





EDUCATION POLICY OUTLOOK

This **policy profile on education** in the Czech Republic is part of the new *Education Policy Outlook* series, which will present comparative analysis of education policies and reforms across OECD countries. Building on the substantial comparative and sectorial policy knowledge base available within the OECD, the series will result in a biannual publication (first volume in 2014). It will develop a comparative outlook on education policy by providing: a) analysis of individual countries' educational context, challenges and policies (education policy profiles) and of international trends and b) comparative insight on policies and reforms on selected topics.

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 will offer constructive analysis of education policy in a comparative format. Each profile will review the current context and situation of the country's education system and examine 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 will 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.

Special thanks to the Government of the Czech Republic for their active input during consultations and their constructive feedback on this report.

Authors: This country policy profile was prepared by Beatriz Pont, Diana Toledo Figueroa, Juliana Zapata (main drafter) and Sylvain Fraccola (statistics and design), from the Education Policy Outlook team, which is part of the Policy Advice and Implementation Division, led by Richard Yelland. Editorial support was provided by Lynda Hawe and Susan Copeland. This profile builds on the knowledge and expertise of many project teams across the OECD's Directorate for Education and Skills, to whom we are grateful.

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.

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).

TABLE OF CONTENTS

Highlights	4
Equity with quality Raising low performance	6
Preparing students for the future High enrolment and attainment in vocational education	8
School improvement Many small schools, autonomous school leaders, traditional teachers	10
Evaluation and assessment to improve student outcomes Adapting independent components to local context	12
Governance National policy and autonomous decision making at local and school level	14
Funding Budget cuts affect financial management of schools	16
Annex A: Structure of the Czech Republic's education system	18
Annex B: Statistics	19
References and further reading	22
Figures	
Figure 1. Student performance in reading and impact of economic, social and cultural status Figure 2. Upper secondary and tertiary attainment Figure 3. Reading performance and percentage of low and top performers Figure 4. Students in education and not in education, by educational attainment and work status Figure 5. School principals' and students' views on learning environment Figure 6. Student assessment by purpose Figure 7. Decisions in public lower secondary schools, by level of government Figure 8. Expenditure on educational institutions as a percentage of GDP	591113
Spotlight	
Spotlight 1. Setting midterm policy priorities to guide progress	15

HIGHLIGHTS

Czech Republic's educational context

Students: The Czech Republic has made progress on reducing the impact of socio-economic background on students' academic performance, reaching high enrolment in early childhood education and care, and achieving higher than average upper secondary attainment rates, especially in vocational education and training. Labour market perspectives for upper secondary and tertiary education graduates are positive, and the share of youth not in education and not in employment is below the OECD average. However, 15-year-old Czech students have below average reading performance on PISA 2009, and results have decreased in reading, math and science since 2000. Reading performance varies highly between schools depending on the socio-economic make-up of their student body. Moreover, fewer students attain tertiary education than the OECD average.

Institutions: More than half of Czech compulsory schools are small and have a high degree of autonomy in following the national education programme. Principals receive initial management training. They have administrative and some pedagogical responsibilities, including defining and organising teacher training and proposing salary bonuses. Conditions for teachers have been improving, with more initial teacher preparation and higher wages. But the average teacher salary is still only half that of an individual with a tertiary education, which might limit attractiveness of the teaching profession and hinder recruitment. Schools are evaluated through well-structured, evidence-driven external inspections.

Governance and funding: With national steering in a decentralised approach, the government sets priorities and defines national programmes and reforms. Expenditure in education is lower than the OECD average, despite increases in spending on tertiary education. The financial crisis has affected education funding, particularly for non-teaching staff in small schools.

Key issues

The Czech Republic faces the challenge of raising overall student performance and reducing the proportion of those who are underperforming. Almost one in four students underperformed on PISA 2009 and did not achieve the level that is considered necessary to participate effectively in society. Inequitable system-level practices, such as early tracking and streaming into special schools, can hinder equity and quality. Progress is also hampered by a lack of systemic support to ensure the capacity of teachers and school leaders to address diverse student needs and provide more inclusive education and by a need for greater clarity to guide schools.

Recent policy responses

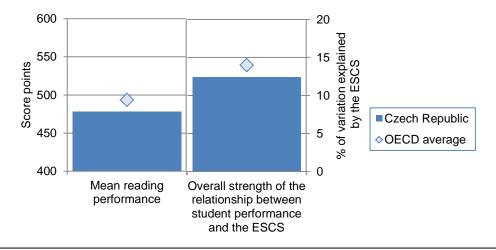
To guide progress on recent reforms, the Long-Term Plan for Education and the Development of the Educational System (2011-15) aims to improve the quality and efficiency of the education system by targeting a wide array of areas, including early childhood education and care, vocational education and training, and evaluation and assessment.

A National Institute of Education has been created to guide and provide support to schools. Selected policy initiatives aim to support more inclusive education, address diverse student needs, improve the teaching profession, and better align education qualifications to those in the labour market.



The Czech Republic achieved lower-than-average scores in PISA 2009 (478 mean score compared to the OECD average of 493) and the impact of socio-economic status on attainment (12%) was lower than the OECD average of 14% (Figure 1).

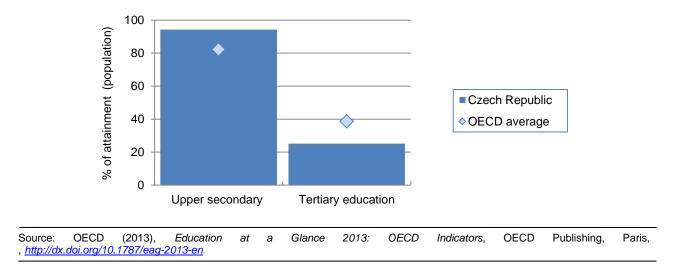
Figure 1. Student performance in reading and relationship between student performance and the economic, social and cultural status (ESCS), for 15-year-olds, PISA 2009



Source: OECD (2010), PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I), OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091450-en.

Secondary education attainment in the Czech Republic is higher than the OECD average, whereas tertiary education attainment is lower (Figure 2). Ninety-four percent of 25-34 year-olds have attained at least secondary education (compared to the OECD average of 82%), and 25% have attained tertiary education (compared to the OECD average of 39%).

Figure 2. Upper secondary and tertiary attainment for 25-34 year-olds, 2011



EQUITY WITH QUALITY:RAISING LOW PERFORMANCE

Equity indicators show that Czech schools are influenced by their socio-economic intake. About 23% of students were below PISA proficiency Level 2 in reading in 2009 (compared to the OECD average of 18%) (see Figure 3), and this proportion has increased significantly since 2000, when it was 17.5%. Girls show higher performance than boys (girls scored 48, higher than the OECD average of 39 points). In the Czech Republic, the impact of socio-economic background on individual educational attainment at age 15 is below the OECD average, while the differences in reading performance between schools are more acute than the OECD average and largely explained by the socio-economic make-up of the schools.

Efforts are underway to make **early childhood education** more accessible to all. The final year of early childhood education is free for all children, and education is compulsory until age 15. Merging of pre-primary education with compulsory education has become common. Access to quality early childhood education and care can improve student outcomes and lessen social inequities, although in the Czech Republic this is hindered by a shortage of places. Enrolment rates in early childhood education at age 4 (85%) are above the OECD average of 82% and enrolment for 5 year-olds increases to 91%, above the 2011 OECD average of 81%.

System-level policies, including school choice, academic streaming and early tracking, can hinder equity in the Czech education system. A majority of Czech parents from a low socio-economic background send their children to local schools, while only a small number of parents from higher socio-economic background choose to do so. School choice can further increase inequities if mechanisms are not in place to lessen the negative effects. Czech students who struggle in school are often streamed into special schools with reduced curricula. Streaming students based on academic ability and early tracking can negatively impact their educational outcomes if education pathways do not provide high curricular standards and opportunities to transfer between tracks. Early tracking occurs at age 11 (compared to the OECD average of 14), and differentiation of educational pathways has increased. Research shows a strong relation between tracks chosen and socio-economic background. At age 11, 13% of the student cohort, mostly from high socio-economic backgrounds, enters *gymnasia*.

Schools face challenges in their efforts to support **disadvantaged students** and address their needs. The Czech School Inspectorate and research on Roma find that Roma children participate less although they are ensured access by law, and that Czech students from disadvantaged backgrounds (low socio-economic levels and Roma students) are more likely to drop out.

The challenge: Avoiding system-level policies which hinder equity and quality – such as unsupported choice, early tracking and streaming into special schools.

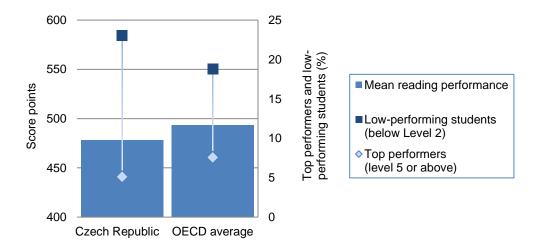
Recent policies and practices

As part of the <u>Education for Competitiveness Operational Programme</u> (2007-13), school counselling centres are being developed to manage school choice, to strengthen support for students in compulsory education, and to help when deciding on an educational pathway (see section on funding, p. 17).

The National Action Plan for Inclusive Education (2010) aims to promote inclusive education at all levels of the Czech education system. Eight working groups have been set up to implement various tasks.

Inclusive Education Support Centres (2009-10), a follow-up to a 2006 programme, were introduced to assess the conditions for inclusive education in compulsory education and provide support to schools to better address individual learning.

Figure 3. Mean score in reading performance and percentage of low and top performers, for 15-year-olds, PISA 2009



Source: OECD (2010), PISA 2009 Results: What Students Know and Can Do: Student Performance in Reading, Mathematics and Science (Volume I), OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091450-en.

PREPARING STUDENTS FOR THE FUTURE: HIGH ENROLMENT AND ATTAINMENT IN VOCATIONAL EDUCATION

Labour market perspectives can play an important role in the educational decisions of young people. In the context of the economic crisis (2008-11), the proportion of 15-29 years-olds not in education and not employed increased to 12.7% but remained below the OECD average of 15.8% (see Figure 4). Unemployment rates in 2011 were especially high for those with less than upper secondary education (21.6%, compared to the OECD average of 12.6%), while they were lower for individuals with upper secondary education (5.7%, compared to the OECD average of 7.3%), and those with tertiary education (2.6%, compared to the OECD average of 4.8%).

The Czech Republic has one of the highest **upper secondary education** attainment rates for the 25-34 year-olds (94%, compared to the OECD average of 82%) (see Figure 2), with most students completing vocational education and training (VET). Teachers working as part-time education counsellors offer students information on educational pathways as well as study and behavioural counselling. A broader approach to career guidance linked to the curriculum can better meet student needs and help develop self-management skills. Disadvantaged students, such as Roma students, have difficulty attaining this level and could benefit from targeted initiatives.

Vocational education and training can help ease entry into the labour market, through school- and work-based programmes. About three out of four upper secondary students enrol in VET, one of the highest proportions in OECD countries. These programmes include apprenticeships and also a technical pathway that leads to a school-leaving examination. Employment rates for VET graduates (75%) were higher than for general upper secondary graduates in 2011 (72%). Research found that students who opted for the apprenticeship track do not feel well prepared for the labour market. The apprenticeship track contains 30% general education, while the technical track has 60%. According to government sources, the dropout rate in apprenticeships is high, and the government is concerned that occupations that used to be covered by this track will not find sufficient numbers of skilled workers in the future. Improving the quality of teaching, the relevance of different options as well as the quality of and access to workplace training can help strengthen this pathway.

Tertiary education attainment is lower than OECD average (25% for 25-34 year-olds, compared to the OECD average of 39%). For 25-34 year-olds with tertiary education, in 2011, earnings were expected to be 49% higher than for those with upper secondary or post-secondary non-tertiary education (OECD average of 40%). Since 1995, tertiary graduation rates for academic programmes (41% in 2011 for type A theory-based programmes) have increased from 13% to above the OECD average of 39%. As in other OECD countries, expanding tertiary education implies providing a sufficiently wide offer to address both labour market needs and students' interests. To continue improving the quality of Czech tertiary education, areas to explore include engagement with key stakeholders, such as in the labour market, and financial support for students.

The challenge: Ensuring skills developed in vocational education and training and tertiary education meet the needs of students and the labour market.

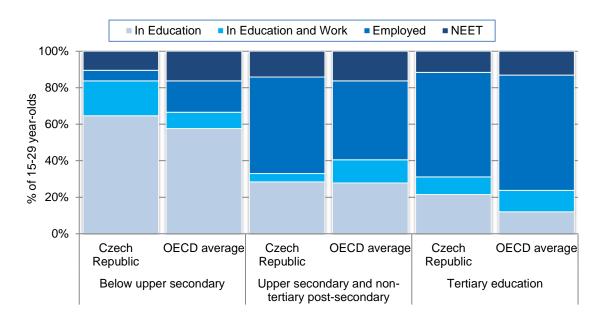
Recent policies and practices

<u>The Strategy of Lifelong Learning in the Czech Republic</u> (2007) aims to improve the match between skills and the labour market.

Based on the Europe 2020 strategy, the Czech Republic has set their long-term education objectives to reduce the dropout rate to a maximum of 5.5% and to increase the ratio of 30-34 year-olds with a tertiary education to 32%.

Tertiary education reforms are in discussion through <u>The Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and other Creative Activities of Higher Education Institutions for 2011-15, which aims to improve quality, relevance, openness and efficiency of funding.</u>

Figure 4. Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status, 2011



NEET: Neither Employed, nor in Education and Training

Source: OECD (2013), Education at a Glance 2013: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2013-en.

SCHOOL IMPROVEMENT: MANY SMALL SCHOOLS, AUTONOMOUS SCHOOL LEADERS, TRADITIONAL TEACHERS

The key to raising achievement in the Czech Republic's 4 125 basic schools and 1 433 upper secondary schools (data from 2009/10) is to develop the conditions for school leaders and teachers to succeed. Particular to the Czech Republic is the fact that there is a large proportion of small schools (some 54% of them with fewer than 150 students), with many located in towns, small towns or villages. According to PISA 2009, students reported a negative view of relations with their teachers and **learning environments** in their classrooms (see Figure 5).

School leaders in the Czech Republic have a high degree of autonomy, including implementing a school educational programme based on the national programme; managing finances; hiring, training and dismissing teachers; and relations with the community. School leaders have a positive view of their leadership and involvement in school matters. Once appointed, they are required to receive school management training during their first two years of practice. To improve results, school leaders could benefit from support and continuous training, to effectively address their specific responsibilities as instructional leaders and focus on student achievement and diversity in schools.

Attracting new **teachers** and ensuring incentives to retain them is also key. Czech secondary teachers are older than the 2011 OECD average, with 68% at or over age 40. The proportion of unqualified teachers has decreased in compulsory and upper secondary education, but has increased in pre-primary education. Initial training (level ISCED 5A) is available in a variety of institutions which have autonomy to create their own study programmes with accreditation by the Ministry of Education, Youth and Sports. Professional development is determined by school leaders and is based on the interests of teachers, school needs and budget rather than on teacher appraisal and development needs. In addition, although teachers' salaries have increased since 2000 and they may receive pay bonuses from school leaders, primary and lower secondary teachers' salaries in 2011 were 54% of full-time, full-year earnings for 25-64 year-olds with tertiary education. Low salaries compared to the OECD average might hinder recruitment and the attractiveness of the teaching profession.

The challenge: Increasing the capacity of schools to raise student performance by focusing on pedagogical leadership and on the attractiveness of the teaching profession.

Recent policies and practices

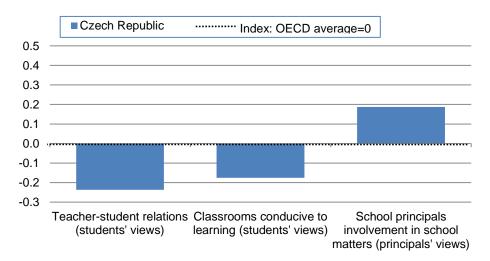
The Long-Term Plan for Education and the Development of the Education System (2011-15) sets as one of its priorities to support teachers and pedagogical staff by:

- increasing salaries for young qualified teachers
- introducing a new teacher career system based on four steps: 1) beginning teacher, 2) teacher, 3) teacher with the first attestation (recognition of higher competence level), and 4) teacher with the second attestation (advancement in these career steps depends on hours of professional development and school leaders' validation of teachers' competencies).

The Project Metodika (Methodology, 2006-11) resulted in the creation of a database system of both theoretical and practical support for teachers.

A new amendment to the Education Act (2012) was introduced to modify the appointment and dismissal of school leaders and introduce a six-year term of office.

Figure 5. The learning environment, PISA 2009



Source: OECD (2010), PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices (Volume IV), OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091559-en.

EVALUATION AND ASSESSMENT TO IMPROVE STUDENT OUTCOMES: ADAPTING INDEPENDENT COMPONENTS TO LOCAL CONTEXT

The Ministry of Education, Youth and Sports (MEYS) and its two national agencies are responsible for **monitoring the education system**: the Czech School Inspectorate (CSI) for external evaluation and accountability of all education levels and the Centre for Evaluation of Education Achievement for external student assessment. The regions, municipalities and schools have autonomy to implement evaluations and assessments (see Figure 6).

System evaluations provide a snapshot of the education system and inform policy development, using an education indicators framework, thematic reports and international student assessments. The national government and each regional government prepare separate evaluation reports, the Status Report on the Development of the Education System, based on progress indicators of the long-term policy objectives (see Spotlight 1). Broader comprehensive system evaluation, emphasising student learning objectives, clearer national education goals and improving system data (such as student performance and background information) can strengthen monitoring of education policies to better inform decision making.

Schools are evaluated through well-structured, evidence-driven external inspections conducted by the Czech School Inspectorate. Schools identified as weaker are followed-up by regions and municipalities to create an improvement plan and later by the CSI. Schools are also required to undertake self-evaluations, but these vary across the school system and their potential is yet to be exploited. Emphasising student and school improvement, as well as aligning both forms of evaluation, can strengthen the process of evaluation and assessment of schools.

With no formal national **teacher appraisal systems**, it is school leaders who are responsible for teacher appraisal and recognise its importance. The hiring process and classroom observations and interviews by school leaders are generally used to develop professional plans and to determine career progression and salary scale. In 2009 and 2010, participatory discussions between MEYS and teachers began efforts to introduce teaching standards and strengthen the teaching profession.

Student assessments vary across schools and classes and are seen as the responsibility of the teacher. Students are tested by both externally-based examinations and ongoing formative assessments (oral and school-based tests). In secondary education, exit examinations are mandatory. Student assessments seem to be more focused on summative results and can be improved by having students take a more active role in their learning and offering assessment for teachers to provide more individualised support. Standardised examinations are being introduced and suggest a continued focus on student outcomes.

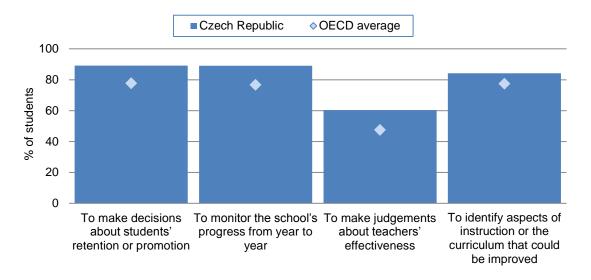
The challenge: Creating a coherent and consistent framework with clear broad goals for the education system, students and teachers to promote school and student improvement.

Recent policies and practices

School leaving examinations (2011) have a common national standardised portion. Full-cohort national standardised tests are being introduced in grades 5 and 9.

A National System of Occupations (NSO) and a National Qualifications System (NQS) (2011) are being developed and linked to the European Qualifications Framework in an effort to better align requirements of occupations with those of the qualifications under the NQS and to respond to the changing qualifications of the labour market.

Figure 6. Percentage of students in schools where the principal reported assessments of students in national modal grade for 15-year-olds, PISA 2009



Source: OECD (2010), PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices (Volume IV), OECD Publishing, Paris http://dx.doi.org/10.1787/9789264091559-en.

GOVERNANCE: NATIONAL POLICY AND AUTONOMOUS DECISION MAKING AT LOCAL AND SCHOOL LEVEL

The Ministry of Education, Youth and Sports (MEYS) determines **national education policy** and the long-term policy objectives that guide the system and all education levels (see Spotlight 1). The following bodies also help shape education policy:

- The Czech School Inspectorate (CSI) monitors and analyses the education system and its quality, excluding higher education institutions.
- The National Institute of Education (NUV), established in 2011, is responsible for developing
 information on issues pertaining to pre-primary through to upper secondary education, vocational and
 technical education, and education guidance and counselling. It is also responsible for formulating the
 framework of the education programmes and for guiding the development of schools education
 programmes.
- The National Institute for Further Education focuses on in-service teacher training.
- The Centre for Higher Education Studies develops policy and strategy for higher education.
- Other ministries, such as the Ministry of Labour and Social Affairs, collaborate with MEYS on issues of labour market and vocational guidance.
- Consultation with advisory bodies (e.g. teachers' professional associations and employers'
 associations) is required for certain actions, such as negotiation of the national educational programme
 or the frameworks educational programmes, and also on long- term policy objectives at national and
 regional levels.

Municipalities are responsible for organising pre-primary and compulsory education (ages 6 to 15). Schools can be established by ministries, regions, municipalities, religious societies or churches, or other legal entities. Fourteen **regional governments** steer education and its objectives within their region for upper secondary and tertiary professional schools.

Since 2003, **schools have autonomy** to make many decisions: 68% of the decisions are made at the school level while 28% are taken at the local or regional level and 4% are taken at the central level (see Figure 7). School leaders have key responsibilities, and school boards must be established to allow participation of parents, students, education staff, and the public. Higher education institutions are autonomous, accredited by the Accreditation Commission and represented at the national level by the Council of Higher Education Institutions and the Czech Rectors' Conference.

The challenge: Ensuring consistency and capacity across the various local and school-level actors.

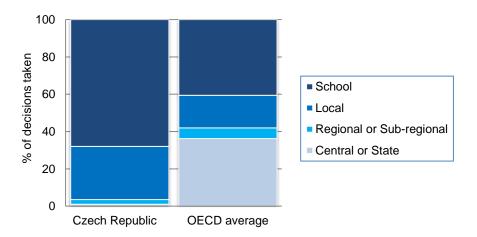
Recent policies and practices

The Long-term Plan for Education and the Development of the Education System (2011-15) presents a wide array of areas to focus on to improve the quality and efficiency of the Czech education system (see Spotlight 1).

The <u>long-term plan for higher education</u> aims to improve the quality of the higher education institutions while diversifying its system, and has introduced new rules for financing.

The National Institute of Education (NUV) (2011) was created to formulate school programmes and support schools in this process.

Figure 7. Percentage of decisions taken in public lower secondary schools at each level of government, 2010



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

Spotlight 1. Setting midterm policy priorities to guide progress

The Ministry of Education, Youth and Sports develops long-term objectives for education. In 2011, the Czech Government approved new long-term policy goals for the education system (2011-15). Regions use these as a framework for their own policy goals.

The <u>Long-Term Plan for Education and the Development of the Educational System</u> prioritises improvement of the quality and efficiency of the education system and its international competitiveness. Some areas include:

- pre-school education
- setting up standardised evaluations for students in 5th and 9th grade (see Annex A)
- setting up arrangements to monitor the quality of secondary education
- optimising the network of upper secondary and higher professional schools
- supporting the quality assurance of professional education and further co-operation with employers
- improving higher professional education
- creating an autonomous system of teachers' remuneration, a professional career system and a new system of continuous teacher training
- reforming regional educational financing
- reducing bureaucracy in the school system
- supporting further adult education especially creating a national system of qualifications and linking it with the European Qualifications Framework.

FUNDING: BUDGET CUTS AFFECT FINANCIAL MANAGEMENT OF SCHOOLS

The Czech Republic has increased its **investment in education**, but it remains below the OECD average. Expenditure on educational institutions at all levels stands at 4.7% of GDP in 2010, below the OECD average of 6.3% (see Figure 8). As in most OECD countries, a large portion of the expenditure on educational institutions comes from public sources (87.7%, above the OECD average of 83.6%), and the share of private expenditure is 12.3% (below the OECD average of 16.4%). Since 2000, public expenditure at all levels of education in the Czech Republic increased more than the OECD average: public funding increased by 58% (compared to the OECD average of 36%), while private funding increased by 98% (compared to the OECD average of 111%). OECD findings indicate that the increased private funding is not necessarily replacing public funding.

Educational spending has increased in both vocational and tertiary education, as enrolments have also increased. **Annual expenditure per student** from primary to tertiary education (USD 6 037) is below the 2010 OECD average (USD 9 313) and is mainly allocated to vocational and tertiary education. Between 2005 and 2010, expenditure per student in primary, secondary and post-secondary non-tertiary student increased by 25%, while enrolment decreased. Over the same period, enrolment in tertiary education increased by 32% and expenditure by 6%.

MEYS sets the **budget for education institutions**, and regions and municipalities can add extra funds depending on their means and priorities. National funds are allocated to the regions on a *per capita* funding basis for schools' costs such as salaries and learning materials. Regions and municipalities allocate these funds to schools, and school leaders are responsible for their financial management. Schools can receive extra national funding for students with special needs on a per-student basis, and they can apply for grants for socio-economically disadvantaged students or additional funding for extra materials or personnel. Public higher education institutions receive funding directly from the national government in the form of a subsidy for education and research.

Private schools can receive state subsidies for teachers and running costs of up to 100% for pre-primary and primary schools and up to 90% for secondary schools. The Czech School Inspectorate indicates that the proportion of publicly funded schools has decreased recently, while privately funded schools and *gymnasia* have increased. Church schools are fully supported from national funds. There is little private funding for vocational education and training programmes.

Budget cuts have put pressure on providing quality education for all. National financial restrictions have reduced allocations for non-teaching staff by 9.5%, particularly staff in early childhood education and care (ECEC). ECEC also faces a shortage of places due to increases in population. School management, especially in small schools, has faced financial difficulties as salaries of pedagogical staff have increased while those of non-pedagogical staff have been reduced.

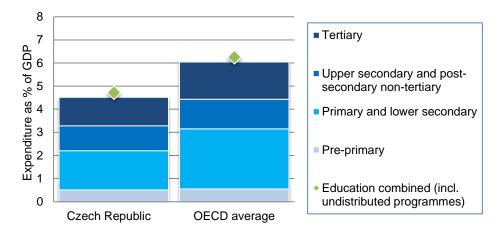
The challenge: Optimising resources, ensuring schools are funded based on student needs and minimising the effect of budget cuts on education.

Recent policies and practices

A 2011 amendment to the Education Act of 2004 proposes modifications to the financing of schools and school facilities, including the addition of a variable to the schools funding formula which includes staff salaries and differentiates between teaching and non-teaching staff and between employees by school types. Financial support for nursery schools has also been proposed to remove obstacles to their establishment.

To better meet the needs of all schools, the <u>Education for Competitiveness Operational Programme (2007-13)</u> (ECOP) allocates grants based on project applications with a majority of them promoting the use of ICT. It also aims to prioritise further education of teachers and other education staff. The ECOP currently represents about 7.6% of the Ministry of Education's overall budget, mostly covered through the European Social Fund.

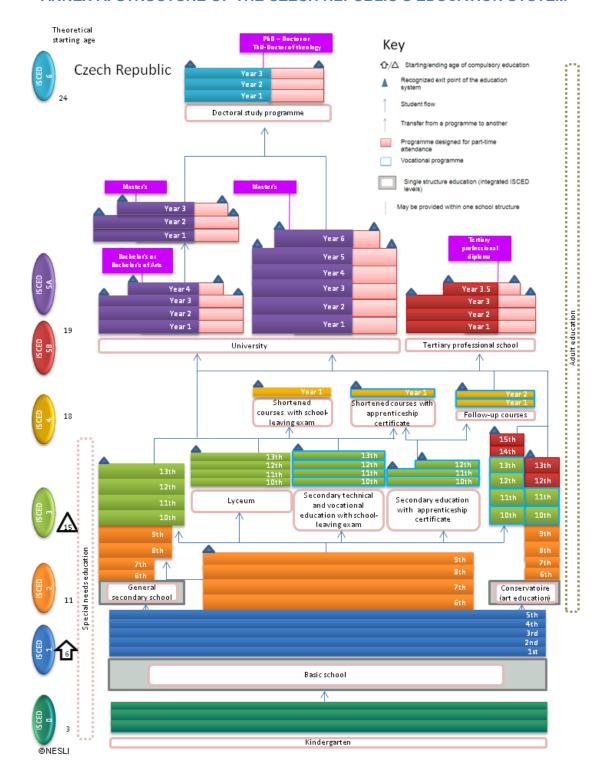
Figure 8. Expenditure on educational institutions as a percentage of GDP, by level of education, 2010



Source: OECD (2013), Education at a Glance 2013: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2013-en.



ANNEX A: STRUCTURE OF THE CZECH REPUBLIC'S EDUCATION SYSTEM



ANNEX B: STATISTICS

#	List of key Indicators	Czech Republic	Average or total	Min	Max		
	Background information						
Pol	Political context						
1	Public expenditure on education as a percentage of GDP, 2010 (EAG 2013)	4.2 %	5.8 %	3.8 %	8.8 %		
Eco	onomy						
2	GDP per capita, 2010, in equivalent USD converted using PPPs (EAG2013)	25 364		15 195	84 672		
3	GDP growth 2011 (OECD National Accounts)	1.9 %	1.8 %	-7.1 %	8.5 %		
Soc	ciety						
4	Population density, Inhab/km2, 2010 (OECD Statistics)	136.2	138	2.9	492		
5	Young people, aged less than 15, 2010 (OECD Statistics)	14.3 %	17.3 %	13 %	28.1 %		
6	Foreign-born population, 2009 (OECD Statistics)	6.4 %	14.1 %	0.8 %	36.9 %		
	Education outcomes						
7	Mean reading performance (PISA 2009)	478	493	425	539		
8	Change in Mean reading performance, 2000-09 (PISA 2009)	-13	1	-31	40		
9	Change in Mean mathematics performance, 2003-09 (PISA 2009)	-24	0	-24	33		
10	Change in Mean science performance, 2006-09 (PISA 2009)	-12	3	-12	30		
11	Enrolment rates in early childhood education and primary education, ages 3 and 4, 2011 (EAG 2013)	72 %	74.4 %	11.6 %	98 %		
12	Population that has attained below upper secondary education, 25-64 year-olds, 2011 (EAG 2013)	7 %	25 %	7 %	68 %		
13	Population that has attained at least upper secondary education, 25-34 year-olds, 2011 (EAG 2013)	94 %	82 %	43 %	98 %		
14	Population that has attained tertiary education, 25-34 year-olds (EAG 2013)	25 %	39 %	19 %	64 %		
15	Population whose highest level of education is vocational upper secondary or post-secondary non-tertiary, 2011 (EAG 2013)	73.9 %	33.5 %	8.4 %	73.9 %		
	Unemployment rates, 25-64 year-olds, 2011 (EAG 2013)						
16	Below upper secondary	21.6 %	12.6 %	2.7 %	39.3 %		
10	Upper secondary and post-secondary non-tertiary	5.7 %	7.3 %	2.2 %	19.2 %		
	Tertiary education	2.6 %	4.8 %	1.5 %	12.8 %		
	Students: Raising outcome	s					
Pol	licy lever 1: Equity and quality						
17	First age of selection in the education system (PISA 2009)	11	14	10	16		
	Proficiency levels on the reading scale (PISA 2009)						
18	Students below Level 2	23.1 %	18.8 %	5.8 %	40.1 %		
	Students at level 5 or above	5.1 %	7.6 %	0.4 %	15.7 %		
	Between- and within-school variance in reading performance (PISA 2009)						
19	Between schools	4 249	3 616	665	6 695		
	Within schools	4 428	5 591	2 795	8 290		
20	Students reporting that they have repeated at least a grade in primary, lower secondary or upper secondary schools (PISA 2009)	4 %	13 %	0 %	36.9 %		



#	List of key Indicators	Czech Republic	average or total	Min	Max		
21	Variance in student performance explained by student socio- economic status (PISA 2009)	12 %	14 %	6 %	26 %		
22	Difference in reading performance between native students and students with an immigrant background, after accounting for socio-economic status (PISA 2009)	17.0	27	-17.0	85.0		
23	Gender differences in student performance on the reading scale (PISA 2009)	-48	-39	-55	-22		
Pol	icy lever 2: Preparing students for the future						
	Upper secondary graduation rates, 2011 (EAG 2013)						
24	General programmes	23 %	50 %	18 %	82 %		
	Pre-vocational/ vocational programmes	55 %	47 %	4 %	99 %		
25	Change in upper secondary graduation rates (average annual growth rate 1995-2011), (EAG 2013)	0 %	0.6 %	-1 %	3.6 %		
	Graduation rates, first-time graduates, 2011 (EAG 2013)						
	Tertiary-type 5A	41 %	40 %	21 %	60 %		
26	Tertiary-type 5B	5 %	11 %	0 %	29 %		
	Tertiary-type 5A (average annual growth rate 1995-2011)	7.1 %	4 %	-1 %	11 %		
	Tertiary-type 5B (average annual growth rate 1995-2011)	-1.9 %	0 %	-20 %	14 %		
27	Youth population not in education, employment or training 15-29 year olds, 2011 (EAG 2013)	12.7 %	15.8 %	6.9 %	34.6 %		
	Institutions: Improving scho	ols			•		
Pol	licy lever 3: School improvement						
28	Index of teacher-student relations based on students' reports (PISA 2009)	-0.24	0	-0.42	0.44		
29	Index of disciplinary climate based on students' reports (PISA 2009)	-0.18	0	-0.40	0.75		
	Teachers younger than 40 years-old, 2011 (EAG 2013)						
20	Primary education	30.7 %	41 %	15 %	60 %		
30	Lower secondary education	37.3 %	39 %	11 %	56 %		
	Upper secondary education	27 %	34 %	7 %	47 %		
	Number of teaching hours per year in public institutions, 2011 (EAG 2013)						
31	Primary education	840	790	589	1 120		
31	Lower secondary education	630 %	709	415	1 120		
	Upper secondary education	602	664	369	1 120		
	Ratio of teachers' salaries to earnings for full-time, full-year adult workers with tertiary education, 2011 (EAG 2013)						
32	Primary education	0.54 %	0.82	0.44	1.34		
	Lower secondary education	0.54 %	0.85	0.44	1.34		
	Upper secondary education	0.58 %	0.89	0.44	1.40		
33	Change in teachers' salaries between 2000 and 2011 in lower secondary education (2000 = 100), (EAG 2013)	7.14 %	16 %	-9 %	103 %		
34	Impact of teacher appraisal and feedback upon teaching, 2007- 08 (TALIS 2008)	Not participating	33.9 %	10.9 %	69.1 %		
35	Teachers who wanted to participate in more development than they did in the previous 18 months, 2007-08 (TALIS 2008)	Not participating	55 %	31 %	85 %		
36	School principals' views of their involvement in school matters, Mean Index, (PISA 2009)	0.19	-0.02	-1.29	1.03		



#	List of key Indicators	Czech Republic	average or total	Min	Max	
Po	licy lever 4: Evaluation and assessment to improve student outco	omes				
	Assessment purposes (PISA 2009)					
37	To make decisions about students' retention or promotion	89.1 %	78 %	1 %	100 %	
	To monitor the school's progress from year to year	89.1 %	77 %	35 %	98 %	
	To make judgements about teachers' effectiveness	60.4 %	47 %	8 %	85 %	
	To identify aspects of instruction or the curriculum that could	04.0.0/	77.0/	47.0/	00.0/	
	be improved	84.2 %	77 %	47 %	98 %	
	Frequency and source of teacher appraisal and feedback, 2007-08 (TALIS 2008)					
38	Once every two years or less	Not participating	35.8 %	13.8 %	65.6 %	
	At least once per year	Not participating	52.2 %	27.6 %	68.6 %	
	Monthly or more than once per month	Not participating	12 %	3.3 %	29.8 %	
	Systems: Organising the sys	tem				
Po	licy lever 5: Governance					
	Decisions taken at each level of government in public lower	secondary ed	lucation, 2	011 (EAC	G 2012)	
	Central or state government	1 %	36 %	0 %	87 %	
39	Regional or sub-regional government	3 %	6 %	0 %	36 %	
	Local government	28 %	17 %	4 %	100 %	
	School government	68 %	41 %	5 %	86 %	
Policy lever 6: Funding						
Annual expenditure per student by educational Institutions, for all services, in equivalent USD converted using PPPs for GDP, 2010 (EAG 2013)					D	
40	Pre-primary education	4 247	6 762	2 280	20 958	
'	Primary education	4 120	7 974	1 860	21 240	
	Secondary education	6 546	9 014	2 470	17 633	
	Tertiary education	7 635	13 528	6 501	25 576	
	Relative proportions of public and private expenditure on educational institutions, 2010 (EAG 2013)					
	Public sources	87.7 %	83.6 %	57.9 %	97.6 %	
	All private sources	12.3 %	16.4 %	2.4 %	42.1 %	
	Public sources, index of change in expenditure on educational institutions (2000-2010)	158	136	101	195	
	All private sources, index of change in expenditure on educational institutions (2000-2010)	198	211	104	790	
No	Note: The average, minimums and maximums refer to OECD countries except in TALIS where they refer to					

participating countries. "m" refers to data not available.

PISA values that are statistically significant are indicated in bold.

REFERENCES AND FURTHER READING

Centre for Higher Education Studies (2006), "Country Background Report for Czech Republic", *OECD Thematic Review of Tertiary Education*, Ministry of Education, Youth and Sports, February 2006, http://www.oecd.org/edu/highereducationandadultlearning/36443831.pdf.

Czech School Inspectorate: http://www.csicr.cz/en/home?lang=en-us.

Czech School Inspectorate (2011), Annual Report, Czech School Inspectorate 2010-2011", Czech School Inspectorate, Prague, http://www.csicr.cz/getattachment/87d8dca8-405c-45c6-ab14-0957aa91cae0.

European Commission (2012), "Commission Staff Working Document: Assessment of the 2012 national reform programme and convergence programme for the Czech Republic", Brussels, 7 June 2012, http://ec.europa.eu/economy_finance/economic_governance/sgp/pdf/20_scps/2012/02_staff_working_document/cz_2012-05-30_swd_en.pdf.

European Qualifications Framework (EQF): http://ec.europa.eu/education/lifelong-learning-policy/egf_en.htm.

Eurypedia, European Encyclopedia on National Education Systems (n.d.), "Czech Republic, Ongoing Reforms and Policy Developments", https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Ongoing_Reforms_and_Policy_Developments.

Eurypedia: European Encyclopedia on National Education Systems (n.d.), "Czech Republic: <u>Overview</u>", https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Czech-Republic:Overview.

File, J. et al. (2009), OECD Reviews of Tertiary Education: Czech Republic, OECD Publishing, Paris, http://www.oecd.org/edu/highereducationandadultlearning/37730231.pdf.

Institute for Information on Education (2011), "Overcoming School Failure: Background Report for the Czech Republic", prepared by J. Strakova, J. Simonova and P. Polechova, June 2011, http://www.oecd.org/education/preschoolandschool/48631810.pdf.

Institute for Information on Education (2011), "OECD Review on Evaluation and Assessment Frameworks for Improving School Outcomes: Country Background Report for the Czech Republic", June 2011, http://www.oecd.org/edu/preschoolandschool/48801463.pdf.

Kuczera, M. (2010), Learning for Jobs: OECD Reviews of Vocational Education and Training, Czech Republic, January 2010, OECD Publishing, Paris, http://www.oecd.org/edu/highereducationandadultlearning/44496125.pdf.

Methodical Portal (Teachers): http://evaluacninastroje.rvp.cz/nuovckk_portal.

MEYS (Ministry of Education, Youth and Sport): http://www.msmt.cz.

MEYS, Statistics on Education: http://www.msmt.cz/statistika-skolstvi?lang=1.

MEYS (2007), "Education for Competitiveness Operational Programme_2007-13", MEYS, Prague, http://www.msmt.cz/areas-of-work/education-for-competitiveness-operational-programme-period.

MEYS (2010), "Strategic Plan for the Scholarly, Scientific, Research, Development, Innovation, Artistic and Other Creative Activities of Higher Education Institutions for 2011-2015", MEYS, Prague, http://www.msmt.cz/file/117928lang=2.

National Institute of Education: http://www.nuv.cz.

OECD (2006), "Funding Systems and Their Effects on Higher Education Systems: Country Study – Czech Republic", IMHE, November 2006, http://www.oecd.org/czech/38307972.pdf.



OECD (2010), PISA 2009 Results: What Makes a School Successful? Resources, Policies and Practices (Volume IV), OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091559-en.

OECD (2010), PISA 2009 Results: Learning Trends: Changes in Student Performance since 2000 (Volume V), OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264091580-en.

OECD (2010), Learning for Jobs: OECD Reviews of Vocational Education and Training Policies, Czech Republic, OECD Publishing, Paris, http://www.oecd.org/ireland/44592419.pdf.

OECD (2011), Education at a Glance 2011: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2011-en.

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

OECD (2013), *Education at a Glance 2013: OECD Indicators*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2013-en.

OECD (2012), Education Today 2013: The OECD Perspective, OECD Publishing, Paris, http://dx.doi.org/10.1787/edu_today-2013-en.

OECD (2012), Equity and Quality in Education: Supporting Disadvantaged Students and Schools, Spotlight Report: Czech Republic, OECD Publishing, Paris, http://www.oecd.org/education/preschoolandschool/49603567.pdf.

OECD (2012), Starting Strong III: A Quality Toolbox for Early Childhood Education and Care, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264123564-en and http://www.oecd.org/edu/school/startingstrongiiiaqualitytoolboxforecec.htm.

Santiago, P., et al. (2012), *OECD Reviews of Evaluation and Assessment in Education: Czech Republic 2012*, OECD Publishing, Paris. http://dx.doi.org/10.1787/9789264116788-en.

Taguma, M., I. Litjens and K. Makowiecki (2012), *Quality Matters in Early Childhood Education and Care: Czech Republic 2012*, OECD Publishing, Paris, http://www.oecd.org/edu/preschoolandschool/50165788.pdf.