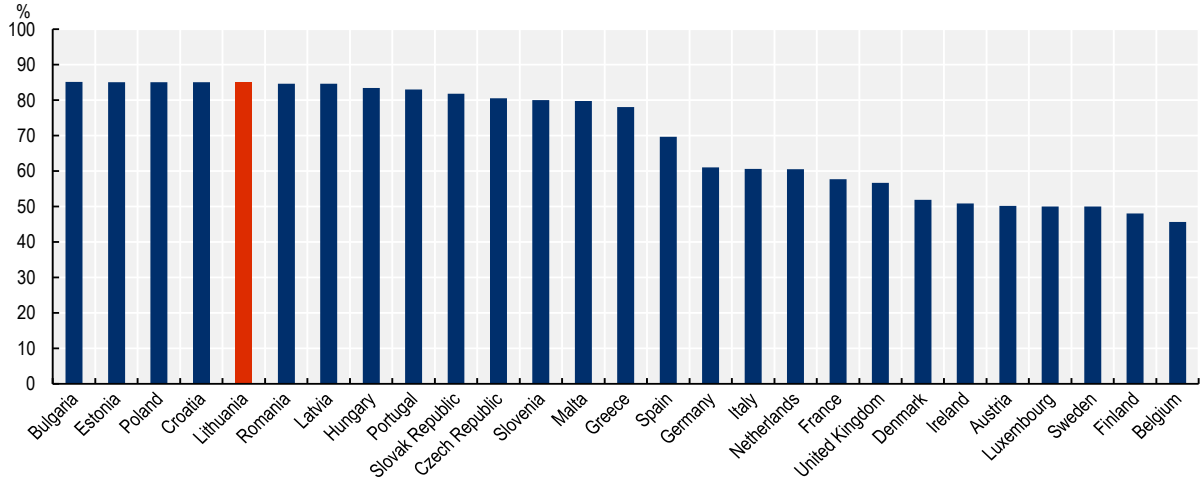
4.14 **Increase employer and potentially employee investment in skills development through the establishment of a tripartite funding agreement.** In exchange for increased public expenditure on skills policies, representatives of employers and employees (e.g. employer associations, trade unions) within the Tripartite Council should commit to increase their contributions to skills policies, for example via potentially mandatory contributions to a skills fund/levy (see Chapter 3). Public contributions to a fund could match employer and employee contributions and therefore increase the social partners' willingness to contribute. These resources could be used for a variety of skills programmes, but could also help to increase the capacities of sectoral professional committees (which are also organised in a tripartite manner, see Opportunity 1). The governance of the training fund, including decisions on the level of contributions and how to spend the funds, should be undertaken in a tripartite manner, for example within the education sub-committee or a dedicated sub-committee for skills within the Tripartite Council (see also Opportunity 1).

4.15 **Better target funding across Lithuania's skills system by assessing options for cost savings in the provision of higher and secondary-level education.** Lithuania should assess options for achieving cost savings in higher and secondary-level education, including through better inter-municipal co-operation between education providers, incentives for municipalities to achieve cost savings in their respective secondary school network, and/or changes in Lithuania's higher education network. First, concerning inter-municipal co-operation in service provision, regional development councils can constitute a forum to discuss potential for inter-municipal co-operation. Lithuania should assess if some municipal public service administration powers including education should be transferred to the county-level, leading to cost savings, as foreseen in the New Regional Development Act. Second, Lithuania should assess if municipalities can be incentivised to achieve cost savings in the provision of secondary education, for example by holding central government subsidies for secondary education at current levels and letting them keep part or all of potential cost savings. In this regard, Lithuania should ensure that in order to increase the capacities of municipalities in skills policy making (see Opportunity 1) and teachers' skills (see Chapter 2), these savings remain ring fenced to skills policy related tasks. A third option for Lithuania's central government is to assess potential cost savings as a result of changes to Lithuania's higher education network.

Enabling sustainable funding for well-functioning, externally-financed skills policies

Skills systems in Europe are often co-financed by external, international funds, for example the European Union's Structural and Investment Fund (ESIF) and subsequently the ESF – albeit to a varying extent. Lithuania is highly dependent on financing from such external sources, which partially leads to problems for the continuity of skills policies across all sectors. Project participants for example emphasised this dependence with reference to projects that aim to improve pedagogical practices and the professional development of teachers, and expand career counselling in schools. There are also several ESF-funded projects in the area of VET that involve increasing the attractiveness of VET among the population, creating investments in VET centres, linking VET schools to local stakeholders (OECD, 2017[13]), supporting different types of apprenticeship programmes (Cedefop, 2015[22]) and giving financial support to employers that invest in skills. At the beginning of the last funding period, 18% of funding for vocational schools was sponsored by EU structural funds (OECD, 2017[13]). In higher education, externally funded projects tend to aim for quality improvements. ALMPs are also to a large extend funded by the ESF (OECD, 2018[15]), and there is a high dependence on external funds in lifelong learning (Figure 5.12). The newly introduced non-formal education voucher system is also mainly funded by the ESF. Various externally funded projects aim to increase the coverage of skills anticipation and assessment tools.

Figure 5.12. Share of EU-ESIF contributions in the funding of lifelong learning



Note: Calculated as the share of EU funding in total funding of the European Structural and Investment Funds (ESIF) thematic objective "Investing in education, training and vocational training for skills and lifelong learning"
Source: OECD calculations based on data from the European Commission (2019[68]), *European Structural and Investment Funds (ESIF) 2014-2020 Finances Planned*, https://cohesiondata.ec.europa.eu/2014-2020/ESIF-2014-2020-FINANCES-PLANNED-DETAILS/e4v6-qrrq.

StatLink https://stat.link/3ou6bi

According to participants in this project, this dependence on external funding leads to various challenges. Earlier reports (OECD, 2018[15]; OECD, 2017[13]) emphasised that Lithuania's dependence on ESF funds raises problems for the continuity of the programmes. Ambitious projects that aim to improve Lithuania's skills system are often fixed-term projects with a maximum duration of five years. The short duration of projects often makes it difficult for institutional mechanisms to be built up (e.g. long-term employer commitment to apprenticeships). After ESF funding stops, projects are often discontinued, especially in economically weaker regions that cannot raise the necessary financial resources. Some projects that participants deemed successful were discontinued and similar projects set-up from scratch.

For example, in the area of career counselling, substantial financial means were invested into introducing professional career counselling in schools. However, after external funding stopped, these services were discontinued in most schools (particularly in economically weaker municipalities). Instead, new regional career centres targeted at youth are currently planned (see Opportunity 2). Similarly, skills anticipation and assessment tools were often only conducted as long as external funding lasted, with no new data being generated afterwards. Currently, the non-formal education voucher system is mainly funded by ESF, and according to participants in this project, its long-term funding is not secured.

These short-term project-based skills funding arrangements will also become more costly for Lithuania in the long term. With the beginning of the 2020 funding cycle of the ESIF, cost sharing between the EU and Lithuania shifts to less advantageous terms, more specifically from a 95/5 split to a 60/40 split (OECD, 2017[13]). Consequently, Lithuania should build a mechanism to decide which externally funded projects should be continued at the national level and on a permanent basis. These decisions must be taken in a co-ordinated manner, minimising potential duplications and discontinuities between projects (OECD, 2020[69]). Such a mechanism could be implemented via letting a newly created, inter-ministerial Skills Policy Council (see Opportunity 1) jointly decide which projects should be expanded to the national level and permanently implemented.

When making these decisions, Lithuania should take into account all available evidence on the outcomes and success of externally funded programmes; however, an earlier report (OECD, 2018[15]) emphasised the lack of skills policy evaluation in Lithuania. While this problem is mitigated for programmes co-financed by the ESF, evaluation efforts were still identified as unsystematic and lacking comparisons against control groups to assess outcomes. Instead of robust evaluative evidence (for example counterfactual impact evaluations, which are rarely carried out, see Box 5.9), most information on the success of ESF-funded programmes relies on monitoring individual indicators (e.g. share of programme participants subsequently in employment, share of programme participants that subsequently continued and/or finished an educational programme). Such indicators were described by participants in this project as insufficient for showing the real impact of investments. In the last funding period of the ESIF, only the EIM conducted regular evaluation exercises, with multiple ministries conducting as few as one evaluation between 2014 and 2020 (Ministry of Finance, 2020[70]). Consequently, upon application for external funding, Lithuania might set aside a certain share of the programme budget for thorough evaluation, as practiced in Germany (OECD, 2018[15]). This could also lead to higher commitment by the respective ministries to carry out thorough evaluations.

Box 5.9. Relevant national example: Assessing well-functioning ESF-funded programmes

Counterfactual impact analysis of ESF-funded skills policies: An example from Lithuania

From 2014 to 2015, the SADM in co-operation with the European research and policy analysis centre, PPMI, conducted a counterfactual impact evaluation of ESF-funded support for unemployed individuals. Administrative data of unemployed individuals between 2004 and 2013 were used to estimate the impact of wage subsidies and vocational training on the number of days in employment and the income of participants. In general, the project also aimed to raise awareness, increase knowledge and develop practical skills for conducting counterfactual impact evaluations among Lithuanian policy makers. Important lessons for future counterfactual impact analysis included the importance of co-operation between analysts, policy makers, implementing institutions and practitioners. Furthermore, the benefits of a framework of co-operation between all stakeholders was emphasised, while ensuring that it remained independent from political influence. It was also highlighted that counterfactual impact evaluation can only provide information about intervention effects, but not political decisions. The evaluation itself was financed by the European Commission and aimed to promote the wider use of counterfactual impact evaluations when evaluating ESF-funded interventions. However, since the project was conducted, only one other project in skills policies, located at the EIM, has been subject to counterfactual impact analysis (Ministry of Finance, 2020[70]). The evaluation analysed the impact of training activities on participants' income within the Human resources INVEST LT+ programme.

Source: PPMI (2015[71]), *Final Report on Counterfactual Impact Evaluation of ESF-funded Active Labour Market Measures in Lithuania*; PPMI (2016[72]), *Counterfactual impact evaluation of ESF-funded active labour market measures in Lithuania*, https://www.ppmi.lt/en/news/counterfactual-impact-evaluation-of-esf-funded-active-labour-market-measures-in-lithuania-29.html?back=home; BGI Consulting (2018[73]), *Evaluation of the Implementation Progress of Priority Axis 9 Specific Objective "Increase Workforce Competitiveness, Ensuring Opportunities to Adapt to Economic Needs" under the Operational Programme for the European Union Funds' Investments*, https://www.esinvesticijos.lt/media/force_download/?url=/uploads/main/documents/docs/12311_aa3163e38026f04518f3fdf26e83fb99.pdf.

Recommendations for enabling sustainable funding for well-functioning, externally-financed skills policies

4.16 **Increase the long-term sustainability of externally funded skills projects by systematically identifying successful programmes and committing to continue them with state funding**. A potential Skills Policy Council (see Opportunity 1) could jointly decide on successful programmes to be permanently implemented and financed by Lithuania's own budget if external funding ends. In these decisions, the Skills Policy Council should be supported by systematic evaluations of ESF-funded programmes. Commitment to undertake systematic evaluations should already be included in the application for external funding, setting aside a certain share of programme budget for thorough evaluation. Funding for well-functioning policies should be secured as part of increased public expenditure (see the previous section "Ensuring well-targeted and shared investments across the skills system").

Summary of policy recommendations

Policy directions	High-level recommendations
Opportunity 1: Increasing the capacity and co-ordination of governmental and non-governmental actors across the skills system	
Strengthening strategic planning and oversight in the Lithuanian skills system	4.1. Develop a shared, overarching vision for developing and using skills by creating a comprehensive skills strategy for Lithuania. 4.2. Improve inter-ministerial co-ordination by creating a designated, inter-ministerial body with lead authority and responsibility for skills policy.
Fostering national-level social partnership and stakeholder engagement in skills policy	4.3. Ensure close collaboration between a future Skills Policy Council and Lithuania's current Tripartite Council. 4.4. Increase the impact of issue-specific stakeholder engagement bodies by guaranteeing government accountability regarding given advice.
Increasing the capacity of governmental institutions and social partners at the subnational level	4.5. Increase the capacity of municipalities, regional development councils and sectoral professional committees to fulfil their responsibilities in the governance of Lithuania's skills system. 4.6. Strengthen social partnership at the subnational level by including trade unions in regional development councils.
Opportunity 2: Enhancing skills information and career guidance systems and practices	
Improving Lithuania's ability to use evidence in skills policy making	4.7. Improve the identification, communication and response to ministries' data needs through regular, inter-ministerial technical-level meetings. 4.8. Continue to improve skills needs assessment and anticipation in Lithuania, particularly in the areas of quantitative skills forecasting and qualitative skills foresight. 4.9. Increase the capacity of ministries and STRATA to fulfil their functions in supporting and undertaking evidence-informed policy making.
Implementing a system of lifelong career guidance for individuals of all ages	4.10. Strengthen career guidance in Lithuania by establishing an integrated, comprehensive lifelong career guidance system to serve all regions and age groups, with multiple modes of delivery. 4.11. Expand the supply, awareness and uptake of career guidance services for adults to support their job searches and their efforts to upskill and reskill. 4.12. Ensure the accessibility of career guidance services for school students of all age groups, regardless of school type and geographical location.
Opportunity 3: Ensuring the sustainable, well-targeted and shared financing of Lithuania's skills system	
Ensuring well-targeted and shared investments across the skills system	4.13. Increase public investment in skills policies as part of a tripartite funding agreement. 4.14. Increase employer and potentially employee investment in skills development through the establishment of a tripartite funding agreement. 4.15. Better target funding across Lithuania's skills system by assessing options for cost savings in the provision of higher and secondary-level education
Enabling sustainable funding for well-functioning, externally-financed skills policies	4.16. Increase the long-term sustainability of externally funded skills projects by systematically identifying successful programmes and committing to continue them with state funding.

References

Baumeler, C., S. Engelage and A. Strebel (2018), *Creation, Maintenance, and Disruption: Occupational Associations and Their Heterogeneous Institutional Work after the Swiss VET Policy Reform*, in C. Nägele & B.E. Stalder (eds.), Trends in vocational education and training research. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET), https://zenodo.org/record/1319630#.YEJSt05xfIU. [40]

Bertelsmann Stiftung (2019), *Sustainable Governance Indicators 2019*, https://www.sgi-network.org/2019/Governance. [25]

BGI Consulting (2018), *Evaluation of the Implementation Progress of Priority Axis 9 Specific Objective "Increase Workforce Competitiveness, Ensuring Opportunities to Adapt to Economic Needs" under the Operational Programme for the European Union Funds' Investments*, BGI Consulting, https://www.esinvesticijos.lt/media/force_download/?url=/uploads/main/documents/docs/12311_aa3163e38026f04518f3fdf26e83fb99.pdf. [73]

Bildungsdirektion Kanton Zürich (2020), *Berufsbildungsfonds Jahresbericht 2019*, Berufsbildungsfonds Kanton Zürich. [74]

Busemeyer, M. and C. Trampusch (eds.) (2012), *The Political Economy of Collective Skill Formation*, Oxford University Press, Oxford, https://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199599431.001.0001/acprof-9780199599431. [62]

Busemeyer, M. and C. Trampusch (2012), "The Political Economy of Collective Skill Formation", in Busemeyer, M. and C. Trampusch (eds.), *The Political Economy of Collective Skill Formation*, Oxford University Press, Oxford, https://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199599431.001.0001/acprof-9780199599431. [35]

Busemeyer, M. and J. Vossiek (2015), *Reforming Education Governance Through Local Capacity-building*, OECD Publishing, https://dx.doi.org/10.1787/5js6bhl2mxjg-en. [37]

Cedefop (2015), *Apprenticeship Review Lithuania*, Publications Office of the European Union, https://www.cedefop.europa.eu/en/publications-and-resources/publications/4140. [22]

Cedefop (2014), *Lithuania: VET in Europe: Country Report 2014*, https://www.cedefop.europa.eu/en/publications-and-resources/country-reports/lithuania-vet-europe-country-report-2014. [16]

EGFSN (2021), *About us*, Expert Group on Future Skills Needs, http://www.skillsireland.ie/about-us/ (accessed on 5 March 2021). [50]

EGFSN (2010), *Future Skills Needs of Enterprise within the Green Economy in Ireland*, Expert Group on Future Skills Needs, http://www.skillsireland.ie/media/egfsn101129-green_skills_report.pdf. [49]

Emmenegger, P., L. Graf and C. Trampusch (2019), "The governance of decentralized cooperation in collective training systems", *Journal of Vocational Education & Training*, Vol. 71/1, pp. 21-45, https://www.tandfonline.com/doi/full/10.1080/13636820.2018.1498906. [36]

Emplopyment Service (2021), *Karjeros centras Alytuje*, Užimtumo tarnyba (Employment Service), https://uzt.lt/karjeras/ (accessed on 5 March 2021). [53]

euroguidance (2020), *Guidance System in Lithuania*, https://www.euroguidance.eu/guidance-system-in-lithuania. [19]

European Commission (2019), *European Structural and Investment Funds (ESIF) 2014-2020 Finances Planned*, https://cohesiondata.ec.europa.eu/2014-2020/ESIF-2014-2020-FINANCES-PLANNED-DETAILS/e4v6-qrrq. [68]

Eurostat (2020), *Government expenditure on education (2018)*, http://ec.europa.eu/eurostat/product?code=gov_10a_exp&language=en&mode=view. [27]

Eurostat (2015), *Continuing Vocational Training Survey (CVTS)*, https://ec.europa.eu/eurostat/web/microdata/continuing-vocational-training-survey. [23]

Eurydice (2019), *National Reforms in School Education*, https://eacea.ec.europa.eu/national-policies/eurydice/content/national-reforms-school-education-38_en. [21]

Fredriksson, P., B. Öckert and H. Oosterbeek (2013), "Long-term effects of class size", *Quarterly Journal of Economics*, Vol. 128/1, pp. 249-285. [65]

Government of the Republic of Lithuania (2021), *Nutarimas Dėl Lietuvos Respublikos Ekonomikos Ir Inovacijų Ministerijos Nuostatų Patvirtinimo*, https://www.e-tar.lt/portal/lt/legalAct/TAR.3CE5C3AA17FB/asr. [10]

Government of the Republic of Lithuania (2019), *Viešųjų konsultacijų metodika ir taikymo gairės*. [33]

Holland, K. and A. Mann (2020), *How Estonia is delivering online career guidance during the coronavirus crisis*, OECD Education and Skills Today, OECD, Paris, https://oecdedutoday.com/estonia-online-career-guidance-during-coronavirus-crisis/. [57]

Ilkevičiūtė, J. (2020), *How much does it cost to be a student in Lithuania?*, https://www.lrt.lt/en/news-in-english/19/1225256/how-much-does-it-cost-to-be-a-student-in-lithuania. [5]

Johansen, L. (2002), "Transferable Training as a Collective Good", *European Sociological Review*, Vol. 18/3, pp. 301-314, https://www.researchgate.net/publication/249285632_Transferable_Training_as_a_Collective_Good. [58]

Kaminskienė, L. (2009), *Social Partnership in Vocational Education and Training in Lithuania: Challenges and Perspectives*, International Handbook of Education for the Changing World of Work, Springer. [6]

Le Deist, F. and V. Tutlys (2012), "Limits to mobility: Competence and qualifications in Europe", *European Journal of Training and Development*, pp. 262-285. [4]

Mann, A., V. Denis and C. Percy (2020), "Career Ready? How schools can better prepare young people for working life in the era of COVID-19", *OECD Education Working Paper*, Vol. 241, https://doi.org/10.1787/e1503534-en. [43]

Ministry of Education, Science and Sport (2021), *Ministry of Education, Science and Sport website*, https://www.smm.lt/web/en/ (accessed on 4 March 2021). [8]

Ministry of Finance (2020), *Vertinimo*, https://www.esinvesticijos.lt/lt/dokumentai/vertinimo. [70]

Ministry of Social Security and Labour (2021), *Ministry of Social Security and Labour website*, https://socmin.lrv.lt/en/ (accessed on 4 March 2021). [9]

Ministry of the Interior (2021), *Ministry of the Interior website*, https://vrm.lrv.lt/en/ (accessed on 4 March 2021). [11]

Ministry of the Interior and STRATA (2020), *Viešojo sektoriaus ataskaita 2016–2019 m*. [45]

Musset, P. and L. Kureková (2018), "Working it Out: Career Guidance and Employer Engagement", *OECD Education Working Papers*, Vol. 175, https://doi.org/10.1787/51c9d18d-en. [55]

Nakrošis, V., R. Vilpišauskas and D. Jahn (2019), *Lithuania Report. Sustainable Govenrance Indicators 2019*, Bertelsmann Stiftung. [24]

National Regional Development Council (2017), *Lithuanian Regional Policy: White Paper for Harmonious and Sustainable Development 2017-2030*, https://vrm.lrv.lt/uploads/vrm/documents/files/ENG_versija/Lithuanian%20Regional%20Policy%20(White%20Paper).pdf. [17]

OECD (2021), *Career Guidance for Adults in a Changing World of Work*, OECD Publishing, Paris, https://doi.org/10.1787/9a94bfad-en. [54]

OECD (2020), *Education at a Glance 2020: OECD Indicators*, OECD Publishing, Paris, https://dx.doi.org/10.1787/69096873-en. [20]

OECD (2020), *OECD Economic Surveys: Lithuania 2020*, OECD Publishing, https://doi.org/10.1787/62663b1d-en. [64]

OECD (2020), *OECD Skills Strategy Northern Ireland (United Kingdom): Assessment and Recommendations*, OECD Skills Studies, OECD Publishing, Paris, https://doi.org/10.1787/1857c8af-en. [69]

OECD (2020), *Public employment services in the frontline for employees, jobseekers and employers*, OECD Publishing, https://www.oecd.org/coronavirus/policy-responses/public-employment-services-in-the-frontline-for-employees-jobseekers-and-employers-c986ff92/. [56]

OECD (2019), *Financial Resources Invested in Education*, OECD Publishing, Paris. [63]

OECD (2019), *Getting Skills Right: Future-Ready Adult Learning Systems*, OECD Publishing, Paris, https://doi.org/10.1787/9789264311756-en. [44]

OECD (2019), *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://doi.org/10.1787/9789264313835-en. [1]

OECD (2019), *OECD Skills Strategy Poland: Assessment and Recommendations*, OECD Publishing, Paris, https://doi.org/10.1787/b377fbcc-en. [28]

OECD (2019), *PISA 2018 Results (Volume II): Where All Students Can Succeed*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/b5fd1b8f-en. [51]

OECD (2019), "Strengthening the governance of skills systems", in *OECD Skills Strategy 2019: Skills to Shape a Better Future*, OECD Publishing, Paris, https://doi.org/10.1787/2a40e30e-en. [3]

OECD (2018), *OECD Reviews of Labour Market and Social Policies: Lithuania*, OECD Reviews of Labour Market and Social Policies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264189935-en. [26]

OECD (2018), *OECD Reviews of Labour Market and Social Policies: Lithuania*, OECD Publishing, Paris, https://doi.org/10.1787/9789264189935-en. [15]

OECD (2017), *Education in Lithuania, Reviews of National Policies for Education*, OECD Publishing, Paris, https://doi.org/10.1787/9789264281486-en. [13]

OECD (2017), *Financial Incentives for Steering Education and Training*, OECD Publishing, Paris, https://doi.org/10.1787/9789264272415-en. [60]

OECD (2017), *Getting Skills Right: Good Practice in Adapting to Changing Skills Needs. A Perspective on France, Italy, Spain, South Africa and the United Kingdom*, OECD Publishing, Paris, https://doi.org/10.1787/9789264277892-en. [42]

OECD (2017), *Multi-level Governance Reforms: Overview of OECD Country Experiences, OECD Multi-level Governance Studies.*, OECD Publishing, Paris, https://doi.org/10.1787/9789264272866-en. [67]

OECD (2017), *Taxation and Skills*, OECD Tax Policy Studies, No. 24, OECD Publishing, https://doi.org/10.1787/9789264269385-en. [61]

OECD (2016), *Asessing and Anticipating Changing Skill Needs*, Getting Skills Right, OECD Publishing, Paris, https://doi.org/10.1787/9789264252073-en. [47]

OECD (2015), *Regulatory Policy in Lithuania: Focusing on the Delivery Side*, OECD Reviews of Regulatory Reform, OECD Publishing, Paris, https://doi.org/10.1787/9789264239340-en. [32]

OECD (forthcoming), *Evidence Based Policy Making and Policy Evaluation at the Centre of Government in Lithuania*, OECD Publishing, Paris. [18]

OECD and ILO (2018), *Approaches to Anticipating Skills for the Future of Work*, Report prepared by the ILO and the OECD for the G20 Employment Working Group, https://www.ilo.org/wcmsp5/groups/public/---dgreports/---inst/documents/publication/wcms_646143.pdf. [48]

Petrylaite, D. (2017), *Post-crisis social dialogue in Lithuania: The contentious path of social policy reform*, In Guardiancich, I. and O. Molina, Talking through the crisis. Social dialogue and industrial relations trends in selected EU countries, ILO. [31]

PPMI (2016), *Counterfactual impact evaluation of ESF-funded active labour market measures in Lithuania*, https://www.ppmi.lt/en/news/counterfactual-impact-evaluation-of-esf-funded-active-labour-market-measures-in-lithuania-29.html?back=home. [72]

PPMI (2015), *Final Report on Counterfactual Impact Evaluation of ESF-funded Active Labor Market Measures*, Public Policy and Management Institute, Vilnius. [71]

Santiago, P. et al. (2017), *OECD Reviews of School Resources: Chile 2017*, OECD Reviews of School Resources, OECD Publishing, https://dx.doi.org/10.1787/9789264285637-en. [38]

Seimas of the Republic of Lithuania (2020), *Dėl Lietuvos Respublikos teritorijos bendrojo plano valstybės teritorijos erdvinio vystymo krypčių ir teritorijos naudojimo funkcinių prioritetų patvirtinimo, Nr. XIII-3021, priimta 2020 m. birželio 4 d.*. [66]

Seimas of the Republic of Lithuania (2020), *Lietuvos Respublikos regioninės plėtros įstatymo Nr. VIII-1889 pakeitimo įstatymas [Law Amending the Republic of Lithuania Law on Regional Development No VIII-1889]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/ab78cdf0b15c11ea9a12d0dada3ca61b?jfwid=-sdmh1t6jf. [14]

Seimas of the Republic of Lithuania (2020), *Strateginio Valdymo Įstatymas [Law on Strategic Management]*, https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/90386d20bab711ea9a12d0dada3ca61b?positionInSearchResults=0&searchModelUUID=4c8ccd4b-daea-4f8e-968f-91eff429855f. [29]

SFIVET (2020), *Review and revision of professional activities*, Swiss Federal Institute for Vocational Education and Training, https://www.sfivet.swiss/cdo-our-services. [39]

Shewbridge, C. et al. (2016), *OECD Reviews of School Resources: Lithuania 2016*, OECD Publishing, Paris, https://doi.org/10.1787/9789264252547-en. [7]

SNG-WOFI (2019), *Lithuania*, http://www.sng-wofi.org/country-profiles/Fiche%20LITHUANIA.pdf. [75]

Social and Economic Council of the Netherlands (2021), *What is the SER*, https://www.ser.nl/en/SER/About-the-SER/What-is-the-SER (accessed on 4 March 2021). [34]

Socialinis Dialogas (2020), *Uždaviniai, tikslai, dalyviai*, https://www.socdialogas.lt/uzdaviniai-tikslai-dalyviai/. [41]

STRATA (2021), *Government Strategic Analysis Center website*, https://strata.gov.lt/en/ (accessed on 4 March 2021). [12]

STRATA (2020), *Mokymasis visą gyvenimą. Įpročiai, patrauklumas, barjerai, naudos suvokimas. Priedai*. [52]

Streeck, W. (1992), *Social Institutions and Economic Performance. Studies of Industrial Relations in Advanced Capitalist Economies*, Sage Publications, London. [59]

Thelen, K. (2004), *How Institutions Evolve: The Political Economy of Skills in Germany, Britain, the United States, and Japan*, Cambridge University Press, Cambridge, https://www.cambridge.org/core/books/how-institutions-evolve/41C3108269725FA3AF2C4AE87A50685E. [2]

Tripartite Council of the Republic of Lithuania (2018), *Nuostatai*, https://trisaletaryba.lt/nuostatai. [30]

Wilson, R., I. Woolard and D. Le (2004), *Developing a National Skills Forecasting Tool for South Africa*, South African Department of Labour. [46]

Notes

[1] Consequently, the dissolution of the tripartite vocational training councils (*Lietuvos profesinio mokymo tarybos*), with some responsibilities subsequently taken over by regional development councils, de facto lead to a loss of trade union influence in skills policies.

[2] While on average the "staff expenditure" of municipalities across all policy sectors is very high in international comparison, municipalities in Lithuania are also responsible for teacher salaries and health administrative staff, thereby skewing the data (SNG-WOFI, 2019[75]).

[3] For an example, see expenses of the training fund in the canton of Zürich, Switzerland (Bildungsdirektion Kanton Zürich, 2020[74]).

Annex A. Engagement

The National Skills Strategy project involved ongoing oversight and input from an inter-ministerial team (the National Project Team). The National Project Team was co-ordinated by the Government Strategic Analysis Center of Lithuania (STRATA) and composed of representatives from various ministries, agencies and social partner organisations, as outlined in Table A A.1 below.

The European Commission was represented by Mr. Arnoldas Pranckevičius, Head of the European Commission Representation in Lithuania.

Table A A.1. National Project Team

Name	Organisation
Danguolė Kiznienė	Project Manager, STRATA
Agnė Kavaliauskienė	Advisor to the Group of Strategic Competences, LRV
Birutė Miškinienė	Representative of Employers, Vilnius Chamber of Commerce, Industry and Crafts (Vilniaus prekybos, pramonės ir amatų rūmai)
Eglė Došienė	Senior Advisor to the Youth Department, SADM
Emilis Ruželė	Representative of Employers, Tripartite Council
Gintautas Jakštas	Head of Higher Education policy and Career Analysis Division (as of 2020), STRATA
Giedrė Beleckienė	Policy Analyst, STRATA
Indrė Raubė	Advisor at the Division of Labour Market, SADM
Inga Liubertė	Advisor of the Division of Labour Market, SADM
Inga Veževičienė	Senior Officer of the Investment into the Growth of Economy Division, FINMIN
Janina Matuizienė	Representative of Trade Unions, Tripartite Council
Jovita Pretzsch	Representative of Trade Unions, Tripartite Council
Julius Jakučinskas	Director for Life Long Learning Department, SMSM
Linas Kadys	Head of the Development of Human Resources at the Department of Economic Development, EIM
Osvaldas Šmitas	Director for the Department of Economic Development, EIM
Jurga Šimkutė	Advisor at the Division of the Development of Human Resources, EIM
Tomas Pūtys	Head of the Division of Non-Formal Education, SMSM

Workshop moderators and note-takers

Staff of STRATA and the ministries in the national project team acted as moderators and note-takers during the virtual workshops in May-June and September 2020.

OECD consultations in Lithuania

The OECD held three rounds of virtual consultations with officials and stakeholders in Lithuania between March and September 2020. A broad range of stakeholders, including representatives of municipalities, regional bodies, adult education providers, employers, employer associations and trade unions participated in these consultations. The consultations included webinars, interactive workshops, thematic expert meetings and bilateral meetings.

Consultation 1: Skills Strategy Seminar

During the first virtual consultations on 9 March 2020, members of the OECD team:

1. held a technical-level meeting with representatives of the seven ministries and agencies in the national project team to discuss and receive feedback on the main elements of the project
2. held a high-level meeting with state secretaries and officials from the seven ministries and agencies to present and receive feedback and endorsement on the main elements of the project.

Vice Minister Marius Skuodis, Ministry of Economy and Innovation chaired the main the meeting. Representatives of several ministries and offices, as well as the European Commission, attended the virtual technical-level meeting and senior official's discussion on 9 March (Table A A.2).

Table A A.2. Senior officials and technical-level meetings, 9 March 2020

Organisation
Ministry of Education, Science and Sport
Ministry of Social Security and Labour
Ministry of Economy and Innovation
Ministry of Finance
Tripartite Council (Representing Employers, Trade Unions and the Government)
The Office of the Government of the Republic of Lithuania
Government Strategic Analysis Center (STRATA)
European Commission Representation in Lithuania

Consultation 2: Assessment consultations

During the second virtual consultations from 27 May to 5 June 2020 (and 22-23 June), members of the OECD team:

1. had bilateral meetings with the ministries and organisations on the national project team
2. held a webinar allowing invitees to watch and hear the Government of Lithuania, European Commission and OECD speak and present about the project, and to ask questions
3. held four stakeholder workshops, one on each priority for the project, to build broad cross-sectoral buy-in to improve Lithuania's skills system, facilitate networking, and gather stakeholders' views
4. held four experts' discussions, one on each priority for the project, for the OECD to gather experts' views on Lithuania's main challenges and opportunities to enrich the report
5. held two regional discussions, with representatives of Kaunas and Utena, for the OECD to gather regional stakeholders' views on Lithuania's main challenges and opportunities to enrich the report.

Representatives of several ministries and offices, the European Commission, and numerous stakeholder groups attended the assessment consultations (Table A A.3).

Table A A.3. Organisations participating in the virtual assessment consultations, 27 May to 5 June 2020 (and 22-23 June)

Organisations
Ministries and agencies
Ministry of Economy and Innovation (Ekonomikos ir inovacijų ministerija)
Ministry of Education, Science and Sport (Švietimo, mokslo ir sporto ministerija)
Ministry of Finance (Finansų ministerija)
Ministry of Social Security and Labour (Socialinės apsaugos ir darbo ministerija)

Organisations
The Office of the President of the Republic of Lithuania (Lietuvos Respublikos Prezidentūra)
The Office of the Government of the Republic of Lithuania (Lietuvos Respublikos Vyriausybės kanceliarija)
Parliament of the Republic of Lithuania (Lietuvos Respublikos Seimas)
Government Strategic Analysis Center (STRATA) (Vyriausybės strateginės analizės centras)
Bank of Lithuania (Lietuvos bankas)
Centre of Registers (VĮ Registrų centras)
Department for Regional Development under the Ministry of Internal Affairs (Regioninės plėtros departamentas prie Vidaus reikalų ministerijos)
Department of Youth Affairs under the Ministry of Social Security and Labour (Jaunimo reikalų departamentas prie Socialinės apsaugos ir darbo ministerijos)
European Commission Representation in Lithuania (Europos Komisijos atstovybė Lietuvoje)
National Agency for Education (Nacionalinė švietimo agentūra)
National Audit Office (Vastybės kontrolė)
National Council of Education (Lietuvos švietimo taryba)
Permanent Representation of the Republic of Lithuania to the OECD (Lietuvos Respublikos nuolatinė atstovybė prie EBPO)
Public Employment Service under the Ministry of Social Security and Labour (Užimtumo tarnyba prie Lietuvos Respublikos socialinės apsaugos ir darbo ministerijos)
State Labour Inspectorate (Valstybinė darbo inspekcija)
Tripartite Council (Representing Employers, Trade Unions and the Government) (Trišalė taryba, atstovaujanti darbdavius, profesines sąjungas ir Vyriausybę)
Stakeholders
Association of Local Authorities in Lithuania (Lietuvos savivaldybių asociacija)
Association of Lithuanian Chambers of Commerce, Industry and Crafts (LPPARA) (Lietuvos prekybos, pramonės ir amatų rūmų asociacija)
Association of Lithuanian Vocational Schools (Lietuvos profesinio mokymo įstaigų asociacija)
Chamber of Agriculture (Žemės ūkio rūmai)
Confinn (UAB “Confinn”)
Education Division of Kaunas Chamber of Commerce, Industry and Crafts (Kauno prekybos, pramonės ir amatų rūmų Švietimo skyrius)
Education Exchanges Support Foundation (Švietimo mainų paramos fondas)
European Innovation Centre (Europinių inovacijų centras)
Factory “Utenos trikotažas” (fabrikas “Utenos trikotažas”)
Global Lithuanian Leaders
InterIno LT (Lietuvos verslo integracija į tarptautinės eksperimentinės plėtros ir inovacijų vertės grandines)
Invest Lithuania (Investuok Lietuvoje)
Jewish Community of Lithuania (Lietuvos žydų (litvakų) bendruomenė)
Kaunas Applied Art School (Kauno Taikomosios dailės mokykla)
Kaunas City Council (Kauno miesto taryba)
Kaunas City Municipality (Kauno miesto savivaldybė)
Kaunas Region Education Centre (Kauno rajono švietimo centras)
Kaunas University of Technology (Kauno technologijos universitetas)
Kazimieras Simonavicius University (Kazimiero Simonavičiaus universitetas)
King Mindaugas Vocational Training Center (Karaliaus Mindaugo profesinio mokymo centras)
Knowledge Economy Forum (Asociacija „Žinių ekonomikos forumas“)
Labour Market Reseach Institute (Darbo rinkos tyrimų institutas)
Lietuvos Junior Achievement (VšĮ "Lietuvos Junior Achievement”)
Lithuanian Association of Adult Education (Lietuvos suagusiųjų švietimo asociacia)
Lithuanian Business Employers’ Confederation (Lietuvos verslo darbdavių konfederacija)
Lithuanian Career Professionals Association (Lietuvos karjeros specialistų asociacija)
Lithuanian Confederation of Industrialists (Lietuvos pramonininkų konfederacija)
Lithuanian Disability forum (Lietuvos negalios organizacijų forumas)
Lithuanian Employers' Confederation (Lietuvos darbdavių konfederacija)
Lithuanian Engineering Industry Association (Lietuvos inžinerinės pramonės asociacija)
Lithuanian Innovation Centre (Lietuvos inovacijų centras)

Organisations
Lithuanian National Commission for UNESCO (Lietuvos nacionalinė UNESCO komisija)
Lithuanian National Union of Students (Lietuvos studentų sąjunga)
Lithuanian School Students' Association (Lietuvos moksleivių sąjunga)
Lithuanian Trade Union "Solidarumas" (Lietuvos profesinė sąjunga ,,Solidarumas")
Lithuanian Trade Union Confederation (Lietuvos profesinių sąjungų konfederacija)
Mykolas Romeris University (Mykolo Riomerio universitetas)
National Digital Coalition (Nacionalinė skaitmeninė koalicija)
National Network of Education NGOs (Švietimo tinklas)
Panevezys City Municipality (Panevėžio miesto savivaldybė)
Panevezys Development Agency (Panevėžio plėtros agentūra)
PPMI Group - Public Policy and Management Institute (Viešosios politikos ir vadybos institutas)
Private limited liability company "Serfas" (UAB "Serfas")
Public institution "Sustainable idea" (VšĮ "Tvari idėja")
Public institution Enterprise Lithuania (VšĮ „Versli Lietuva")
Qualifications and Vocational Education and Training Development Centre (Kvalifikacijų ir profesinio mokymo plėtros centras)
Siauliai Labour Market Training Centre (Šiaulių darbo rinkos mokymo centras)
SMK University of Applied Social Sciences (Socialinių mokslų kolegija)
Social initiative "Cycling Without Age" (pilietinė iniciatyva "Cycling Without Age")
Social Innovation Fund (Socialinių inovacijų fondas)
Soros International House
SPA VILNIUS Treatment Centre ("SPA Vilnius")
Swedbank
The World Lithuanian Youth Association (Pasaulio lietuvių jaunimo sąjunga)
Training and Consulting Centre of Association of Local Authorities in Lithuania (Lietuvos savivaldybių asociacijos Mokymo ir konsultavimo centras)
Utena Dauniskis gymnasium (Utenos Dauniškio gimnazija)
Utena Division of Panevezys Chamber for Commerce, Industry and Crafts (Panevėžio prekybos, pramonės ir amatų rūmų Utenos padalinys)
Utena Education Centre (Utenos švietimo centras)
Utena Region Municipality (Utenos rajono savivaldybė)
Utena Regional Development Council (Utenos regiono plėtros taryba)
Utena University of Applied Sciences (Utenos kolegija)
Vilnius Academy of Arts (Vilniaus Dailės Akademija)
Vilnius car mechanics and business school (Vilniaus automechanikos ir verslo mokykla)
Vilnius Chamber of Commerce, Industry and Crafts (Vilniaus prekybos, pramonės ir amatų rūmai)
Vilnius City Administration (Vilniaus miesto savivaldybė)
Vilnius University (Vilniaus universitetas)
Visaginas Technology and Business Vocational Education and Training Centre (Visagino technologijos ir verslo profesinio mokymo centras)
Visionary Analytics
Vytautas Magnus University (Vytauto Didžiojo universitetas)

Consultation 3: Recommendations consultations

During the third virtual consultations from 21 to 25 September 2020, members of the OECD team:

1. held a webinar allowing invitees to watch and hear the Government of Lithuania and OECD speak and present about the project
2. held four stakeholder workshops, one on each priority for the project, to gather stakeholders' views on draft policy recommendations
3. held 9 experts' discussions on key topics covered in the project, for the OECD to test draft recommendations with experts.

Representatives of several ministries, offices and stakeholder groups attended the recommendations consultations (Table A A.4).

Table A A.4. Organisations participating in the virtual recommendations consultations, 21-25 September 2020

Organisations
Ministries and agencies
Ministry of Economy and Innovation (Ekonomikos ir inovacijų ministerija)
Ministry of Education, Science and Sport (Švietimo, mokslo ir sporto ministerija)
Ministry of Finance (Finansų ministerija)
Ministry of the Interior (Vidaus reikalų ministerija)
Ministry of Social Security and Labour (Socialinės apsaugos ir darbo ministerija)
The Office of the President of the Republic of Lithuania (Lietuvos Respublikos Prezidentūra)
The Office of the Government of theRepublic of Lithuania (Lietuvos Respublikos Vyriausybės kanceliarija)
Government Strategic Analysis Center (STRATA) (Vyriausybės strateginės analizės centras)
Tripartite Council (Representing Employers, Trade Unions and the Government) (Trišalė taryba, atstovaujanti darbdavius, profesines sąjungas ir Vyriausybę)
Bank of Lithuania (Lietuvos bankas)
Centre for Quality Assessment in Higher Education (Studijų kokybės vertinimo centras)
Civil Service Department under the Ministry of the Interior (Valstybės tarnybos departamentas prie Vidaus reikalų ministerijos)
National Agency For Education (Nacionalinė švietimo agentūra)
National Audit Office (Valstybės kontrolė)
National Council of Education (Lietuvos švietimo taryba)
Permanent Representation of the Republic of Lithuania to the OECD (Lietuvos Respublikos nuolatinė atstovybė prie EBPO)
Public employment service under the Ministry of Social Security and Labour (Užimtumo tarnyba prie Lietuvos Respublikos socialinės apsaugos ir darbo ministerijos)
Regioninės plėtros departamentas prie Vidaus reikalų ministerijos (Department for Regional development under the Ministry of the Interior)
State Labour Inspectorate (Valstybinė darbo inspekcija)
Statistics Lithuania (Lietuvos statistikos departamentas)
Study Evaluation Commission at the Centre for Quality Assessment in Higher Education (Studijų kokybės vertinimo centro Studijų vertinimo komisija)
Stakeholders
Alytus "Sakalėlis" primary school (Alytaus Sakalėlio pradinė mokykla)
Association of Local Authorities in Lithuania (Lietuvos savivaldybių asociacija)
Association for HR Professionals (Personalo valdymo profesionalų asociacija)
Association Investors' Forum (Asociacija „Investuotojų forumas”)
Association of Klaipeda City Communities (Klaipėdos bendruomenių asociacija)
Association of Lithuanian Chambers of Commerce, Industry and Crafts (LPPARA) (Lietuvos prekybos, pramonės ir amatų rūmų asociacija)
Association of Young Physicians (Jaunųjų gydytojų asociacija)
Dzukija school (Dzūkijos mokykla)
EAPN Lithuania – Lithuanian National Anti Poverty Network (Nacionalinis skurdo mažinimo organizacijų tinklas)
Education Exchanges Support Foundation (Švietimo mainų paramos fondas)
ESTEP (VšĮ Europos socialiniai, teisiniai ir ekonominiai projektai)
Invest Lithuania (Investuok Lietuvoje)
ISM University of Management and Economics (ISM Vadybos ir ekonomikos universitetas)
Kaunas Region Education Centre (Kauno rajono švietimo centras)
Kaunas University of Applied Engineering Sciences (Kauno technologijos universitetas)
Kaunas University of Applied Sciences (Kauno kolegija)
Knowledge Economy Forum (Asociacija „Žinių ekonomikos forumas“)
LAMA BPO (Lietuvos aukštųjų mokyklų asociacija bendrajam priėmimui organizuoti)
Lithuanian Association of Adult Education (Lietuvos suaugusiųjų švietimo asociacija)

Organisations
Lithuanian Association of Hotels and Restaurants (Lietuvos viešbučių ir restoranų asociacija)
Lithuanian Career Professionals Association (Lietuvos karjeros specialistų asociacija)
Lithuanian Centre of Non-formal Youth Education (Lietuvos mokinių neformaliojo švietimo centras)
Lithuanian Confederation of Industrialists (Lietuvos pramonininkų konfederacija)
Lithuanian employers' confederation (Lietuvos darbdavių konfederacija)
Lithuanian National Union of Students (Lietuvos studentų sąjunga)
Lithuanian Trade Union „Solidarumas" (LPSS) (Lietuvos profesinė sąjunga „Solidarumas")
Lithuanian Trade Union Confederation (LPSK) (Lietuvos profesinių sąjungų konfederacija)
Lithuanian Youth Council (Lietuvos jaunimo organizacijų taryba)
Nacionalinė NVO koalicija (National Coalition of Non-Governmental Organizations)
National Association of Third Age Universities (Nacionalinė trečiojo amžiaus universitetų asociacija)
National Digital Coalition (Nacionalinė skaitmeninė koalicija)
National Network of Education NGOs (Švietimo tinklas)
Panevezys City Municipality's STEAM Centre (Panevėžio gamtos mokslų, technologijų, inžinerijos, matematikos tyrimų ir eksperimentinės veiklos atviros prieigos centras)
Panevezys Development Centre (VšĮ Panevėžio plėtros agentūra)
PPMI Group - Public Policy and Management Institute (Viešosios politikos ir vadybos institutas)
Private limited liability company "Orion Global PET ("UAB "Orion Global PET")
Private limited liability company "Serfas" (UAB "Serfas")
Public institution Enterprise Lithuania (VšĮ „Versli Lietuva")
Rectors' Conference of Lithuanian University Colleges (Lietuvos kolegijų direktorių konferencija)
Siauliai Labour Market Training Centre (Šiaulių darbo rinkos mokymo centras)
SMK University of Applied Social Sciences (Socialinių mokslų kolegija)
Soros International House
Utena Education Centre (Utenos švietimo centras)
Vilnius Chamber of Commerce, Industry and Crafts (Vilniaus prekybos, pramonės ir amatų rūmai)
Vilnius City Administration (Vilniaus miesto savivaldybė)
Vilnius Gediminas Technical University (Vilniaus Gedimino technikos universitetas)
Vilnius International Film Festival "Kino pavasaris" (Vilniaus tarptautinis kino festivalis "Kino pavasaris")
Vilnius University (Vilniaus universitetas)
Vilnius University of Applied Sciences(Vilniaus kolegija)
Visaginas Technology and Business Vocational Education and Training Centre (Visagino technologijos ir verslo profesinio mokymo centras)
Visaginas Third Age University (Visagino trečiojo amžiaus universitetas)
Visionary Analytics
Vytautas Magnus University (Vytauto Didžiojo Universitetas)
Zirmunai Vocational Education Centre (profesinio mokymo centras "Žirmūnai")

OECD Skills Studies

OECD Skills Strategy Lithuania

ASSESSMENT AND RECOMMENDATIONS

Skills are the key to shaping a better future and central to the capacity of countries and people to thrive in an increasingly interconnected and rapidly changing world. Megatrends such as globalisation, technological advances, and demographic change are reshaping work and society, generating a growing demand for higher levels and new sets of skills.

OECD Skills Strategy projects provide a strategic and comprehensive approach to assess countries' skills challenges and opportunities and help them build more effective skills systems. The OECD works collaboratively with countries to develop policy responses that are tailored to each country's specific skills needs. The foundation of this approach is the OECD Skills Strategy Framework, which allows for an exploration of what countries can do better to: 1) develop relevant skills over the life course; 2) use skills effectively in work and in society; and 3) strengthen the governance of the skills system.

This report, *OECD Skills Strategy Lithuania: Assessment and Recommendations,* identifies opportunities and makes recommendations for Lithuania to better equip young people with skills for work and life, raise adults' and enterprises' participation in learning, use people's skills more effectively in workplaces, and strengthen the governance of skills policies.

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