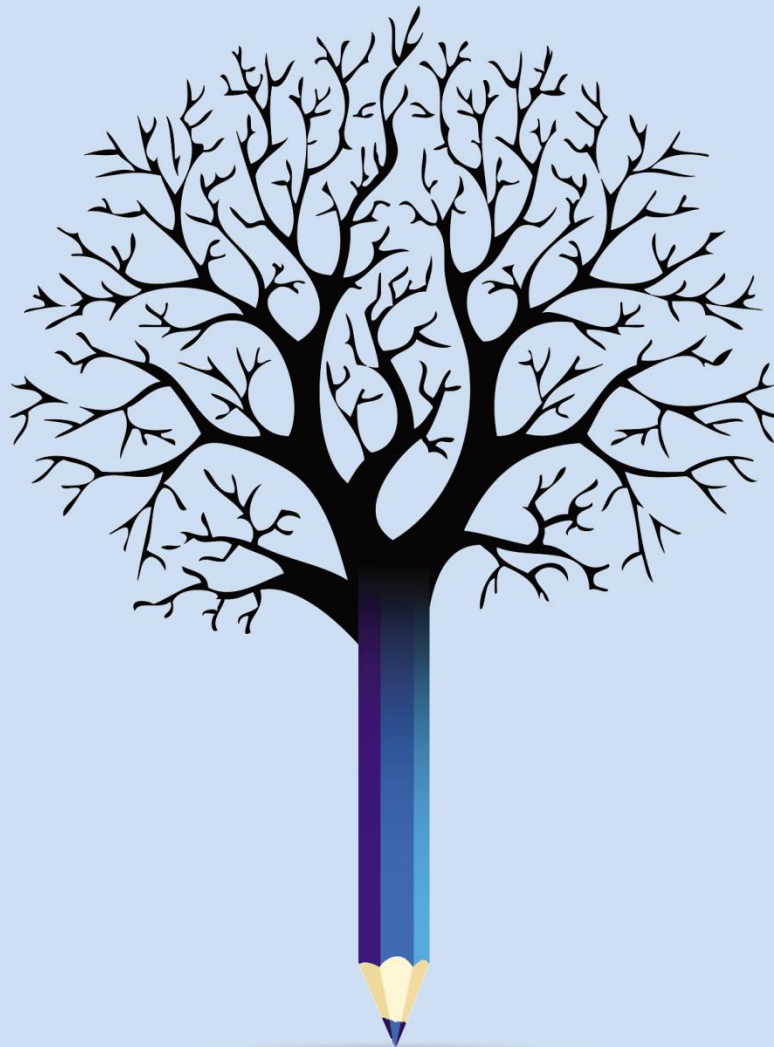




EDUCATION POLICY OUTLOOK: SWEDEN





EDUCATION POLICY OUTLOOK

This **policy profile on education** in Sweden is part of the *Education Policy Outlook* series, which presents comparative analysis of education policies and reforms across OECD countries. Building on the OECD's substantial comparative and sectorial policy knowledge base, the series offers a comparative outlook on education policy by providing analysis of individual countries' educational context, challenges and policies (education policy profiles), analysis of international trends, and insight into policies and reforms on selected topics. In addition to country-specific profiles, the series also includes a recurring publication. The first volume, *Education Policy Outlook 2015: Making Reforms Happen*, was released in January 2015.

Designed for **policy makers, analysts and practitioners** who seek information and analysis of education policy taking into account the importance of national context, the country policy profiles offer constructive analysis of education policy in a comparative format. Each profile reviews the current context and situation of the country's education system and examines its challenges and policy responses, according to six policy levers that support improvement:

- Students: How to raise outcomes for all in terms of 1) equity and quality and 2) preparing students for the future.
- Institutions: How to raise quality through 3) school improvement and 4) evaluation and assessment.
- System: How the system is organised to deliver education policy in terms of 5) governance and 6) funding.

Some country policy profiles contain spotlight boxes on selected policy issues. They are meant to draw attention to specific policies that are promising or showing positive results and may be relevant for other countries. This country profile also includes a spotlight on the European Union perspective for Sweden, based on challenges and recommendations identified by the Council of the European Union and the European Commission as part of their activities with EU member countries.

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Authors: This country policy profile was prepared by Judith Peterka (main drafter), Diana Toledo Figueroa, Gillian Golden and Manon Giovinazzo, from the Education Policy Outlook team, part of the Policy Advice and Implementation Division led by Paulo Santiago. Editorial support was provided by Susan Copeland and Célia Braga-Schich. This profile builds on the knowledge and expertise of many project teams across the OECD Directorate for Education and Skills, to whom we are grateful. Mónica Képe-Holmberg contributed on behalf of the European Commission Directorate-General for Education and Culture.

Sources: This country profile draws on OECD indicators from the Programme for International Student Assessment (PISA), the Survey of Adult Skills of the Programme for International Assessment of Adult Competencies (PIAAC), the Teaching and Learning International Survey (TALIS) and the annual publication *Education at a Glance*, and refers to country and thematic studies such as OECD work on early childhood education and care, teachers, school leadership, evaluation and assessment for improving school outcomes, equity and quality in education, governing complex education systems, vocational education and training, and tertiary education. Much of this information and documentation can be accessed through the OECD Education GPS (<http://gpseducation.oecd.org>).

Most of the figures quoted in the different sections refer to Annex B, which presents a table of the main indicators for the different sources used throughout the country profile. Hyperlinks to the reference publications are included throughout the text for ease of reading, and the References and further reading section lists both OECD and non-OECD sources.

More information is available from the OECD Directorate for Education and Skills (www.oecd.org/edu) and its web pages on Education Policy Outlook (www.oecd.org/edu/policyoutlook.htm), as well as on the EU Education and Training Monitor (http://ec.europa.eu/education/tools/et-monitor_en.htm) and Eurydice (<https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Sweden:Overview>).



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HIGHLIGHTS

Sweden's educational context

Students: After a period of decline since PISA 2006, Sweden's performance in science stabilised in PISA 2015, and it is now around the OECD average. The impact of socio-economic background on science performance is also close to the OECD average. Skills among adults (16-65 year-olds) are among the highest across all OECD countries in all proficiencies tested. While recent immigrants had low scores, those who are more established had significantly higher scores. Sweden has high enrolment rates in early childhood education, and comprehensive education is compulsory for all students from age 7 to age 16. Also, Sweden has a lower share than other OECD countries of young people (15-29 year-olds) not in education, employment or training.

Institutions: The learning environment in Swedish classrooms is positive in terms of student-teacher relations, but it could be more conducive to learning. Teachers report low job satisfaction, and fewer teachers than in other OECD countries would choose their profession again. There are national assessments at Grades 3, 6 and 9, as well as at upper secondary school, but no coherent school evaluation framework has yet been established.

Governance and funding: The education system in Sweden is quite decentralised. It is steered nationally, focusing on overall education priorities, and funded through agreements with municipalities and independent education providers, which have the main financial responsibility. Funding in Sweden is mainly public, and expenditure per student is among the highest across OECD countries. The major part of school funding comes from municipal tax revenues that are then allocated under different funding models depending on the municipality. School funding is also influenced by the availability of school choice, as funding is attached to students rather than schools. Tertiary education is free of charge for all students, except those who come from outside the European Union / European Economic Area and Switzerland.

Key policy issues

One of Sweden's main challenges is to continue improving the learning environment and teaching conditions, so that teachers feel more satisfied with their jobs and the most-qualified stay in the profession. At the same time, it is crucial to raise outcomes for immigrant students and continue to work towards quick integration. There is a need for a national framework to evaluate schools and teachers and ensure comparability of assessment results across schools. Finally, it is crucial to identify and implement an effective resource allocation model to promote efficient resourcing across the system.

Recent policy responses

The Education Act, implemented in 2011, aims to provide all students with the opportunity to reach achievement targets and complete upper secondary school, with improved skills for both the labour market and further studies. Students who risk not achieving targets have the right to receive individual support.

The Swedish School Commission (2015) aims to contribute to improve learning outcomes, the quality of teaching and learning in Swedish schools. Its [final report](#) was published in 2017.

Sweden has introduced a range of measures and reforms in response to new challenges created by the refugee crisis and growing immigration (see Spotlight 2).

The coalition for the teaching profession and the resulting increase in teachers' salaries, beginning in 2016, aims to improve teachers' wages and competence development.

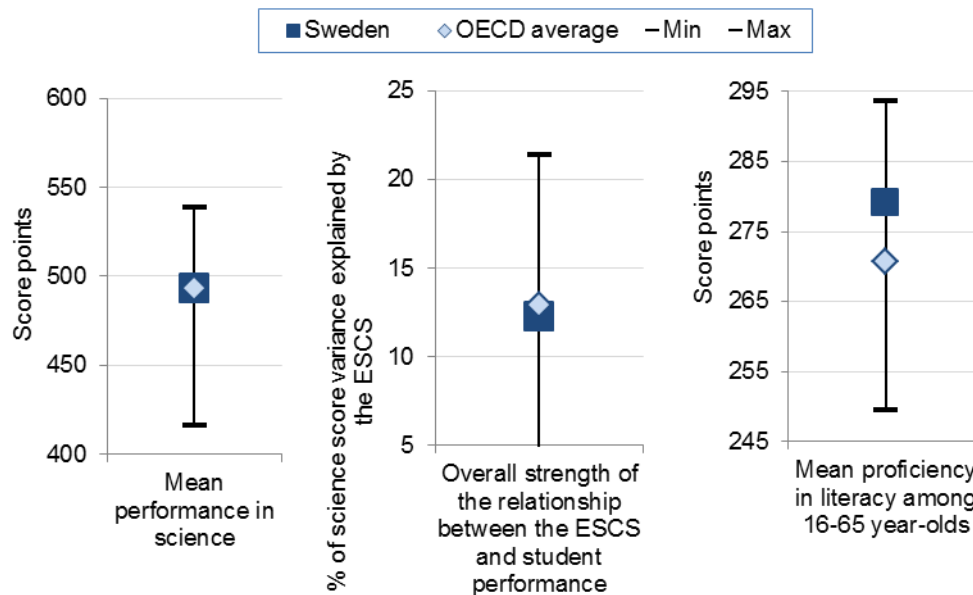
In order to continue to enhance teacher qualification levels in the system, the Boost for Teachers programme ([Lärarlyftet](#)), introduced in 2007, will be further developed until 2018 as Boost for Teachers II. This programme will focus on enhancing the qualifications of teachers who are not qualified for all subjects or age groups they teach, with the goal of increasing the number of fully certified teachers in the education system. The government also supports continuous professional development for teachers through the Boost for Mathematics and Boost for Reading initiatives (see Spotlight 3).

A new model of quality assurance of higher education was implemented in 2016, which is no longer linked to a previously introduced additional resource allocation. From 2016 onwards, university chancellors and the National Authority for Higher Education remain responsible for evaluating higher education institutions, but also ensure that universities develop their own system of quality control.



In PISA 2015, Sweden’s performance was around the OECD average in science and mathematics and above the OECD average in reading. Although Sweden’s performance in science stabilised between 2012 and 2015, it decreased on average across PISA cycles since 2006. The proportion of low performers in science is higher in 2015 (21.6%) than in 2006 (16.4%), but the proportion of top performers in science is back at 2006 levels (8.5%). The impact of socio-economic background on science performance of 15-year-old students in Sweden (12.2%) is similar to the OECD average (12.9%).

Figure 1. Performance of 15-year-olds in science, relationship between student performance and the economic, social and cultural status (ESCS) (PISA 2015) and performance of adults in literacy (Survey of Adult Skills)

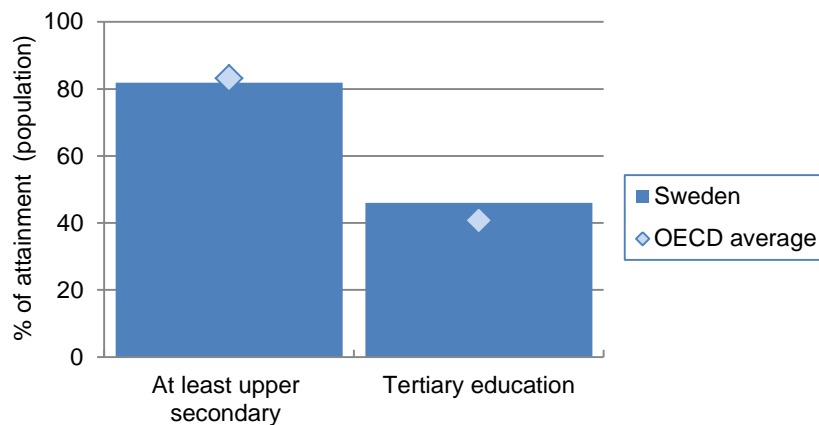


Note: "Min"/"Max" refer to OECD countries with the lowest/highest values.

Sources: OECD (2016), *PISA 2015 Results (Volume I): Excellence and Equity in Education*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264266490-en>; OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264204256-en>.

Upper secondary and tertiary education attainment in Sweden is similar to the OECD average: 82% of 25-34 year-olds have attained at least upper secondary education (compared to the OECD average of 84%), and 46% have attained tertiary education (compared to the OECD average of 42%) (Figure 2).

Figure 2. Upper secondary and tertiary attainment for 25-34 year-olds, 2015



Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.



Spotlight 1. The European Union perspective: Sweden's education and training system and the Europe 2020 Strategy

In the European Union's growth and employment strategy, *Europe 2020*, education and training is recognised as a key policy area in contributing to Europe's economic growth and social inclusion. The European Union set a two-fold target in education by 2020: reducing the rates of early school leaving below 10%, and reaching at least 40% of 30-34 year-olds completing tertiary or equivalent education. Countries set their own related national targets. The Europe 2020 goals are monitored through the European Union's yearly assessment of the main economic and growth issues.

The *European Semester Country Report 2017* identified a number of key issues for Sweden in education and training:

- School education outcomes in terms of basic skills proficiency have improved after years of deteriorating performance. However, inequalities in educational outcomes are rising. According to PISA 2015, student performance had improved significantly in mathematics and reading compared to 2012, and had remained broadly stable in science. The proportion of low achievers is now close to the EU average in all three core subjects. At the same time, the gap has increased both between the highest and lowest-performing students and between the socio-economically advantaged and disadvantaged ones.
- The performance gap between foreign-born and native-born students remains high. In PISA 2015, one in two foreign-born students performed below the baseline level in science. The proportion of early school leavers is also much higher among foreign-born (13.9%) than native-born (5.9%), while the overall early school leaving rate is relatively low compared to the EU average (7% vs. 11% in 2015). The transition between compulsory and upper secondary schooling is also a hurdle for many foreign-born students. In addition, the large number of asylum seekers who arrived in 2015 has brought new challenges.
- Recent government measures aim at improving school outcomes and students' basic skills. The government is prioritising "early intervention", i.e. the first years of schooling (see recent policies and practices). To ensure that all students achieve a baseline level in reading, writing and mathematics on finishing grade 3, a "reading-writing-arithmetic guarantee" is due to enter into force in 2018. Integrating the newly arrived in the school system is also an important priority. To improve the attractiveness of the teaching profession, the government is increasing financial incentives and continues to support teachers' continuous professional development. The growing teacher shortage is also being addressed.
- Access to adult education and vocational education and training (VET) is being improved. Since January 2017, adults over the age of 20 who had already left the education system have the right to complement their previous studies and obtain an upper secondary qualification. To raise the attractiveness of vocational upper secondary education, once approved by Parliament, all "national" programmes, including VET programmes, should grant again eligibility to higher education. However, the increase in the number of apprenticeships in upper secondary school remains limited despite a slight upward trend in certain sectors (e.g. retail and hotel sector).



EQUITY AND QUALITY: FOCUSING ON INCLUSION

Sweden's school system emphasises inclusion and is relatively equitable in many respects. From a position well above average in PISA 2000, Sweden's performance had fallen by 2012. On average, Sweden's three-year performance has declined across PISA cycles in science, mathematics and reading. However, compared to PISA 2012, Sweden's performance stabilised in science and increased in reading and mathematics in PISA 2015. Sweden became then around or above the OECD average in all three domains tested in PISA 2015. The impact of socio-economic background on students' performance in science at age 15 is around average, according to PISA 2015 results (12.2%, compared to the OECD average of 12.9%) (Figure 2). Girls and boys performed equally well in mathematics and science in PISA 2015, and there was also an equal share of top performers in all three subjects (3.9%), although, as in all other participating countries, girls significantly outperformed boys in reading.

Early childhood education and care (ECEC) is well developed and has high coverage in Sweden: 93% of 3-year-olds are in some kind of ECEC programme (at ISCED level 02) (compared to the OECD average of 69%). Improving quality in ECEC is a priority in Sweden, which recently implemented a revised curriculum for ECEC.

Some system-level policies, such as delayed tracking or low grade repetition, can favour equity, while [evidence](#) shows that other policies, such as school choice, can hinder equity if not managed carefully. Tracking in Sweden begins at the end of compulsory education, which is organised into a single structure covering primary and lower secondary education from age 7 to age 16. Grade repetition rates are below average, with 4% of 15-year-olds having repeated a grade (compared to the OECD average of 11.3%). Sweden introduced school choice in 1991, followed by another reform in 1992 that allowed private organisers to start independent schools financed by public grants. These reforms have led to the growth of an independent private schools' sector. In 2015/16, 14.8% of students in compulsory education and 25.9% of students in upper secondary education attended independent schools. In 2015, variation between schools accounted for 18% of total variation in scores. This is below the OECD average of 30%, although it is higher than in neighbouring Nordic countries. Variation within schools accounts for a larger proportion of variance in performance than the OECD average. This suggests a strong relationship between performance and the specific schools that students attend. Other [evidence](#) also suggests that school choice is positively associated with increased school segregation between migrants and natives across school types in Sweden.

Sweden needs to provide equitable opportunities to an increasing number of **immigrant students**, who make up 17.4% of 15-year-olds, according to PISA 2015. About 40% of students with a migrant background are low performers in science in PISA 2015, and the proportion is even higher for first-generation migrants (50%). In addition, fewer foreign-born students achieve the necessary passing grades to enter an upper secondary national programme. National evidence shows that only 52% of students who migrated after the age of 7 qualify for a national programme at upper secondary level. The share drops to 28% of students among those who arrived at age 12-15 (in their last four years of compulsory schooling), compared to the national average of close to 90%. Better integration has been hindered by a lack of mapping of students' previous knowledge, physical separation of newly arrived students from the mainstream and lack of individualised support.

The challenge: Raising student performance and tackling inequalities in outcomes.

Recent policies and practices

The government allocated just under SEK 2.3 billion (around USD 260 million) in 2017 for grants for early intervention to schools. Municipalities as well as independent schools might use this grant to decrease class sizes or to employ more primary or special needs teachers.

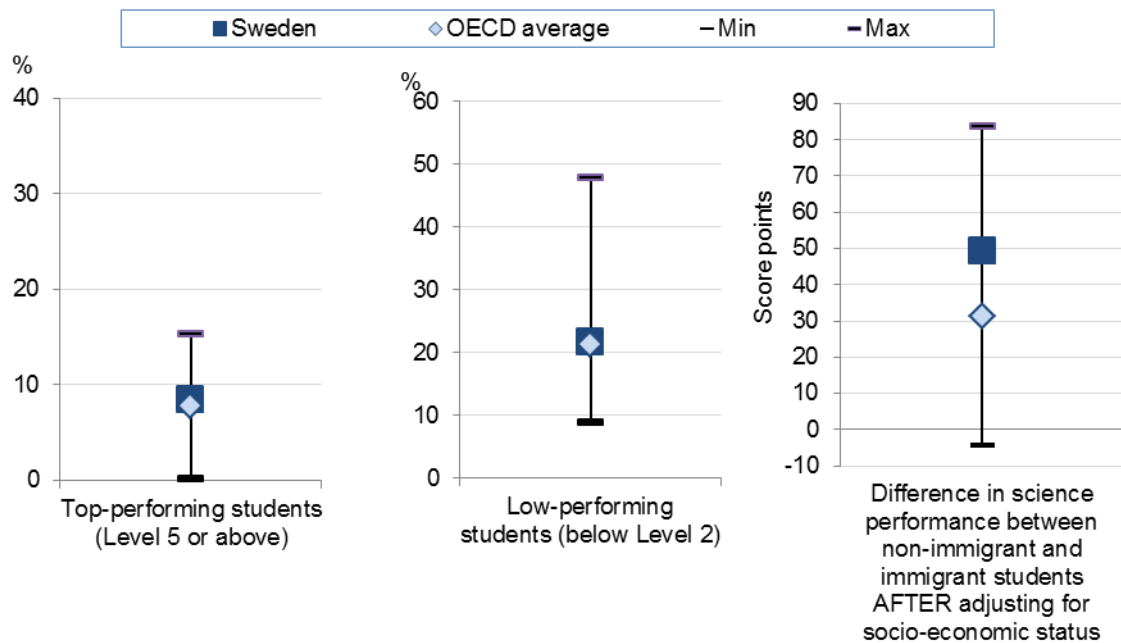
Sweden's ECEC curriculum ([Läroplan för Förskolan – Lpfö 98](#)) is a legally binding document on the values and principles that guide ECEC programmes, with accompanying documents that indicate what is expected from ECEC centres and staff. The curriculum aims to ensure continuous child development by using one national framework plan for ECEC, putting the child and play at the centre of the curriculum, balancing content by addressing academic and socio-emotional development, reflecting on parents' opinions and expectations, and respecting cultural values. [Revisions in 2016](#) aim to improve transitions and cooperation between the primary school, the school and the leisure centre to create context, continuity and progression in the child's development and learning.

The [new consolidated curriculum](#) (2011) covers compulsory schools for all students in Sami schools, special schools, upper secondary schools and leisure centres. It contains new general goals, guidelines and syllabuses that are intended to support the integration of activities to reach the goals of compulsory schools. Mandatory national subject tests are held in Grades 3, 6 and 9. There are also new qualification requirements for areas including upper secondary studies.

Sweden has implemented measures to integrate migrants and help improve their outcomes (Spotlight 2).



Figure 3. Percentage of low and top performers and performance difference between non-immigrant and immigrant students in science (PISA 2015)



Note: "Min"/ "Max" refer to OECD countries with the lowest/highest values.

Source: OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264267510-en>.

Spotlight 2. Integrating newly arrived students and teachers into the Swedish education system

Sweden has implemented some accelerated procedures to integrate newly arrived migrants as quickly as possible through different policy initiatives.

To both address the teacher shortage and foster quicker integration, Sweden implemented a Fast Track for Teachers programme in 2016 (See also Funding). Newly arrived teachers and pre-school teachers can have their qualifications validated quickly and enter a fast-track teacher training programme partly run in Arabic, which is currently provided by six Swedish Universities. The fast track programme covered 420 newly arrived teachers in 2016 and 720 teachers in 2017. Teachers also do work placements of 26 weeks in Swedish schools or pre-schools in parallel to their studies to promote quicker access to the labour markets. Programmes are aimed at immigrants who already possess a degree-level teaching qualification, and participants are expected to be able to complete them in one year instead of four, although the time needed to obtain a license can vary depending on the person's previous education and working experience, as well as labour market opportunities. Recent [evidence](#) suggests some positive results on this initiative, with collaboration between participating universities and the Employment service.

In Sweden, newly arrived students are defined as students aged 7-18, who have migrated to Sweden and do not have a basic knowledge of Swedish. These students are considered as newly arrived for up to four years after starting in a Swedish school. Their previous schooling and level of literacy and numeracy is assessed within their first two months at school. Based on this assessment, school principals decide what grade to place them in and develop an appropriate education plan. Newly arrived students can initially be taught in separate introductory classes if necessary, but should be in mainstream classes as much as language proficiency allows. Placements in introductory classes should be terminated after a maximum of two years. To promote social integration, the government recommends that introductory and mainstream classes should be located near one another, but this is not mandatory.

In addition, special government grants are available to schools that provide extra teaching in Swedish as a second language. The Swedish National Agency for Education also provides support to schools and municipalities to improve the quality of education for immigrant students and students whose mother tongue is not Swedish.



PREPARING STUDENTS FOR THE FUTURE: DIVERSE PATHWAYS FOR TRANSITION BETWEEN EDUCATION AND THE LABOUR MARKET

The capacity of a country's education system to effectively develop **skills and labour market perspectives** can play an important role in the educational decisions of its population. Sweden has a relatively low rate of unemployment of 25-34 year-olds with tertiary education (5.1% in 2015, compared to the OECD average of 6.9%). Sweden also has a below-average share of 15-29 year-olds not in education and not employed in 2015 (9.1%, compared to the OECD average of 14.6%) (Figure 4). There is an effort to make adult education accessible and, within the public education and training system, it is free of charge for Swedish citizens and some cases of non-Swedish residents (e.g. citizens from the European Union or Switzerland). Among the countries participating in the 2015 OECD Survey of Adult Skills, adults (16-65 year-olds) in Sweden performed at above-average levels in literacy and numeracy (Figure 1). While recent immigrants had very low scores (on average, at or near the bottom of Level 1), those who are more established had significantly higher scores. At the same time, [OECD evidence](#) also shows skills mismatch in terms of employment in Sweden (for example, according to the field of study, type of qualifications or level of skills). Also, about one-third of firms surveyed reported difficulties in filling vacancies due to the lack of workers with adequate skills, with emerging wage pressures in sectors requiring high skills.

In Sweden, 82% of 25-34 year-olds attained at least **upper secondary education** (close to the OECD average of 84%) (Figure 2). Around the age of 16, students can choose from a total of 18 upper secondary programmes, of which 12 are of vocational orientation. A challenge is to provide relevant upper secondary education that will prepare young adults for work, as well as capacity for further learning. Students who do not achieve the necessary lower secondary grades to meet entrance requirements for national general or vocational upper secondary programmes can complete one of five different introductory programmes in order to gain entrance to them.

Acceptance to **vocational education and training (VET)** occurs on the basis of grades from compulsory school. It is possible to follow a vocational programme as an apprentice. Reforms to the system in 2011 mean that basic eligibility from VET programmes to higher education is not always available. This may hinder the attractiveness of VET, but all students or graduates of vocational programmes can attend additional mathematics, English or Swedish classes to gain access to higher education. Sweden may face a shortage of vocational education teachers to fill future needs.

Attainment of tertiary education in Sweden is similar to the OECD average (Figure 2). Graduation rates are below the OECD average for students of short tertiary programmes (6%, compared to the OECD average of 11%) and bachelor's degrees (27%, compared to the OECD average of 38%). However, graduation rates for master's and doctorates or equivalent are above the OECD average: 20% for master's degree students (compared to the OECD average of 18%) and 2.4% for doctoral students (one of the highest graduation rates among OECD countries, where the average is 1.7%).

The challenge: Raising educational attainment and skills outcomes and ensuring attractiveness of VET.

Recent policies and practices

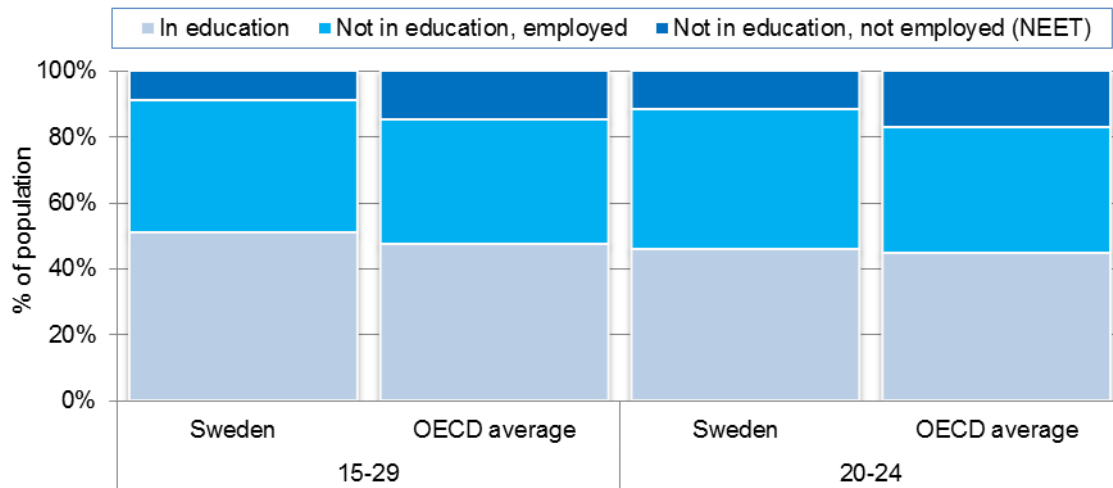
Work-based learning, including apprenticeships, has been [integrated](#) as part of vocational education and training in upper secondary schools since 2011.

The [Swedish National Agency for Higher Vocational Education](#), established in 2009, administers the common framework of publicly funded vocational education at the post upper secondary level. It decides which programmes will receive public funding and be included in the framework, audits the quality and outcomes of the courses, and analyses and assesses the demand for qualified labour and trends in the labour market.

The [Knowledge Boost](#) programme consists primarily of government grants that local authorities can use for permanent study places in VET, with work-based learning comprising at least 70% of the education. Since students in the Swedish tuition for immigrants language training programme (SFI) are often unable to participate in VET due to lack of proficiency in Swedish, some of the funds for this policy are to be invested in combined educational programmes, such as VET and SFI.



Figure 4. Percentage of 15-29 year-olds in education and not in education, by age and work status, 2014



NEET: Neither employed nor in education and training.

Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2016-en>.



SCHOOL IMPROVEMENT: STRENGTHENING LEARNING IN SCHOOL ENVIRONMENTS

In PISA 2015, Swedish 15-year-olds reported more positive views than the OECD average on teachers' adaptive instruction and rated their classrooms as conducive to learning at around the same level as the OECD average (Figure 5). Student truancy levels are also lower than average (91% of students reported they had not skipped school in the two weeks prior to the PISA 2015 test, compared to the OECD average of 80.3%), and students also reported higher levels of support from teachers in science classes than the OECD average (mean index of teacher support of 0.15).

Swedish **school leaders** mainly work full time as school principals, without teaching obligations (92.4%, well above the TALIS 2013 average of 62.4%). A lower share of school principals than the TALIS average reported engaging in activities related to instructional leadership, such as ensuring that teachers take responsibility for improving their teaching skills (44.1%, compared to the TALIS average of 68.6%). Swedish school leaders also reported spending more of their working time on administrative and leadership tasks than most of their TALIS counterparts, and reported the second-lowest level of job satisfaction among countries participating in TALIS. However, in the later PISA 2015 survey, school principals in Sweden reported that they engage more often in activities that promote effective teacher-principal relations and a positive learning environment, showing stronger than average educational leadership in the areas of curricular development, instruction, and fostering teacher engagement (with lower levels of leadership than average in enabling staff professional development).

Swedish **teachers** are slightly older than the average across OECD countries (in 2014, for example, 38% of primary teachers were over 50, compared to the OECD average of 30%). Lower secondary teacher trainees follow a pre-service teacher-training programme of 4.5 years, including a mandatory teaching practicum. Just 9.7% of permanent lower secondary teachers reported participating in a formal induction programme (compared to the TALIS average of 49%). Sweden does not require teachers to participate in continuous professional development, but 83.4% of Swedish teachers reported having participated in professional development activities in the previous 12 months (slightly below the TALIS average of 88.4%). Only 5% of Swedish teachers considered that the teaching profession is valued in society (compared to the TALIS average of 30.9%), and only 53.4% reported they would choose to work as teachers if they could decide again.

Teaching conditions include starting salaries close to the OECD average, but with limited progression, as well as lower than average student-teacher ratios. For example, the starting salary of a teacher at primary level in Sweden was USD 32 313 (compared to the OECD average of USD 31 028), while the salary at top of scale is USD 42 699 (below the OECD average of USD 51 254) in 2014. At the same time, Sweden had a ratio of 13 students per teaching staff in educational institutions at primary level, which was below the OECD average of 15 in 2014. Without appropriate intervention, the age profile of teachers in Sweden and the perception of the profession and teaching conditions are likely to lead to future teacher shortages.

The challenge: Providing school leaders and teachers with adequate development and career progression opportunities to strengthen the profession and make it more attractive.

Recent policies and practices

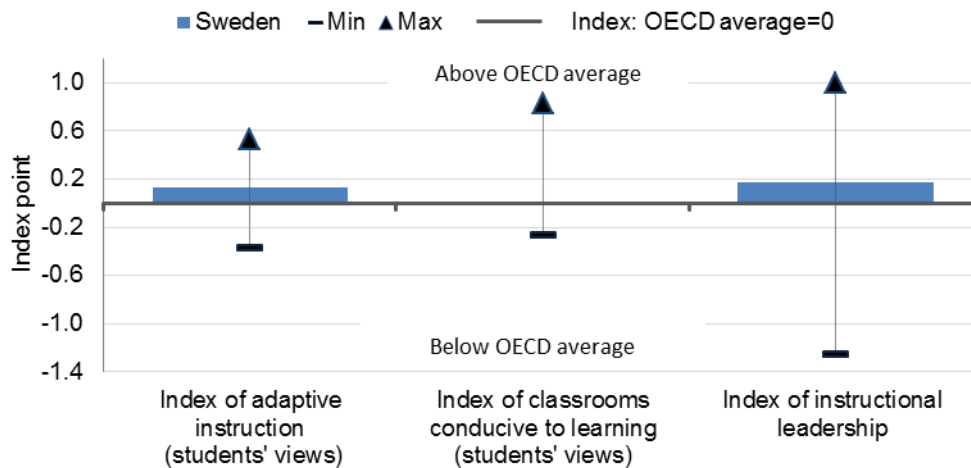
The Swedish School Commission (2015) aims to contribute to improve learning outcomes, the quality of teaching and learning in Swedish schools. Its [final report](#) (2017) contains proposals for improvement, a schedule for implementation and necessary amendments to statutes.

The Boost for Teachers programme ([Läraryftet](#)) (first implemented in 2007-11 and now extended to 2018 in a second phase) offered the possibility to follow advanced continuing professional education at higher education institutions to 30 000 teachers during its first phase. Boost for Teachers II ([Läraryftet II](#)) (2012-18) offers teachers who are not qualified for all subjects or age groups they teach the opportunity to take specialised courses to acquire these qualifications and to take continuing professional development courses to become special needs teachers. The government supported an in-service training programme for preschool teachers called Boost for Preschool ([Förskolelyftet](#)), which received funding of SEK 40 million (USD 4.5 million) per year from 2012 to 2014. The government also developed the [Boost for Mathematics](#) and [Boost for Reading](#) initiatives (see Spotlight 3).

The [National School Leadership Training Programme](#), the state education service for newly-appointed principals, preschool heads and deputy principals, is mandatory for principals hired after March 2010. Training lasts three years and encompasses three knowledge areas: school law and exercise of public authority, steering of goals and results, and school leadership. The [Programme for Professional Development for School Leaders](#) focuses on developing pedagogical leadership and is aimed at principals who have been working for at least one year and are responsible for curriculum-based activities. It started in 2011 and has been extended until 2018.



Figure 5. The learning environment, PISA 2015



Note: "Min": Country/economy with the minimum value in the index. "Max": Country/economy with the maximum value in the index. Source: OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264267510-en>.

Spotlight 3. Innovative in-service teacher training in mathematics (*Matematiklyftet*) and reading (*Läslifyftet*)

Sweden has identified the lack of continuous training of its teaching workforce as a major challenge. It has therefore introduced training in effective teaching methods through collaborative learning, with new "boost" programmes, the most significant collaborative learning programmes ever developed in Sweden. These [research-based](#) programmes represent an investment of more than EUR 28 million.

All mathematics teachers can participate in [Matematiklyftet](#) (an in-service training programme in mathematics, launched in 2012). Three out of four mathematics teachers in compulsory and upper secondary schools (over 35 000 teachers) have participated in the programme since its launch. Since 2015, teachers of Swedish have been able to participate in [Läslifyftet](#) (2015-19), an in-service training programme in literacy, which has been extended to pre-school teachers in order to strengthen the educational mission of pre-schools and also to promote the teaching of Swedish at an early age for children whose mother tongue is different from Swedish. The Swedish government will allocate SEK 6 million (USD 677 600) per year to this programme during 2017-19. There is also a Boost for Science programme for science teachers.

The *Matematiklyftet* programme also includes study programmes for school principals and tutors in mathematics. The material used is produced in collaboration with over 20 universities and colleges around Sweden and is available on a specific [website](#). The materials on the website are open source and are structured into year groups and types of schools. All materials follow a four-part structure: 1) teachers prepare individually, using the materials provided to them; 2) they meet and discuss what they have read and plan a lesson; 3) they teach the lessons in their own classrooms; and 4) they meet again to evaluate and discuss experiences drawn from their lessons. Weekly discussion meetings focus on didactic questions and are moderated by mathematics tutors trained by national authorities.

During the course of the programme, teachers exchange learning materials, ideas and experiences and enter into professional dialogue. In addition, the programme fosters collaboration in teaching and enhances team building among the teachers in the group. School principals are also involved in the training. Given the heavy workload of teachers, it is crucial that the meetings be well organised.

A need for in-service training in special needs was also identified, and as a result a [new in-service training programme](#), similar to *Matematiklyftet*, opened for applications in 2016.

There is evidence on positive effects of the *Matematiklyftet*. For example, [a study](#) has found the education model (collegial conversations with the support of a supervisor and didactic support material) to be an important factor of success, with teachers feeling more aware of their role, communicating better in the classroom and managing to shape better their teaching based on students' different needs.



EVALUATION AND ASSESSMENT: TOWARDS COHERENT NATIONAL ASSESSMENTS AND COMMON EVALUATION STANDARDS

Sweden combines national standard-setting and test development with a high degree of responsibility devolved to schools to carry out evaluation and assessment. Challenges exist in aligning all the elements of evaluation and assessment established at different system levels to ensure coherence and complementarity.

The major responsibility for establishing a framework for evaluating the quality of the education system lies within the [Ministry of Education and Research](#), but in practice much of the authority for **system evaluation** is given to the [Swedish National Agency for Education](#). According to an [OECD Study](#), as well as national evidence, synergies in assessment and evaluation practices remain underdeveloped in Sweden. While key elements of evaluation and assessment have been established, a coherent national framework is required to integrate and improve existing arrangements.

Swedish **schools** have internal and external evaluation processes. Specific internal school evaluation processes are chosen by the schools, although systematic quality assurance processes exist which are framed by the [Education Act](#), school regulations and compulsory education curricula. Most schools prepare annual quality reports with yearly objectives, measures taken, and evaluation of progress. They are also expected to report students' results in both national tests and final school grades to the Swedish National Agency for Education. External evaluations are carried out by the [Swedish Schools Inspectorate](#), whose objective is to monitor both education quality and compliance with regulations. Evidence points to a need to improve schools' evaluation processes to ensure consistency and an effective orientation towards education improvement. In PISA 2015, school leaders in Sweden report that assessment results are used more than average to monitor the progress of schools from year to year or to identify aspects of instruction or the curriculum that could be improved (Figure 6).

Sweden does not have a formal **teacher appraisal** system. While teachers may be evaluated collectively as part of school self-evaluation and school inspection, individual teacher appraisal is not regulated by law. There are no formal procedures and little central guidance for evaluating the performance of qualified teachers. Teachers receive feedback mainly from their school leader, and school leaders and teachers may hold individual discussions that focus on the teacher's work, working conditions and training. Each municipality, in collaboration with local stakeholders, defines its own teacher-appraisal criteria, which are linked to local objectives.

Sweden's **student assessment** system focuses more on formative assessment in the early years of education. Students are engaged in setting learning goals through individual development plans and both self-assessment and peer-assessment. There is a strong focus on classroom-based assessments, through which teachers collect a variety of evidence on student progress and provide regular feedback to students. In addition, national assessments are administered by schools at key stages in compulsory education (Grades 3, 6 and 9) and in upper secondary education. National tests are normally scored by the students' teachers. Verification of national assessments has shown an uneven teacher grading across schools, and analysis based on national test results showed increasing performance over the same period as performance in international assessments declined. This has raised concerns about the adequacy of national test results as an indicator of overall standards in school and system performance, and highlighted the need to balance high levels of trust and decentralisation of responsibility for assessments with ensuring capacity for effective assessment throughout the system.

The challenge: Providing a clear and coherent national framework for evaluation and assessment that gives a clear understanding of performance across the system.

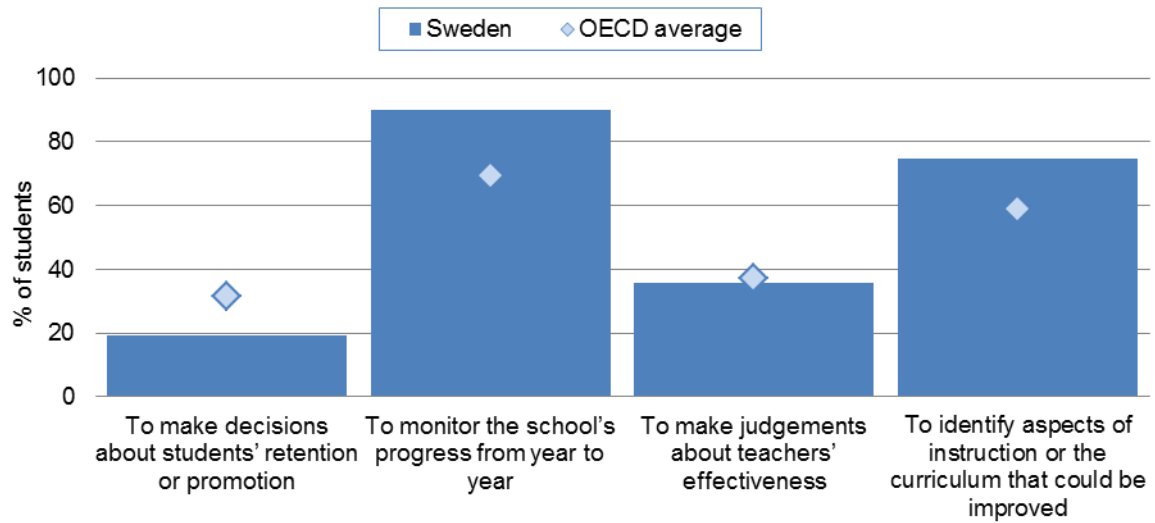
Recent policies and practices

The [Swedish Schools Inspectorate](#) (2008) can exert sanctions and impose fines (through a strengthened role granted by the [Education Act](#), 2011) to schools not complying with regulations and standards. In the new model introduced in 2011, the Inspectorate should prioritise the schools which have the greatest need for support, as well as increase the overall level of school supervision. Inspection reports are publicly accessible on a [website](#).

In 2016, the [Inquiry on National Tests](#) proposed a new national system for assessing knowledge, consisting of three components: national tests, national assessment support materials and national knowledge evaluation. According to the proposal, the Swedish National Agency for Education will be given an overall remit to develop the national tests, assessment support and knowledge evaluation components. Its role will include disseminating information about the new system for assessing knowledge and its various components, and providing training on the system.



Figure 6. Percentage of students in schools where the principal reported assessments of students in national modal grade for 15-year-olds, PISA 2015



Source: OECD (2016), *PISA 2015 Results (Volume II): Policies and Practices for Successful Schools*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264267510-en>.



GOVERNANCE: A HIGHLY DECENTRALISED EDUCATION SYSTEM

The **central government of Sweden holds overall responsibility for education** and is in charge of developing curriculum, national objectives and guidelines for the education system. Responsibilities at the central level are shared between the Ministry of Education and Research and three autonomous national agencies established by legislation:

- The [Swedish National Agency for Education](#) supports and evaluates the work of municipalities and schools, co-ordinates with the Ministry in setting the national goals and curriculum and publishes a set of educational statistics.
- The [Swedish Schools Inspectorate](#) authorises the establishment of new independent schools and also ensures that municipalities, organisers of independent schools and the schools themselves follow the centrally-set laws and regulations.
- The [National Agency for Special Needs Education](#) co-ordinates the government's efforts regarding students with special educational needs.

According to the [Education Act](#), Sweden's 290 **municipalities** are responsible for the public schools sector. The municipalities and the providers of independent schools are organised in two associations: the Swedish Association of Local Authorities and Regions, representing the municipalities, and the Swedish Association of Independent Schools, representing private school organisers. These associations are in charge of implementing educational activities, organising and operating school services, allocating resources and ensuring that the national goals for education are met. The [Swedish Local Government Act](#) decrees that every municipality shall be governed by an elected body, the [Municipal Assembly](#). This Municipal Assembly appoints an education committee to govern its public education system, and school leaders in municipal schools report to the education committee. A limited but increasing number of municipalities reallocate resources to schools with low-performing and/or socially underprivileged students.

According to an [OECD study](#), the level of autonomy of Sweden's 4 909 compulsory comprehensive **schools** in 2012/13 (84% municipal and 16% independent schools, with 43 independent schools for students with learning disabilities) has only slightly increased since 2003. Schools take the largest share of decisions (47%), followed by municipalities (35%), and the state takes the remaining 18% of decisions (Figure 7). According to the same study, local autonomy is not matched with adequate public accountability. There is also some lack of capacity and clarity on roles and responsibilities at the local level.

The [Riksdag](#) (parliament) and the government hold overall **responsibility for higher education and research** in Sweden. They decide on the goals, regulations and allocation of resources. Education and research are the remit of the [Ministry of Education and Research](#). The [Swedish Higher Education Authority](#) (*Universitetskanslersämbetet*) is responsible for quality assurance of higher education and granting licences to award qualifications, while the [Swedish Council for Higher Education](#) (*Universitets- och högskolerådet*) is in charge of preventing discrimination and promoting equal treatment and widened participation at universities. However, within these parameters, universities and university colleges remain separate state entities and make their own decisions about the content of courses, admissions, grades and other related issues. Higher education institutions also have some autonomy to decide on their own organisation and allocation of resources.

The challenge: Strengthening the alignment and capacity to deliver reforms with a decentralised approach and a national vision.

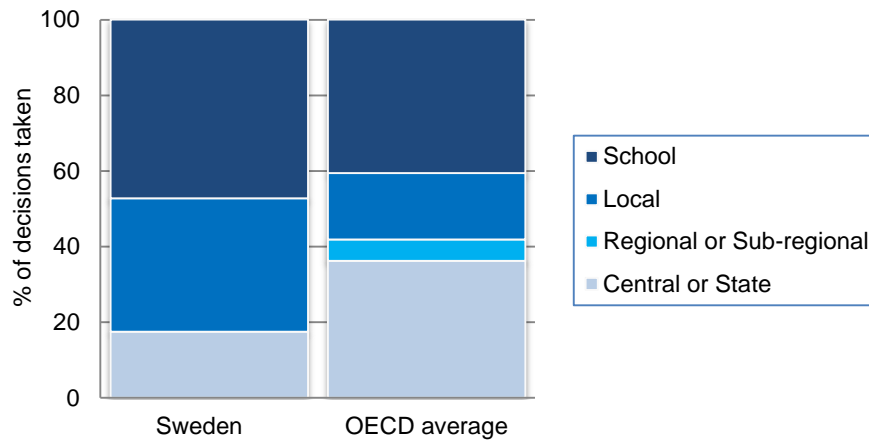
Recent policies and practices

The **Education Act** ([Skollag \[2010:800\]](#)) and the **Education Ordinance** ([Skolförordning \[2011:185\]](#)) provided an update of basic regulations for all levels of education from preschool to upper secondary school, the Sami school and municipal adult education, including tuition for immigrants and students with certain disabilities.

A new [quality assurance mechanism](#) for higher education has been developed and rolled out by the Swedish Higher Education Authority. It takes a more unified and collaborative approach to evaluation by engaging students and the labour market in the dialogue, and supporting individual institutions in developing their own internal policies and procedures for quality assurance. A six-year plan has been developed to cover the evaluation strategy, beginning in 2017.



Figure 7. Percentage of decisions taken in public lower secondary schools at each level of government, 2012



Source: OECD (2012), *Education at a Glance 2012: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2012-en>.



FUNDING: HIGH LEVELS OF PUBLIC INVESTMENT

Sweden's **investment in educational institutions** for primary to tertiary levels was 5.4% of its gross domestic product (GDP) in 2013 (slightly above the OECD average of 5.2%) (Figure 8). It has remained relatively stable at this level since 2005. Sweden is the only OECD country where expenditure on educational institutions from primary to post-secondary non-tertiary education is fully public, with no private expenditure. The share of public funding at tertiary level is 90% (above the OECD average of 70%). Despite these relatively high levels of public investment, [evidence](#) suggests that current mechanisms for allocating and using resources should be revised to improve effectiveness.

Annual expenditure per student from primary to tertiary education (including R&D activities) in 2013 was USD 13 072 (above the OECD average of USD 10 493). From 2005 to 2013, there were significant increases in expenditure per student, despite falling enrolment levels overall. Expenditure per student increased by 12% in primary, secondary and post-secondary non-tertiary education (compared to the OECD increase of 17%), while enrolment decreased by 8% during the same period. At tertiary level, expenditure per student in 2013 increased by 19% compared to 2005 (the average OECD increase was 11% during the same period), while enrolment increased by 2%.

Schools are mainly financed through municipal taxes, while about 15% of the budget is based on state grants, so there are no privately-funded schools in Sweden. The students' home municipality is responsible for school funding, regardless of whether students attend a public school or an independent school. The money follows the students to the school where they are enrolled. Schools are not permitted to charge fees. This means that independent schools are entitled to public funding from students' home municipalities.

School budgeting for preschools, and primary and secondary schools is completely decentralised to **municipalities** and funded through municipal taxes. Each municipality decides how resources will be allocated between schools (for example, if one school will receive more money than another because of socio-economic factors). To a large extent, the school then has the responsibility of allocating the resources in the best way to meet the needs of students. As there is no general model for resource allocation, municipalities may not always have the knowledge or capabilities to allocate funding effectively. [National evidence](#) shows that only a limited number of municipalities reallocate resources to schools with low-performing and/or socially underprivileged students, and state grants often do not reach the schools that most need them.

The Swedish Government has primary responsibility for public **funding of higher education institutions**. Sweden has no tuition fees for Swedish citizens and for citizens of the EU/EEA and Switzerland, and it can provide financial support (through study grants and study loans) to students to cover for their living expenses if a minimum performance level in the number of credits achieved. Non-Swedish residents are normally eligible for financial support if they moved to Sweden for a different reason than study.

The challenge: Improving mechanisms for allocating and using resources to improve their effectiveness.

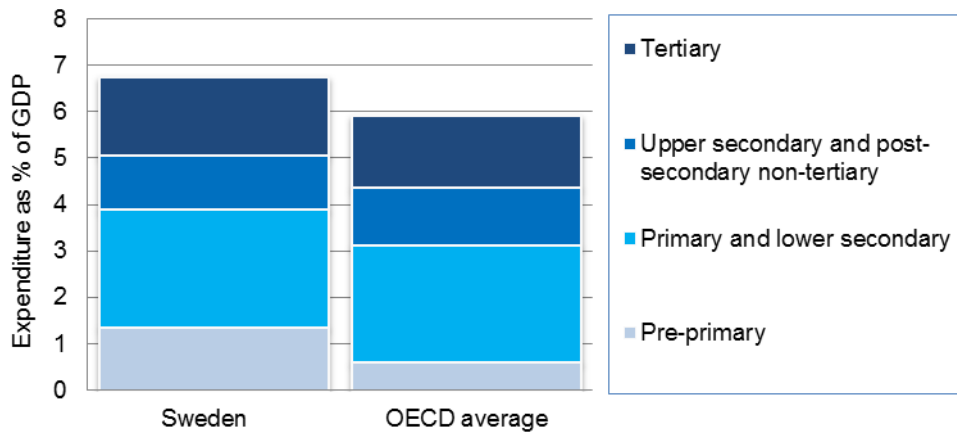
Recent policies and practices

The [coalition for the teaching profession](#) (2015) fostered discussions with social partners on how to improve the teachers' wage progression linked to their competences and development (other objectives include revising the teachers' administrative workload, improving induction processes and diversifying teacher career pathways). To support the actions of the coalition for the teaching profession, a new [Teacher Salary Boost](#) initiative (*Lärarlönelyftet*) earmarks an additional SEK 3 billion (USD 339 million) per year in the budget for teacher salaries starting in 2016. In 2016/17 approximately 60 000 teachers are expected to benefit from salary increases. Principals/employers can request an average of SEK 3 000 (USD 338) in monthly funding per teacher, and they then decide how the increases are allocated locally among teachers.

The government has made available substantial additional funds for various initiatives to support the transition of newly arrived immigrants. The [Fast-Track initiative](#) (2015), for example, was developed in collaboration with social partners to: 1) Support labour market integration of newly arrived immigrants within two years since their arrival in sectors related to their previous education or experience, and; 2) Address skills' shortages in selected industries (such as pharmacies, tourism, health, painting) and professions (such as or teachers and doctors). This initiative provides participants with an introduction benefit or an activity grant and combines an assessment of their skills and validation of their foreign professional credentials with customised bridging programmes and language training specific to their profession. Participants completing it receive an occupational certificate or credential. This reform is part of broader efforts to improve the services of the Swedish Public Employment Service (Arbetsförmedlingen), but additional SEK 35 million are allocated per year between 2017 and 2019 specifically to support the Fast Track Initiative.



Figure 8. Expenditure on educational institutions as a percentage of GDP, by level of education, 2013



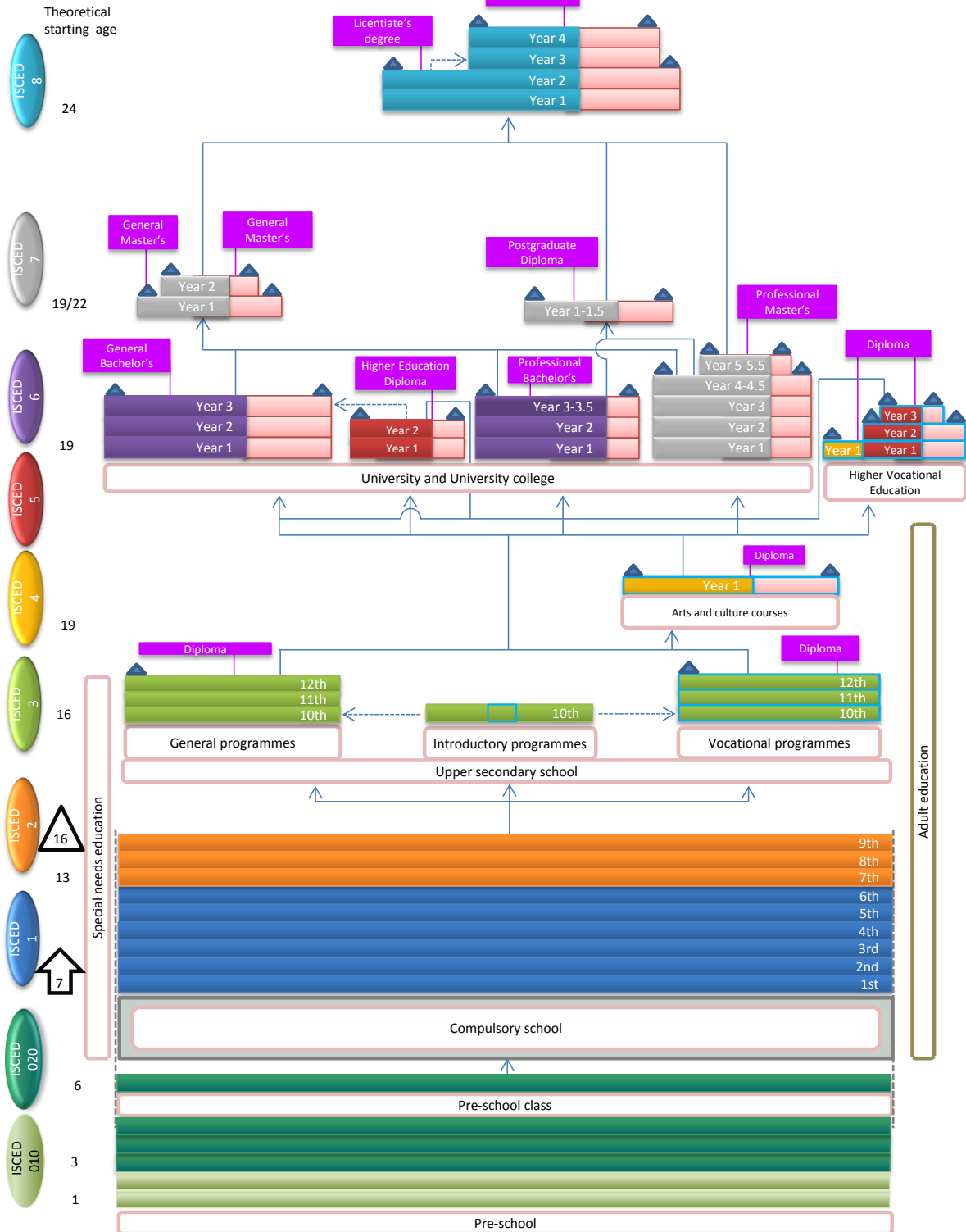
Source: OECD (2016), *Education at a Glance 2016: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.187/eag-2016-en>.



ANNEX A: STRUCTURE OF SWEDEN'S EDUCATION SYSTEM

Sweden

2016



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Source: OECD (2012-13), "Sweden: Overview of the education system", *OECD Education GPS*, http://gpseducation.oecd.org/Content/MapOfEducationSystem/SWE/SWE_2011_EN.pdf.



ANNEX B: STATISTICS

#	List of key indicators	Sweden	Average or total	Min OECD	Max OECD
Background information					
<i>Political context</i>					
1	Public expenditure on education as a percentage of GDP (from primary to tertiary), 2013 (EAG 2016)	5.9%	4.8%	3.3%	7.3%
<i>Economy</i>					
2	GDP per capita, 2014, in equivalent USD converted using PPPs (OECD Factbook 2015/2016)	45 153	38 865	17 831	97 273
3	GDP growth 2014 (OECD Factbook 2015/2016)	2.3%	1.8%	-0.4%	5.2%
<i>Society</i>					
4	Population density, inhab/km ² , 2014 (OECD Statistics)	24	142	3	507
5	Population aged less than 15 as a percentage of total population, 2010 (OECD Factbook 2014)	16.6%	18.6%	13.1%	29.6%
6	Foreign-born population as a percentage of total population, 2013 or latest available year (OECD Factbook 2015)	16.0%	n/a	0.3%	43.7%
Education outcomes					
7	Mean performance in science (PISA 2015)	493	493	416	538
8	Average three-year trend in reading performance across PISA assessments (PISA 2015) ^{4,5}	-5.2	0.7	-5.2	9.2
9	Average three-year trend in mathematics performance across PISA assessments (PISA 2015) ^{4,5}	-5.4	-1.0	-9.7	10.1
10	Average three-year trend in science performance across PISA assessments (PISA 2015) ^{4,5}	-4.0	-1.4	-10.6	7.6
11	Enrolment rates of 3-year-olds in early childhood education as a percentage of the population of the same age group, 2014 (EAG 2016)	93%	71%	3%	100%
12	% of 25-64 year-olds whose highest level of attainment is lower secondary education, 2015 (EAG 2016)	13%	15%	1%	33%
13	% of 25-34 year-olds whose highest level of attainment is at least upper secondary education, 2015 (EAG 2016)	82%	84%	45%	98%
14	% of 25-34 year-olds whose highest level of attainment is tertiary education, 2015 (EAG 2016)	46%	42%	21%	69%
15	% of 25-34 year-olds whose highest level of attainment is vocational upper-secondary or post-secondary non-tertiary education, 2015 (EAG 2016)	21.6%	26.5%	4.5%	57.7%
Unemployment rates of 25-34 year-olds by educational attainment, 2015 (EAG 2016)					
16	Below upper secondary	17.5%	17.4%	4.2%	38.0%
	Upper secondary and post-secondary non-tertiary	6.1%	9.2%	4.1%	31.7%
	Tertiary education	5.1%	6.9%	2.5%	30.2%
Students: Raising outcomes					
<i>Policy lever 1: Equity and quality</i>					
17	First age of selection in the education system (PISA 2015)	16	14	10	16
Students performing at the highest or lowest levels in science (%) (PISA 2015)					
18	Students performing below Level 2	21.6%	21.2%	8.8%	47.8%
	Students performing at Level 5 or above	8.5%	7.7%	0.1%	15.3%
Variance in science performance between schools and within schools as a percentage of the OECD average variance in science performance (PISA 2015)					
19	Between-schools percentage of variance	18%	30%	4%	65%
	Within-schools percentage of variance	96%	69%	33%	99%
20	% of students reporting that they have repeated at least a grade in primary, lower secondary or upper secondary schools (PISA 2015)	4.0%	11.3%	1.1%	34.0%



#	List of key indicators	Sweden	Average or total	Min OECD	Max OECD
21	Percentage of variance in science performance in PISA test explained by ESCS (PISA 2015) ⁴	12.2%	12.9%	4.9%	21.4%
22	Score difference in science performance in PISA between non-immigrant and immigrant students AFTER adjusting for socio-economic status (PISA 2015) ⁴	49	31	-5	83
23	Score differences between boys and girls in science (PISA 2015) ⁴	-5	4	-19	19
<i>Policy lever 2: Preparing students for the future</i>					
Adjusted mean proficiency in literacy among adults on a scale of 500 (Survey of Adult Skills, 2012)					
24	Among 16-65 year-olds (adjusted)	279.2	270.7	249.4	293.6
	Among 16-24 year-olds (adjusted)	282.8	277.9	260.2	296.7
Upper secondary graduation rates in % by programme of orientation, 2013 (EAG 2016)					
25	General programmes	48%	54%	20%	111%
	Pre-vocational/ vocational programmes	29%	46%	4%	96%
First-time graduation rates, by tertiary ISCED level, 2013 (EAG 2016)					
26	Short tertiary (2-3 years), ISCED 5	6.2%	10.6%	0.0%	26.4%
	Bachelor's or equivalent, ISCED 6	26.8%	37.8%	8.4%	60.7%
	Master's or equivalent, ISCED 7	19.8%	17.6%	3.7%	37.6%
	Doctorate or equivalent, ISCED 8	2.4%	1.7%	0.2%	3.4%
27	% of 15-29 year-olds not in education, employment or training, 2015 (EAG 2016)	9.1%	14.6%	6.2%	28.8%
Institutions: Improving schools					
<i>Policy lever 3: School improvement</i>					
28	Mean index of adaptive instruction in science lessons (PISA 2015)	0.13	0.01	-0.38	0.53
29	Mean index of disciplinary climate based on students' reports (PISA 2015)	0.02	0.00	-0.27	0.83
% of teachers above the age of 50 by education level, 2014 (EAG 2016)					
30	Primary education	38%	30%	13%	58%
	Lower secondary education	39%	34%	7%	59%
	Upper secondary education	44%	38%	11%	69%
Number of teaching hours per year in public institutions by education level, 2014 (EAG 2016)					
31	Primary education	m	776	569	1 146
	Lower secondary education, general programmes	m	694	459	1 146
	Upper secondary education, general programmes	m	644	386	1 146
Ratio of actual teachers' salaries to earnings for full-time, full-year adult workers with tertiary education, 2014 (EAG 2016)					
32	Primary education	0.82	0.81	0.56	1.08
	Lower secondary education, general programmes	0.84	0.85	0.56	1.23
	Upper secondary education, general programmes	0.88	0.89	0.58	1.23
33	Growth rate of teachers' salaries between 2005 and 2014 in lower secondary education, 2014 (EAG 2016)	m	3%	-30%	37%
34	% of lower secondary education teachers who report a "moderate" or "large" positive change on their knowledge and understanding of their main subject field(s) after they received feedback on their work at their school (TALIS 2013)	36.7%	53.5%	26.7%	86.2%



#	List of key indicators	Sweden	Average or total	Min OECD	Max OECD
<i>Policy lever 4: Evaluation and assessment to improve student outcomes</i>					
35	Percentage of lower secondary education principals who report that they use student performance and student evaluation results (including national/international assessments) to develop the school's educational goals and programmes (TALIS 2013)	89.6%	88.8%	58.5%	99.5%
% of students whose school principals reported that assessments are used for the following purposes (PISA 2015)					
36	To make decisions about students' retention or promotion	19%	31%	3%	61%
	To monitor the school's progress from year to year	90%	69%	26%	98%
	To make judgements about teachers' effectiveness	36%	37%	4%	88%
	To identify aspects of instruction or the curriculum that could be improved	75%	59%	14%	92%
% of lower secondary education teachers reporting appraisal/feedback from the school principal on their work with this frequency (TALIS 2013)					
37	Once every two years or less	15.6%	33.9%	3.2%	88.8%
	Once per year	59.4%	41.5%	9.5%	82.1%
	Twice or more per year	25.0%	24.7%	1.0%	49.6%
Systems: Organising the system					
<i>Policy lever 5: Governance</i>					
% of decisions taken at each level of government in public lower secondary education, 2011 (EAG 2012)					
38	Central or state government	18%	36%	0%	87%
	Regional or sub-regional government	m	6%	0%	36%
	Local government	35%	17%	0%	100%
	School government	47%	41%	5%	86%
<i>Policy lever 6: Funding</i>					
Annual expenditure per student by educational institutions, for all services, in equivalent USD converted using PPPs for GDP, 2013 (EAG 2016)					
39	Pre-primary education	12 833	8 070	3 172	19 233
	Primary education	10 664	8 477	2 717	17 959
	Secondary education	11 354	9 811	3 065	19 762
	Tertiary education	23 219	15 772	7 568	40 933
Relative proportions of public and private expenditure on educational institutions, 2013 (EAG 2016)					
40	Public sources	96.8%	84.2%	61.2%	99.0%
	All private sources	3.2%	15.8%	1.0%	38.8%
	Index of change in expenditure on educational institutions, public sources, (constant prices, 2008=100)	101	106	76	163
	Index of change in expenditure on educational institutions, all private sources, (constant prices, 2008=100)	m	116	75	212
Notes					
1. The average, total, minimums and maximums refer to OECD countries except in TALIS and the Survey of Adult Skills, where they refer to participating countries.					
2. "m": included when data is not available.					
3. "NP": included if the country is not participating in the study.					
4. Statistically significant values of the indicator are shown in bold (PISA 2015 only).					
5. The average three year trend is the average change in PISA score points from a country's/economy's earliest participation in PISA to PISA 2015.					
6. "n/a": included when the category is not applicable.					



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