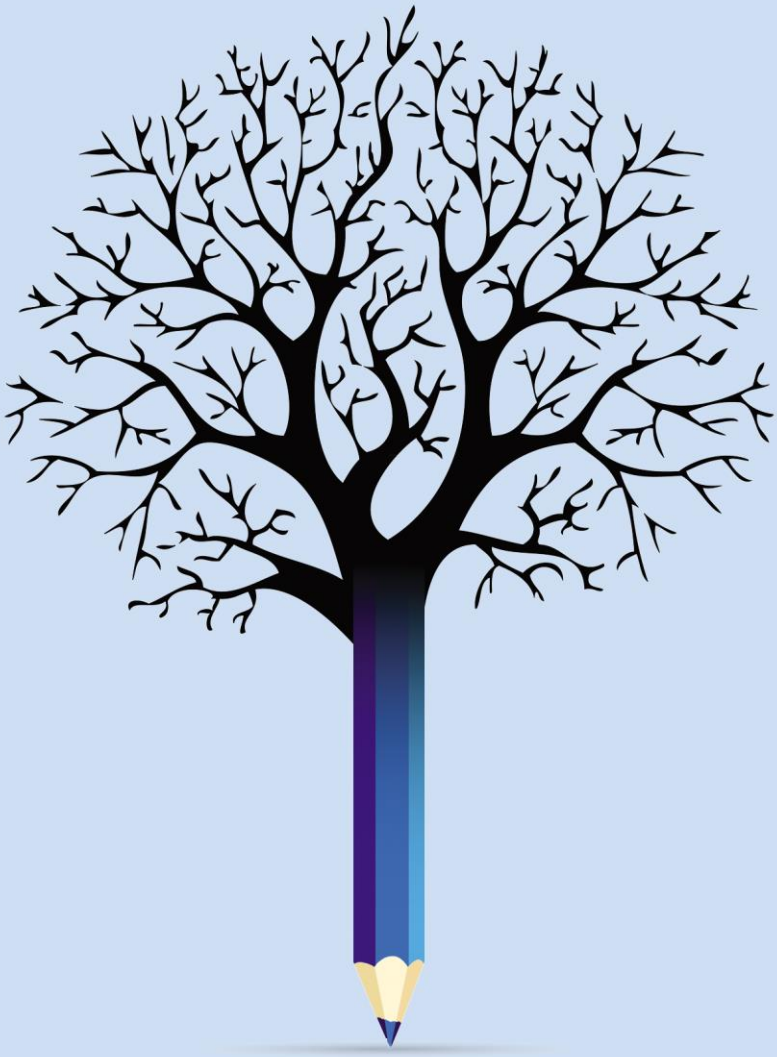
EDUCATION POLICY OUTLOOK

HUNGARY



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EDUCATION POLICY OUTLOOK

This **policy profile on education** in Hungary 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 improve 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 Hungary, 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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Sources: This country profile draws on OECD indicators from the Programme for International Student Assessment (PISA), 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 can be accessed through the OECD Education GPS at 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 also in the References and further reading section, which 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/Hungary:Overview).

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Hungary's educational context

Students: Hungary performed below the OECD average in PISA 2012, with improved performance in reading, unchanged performance in science and decreased performance in mathematics across PISA cycles. The impact of socio-economic background on mathematics performance of 15-year-olds was among the largest in OECD countries, with high variance between schools (school selection is made based on students' records). Hungary has some system-level policies in place that can help promote equity in education. Pre-primary education starts at age 3, and an above-average proportion of 3-4 year-olds are enrolled. School education is compulsory from age 6 to age 16, with comprehensive schooling typically from age 6-7 to age 14-15, and grade repetition is low. Tracking can partially start at Grade 5 (age 10-11) or at Grade 7 (age 12-13), when students can apply to an 8-year or 6-year general secondary school. Early school choice, selection may hamper equity. Secondary attainment is high, but the tertiary attainment rate remains low, and a high proportion of students do not complete their studies.

Institutions: Autonomy over assessment and curriculum in Hungarian schools is at around the OECD average. Following the 2011 school reform, secondary teachers in Hungary do between five and six years of pre-service training, including a one-year mandatory teaching practicum. Average class size, teaching time at primary and secondary level and teachers' salaries were below the OECD average in 2013. Hungary assesses student learning outcomes to monitor performance of the education system at the national level (National ABC and secondary school leaving examination) and at the international level (PISA, TIMSS and PIRLS). As of 2015, school evaluation comprises both self-evaluation and external evaluation carried out by trained expert teachers of the Hungarian Educational Authority.

System: The central government is responsible for governance of the education system, with strengthened responsibilities in primary and secondary education in recent years. The Ministry of Human Capacities is responsible for the overall education system, while vocational education and training (VET) and adult training are within the competence of the Ministry for National Economy. Since July 2015, the Ministry for National Economy is also in charge of maintaining VET institutions. Expenditure on educational institutions for all educational levels combined represents a significantly smaller-than-average share of GDP compared to other OECD countries.

Key policy issues

Hungary faces challenges in improving students' basic skills, reducing the impact of socio-economic background on educational outcomes of disadvantaged students and offering quality and inclusive education for all. Another key issue is making education and training more responsive to labour-market needs. This requires mechanisms to forecast skills needs and measures to make VET more innovative and attractive to a broader pool of students. Hungary needs to tackle the general quality of tertiary education and reduce dropout. The teaching workforce is ageing, and there is a shortage of subject teachers in certain regions and fields of teaching. Priorities include attracting a younger teaching workforce and improving pedagogical practices and teacher training. Hungary needs to ensure that evaluation and assessment results are used effectively to improve school quality and student learning. Following recent reforms, Hungary still has to achieve an adequate level of public funding for education and find a suitable balance in decision-making power between different levels of governance.

Recent policy responses

The government's updated *Decree on the Basic National Programme of Kindergarten Education* (363/2012(XII.17) came into force in 2013, outlining the principles and tasks of kindergarten education. Starting in 2015, participation in early childhood education and care became mandatory from age 3, with minimum attendance of four hours per day.

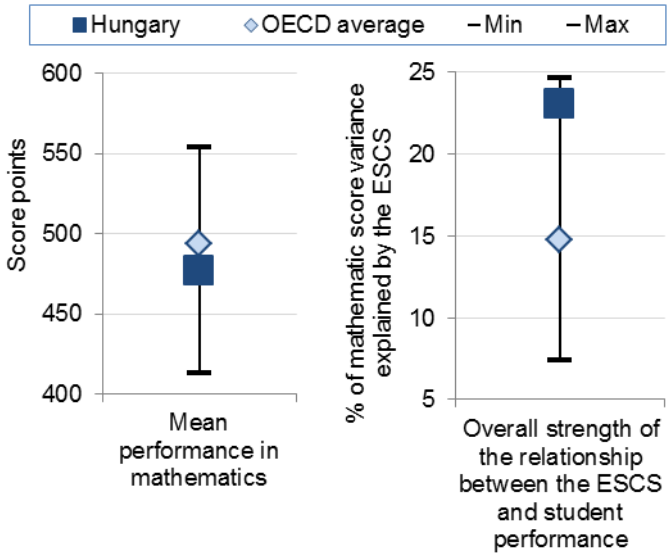
Other reforms include the *Act on Vocational Education and Training* to better match skills to the labour market and the *creation of VET centres*. The *National Higher Education Act* (2011) and the *Higher Education Strategy* (2014) have been introduced to improve labour market relevance of higher education programmes.

Hungary is gradually introducing a *Youth Guarantee Implementation Plan* to provide all 15-24-year-olds with an offer of employment, a place in further education within four months of registering with the National Employment Service. The plan will be fully operational in 2018 and will also cover training of those who are neither employed nor in education and training.

A career management system has been introduced (2013), and teacher remuneration is progressively increasing (2013-17) to attract and retain teachers in Hungary. A reformed external school evaluation process was launched in 2015 to better link the system of external school evaluation and teacher appraisal.

Hungary achieved below-average scores in mathematics, reading and science on PISA 2012. Across PISA cycles, student performance improved in reading, decreased in mathematics and remained unchanged in science. The impact of students' socio-economic status on mathematics scores (23.1%) decreased between 2003 and 2012, but remains well above the OECD average (14.8%).

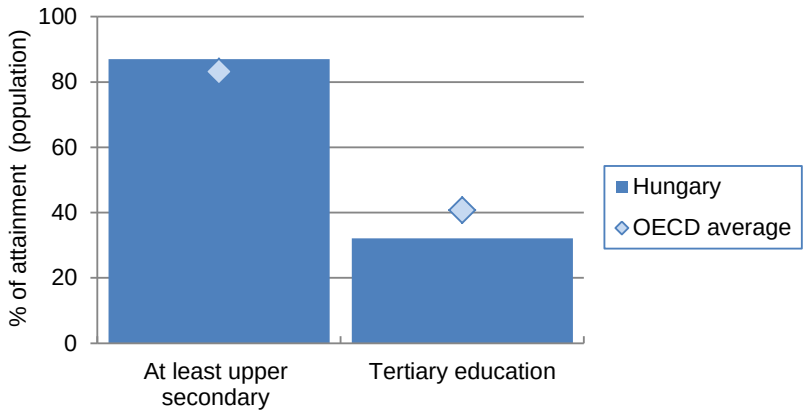
Figure 1. Student performance in mathematics and relationship between student performance and the economic, social and cultural status (ESCS), for 15-year-olds, PISA 2012



Source: OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading and Science*, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208780-en.

In Hungary, the share of 25-34 year-olds with at least an upper secondary education (87%) is above the OECD average (83%). The proportion of 25-34 year-olds with a tertiary education in Hungary is 32%, 9 percentage points below the OECD average of 41% in 2014 (Figure 2).

Figure 2. Upper secondary and tertiary attainment for 25-34 year-olds (2014)



Source: OECD (2015), *Education at a Glance 2015: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2015-en.

Spotlight 1. The European Union perspective:
Hungary'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 by EU's yearly assessment of the main economic and growth issues.

The *European Semester Country Report 2015* identified a number of challenges for Hungary in education:

- The early school leaving rate is at the EU average (11.1% in 2014), with no recent improvement (11.4% in both 2011 and 2014). Early school leaving is particularly high in vocational education and training (30%), and in disadvantaged regions and among Roma students. The proportion of low-achievers in mathematics has increased, and the impact of socio-economic background on educational outcomes is one of the highest in the European Union. In response to the challenge, the government adopted a *national early school-leaving strategy* in November 2014 and began developing an early warning system.
- Access to high-quality inclusive mainstream education for disadvantaged students remains a challenge, particularly for Roma students. A high proportion of Roma students attend schools or classes where 50% or more of their classmates are Roma. *Educational attainment* among Roma is lower than the national average: 77.7% have completed only Grade 8 of primary education (compared to 24.6% in the total population) and fewer than 1% have a tertiary degree (compared to 18.5% in the total adult population).
- Transition between different forms and stages of education and to the labour market could be improved. Students' educational performance in primary education influences the choice of secondary schools. Transition between educational pathways is possible, but the gap in competence levels between students widens during their time in different types of upper-secondary schools. This makes it difficult to change schools later, particularly for students in vocational schools (*szakiskola*). These students face barriers in progressing to higher education.
- Hungary has reached its national tertiary attainment target among 30-34 year-olds (34.1% in 2014). But tertiary attainment remains below the EU average of 37.9%, and the dropout rate is very high (47% in 2011). Participation in higher education depends on family contributions, and 25% of students live in very modest conditions. The share of students admitted to state-funded places dropped by 11% between 2011 and 2014. Annual expenditure per student on public educational institutions in tertiary education remains below the EU average.

The *Council of the European Union recommendation to Hungary* in regard to education is:

"Increase the participation of disadvantaged groups in particular Roma in inclusive mainstream education, and improve the support offered to these groups through targeted teacher training; strengthen measures to facilitate the transition between different stages of education and to the labour market, and improve the teaching of essential competences."

EQUITY AND QUALITY: DECLINING STUDENT PERFORMANCE AND BARRIERS TO EQUITY

Student performance in Hungary was below the OECD average in PISA 2012, and **equity indicators** for 15-year-olds are less positive than for their peers in other OECD countries. Hungarian students performed below the OECD average in mathematics, reading and science. In mathematics, Hungary had a smaller share of top performers (9.3% of students at or above Level 5, compared to the OECD average of 12.6%) and a higher share of low performers (28.1% of students below proficiency Level 2, compared to the OECD average of 23.0%) (Figure 3). The impact of socio-economic background on student performance was among the largest in OECD countries (23.1%, compared to the OECD average of 14.8%). Between-school variance in Hungary is the third highest among all OECD countries, while within-school variance is below the OECD average.

Participation in **early childhood education and care** (ECEC) is relatively high. In Hungary, about 75% of 3-year-olds and 93% of 4-year-olds were enrolled in ECEC in 2013 (above the OECD average of 72% for 3-year-olds and 85% for 4-year-olds). Two kinds of full-time centre-based services are available: nursery (*bölcsőde)* for children up to age 3 and kindergarten *(óvoda)* for children between age 3 and compulsory school. Both offer all-day service for 50 weeks per year. A large majority of students in early childhood education (91%) are in public institutions (well above the OECD average of 61%).

System-level policies (such as early tracking, school choice, academic selection and grade repetition) can hinder equity if not managed appropriately. In Hungary, school education is compulsory from age 6 to age 16, one year longer than the OECD average. Compared to the OECD average (age 15), tracking starts early in Hungary: partially at Grade 5 (age 10-11) or later at Grade 7 (age 12-13), when students can apply to an 8-year or 6-year general secondary school. Around 85% of Hungarian students are in schools which can select students according to academic performance or recommendations from feeder schools, based mainly on their academic records (compared to the OECD average of 43% of students in such schools). *Evidence* shows that the Hungarian system of school choice can lead to socio-economic drawbacks and disparities in student performance.

Hungary can further improve access for Roma**,** to provide better equity opportunities in education. Roma students are under-represented in pre-school enrolment and have high early school leaving rates. Roma students also tend to suffer from weaker educational family support and more limited access to learning opportunities. About 45% of Roma students who live in areas with a Roma population higher than the national average attend schools or classes where 50% or more of their classmates are Roma. According to a *national survey* focusing on comparison and progress in educational attainment of the cohort of 1991 and 1971, the educational attainment of Roma students is lower than the national average. Almost half of Roma have completed only primary and lower secondary education, with 46% at secondary level (VET and final exam together), and just 4% of Roma from the 1991 cohort have attained a tertiary degree (compared to the national average of 13% who have completed only primary and lower secondary education and 31% who have attained tertiary education).

The challenge: Ensuring that students from disadvantaged backgrounds, particularly Roma students, have equal access to high-quality, inclusive, mainstream education.

Recent policies and practices

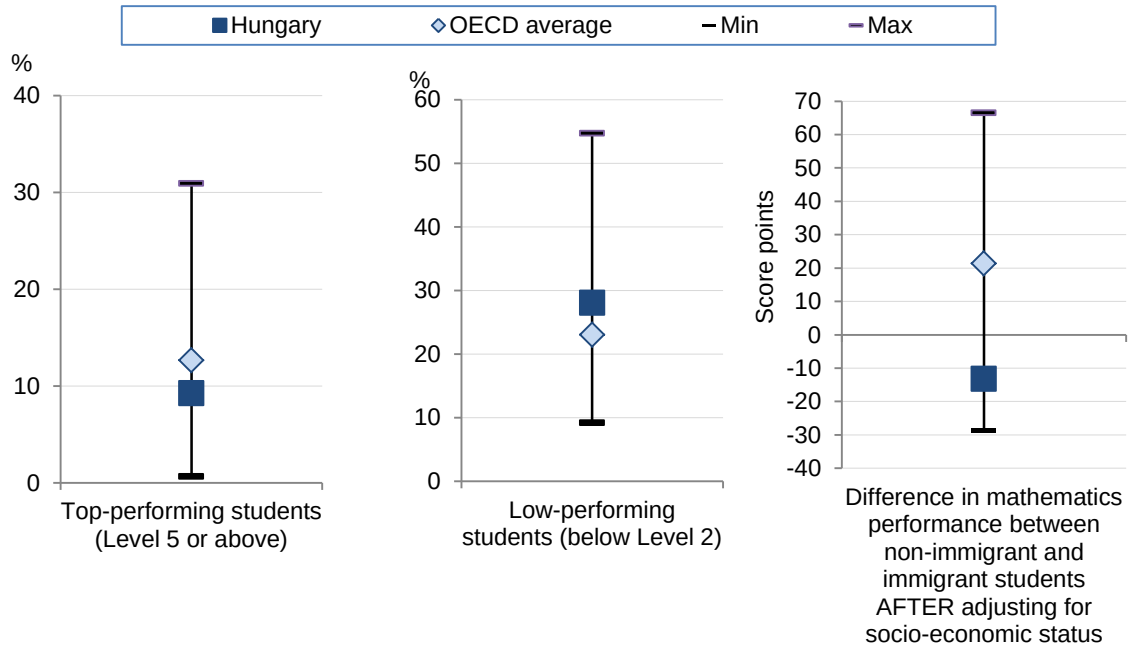
The government's updated *Decree on the Basic National Programme of Kindergarten Education* (363/2012. [XII.17.]) came into force in 2013, outlining the principles and tasks of kindergarten education. Starting in 2015, participation in ECEC became mandatory from age 3, with minimum attendance of four hours per day, as a preventive measure to reduce early school leaving, particularly for children from disadvantaged backgrounds.

The *National Public Education Act* (2011) centralised management of public education institutions to reduce regional gaps in the quality of services. The Act also reduced the compulsory school-leaving age from 18 to 16, which has raised concerns that disadvantaged students might spend less time in education.

The *National Core Curriculum* (2012) emphasises teaching of basic skills in primary and secondary schools.

The government adopted several strategies to promote quality, improve opportunities and tackle early school leaving. These include 1) the *Mid-term Strategy Against School Leaving Without Qualification* (2014) to prevent and tackle early-school leaving, improve students' skills and competences and foster employability; 2) the *Public Education Development Strategy* (2014-20) to foster inclusive education; and 3) the *National Social Inclusion Strategy* (2011-20) to promote inclusion measures in child welfare, education and employment.

Figure 3. Percentage of low and top performers and performance difference between non-immigrant and immigrant students in mathematics, PISA 2012



Source: *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading, and Science*, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264208780-en.

Spotlight 2. Providing better education opportunities for Roma and disadvantaged students

Several initiatives aim to support students in need in Hungary and to promote their higher educational achievement:

- The *Sure Start Children's Houses* (2006) initiative aims to create safe learning opportunities for disadvantaged children under age 3. In 2015, 112 Sure Start Children's Houses were in operation, mainly in disadvantaged regions.
- The *Arany János* Programmes (2013) support disadvantaged students to complete secondary education, and enter higher education or the labour market, through educational, social, health and cultural support tailored to students' needs. An evaluation in 2014 found a positive effect on equity.
- The On the Road Programme (*Útravaló-MACIKA*, 2005) provides financial support to disadvantaged students, as well as up to two hours per week of mentoring support. In 2014/15 almost 13 000 students were involved in the programme. An evaluation by the Education Research and Development Institute found that it effectively reaches the most disadvantaged students, especially Roma students.
- The *Tanoda Study Hall Programme* (1990, funded by the European Union since 2004), tackles social exclusion by supporting students, particularly Roma students, through individual mentoring and development plans based on specific individual needs. In 2015, there were 178 Study Halls, each involving 30-35 students.
- The *Integrated Pedagogical System* (*Integrált Pedagógiai Rendszer,* 2003) provides additional financial support to applying kindergartens and schools through yearly tenders. It aims to improve educational achievement and school attendance of disadvantaged students and promotes inclusive education.

PREPARING STUDENTS FOR THE FUTURE: TACKLING DROPOUT AND INCREASING ATTAINMENT

Labour market perspectives can play an important role in students' decisions to stay in education. Unemployment rates in Hungary for all levels of educational attainment have decreased between 2010 and 2014, and were below the OECD average in 2014, except for those with less than upper secondary education. Hungary has the fourth largest employment gap in OECD countries between those with less than upper secondary education and those who hold of tertiary education degrees (a difference of 37 percentage points, compared to the OECD average of 28 percentage points). The share of 15-29 year-olds (17.5%) who are neither employed nor in education and training (NEETs) is above the OECD average (15.5%).

Upper secondary education is divided into three main pathways: 4-year, 6-year and 8-year upper secondary general school (*gimnázium*), upper secondary vocational school (*szakközépiskola*), and vocational school (*szakiskola*). As of 2016, all programmes will prepare students for the final secondary leaving exam, which provides entry into tertiary education. Students in vocational schools can obtain a vocational qualification and enter the labour market at the end of the third year. Currently, these students at vocational schools have to take an additional preparatory course of two years to pass this test. Providing all students with equitable opportunities to level up their basic skills in order to succeed this test will be important. In 2014, a higher share of Hungarian 25-34 year-olds (87%) attained upper secondary education than the OECD average (83%) (Figure 2).

Vocational education and training can ease entry into the labour market. In Hungary, fewer students (26%) than the OECD average (46%) were enrolled in VET programmes at upper secondary level. The rising dropout rate in vocational schools (nearly 30%) is a source of concern in Hungary.

Access to **tertiary education** is possible for students who obtain the secondary school leaving certificate. Admittance is competitive, based on entrance scores earned above the minimum scores defined annually by the government. Hungarian students can access *tertiary education* in both universities (academic focus) and colleges (practical focus). Outstanding universities can be qualified as research universities, and outstanding colleges can be qualified as colleges of applied sciences. Tertiary education attainment levels among young adults (25-34 year-olds) in Hungary (32%) is below the OECD average (41%). The number of people entering tertiary education has declined over the past several years. Tertiary education credentials are rewarded in the labour market: 25-34 year-old degree holders in Hungary can expect to earn on average 78% more than their peers who have only upper secondary education (the average OECD earning premium is 41%).

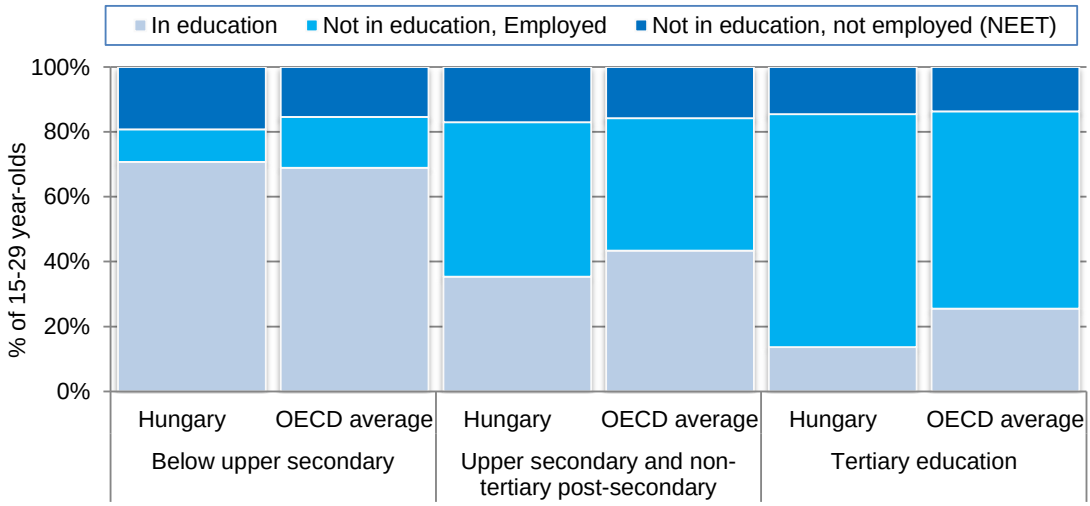
The challenge: Improving basic skills for all by ensuring flexibility of all secondary tracks and relevant curricula to help students enter the labour market and higher education.

Recent policies and practices

Hungary has been working on *system-level reforms* since 2011 (see Spotlight 2), including the following:

- In 2013, the quota system for selection of tertiary education applicants was replaced by minimum score requirements per study programme and admission based on programme capacities (*Decree on National Higher Education Excellence*, 2013). The *Decree on Admission Procedure to Higher Education* (423/2012. (XII. 29.]) defines the gradual rise of minimum admission requirements to universities and colleges between 2013 and 2016.
- The national *Higher Education Strategy* (2014) (see Spotlight 4) stipulates that all students admitted to higher education will need to pass a *competence test* at the beginning of the programme. Mentoring, coaching and catch-up courses will be organised for students with lower results on this test to prevent them from dropping out.
- Hungary is gradually introducing a *Youth Guarantee Implementation Plan* to provide all 15-24-year-olds with an offer of employment, a place in further education within four months of registering with the National Employment Service. The plan will be fully operational in 2018 and will also cover training for NEETs.
- The *Career Guidance System* (2012-15) has involved development and continuous updating of national career guidance and training for 4 000 teachers and counsellors who provide career guidance.
- Public Education Bridge Programmes (*National Public Education Act*, 2011) aim to assist students who could not complete primary education to enrol in upper secondary education or obtain knowledge for entering the labour market.

Figure 4. Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status (2014)



NEET: Neither Employed, nor in Education and Training (by higher education status)
Source: OECD (2015), *Education at a Glance 2015: OECD Indicators*, OECD Publishing, http://dx.doi.org/10.1787/eag-2015-en.

Spotlight 3. Strengthening vocational education and training

Hungary has been working on *system-level reforms* since 2011 to better match skills with labour market needs, strengthen the professional content of teaching/learning at secondary level, and provide broader workplace training and tools for higher stakeholder engagement (Act No. CLXXXVII of 2011 on VET). The main changes are introduction of a dual model of upper secondary vocational education, creation of VET centres, reform of the vocational qualification system and increased quality assurance measures. In addition, management of vocational schools and vocational secondary schools has been transferred from the Ministry of Human Capacities to the Ministry of National Economy.

- The dual model in vocational schools aims to extend work-based forms of learning and training. Practical training is offered by companies based on apprenticeship contracts (there are more than 50 000 apprenticeship contracts). Hungary has increased the duration of practical training in vocational schools and reduced teaching time for basic competences such as mathematics and reading. It has also reduced the overall duration of school-based vocational training to three years. This reduction of curriculum content and time devoted to basic skills has raised concerns about limiting students' chances for further education and future jobs, especially for students from disadvantaged backgrounds (who are over-represented in vocational schools).
- With the *amendment of the Act on VET* (2015), 44 VET centres were introduced to strengthen the dual system and facilitate more effective co-operation among schools and with the local economy. VET centres have their own budget and high pedagogical and economic autonomy.
- The examination system for vocational qualifications also changed from module-based exams to a complex final exam.
- The Hungarian Common Quality Management Framework for VET (*Egységes Szakképzési Minoségirányítási Keretrendszer,* ESZMK) includes VET quality indicators, self-assessment tools, a system of surveying partners' needs and satisfaction, as well as a "common process model" for school-based VET and adult training.
- Based on the *Act on VET* (2011) and the *Adult Training Act* (2013), in 2015 Hungary offers a second vocational qualification free of charge and subsidised by the state, to increase access to VET. The age of entry to initial vocational education has risen from 21 to 25, and upper secondary school leaving exams (*érettségi*) have been facilitated by providing longer courses (3+2 years) for students at vocational schools.

SCHOOL IMPROVEMENT: FOSTERING BETTER TEACHING CONDITIONS

To raise achievement in schools, it is important to develop **learning environments** offering the conditions for school leaders and teachers to succeed. In PISA 2012, students in Hungary reported positive views of their learning environments at around the OECD average (Figure 5). While a lower share of students in Hungary reported arriving late at school (24%, compared to the OECD average of 35%), a higher share reported that students do not listen to what their teacher says in most or every lesson (36% in Hungary, compared to the OECD average of 32%). Students in Hungary receive less instructional teaching hours than the OECD average: 646 hours annually in primary education and 743 hours in lower secondary education (compared to the OECD average of 804 hours for primary education and 916 hours for lower secondary education).

Around 40.6% of **school leaders** reported in PISA 2012 ensuring more than once a week that teachers work according to their schools' educational goals (compared to the OECD average of 20.3%). Candidates for school leadership positions must be qualified teachers with more than five years teaching experience. In addition, they must complete pre-service training and 120 hours of training for every 7 years in service. School leaders in public schools are appointed by the Minister of Education, upon recommendation of the *Klebelsberg Institution Maintenance Centre* (KLIK). They are evaluated on criteria such as student performance and pre-defined school objectives and can receive salary rewards.

Attracting and developing quality **teachers** is key to promoting quality in education systems. Around 30% of teachers in Hungary are below the age of 40 in primary and lower secondary education (compared to the OECD average of 40%). The ageing teacher population may lead to teacher shortages, and Hungary expects an increasing demand for qualified teachers, particularly in mathematics and science. According to *national evidence*, there has been an increase in the number of new entrants admitted to teacher training. Initial teacher training lasts four years for primary teachers and between five and six years for secondary teachers. Teacher training graduates enter the teaching profession as "novice teachers" for the first 24 months. Upon successful completion of an accreditation exam, they continue in the teaching career system as "Teacher I". According to the *Hungarian National Social Inclusion Strategy*, teachers need more systematic preparation to tackle low achievement and promote inclusive education. All teachers in public schools must be registered with the teacher chamber (*nemzeti pedagóguskar*), and participation in continuous professional development is compulsory to remain in the teaching profession. Teachers' salaries in Hungary were among the lowest of all OECD countries in 2013, and much lower than the salaries of other tertiary educated professions. Primary teachers earned 62%, and upper secondary teachers 48%, of the average actual salary of a 25-64 year-old similarly educated graduate in 2013 (compared to the OECD average of 78% for primary teachers and 82% for upper secondary teachers).

The challenge: Attracting and developing quality teachers to meet the needs of a diverse student body and avoid teacher shortages.

Recent policies and practices

The *Decree on the National Core Curriculum* (2012) re-defines the mission of the National Curriculum and its role as conveyor of values and a regulatory instrument, and introduces general knowledge content. In 2013, a weekly timeframe took effect for mandatory classes that schools must implement.

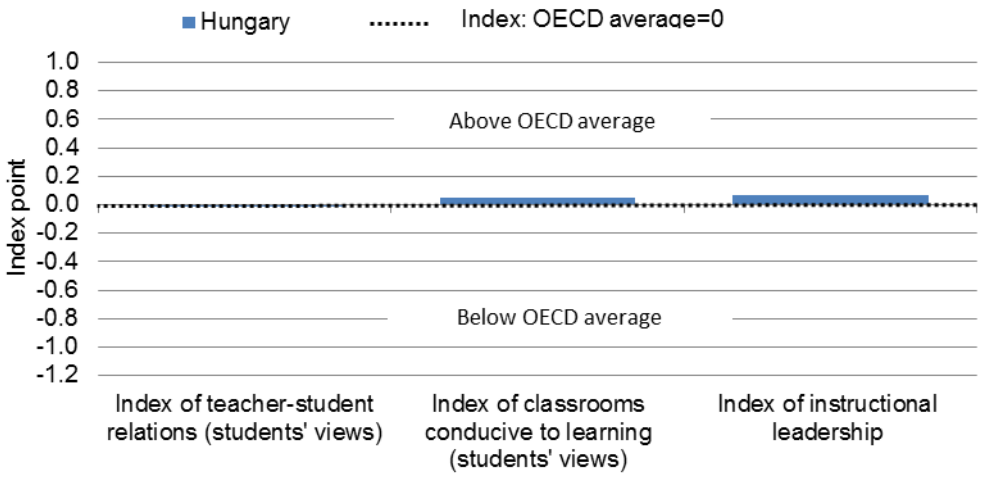
The *Act on Textbook Provision in National Public Education* (2013) establishes a national body responsible for textbook development, publishing and distribution. It stipulates free new textbooks for all students in primary education and for disadvantaged students in secondary education.

To support starting teachers, the *Decree on the Teacher Training System* (2012) reintroduced an undivided teacher training programme and increased the duration of in-school teaching practicums from six months to a full year. Furthermore, the National Public Education Act (2011) defines teachers' tasks, rights and obligations. Since 2013, starting teachers receive mentoring in their school over the first two years of their career.

The *Klebelsberg Institution Maintenance Centre* (2013) aims to reduce teacher shortages and attract gifted students to the teaching profession. After their studies, graduates must accept a position offered by KLIK and remain in the profession for the same number of years they spent in the scholarship programme.

The *National Public Education Act* (2011) transferred teacher employment status to state level for state-maintained public education institutions. In 2013, a new system of teacher career management was introduced, in which teachers can be promoted from "Novice Teacher" to "Teacher I", "Teacher II", "Master Teacher" or "Researcher Teacher". In 2013 all teachers were classified as Teacher I and experienced teachers (who had a salary loss with the re-classification) had to prepare a portfolio to be reclassified to Teacher II. A new wage scale was also introduced in 2013, with expected salary increases of at least 3 to 4% from 2015 to 2017. The system also links teachers' salaries to teacher appraisal. Starting 2015/16, a new *teacher appraisal system* for VET teachers will be implemented.

Figure 5. The learning environment, PISA 2012



Source: OECD (2013), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en.

EVALUATION AND ASSESSMENT TO IMPROVE STUDENT OUTCOMES: BUILDING AN INTEGRATED FRAMEWORK

Defining effective **evaluation and assessment strategies** is important to improve student outcomes and develop a better and more equitable school system. Two bodies steer the main evaluation and assessment practices in Hungary. The Ministry of Human Capacities has overall responsibility and supports aspects of implementation, and the Educational Authority collects data at the national level, carries out school inspections and provides evaluation material and guidelines. Hungary has a three-level curriculum system to determine education content: a central core curriculum, a framework curriculum and local curricula.

System evaluations use national and international assessments of student learning outcomes to monitor performance of the education system. Hungarian students participate in diagnostic tests at the end of Grade 4, and the National Public Education Act (2011) stipulates a National Assessment of Basic Competencies (National ABC) at the end of Grades 6, 8 and 10 in mathematics, reading and, since 2015, in one foreign language as well. The results of the National ABC are public, except for individual student performance, which can be accessed only with a student's confidential assessment ID. As of 2015, schools are also required to prepare an analysis of their results that covers their mean performance, student distribution and information on students' family background. In addition, there are secondary-level admission tests and a central two-tier secondary leaving exam that generates data for monitoring and evaluation. Hungary also takes part in international student assessments such as PISA, PIRLS and TIMSS. The triennial Report on Hungarian Public Education publishes the views of the Hungarian adult population on public education, including a subsample of parents.

In 2015, Hungary implemented major reforms on **external and internal school evaluation**. There are now two types of external evaluations. Legal compliance checks (*Hatósági ellenőrzés*) aim to ensure that schools operate according to legislation. Pedagogical/professional inspections (*Pedagógia-szakmai ellenőrzés*) cover the evaluation of teachers, school heads and schools. Based on the evaluation report, schools develop a five-year action plan. The legal compliance checks may lead to disciplinary measures and remain confidential, while the pedagogical/professional evaluations provide remedial actions and are public. External evaluations are organised by the Educational Authority and carried out by experienced specially trained expert teachers. External school evaluations should take the report of the National ABC into consideration. In addition, school maintainers may also evaluate their institutions. At the same time as their external evaluation, schools carry out internal evaluations, which they organise independently using tools and materials provided by the Educational Authority.

In Hungary, **teacher appraisal** has an impact on teachers' salaries and may influence career opportunities. As of 2015, the new teacher career model stipulates that teachers must be regularly appraised by external evaluators during external school evaluations, as well as by the school principal or a senior member of staff. Most teacher appraisals in Hungary take students' achievement into account to assess teachers' effectiveness (Figure 6). While schools can choose the criteria for teacher appraisal, evaluation of the selected criteria is strictly regulated.

Student assessment in Hungary includes summative and formative assessments. Teachers have autonomy to select assessment tools. Most teachers use assessment on a daily basis. Among the most popular types of assessment are oral assessments, administration of short written tests (5-20 minutes), and checking homework assignments. The National Public Education Act (2011) states that students' achievement must be regularly assessed in the form of marks, and that parents have the right to receive detailed information regularly on the development, conduct and progress of their children. During the academic year, students receive marks for knowledge and conduct that count towards their final reports, which are issued twice every school year.

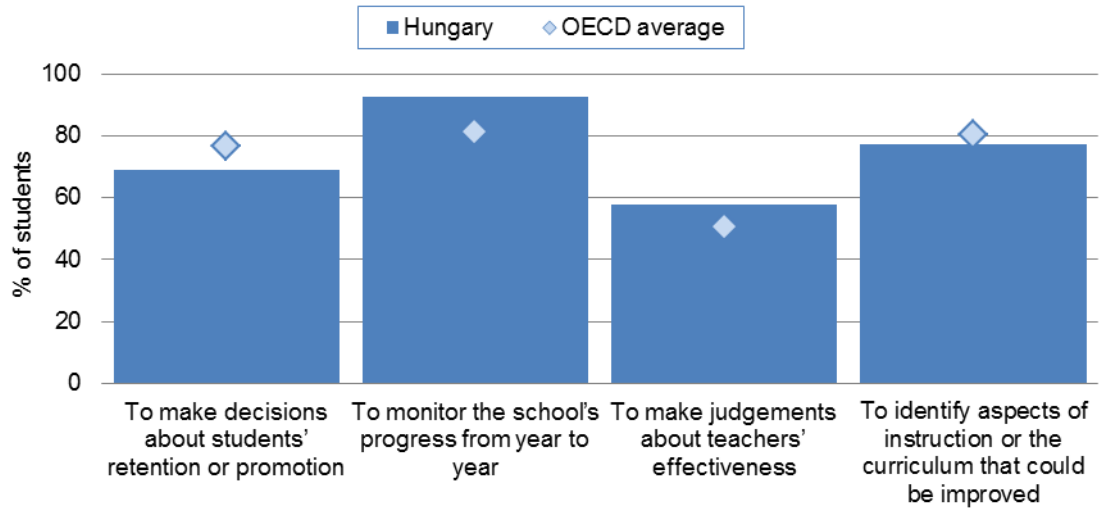
The challenge: Ensuring that results from school evaluations and student assessments are used effectively to improve school quality and student learning.

Recent policies and practices

Guidelines for pedagogical/professional external school evaluations were adopted by the Minster of Human Capacities in 2014 and implemented in 2015. A full school evaluation process includes evaluation of teachers, the school head and the institution itself.

Since 2008, all students have a *personal assessment identifier* that makes it possible to track their academic development over time and to better understand the impact of schools on their development. When students transfer to another school, their assessment identifiers and their previous results go with them, which can be useful for their new teachers.

Figure 6. Percentage of students in schools where the principal reported the following uses for student assessments, PISA 2012



Source: OECD (2013), *PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices*, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en.

GOVERNANCE: BALANCING CENTRALISATION AND AUTONOMY

In Hungary, governance of the public education system is shared between the central government and 198 municipal school districts. Recent reforms have centralised what had been a highly decentralised system. The Ministry of Human Capacities (*Emberi Erőforrások Minisztériuma,* EMMI) is responsible for schools and higher education. For schools, EMMI defines the national curriculum, development and selection of textbooks, teachers' salaries, teacher career systems and the public budget for primary and secondary schools. For higher education, it defines policy, determines the number of state-funded places for each institution and discipline, and operates the education information and career tracking systems, and in the case of public institutions, also prepares the budget.

The Ministry for National Economy (*Nemzetgazdasági Minisztérium*, NGM) oversees vocational education and training (including VET centres) and adult training. The two ministries jointly govern school-based VET. The Deputy State Secretariat for Social Inclusion in the Ministry of Human Capacities defines policies and measures related to social inclusion for disadvantaged groups. Other bodies also help to shape education policy:

- The Educational Authority (*Oktatási Hivatal*, OH) delivers international and national student assessments and examinations, carries out legal and professional control, educational evaluation, measurement, and audits and analyses stipulated by the Act on National Public Education. It also develops evaluation criteria and procedural protocols for teachers' appraisals and qualification exams. OH manages admission procedures and higher education graduate career tracking systems, as well as databases for schools. OH also includes the Hungarian Equivalence and Information Centre.
- The National Public Education Council (*Országos Köznevelési Tanács*), the professional advisory body of the Ministry of Human Capacities, makes proposals for decision-making, mainly with respect to curriculum evaluation and content of school books. Other advisory bodies include the Hungarian Institute for Research and Development (*Oktatáskutató és Fejlesztő Intézet*) and the Council of National Minorities (*Országos Nemzetiségi Tanács*).
- The National Vocation and Adult Training Council (*Nemzeti Szakképzési és Felnőttképzési Tanács*) is an advisory body of the Ministry for National Economy. The National Office of Vocational Education and Training and Adult Learning (*Nemzeti Szakképzési és Felnőttképzési Hivatal,* NSZFH) supports the NGM (e.g. with maintaining VET centres and fulfilling co-ordination, research and information functions.).
- The Klebelsberg Institution Maintenance Centre (*Klebelsberg Intézményfenntartó Központ*, KLIK, 2012) is responsible for maintenance of public schools (primary and general secondary) in Hungary. This includes evaluating the effectiveness of pedagogical work of schools, employing teachers, supplying teaching materials and co-ordinating professional training. Since 2015, upper secondary vocational institutions have been transformed into member schools of local or regional VET centres and are maintained by NSZFH. Non-state education institutions are not part of the maintenance, but are under legal control of the county government offices.

Municipalities are responsible for delivering early childhood education. In 2011, Hungarian **schools** had higher levels of autonomy than schools in other OECD countries. Hungarian lower secondary schools took 67% of all decisions (above the OECD average of 41%). With the inauguration of KLIK in 2013, responsibilities of the central government were strengthened in public primary and secondary education. A higher share of decisions is now taken at the centre, while all pedagogical decisions are still made within schools.

Higher education institutions (HEIs) are regulated by the central government. The Hungarian higher education network is highly diverse, comprising public HEIs and non-public HEIs (church, private and foundation institutions). The Hungarian Rectors' Conference has a consultative role in decision making, in particular for programme structure, credit systems, and learning outcomes; on other matters it provides an opinion. To receive state recognition and to issue degrees, all HEIs (including private institutions), must undergo an evaluation and be accredited by the Hungarian Higher Education Accreditation Committee.

The challenge: Finding the right balance in distribution of responsibilities so that all schools can provide quality education to their students.

Recent policies and practices

Responsibility for all local government-maintained educational institutions moved to the *Klebelsberg Institution Maintenance Centre* in 2013. With *Government Decree No. 120/2015*, 300 schools with vocational programmes were moved from KLIK to local VET centres to increase effectiveness and locate financial decisions closer to institutions.

Hungary is currently implementing major reforms in its higher education system (see Spotlight 4).

Spotlight 4. Reforms in higher education

The government approved the Higher Education Strategy in December 2014 and amended legislation accordingly. Among the main changes introduced recently:

- *New practically oriented bachelor programmes, the dual training system:* This form of education complements university or college programmes. Students do 22-24 weeks of practical training at a company over the whole study programme. This is a fixed-term employment contract, where students receive a salary. Their net salary is equal to the minimum wage for the whole duration of their studies. The definition of dual training was introduced in an amendment of Act CCIV on National Higher Education (2014). The Dual Training Council was established by *Government Decree 220/2014* (VIII.29). In 2015, 19 higher education institutions launched 79 bachelor of science programmes in dual form.

- *Community-based higher education study centres in disadvantaged regions:* These centres are to be established in disadvantaged regions that offer no higher education. They will provide the necessary infrastructure to accommodate programmes of established higher educational institutions (after being licensed by the Educational Authority, in consultation with the Hungarian Higher Education Accreditation Committee). As a first step in implementing the above policies, the *2015 amendment of the Act on National Higher Education* sets the definition of higher education centres for community-based studies and empowers the government to regulate the establishment and operation of these centres.

- *A chancellery system*: Previously, rectors had final responsibility for all decisions made by universities. Since 2014, (*Act CCIV on National Higher Education*), there is a chancellor appointed by the Prime Minister in each public higher education institution. Chancellors are executive heads with final responsibility for financial and economic decisions, while rectors retain final responsibility for teaching and research decisions. As academic and financial decisions are typically closely linked, chancellors have a crucial position in the steering of universities, including effective allocation of resources.

- *Institutional governance*: The July 2015 amendment to the *Act on National Higher Education* established a new consistory system. A five-member body (three members delegated by the minister responsible for higher education plus the rector and chancellor of the institution) sets long-term strategic goals for the institution, including adopting the medium-term institutional development plan and the annual budget programme.

FUNDING: DECREASED PUBLIC INVESTMENT IN EDUCATION

Hungary's investment in **educational institutions** (for all education levels combined) is one of the lowest among OECD countries (4.1% of GDP, compared to the OECD average of 5.3%). Public expenditure on education in Hungary was 7.5% of total public expenditure in 2012, the second lowest share among OECD countries. In addition, the share of public expenditure on education decreased by 22% over the period 2008-12 for all levels combined – the steepest decrease of all OECD countries (the OECD average increased by 5%). The share of private expenditure on institutions (based on a new data submission on private sources of non-public institutions) across all education levels (18.5%) is above the OECD average (16.5%). Private expenditure is highest at the tertiary level (45.6% all expenditures, compared to the OECD average of 30.3%). From 2005-12, public expenditure at all education levels decreased by 25% (the OECD average increased by 18%).

In 2012, Hungary's **annual public expenditure per student** on public educational institutions **(**for all levels of education combined except pre-primary) was USD 5 564, below the OECD average of USD10 220. Hungary spent USD 4 370 per student in primary education and USD 4 419 per student in secondary education (compared to the OECD average of USD 8 247 and USD 9 518, respectively), and USD 7 405 at tertiary level (compared to the OECD average of USD 10 309). Hungary is among the few countries where spending per student in primary, secondary and post-secondary non-tertiary education decreased between 2005 and 2012 (by 17%), while the number of students also decreased (by 9%). The expenditure per student at the tertiary level also decreased by 15% between 2008 and 2012, while the number of students decreased by 7%.

Since 2013, public **school funding** is managed directly by the Klebelsberg Institution Maintenance Centre, which allocates grants to public schools from the budget of the Ministry of Human Capacities. KLIK's funding responsibilities include salaries of teachers, staff who directly support teaching and maintenance staff, as well as the costs of transportation, construction, extensions and renovations. There are no fixed funding formulas to determine the amount of funds that municipalities or schools receive, but overall student numbers and the number of socio-economically disadvantaged students are taken into account. KLIK also allocates earmarked funds to municipalities for goods and services related to operation of local schools. Independent private institutions receive school funding directly from the Ministry of Human Capacities. Since July 2015 **VET schools and centres** receive funding from the Ministry for National Economy (instead of KLIK), and the National Office of Vocational Education and Training and Adult Learning co-ordinates and monitors budget planning of VET centres. VET centres are also expected to raise some of their own funding.

Public and private **higher education institutions** offer state-funded and fee-paying places for applicants. The amount of fees is determined by HEIs in accordance with government regulations. *Evidence* shows that part-time students rely mainly on self-earned income to finance their studies, whereas more than 60% of full-time students rely mainly on financial support from their families. In total, about 9.4% of Hungarian students report that they rely mainly on grants or student loans. In Hungary, two types of student loans are available: Student Loan 1, open to any student to cover study related costs, and Student Loan 2, open to fee-paying students to cover their tuition fees. Students who obtain a full state-funded place must 1) commit to remaining in the Hungarian labour market for a period equal to the duration of their studies after graduation; 2) complete a minimum number of credits; 3) achieve the minimum level of grades set by the institution; and 4) complete their studies in no more than 1.5 times the formal length of the programme. Students who perform below these minimum standards are reclassified as fee-paying, and students who perform well may become state-funded.

The **economic crisis** affected Hungary heavily, resulting in a 7.8% decrease of public funding for education between 2011 and 2012, according to a *study on education funding* by the European Commission. As a result, statutory teacher salaries were frozen, and some restrictions were applied to allocation of family allowances by creating closer links between these allowances and participation in education. At the same time, subsidies for student transport have increased.

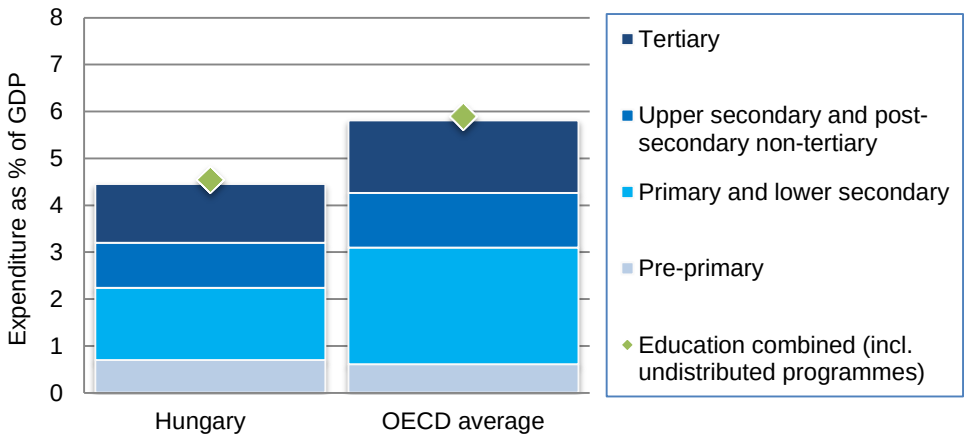
The challenge: Achieving an adequate level of public funding for education and using resources more efficiently.

Recent policies and practices

Through the *Tied Student Loan (Student Loan 2, 2012)*, fee-paying tertiary students are eligible for a state-subsidised student loan at a fixed interest rate of 2% to cover their tuition fees.

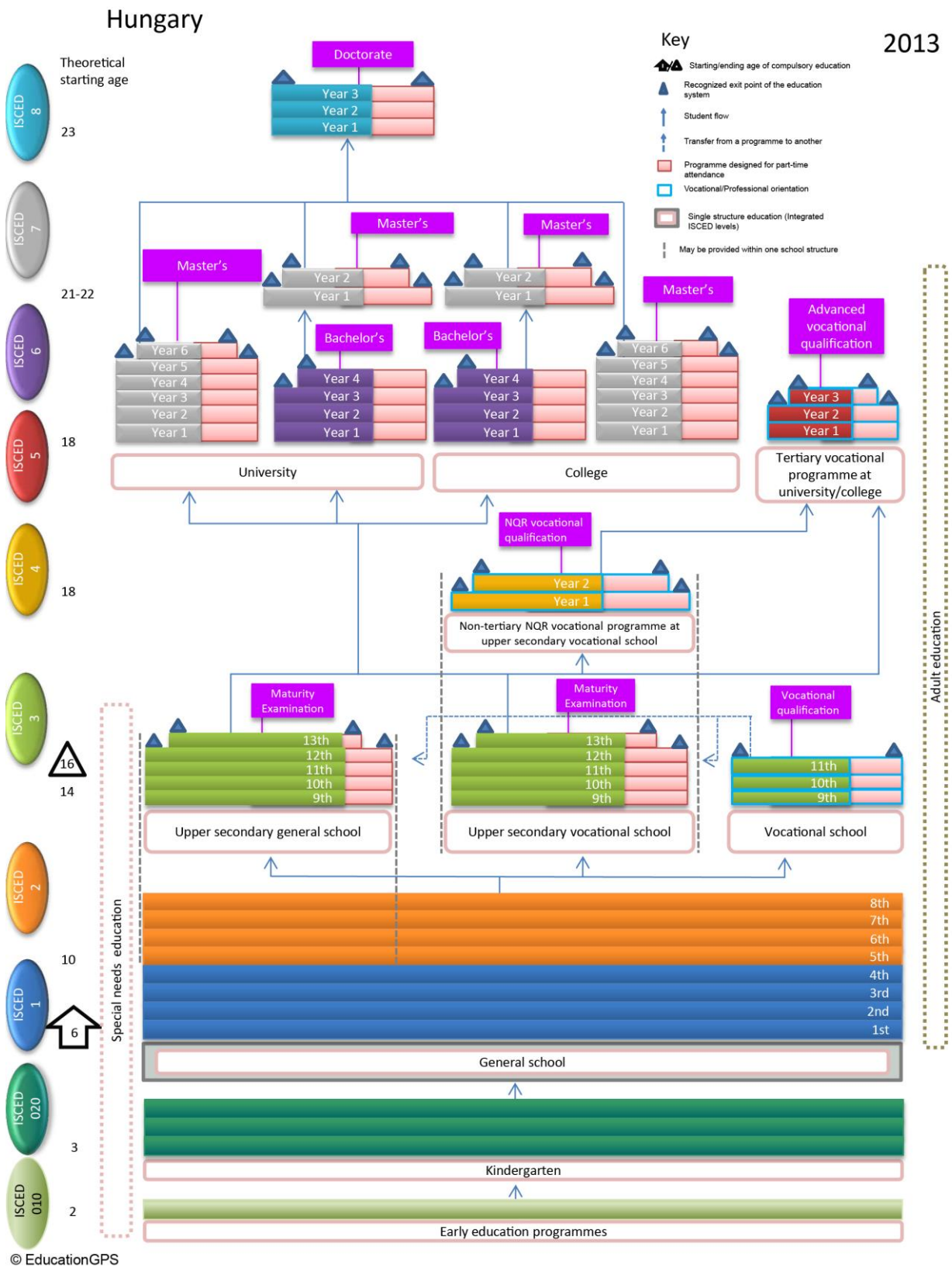
In addition, grants are paid to firms that provide practical training for initial VET students through the *Levy-Disbursement Scheme* (newly regulated in 2011).

Figure 7. Expenditure on educational institutions as a percentage of GDP, by level of education, 2012



Source: OECD (2015), *Education at a Glance 2015: OECD Indicators*, OECD Publishing,Paris, http://dx.doi.org/10.1787/eag-2015-en.

ANNEX A: STRUCTURE OF HUNGARY'S EDUCATION SYSTEM



Source: OECD (2012-13), "Hungary: Overview of the education system", *OECD Education GPS*, http://gpseducation.oecd.org/Content/MapOfEducationSystem/HUN/HUN_1997_EN.pdf.

ANNEX B: STATISTICS

#	List of key indicators	Hungary	Average or total	Min OECD	Max OECD
	Background information				
Political context					
1	Public expenditure on education as a percentage of GDP, 2012 (EAG 2015)	3.6%	4.8%	3.5%	7.7%
Economy					
2	GDP per capita, 2012, in equivalent USD converted using PPPs (EAG 2015)	22 494	n/a	16 767	91 754
3	GDP growth 2013 (OECD National Accounts)	1.1%	1.3%	-3.9%	4.1%
Society					
4	Population density, inhab/km^2, 2014 (OECD Statistics)	106.2	142	3.1	507
5	Population aged less than 15 as a percentage of total population, 2010 (OECD Factbook 2014)	14.7%	18.6%	13.1%	29.6%
6	Foreign-born population as a percentage of total population, 2011 or latest available year (OECD Factbook 2014)	4.7%	0%	0.3%	42.1%
	Education outcomes				
7	Mean performance in mathematics (PISA 2012)	477	494	413	554
8	Annualised change in mathematics performance across PISA assessments (PISA 2012)[4,5]	**-1.3**	**-0.3**	-3.3	4.2
9	Annualised change in reading performance across PISA assessments (PISA 2012)[4,5]	**1.0**	**0.3**	-2.8	4.1
10	Annualised change in science performance across PISA assessments (PISA 2012)[4,5]	-1.6	**0.5**	-3.1	6.4
11	Enrolment rates of 3-4 year-olds in early childhood education and primary education as a percentage of the population of the same age group, 2013 (EAG 2015)	84%	81%	22%	100%
12	% of 25-64 year-olds whose highest level of attainment is lower secondary, post-secondary non-tertiary education or below, 2014 (EAG 2015)	16%	15%	0%	33%
13	% of 25-34 year-olds whose highest level of attainment is at least upper secondary education, 2014 (EAG 2015)	87%	83%	46%	98%
14	% of 25-34 year-olds whose highest level of attainment is tertiary education, 2014 (EAG 2015)	32%	41%	24%	68%
15	% of 25-64 year-olds whose highest level of attainment is vocational upper-secondary or post-secondary non-tertiary education, 2014 (EAG 2015)	51%	26%	6%	67%
16	***Unemployment rates of 25-34 year-olds by educational attainment, 2014 (EAG 2015)***				
	Below upper secondary	23.4%	19.1%	4.7%	55.9%
	Upper secondary and post-secondary non-tertiary	8.5%	10.2%	3.7%	36%
	Tertiary education	3.6%	7.5%	2.9%	32.5%
	Students: Raising outcomes				
Policy lever 1: Equity and quality					
17	First age of selection in the education system (PISA 2012)	11	14	10	16
18	***Students performing at the highest or lowest levels in mathematics (%), (PISA 2012)***				
	Students performing below Level 2	28.1%	23%	9.1%	54.7%
	Students performing at Level 5 or above	9.3%	12.6%	0.6%	30.9%
19	***Variance in mathematics performance between schools and within schools as a percentage of the OECD average variance in mathematics performance (PISA 2012)***				
	Between-schools percentage of variance	63%	37%	6%	65%
	Within-schools percentage of variance	39%	63%	34%	90%
20	% of students reporting that they have repeated at least a grade in primary, lower secondary or upper secondary schools (PISA 2012)	10.8%	12.4%	0.0%	36.1%

#	List of key indicators	Hungary	Average or total	Min OECD	Max OECD
21	Percentage of variance in mathematics performance in PISA test explained by ESCS (PISA 2012)[4]	**23.1%**	**14.8%**	7.4%	24.6%
22	Score difference in mathematics performance in PISA between non-immigrant and immigrant students AFTER adjusting for socio-economic status (PISA 2012)[4]	-13	**21**	-29	66
23	Score differences between boys and girls in mathematics (PISA 2012)[4]	**9**	**11**	-6	25
Policy lever 2: Preparing students for the future					
24	***Adjusted mean proficiency in literacy among adults on a scale of 500 (Survey of Adult Skills, 2012)***				
	Among 16-65 year-olds (adjusted)	NP	270.7	249.4	293.6
	Among 16-24 year-olds (adjusted)	NP	278.0	260.0	297.0
25	***Upper secondary graduation rates in % by programme of orientation, 2013 (EAG 2015)***				
	General programmes	63%	52%	19%	82%
	Pre-vocational/ vocational programmes	22%	47%	0%	0%
26	***First-time graduation rates, by tertiary ISCED level, 2013 (EAG 2015)***				
	Short tertiary (2-3 years), ISCED 5	7%	11%	0%	28%
	Bachelor's or equivalent, ISCED 6	22%	36%	9%	61%
	Master's or equivalent, ISCED 7	15%	17%	3%	40%
	Doctorate or equivalent, ISCED 8	0.7%	1.7%	0.2%	3.6%
27	% of 15-29 year-olds not in education, employment or training, 2012 (EAG 2015)	18%	16%	7%	32%
Institutions: Improving schools					
Policy lever 3: School improvement					
28	Mean index of teacher-student relations based on students' reports (PISA 2012)	-0.02	0.00	-0.42	0.47
29	Mean index of disciplinary climate based on students' reports (PISA 2012)	0.05	0.00	-0.33	0.67
30	***% of teachers above the age of 50 by education level, 2013 (EAG 2015)***				
	Primary education	34%	31%	16%	57%
	Lower secondary education	38%	34%	17%	63%
	Upper secondary education	32%	38%	26%	73%
31	***Number of teaching hours per year in public institutions by education level, 2013 (EAG 2015)***				
	Primary education	601	772	569	1 129
	Lower secondary education, general programmes	601	694	415	1 129
	Upper secondary education, general programmes	597	643	369	1 129
32	***Ratio of actual teachers' salaries to earnings for full-time, full-year adult workers similarly educated, 2013 (EAG 2015)***				
	Primary education	0.62	0.78	0.52	1.09
	Lower secondary education, general programmes	0.62	0.80	0.52	1.24
	Upper secondary education, general programmes	0.48	0.82	0.48	1.24
33	Growth rate of teachers' salaries between 2005 and 2013 in lower secondary education, 2013 (EAG 2015)	-32%	2%	-32%	31%
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) (TALIS 2013)	NP	53.5%	26.7%	86.2%

#	List of key indicators	Hungary	Average or total	Min OECD	Max OECD
Policy lever 4: Evaluation and assessment to improve student outcomes					
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)	NP	88.8%	58.5%	99.5%
36	***% of students whose school principals reported that assessments are used for the following purposes (PISA 2012)***				
	To make decisions about students' retention or promotion	69%	77%	1%	98%
	To monitor the school's progress from year to year	93%	81%	48%	100%
	To make judgements about teachers' effectiveness	58%	50%	14%	88%
	To identify aspects of instruction or the curriculum that could be improved	77%	80%	49%	99%
37	***% of lower secondary education teachers reporting appraisal/feedback from the school principal on their work with this frequency (TALIS 2013)***				
	Once every two years or less	NP	33.9%	3.2%	88.8%
	Once per year	NP	41.5%	9.5%	82.1%
	Twice or more per year	NP	24.7%	1.0%	49.6%
Systems: Organising the system					
Policy lever 5: Governance					
38	***% of decisions taken at each level of government in public lower secondary education, 2011 (EAG 2012)***				
	Central or state government	10%	36%	0%	87%
	Regional or sub-regional government	0%	6%	0%	36%
	Local government	23%	17%	0%	100%
	School government	67%	41%	5%	86%
Policy lever 6: Funding					
39	***Annual expenditure per student by educational institutions, for all services, in equivalent USD converted using PPPs for GDP, 2012 (EAG 2015)***				
	Pre-primary education	4 539	7 612	3 416	19 719
	Primary education	4 370	8 247	2 577	20 020
	Secondary education	4 419	9 518	2 904	20 617
	Tertiary education	8 876	15 028	7 779	32 876
40	***Relative proportions of public and private expenditure on educational institutions, 2012 (EAG 2015)***				
	Public sources	82%	83%	60%	98%
	All private sources	18%	17%	2%	40%
	Index of change in expenditure on educational institutions, public sources, (constant prices, 2005=100)	75	114	75	165
	Index of change in expenditure on educational institutions, all private sources, (constant prices, 2005=100)	m	137	76	538

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 2012 only)
5. The annualised change is the average annual change in PISA score points from a country's/economy's earliest participation in PISA to PISA 2012. It is calculated taking into account all of a country's/economy's participation in PISA.
See www.oecd.org/pisa/keyfindings/pisa-2012-results-overview.pdf.
6. "n/a": included when the category is not applicable.

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