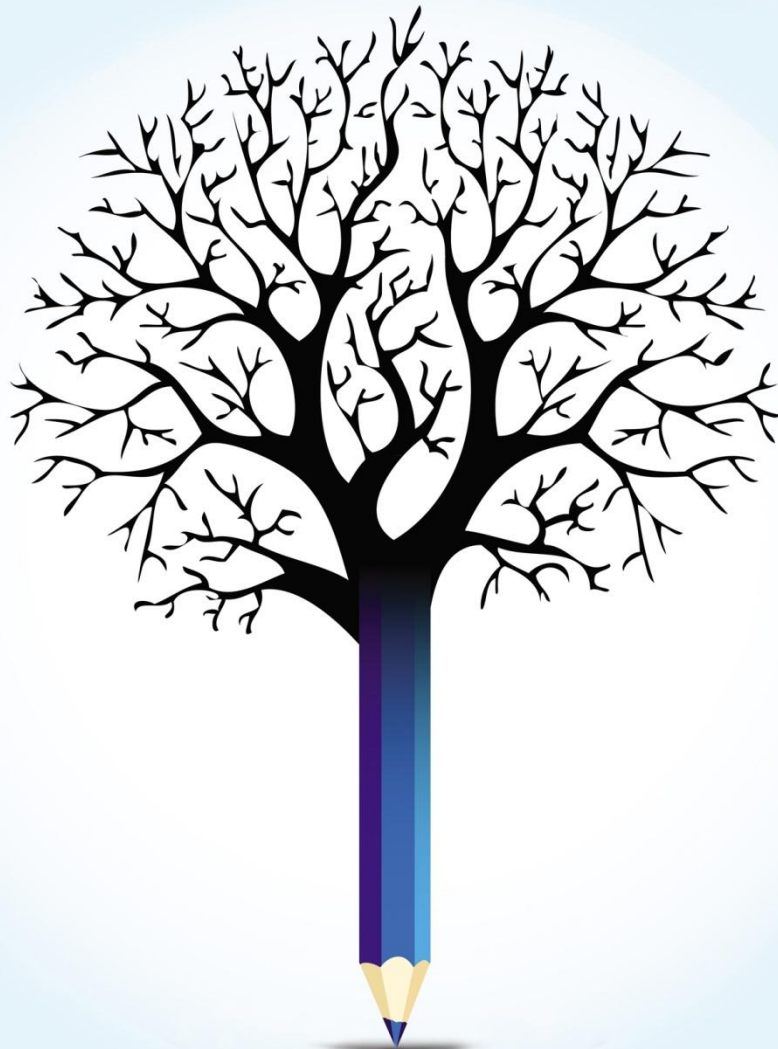




EDUCATION POLICY OUTLOOK **PORTUGAL**



EDUCATION POLICY OUTLOOK

This **profile on education policy** in Portugal is part of the new *Education Policy Outlook* series, which presents 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 contributes to a biennial publication (first volume in 2015). It offers 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 offer constructive analysis of education policy in a comparative format. Each profile reviews the current context and situation of the country's education system and examines its challenges and policy responses, according to six policy levers that support improvement:

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

Some country policy profiles contain spotlight boxes on selected policy issues. They are meant to draw attention to specific policies that are promising or showing positive results and may be relevant for other countries.

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

Authors: This country policy profile was prepared by Hyo Jeong Yee (main drafter), Beatriz Pont, Diana Toledo Figueroa, Etienne Albiser, Soumaya Maghnouj 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. David Valenciano and Elodie de Oliveira also contributed during the revision process. 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), the Survey of Adult Skills, and the annual publication *Education at a Glance*, and refers to country and thematic studies such as OECD work on early childhood education and care, teachers, school leadership, evaluation and assessment for improving school outcomes, equity and quality in education, governing complex education systems, vocational education and training, and tertiary education. Much of this information and documentation can be accessed through the Education GPS <http://gpseducation.oecd.org>.

Most of the figures quoted in the different sections refer to Annex B, which presents a table of the main indicators for the different sources used throughout the country profile. Hyperlinks to the reference publications and to relevant legislation 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 and quality	
Improvements in student learning outcomes	6
Preparing students for the future	
Working to raise educational attainment	8
School improvement	
Fostering leadership and training	10
Evaluation and assessment to improve student outcomes	
Building an integrated framework	12
Governance	
A centralised system with increased decision making at the local level	14
Funding	
Mainly from public sources	16
Annex A: structure of Portugal's education system	18
Annex B: statistics	19
References and further reading	22

Figures

Figure 1. Performance of 15-year-olds in mathematics and impact of ESCS	5
Figure 2. Upper secondary and tertiary attainment for 25-34 year-olds, 2012	5
Figure 3. Top and low performers	7
Figure 4. Percentage 15-29 year-olds in education and not in education	9
Figure 5. School principals' and students' views on learning environments	11
Figure 6. Student assessment by purpose	13
Figure 7. Decisions in public lower secondary schools at each level of government	15
Figure 8. Expenditure on educational institutions as a percentage of GDP	17

Spotlights

Spotlight 1. Programme to combat school failure and early school leaving	7
Spotlight 2. The vocational education and training integrated strategy	9
Spotlight 3. Reorganisation of the education system and increased local and school governance	15



HIGHLIGHTS

Portugal's educational context

Students: Portugal has made major improvements across PISA cycles in mathematics, reading and science, with performance in PISA 2012 around the OECD average in mathematics and below the OECD average in reading and science. The impact of students' socio-economic background on mathematics performance and grade repetition rates is higher than the average for other OECD countries. Portugal system-level practices include enrolment rates for 3-4 year-olds above the OECD average, universal enrolment for 5-14 year-olds and compulsory education recently extended to 12 years (from age 6 to age 18) – one of the longest periods of compulsory schooling among OECD countries. Attainment rates at upper secondary and tertiary levels are below the OECD average, and enrolment in upper secondary vocational education and training (VET) is around the OECD average. Portugal has steadily reduced dropout since 2000, accelerating the decrease in recent years, although it remains high compared to the average of OECD countries. Unemployment rates are above the OECD average for all education attainment levels.

Institutions: Teachers in Portugal undertake initial training (including a teaching practicum), have compulsory continuous training and benefit from comparatively high salaries. Teachers' workload is heavier than the OECD average, but significant time reductions are possible for most teachers from age 50. In PISA 2012, school leaders report levels of instructional leadership similar to the OECD average, and they now take specialised mandatory training. Teacher appraisal is recent and focuses more on accountability for purposes of career progression than on improvement. School self-evaluations and external evaluations are also new, and not all schools carry out self-evaluations. Schools organise internal student assessments for all subjects and the Educational Evaluation Institute (*Instituto de Avaliação Educativa*, IAVE I.P, 2013) carries out external student assessments for mathematics and Portuguese.

Governance and funding: The Ministry of Education and Science (*Ministério da Educação e Ciência*) is responsible for education and science policies, and there is some decentralisation towards school and municipality levels. In tertiary education, the Agency for Assessment and Accreditation of Higher Education (*Agência de Avaliação e Acreditação do Ensino Superior*, A3ES) evaluates the creation of tertiary graduate programmes, based on EU guidelines. The share of GDP devoted to education is below the OECD average, with a higher proportion of public funding than the OECD average.

Key policy issues

Portugal faces the challenges of ensuring that all students complete compulsory education, increasing attainment rates in upper-secondary and tertiary education, and offering the quality and inclusive education for all students that is relevant to labour market needs. Portugal needs to continue to define professional pathways for teachers and school principals, providing relevant training and implementing reform of the teacher training system. Further developing an integrated evaluation and assessment framework centred on quality student learning would help move beyond the objective of accountability to provide clearer information on how schools, school leaders and teachers can improve in the classroom. It is also important to continue increasing autonomy, while providing support and capacity for schools and local and regional levels, and to improve the use of financial resources.

Recent policy responses

Portugal is implementing policies to reduce early school dropout and increase educational attainment and qualifications of the workforce. The Programme to Combat School Failure and Early School Leaving (*Programa de Combate ao Insucesso e Abandono Escolar*, 2012) aims to support students at risk of dropping out, reintegrate those who have dropped out and strengthen VET in upper-secondary education. A *National Qualifications System* and *National Qualifications Framework* were created in 2007 to boost transparency and comparability across the education system.

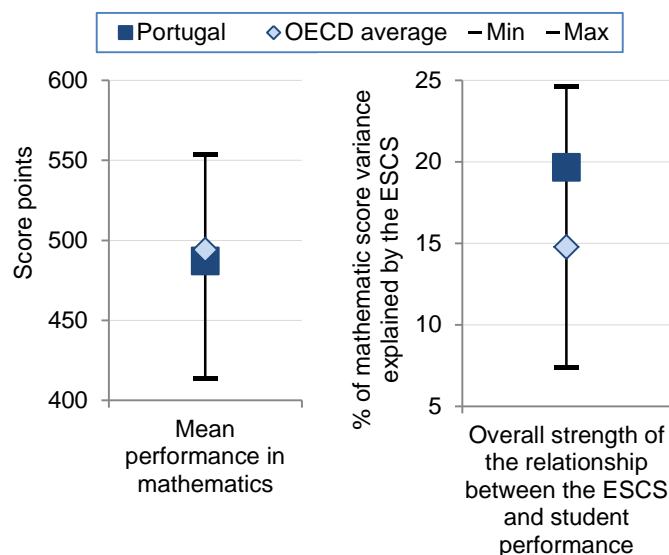
Portugal launched a major reform on school leadership in 2008 that increased the leadership authority of the school director (Decree-Law 137/2012) and, in 2014, introduced other major reforms to strengthen the teaching profession at different career points (before entrance, during initial training, at entry to the profession, and throughout their professional careers) to allow teachers to continue improving and progressing.

Portugal has promoted decentralisation policies at local and school levels. A *decree* expanded funding responsibilities of municipalities from pre-schooling up to lower secondary education (2008) for such things as infrastructure, school social action or hiring of non-teaching staff. Schools were granted much greater autonomy in the curriculum (*Curriculum Reform*, 2012) and the possibility of voluntary *autonomy agreements*.



Portugal performed at around the OECD average in mathematics in PISA 2012 (mean score of 487 compared to the OECD average of 494), with significant improvement compared to previous PISA cycles from 2000 to 2009. In PISA 2012, the impact of socio-economic background on mathematics performance of 15-year-old students in Portugal was 19.6%, above the OECD average of 14.8%.

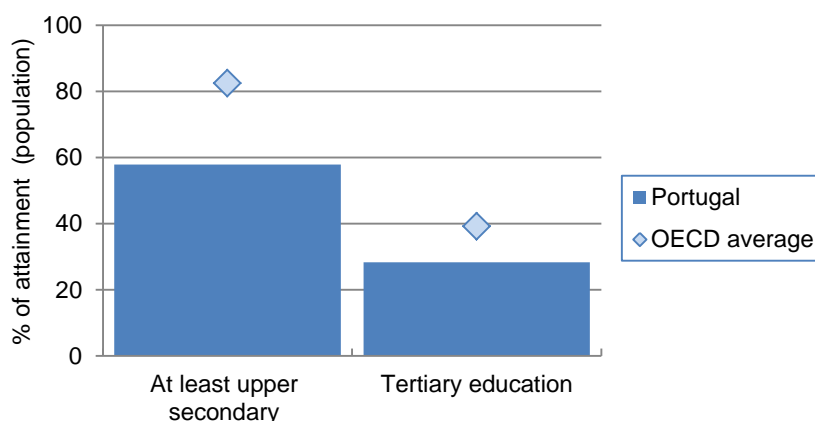
Figure 1. Performance of 15-year-olds in mathematics and relationship between student performance and economic, social and cultural status (ESCS), PISA 2012



Source: PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading, and Science, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264208780-en>; OECD (2013).

In 2011, 58% of 25-34 year-olds have attained at least secondary education (compared to the OECD average of 82%) and 28% have attained tertiary education (compared to the OECD average of 39%).

Figure 2. Upper secondary and tertiary attainment for 25-34 year-olds (2012)



Source: OECD (2014), Education at a Glance 2014: OECD Indicators, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-en>.



EQUITY AND QUALITY: IMPROVEMENTS IN STUDENT LEARNING OUTCOMES

Portugal has experienced large improvements in mathematics, reading and science since 2000 and improved its **equity indicators** for 15-year-olds. In PISA 2012, 15-year-olds performed at around the OECD average in mathematics and below the OECD average in science and reading. Almost one in four students (24.9%) were below proficiency Level 2 in mathematics in PISA 2012, and the proportion of top performers (Level 5 or above) is below average (Figure 3). The impact of students' socio-economic status on mathematics performance is higher than the OECD average. Schools across Portugal show similar achievement levels, with larger student performance variations in mathematics found within schools than between schools.

Fair and inclusive policies aiming to achieve an equitable system include **early childhood education and care** (ECEC). Enrolment in ECEC in Portugal is above the OECD average in 2012: 78% of 3-year-olds and 92% of 4-year-olds are enrolled at pre-primary level (compared to the OECD average of 70% for 3-year-olds and 82% for 4-year-olds), and enrolment is practically universal between ages 5 and 14.

Some **system-level policies** may promote equity, while others (such as school choice or grade repetition) may hinder equity if not managed appropriately. Education is compulsory from ages 6 to 18 in Portugal (two years more than the OECD average), with comprehensive schooling (the same curriculum for all students) until age 15. National data shows an increase of 33% in the inclusion in regular schools of students with special education needs (SEN) (2010/11). In PISA 2012, about 34.3% of 15-year-olds in Portugal had repeated at least one grade, compared to the OECD average of 12%. An [OECD study on equity and quality in education](#) shows that grade repetition is ineffective in improving outcomes, can contribute to dropout and can be costly to the system. Also, [legislation](#) in Portugal enlarged school choice for parents in public schools in 2012. [OECD evidence](#) demonstrates that if school choice is not well designed, it can hinder equity.

In Portugal, the impact of students' **socio-economic background** on their performance is higher than the OECD average. [OECD evidence](#) shows that family background can also have a strong impact on the probability of students dropping out of school and not participating in tertiary education. Boosting performance and attainment of these students can contribute to raising overall equity and quality of education.

The challenge: Reducing grade repetition and dropout and ensuring inclusive learning opportunities for all students.

Recent policies and practices

Portugal developed Curriculum Guidelines for Pre-school Education (2012), and provides free voluntary pre-primary education for 3-4 year-olds. Enrolment of 5-year-olds in pre-primary or primary education is compulsory.

The Third Generation of the Priority Intervention Education Territories Programme ([Territórios Educativos de Intervenção Prioritária](#), TEIP 3, 2012) targets geographical areas with a socially disadvantaged population and early school leaving rates above the national average. It aims to promote student success by improving the quality of learning; tackling disciplinary issues, early school leaving and absenteeism; improving transitions to the labour market; promoting co-ordination among schools, civil society and training institutions; and better adapting to student needs. TEIP covers 16% of Portuguese schools.

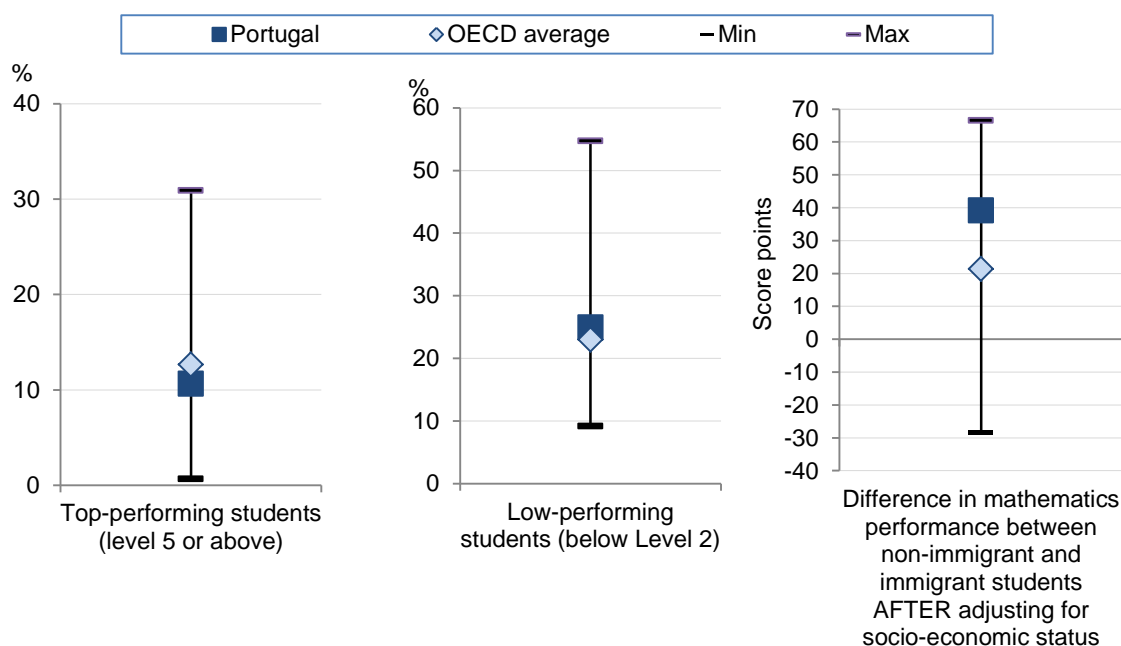
The School Food Support Programme ([Programa Escolar de Reforço Alimentar](#), PERA, 2012) aims to provide a morning meal to students identified by their schools as facing food shortages, and to increase awareness among students and their families of the importance of a healthy diet and eating breakfast at home. The programme covered about 14 000 students in 2012/13, and about 12 000 students in 2013/14.

The National Strategy for the Integration of Roma Communities ([Estratégia Nacional para a Integração das Comunidades Ciganas](#), 2013) aims to ensure access of children from Roma communities to pre-primary education, as well as to increase their completion of compulsory education and access to tertiary education. The ministry created a [database](#) (2013) of students from itinerant families to monitor school attendance and help ensure completion of compulsory education.

Individualised educational programmes for children and youth with special education needs ([Programas educativos individuais de crianças ou jovens com necessidades especiais de educação](#), 2008) provide specialised support (learning, medical, evaluation) to SEN students in the regular schooling system.



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

Spotlight 1. Programme to combat school failure and early school leaving

The Programme to Combat School Failure and Early School Leaving (*Programa de Combate ao Insucesso e Abandono Escolar*, 2012) builds on a series of measures designed to prevent early school leaving by providing extra support to students at risk of failing in primary and secondary education and by developing VET in upper secondary education as an equal alternative to the general programme. These measures include the following:

- provision of daily supervised personalised study time in primary education as soon as difficulties are detected
- additional study time and more individualised and targeted support for students identified as at risk of failing their school year in the national student assessments in 4th and 6th grade, as well as a possibility to take the exams at the end of the support period
- temporary grouping of students with similar learning characteristics to address difficulties detected and to develop revealed capacities through a more focused and individualised work programme
- implementation of information systems to follow schools and students in real time to identify the need for individual support and detect cases of potential school dropout and academic failure
- vertical merger of school processes from pre-primary education to secondary education to provide continuity in the pedagogical project (concluded in 2013)
- improving and adapting the vocational educational offer to student needs by creating more vocational courses in lower and upper secondary education and putting in place a coherent national vocational education and training strategy to guide students and involve the business sector (see Spotlight 2).



PREPARING STUDENTS FOR THE FUTURE: WORKING TO RAISE EDUCATIONAL ATTAINMENT

The capacity of a country's education system to effectively develop skills and labour market perspectives can play an important role in the educational decisions of its population. In 2012, unemployment of 25-64 year-olds in Portugal is 14.5% (compared to the OECD average of 7.5%). The unemployment rate among those with the highest education attainment is 10.5%, more than twice the OECD average of 4.8%. During the economic crisis of 2008-12, unemployment increased more than the OECD average, especially for 25-34 year-olds of all education attainments. More 15-29 year-olds than the OECD average are not in education and not employed in 2012 (15.7% compared to the OECD average of 12.7%) (Figure 4). [OECD evidence](#) shows that low education attainment of the workforce explains a substantial proportion of Portugal's productivity gap, and that income inequalities are also linked to levels of educational attainment.

Upper secondary education, compulsory since 2009, lasts three years and includes academic and vocational courses. It is organised into four strands: sciences and humanities, technological, specialised artistic and vocational education. Over the last decade, the proportion of people with upper secondary education has grown, and Portugal can continue working to bridge the remaining gap with other OECD countries. About 30% of 25-34 year-olds attain upper secondary or post-secondary non-tertiary education, compared to the OECD average of 44%, while 58% of 25-34 year-olds have at least an upper secondary degree in 2012, compared to the OECD average of 82% (Figure 2).

Vocational education and training (VET) can facilitate entry into the labour market and is available for those who have completed at least nine years of schooling or equivalent training. Portugal has 41% of enrolments in upper-secondary VET in 2012, compared to the OECD average of 44%. VET programmes, which include vocational, technological and also artistic courses, play an important role in Portugal in policies to prevent dropout (See Spotlight 2). These programmes target those who wish to pursue a vocational qualification as well as those who have dropped out – or are at risk of dropping out. The Vocational Training Centre network provides apprenticeship courses and initial vocational training (both theoretical and practical) to prepare young people to find employment or continue their education. Transition from VET programmes to tertiary education is assured.

In Portugal, **tertiary education** is offered at universities and polytechnic institutions. After large increases between 1990 and 2012, tertiary education attainment of 25-64 year-olds is at 19%, below the OECD average of 32%. Tertiary attainment of the younger cohorts (25-34 year-olds) is higher (28%), while it remains below the OECD average in 2012 (39%) (Figure 2). Graduation rates for general tertiary education programmes in Portugal are slightly above the OECD average in 2012 (41%, compared to the OECD average of 39%). Tertiary-educated 25-34 year-olds in Portugal can expect to earn 56% more than those with an upper secondary education (above the OECD average of 40% in 2011).

The challenge: Increasing educational attainment and making education and training more relevant to the labour market.

Recent policies and practices

The network of Centres for Qualification and Vocational Education (*Centros para a Qualificação e o Ensino Profissional*, CQEP) was created to bridge the gap between education, training and employment (See Spotlight 2). This network replaced the *New Opportunities Programme* ([Programa Novas Oportunidades](#), 2005), which had been adjusted in 2013 (based on an impact evaluation study) to focus more on job market requirements and professional retraining and to align it further with guidelines of the European Alliance for Apprenticeships.

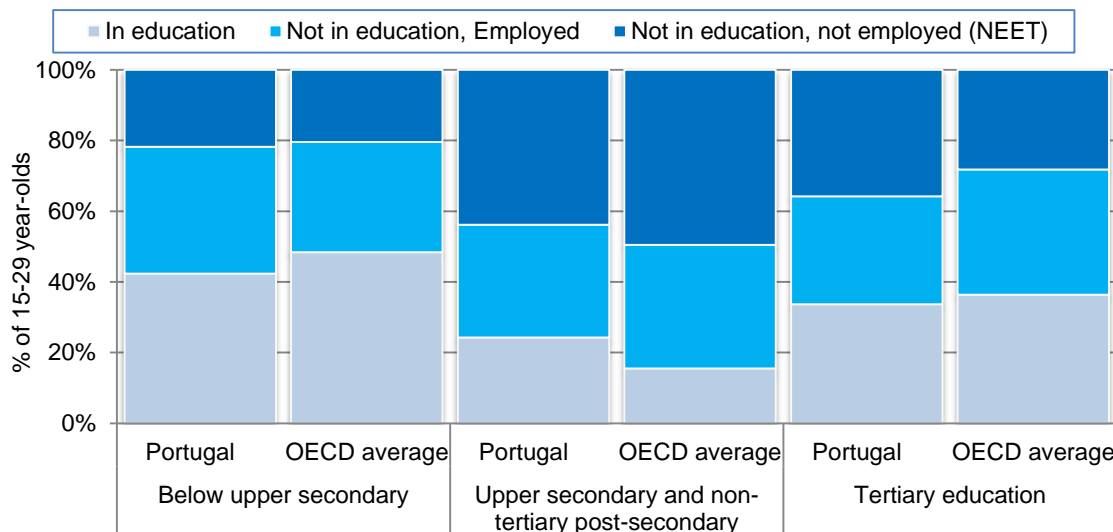
A platform of *Information and Management of Education and Training Offer* ([Sistema de informação e gestão da oferta educativa e formativa](#), SIGO, 2007) aims to monitor enrolment and certification (See Spotlight 2).

Portugal created the National Qualifications System ([Sistema Nacional de Qualificações](#), SNQ, 2007) and the National Qualifications Framework ([Quadro Nacional de Qualificações](#), QNQ, 2007), which is aligned with the European Qualification Framework. The SNQ aims to allow for easier comparability of qualifications across the education sector (general, vocational, apprenticeship) and informal education and international programmes. It also aims to better inform students of the value of each qualification on the labour market and valorise double certification qualifications.

Portugal developed the National Plan for Youth Guarantee ([Plano Nacional do Programa Garantia Jovem](#), 2013) to help youth under age 25 to find employment, continued education, an apprenticeship or a traineeship within four months of becoming unemployed or leaving the formal education system.



Figure 4. Percentage of 15-29 year-olds in education and not in education, by educational attainment and work status (2012)



NEET: Neither Employed, nor in Education and Training

Source: OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-en>.

Spotlight 2. The vocational education and training integrated strategy

The national VET integrated strategy (2012-14) is regarded as a key policy to fight youth unemployment and prevent school failure and dropout. It is designed to reinforce the dual education system, involve industry in education and link curricula to labour market needs. Among its main elements are the following:

- The *VET upper secondary syllabus* (2013) was reformulated to provide more training hours in a work context. Portugal is gradually introducing alternative vocational pathways at lower and upper secondary levels for students at risk of dropout. A new legal framework is being developed to harmonise VET programmes available in schools and training centres. It introduces management, organisational and administrative changes in public VET schools, according to their offer and student population.
- The Specific Vocational Programmes initiative (2012) is a pilot project to provide *vocational courses* starting in lower secondary education, targeting students from the age of 13. The programme requires schools to establish a protocol for apprenticeships with local businesses to avoid skills mismatch and an over-supply of graduates. It was extended in 2013 to upper-secondary education, aiming to facilitate transitions between VET and general education, as well as into tertiary education. In 2013, the programme enrolled 11 000 students, up from 285 students in 2012.
- Centres for Qualification and Vocational Education (*Centros para a Qualificação e o Ensino Profissional CQEP*, 2013) aim to provide quality guidance and counselling about schools, VET and dual certification opportunities. These centres help youth and adults find education and training; develop school and professional processes for recognition, validation and certification of competencies; collaborate in definition of criteria for establishment of a network of educational and training provision; monitor how student training adheres to previously defined paths; and collect information on learning outcomes and the labour market.
- Vocational Reference Schools (*Escolas de Referência do Ensino Profissional*, EREP, 2012) focus on economic sectors considered as priority and receive seals of quality from the government.
- At tertiary level (from 2014/15), two-year Specialised Higher Education Courses (corresponding to Level 5 in the European Qualifications Framework) called Technological Specialised Higher Education Programmes (*Cursos Técnicos Superiores Profissionais*, TeSP) will focus on areas of skills shortage. These courses will link secondary VET schools and Polytechnic Higher Education Institutions (*Instituições de ensino superior politécnico*) with local or regional enterprises.



SCHOOL IMPROVEMENT: FOSTERING LEADERSHIP AND TRAINING

Developing positive **learning environments** for school leaders and teachers to succeed is essential to raise achievement in Portugal's schools. In PISA 2012, students report having better relations with their teachers than the OECD average and view their classrooms as conducive to learning at the OECD average (Figure 5). Teachers report less positive classroom disciplinary climate, with the second lowest score among TALIS countries.

School leaders in Portugal participate in instructional activities at a level similar to the OECD average, according to the PISA 2012 index of instructional leadership. Professionalisation of the school leadership role is fairly recent in Portugal, as schools were managed collegially by the teaching staff before 2008. While schools in Portugal have gained new areas of responsibility in recent years (see Spotlight 3), school leaders report some of the lowest levels of school autonomy over curriculum and assessments among OECD countries (PISA 2012).

Teachers in Portugal must complete a five-year pre-service teacher-training programme that includes a teaching practicum and requires a competitive entry examination. Teaching hours are higher on average per year than in most OECD countries (756 hours at primary level, compared to the OECD average of 782; and 616 hours at lower and upper secondary levels, compared to OECD averages of 694 in lower secondary and 655 in upper secondary). The average age of teachers in Portugal is 44.7 years old, slightly above the TALIS average of 42.9. The proportion of teachers in Portugal who are 50 or older is similar to or lower than the OECD average: 31% in primary education (compared to the OECD average of 31%); 28% in lower secondary (OECD average of 34%); and 25% in upper secondary education (OECD average of 38%). Teaching hours per week in Portugal progressively decrease for primary (second cycle), lower secondary and SEN teachers at the age of 50 to reach a maximum of 8 teaching hours by the age of 60. Teachers' salaries increased by 26% over 2000-11 (among the largest increases in the OECD), reaching the OECD average, and are higher than those for an average worker with a tertiary qualification in 2012. A large majority of teachers (84.8%) participated in professional development in the previous 12 or 18 months, similar to the TALIS average (87.7%). The area where most teachers reported greater need for professional development was teaching to students with special education needs (26.5%, slightly above the TALIS average of 22.3%). About 16.5% of teachers reported having participated in professional development related to this area, well below the TALIS average of 31.7%. A lower proportion of teachers in Portugal than the TALIS average consider that the teaching profession is valued in society, and that they would choose to work as teachers if they had a second chance to decide on a career.

The challenge: Strengthening the school leadership and teaching profession through support and training relevant to their needs.

Recent policies and practices

Starting in 2006, [Portugal reorganised its public school network](#) around school clusters (schools of one or more education levels grouped under centralised leadership) that in 2012 represented a quarter of all pre-primary, primary and secondary schools. School clusters aim to facilitate transition across education levels, as well as to overcome geographical isolation and social exclusion. The government also closed isolated schools with poor facilities and below-average success rates. Students from those schools were transferred to larger schools, which were often newly built. This policy also aimed to foster greater collaboration among teachers, improve work organisation and provide wider learning opportunities for students.

The [Plano Tecnológico da Educação \(PTE, 2007-10\)](#) aimed to modernise technological infrastructure in schools and improve training and use of ICT among students and teaching staff. An [evaluation](#) (2010) showed that while the overall goals were reached, teacher training and e-content delivery targets were not fully reached.

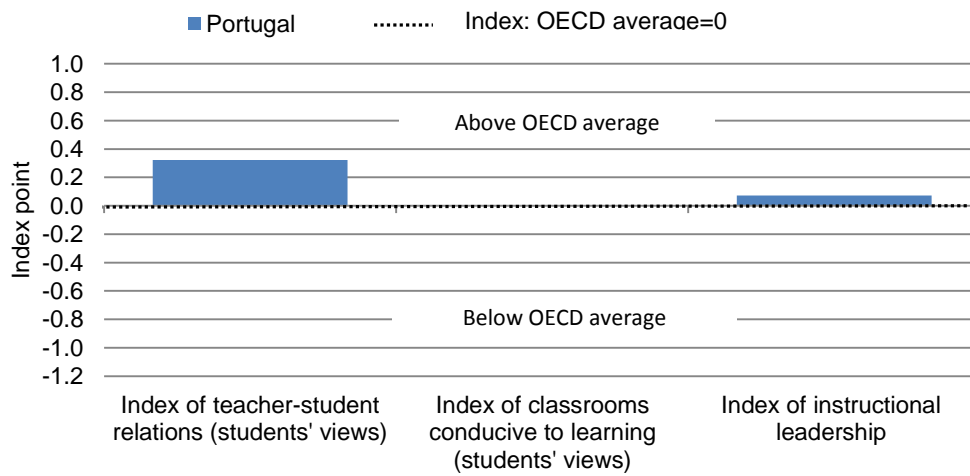
Portugal revised the curriculum for the second cycle of primary education and lower secondary education (2012/13). The new curriculum aims to set standards of basic skills to be reached by all students in Portuguese, mathematics, sciences and foreign languages, and to give schools more flexibility over curriculum management.

The [reform of school leadership](#) (2008) modified selection processes and responsibilities for principals, from *primus inter pares* (teachers elected to the position by their peers, functioning mainly as administrators) towards professionally selected and accountable school leaders with clearly identified authority and responsibilities. [Specialised mandatory training for school leaders](#) was also reinforced (2012).

Several initiatives aim to strengthen the teaching profession, including (1) more stringent [admission conditions in teachers education programmes](#) (2014); (2) [reinforced scientific curricula in teachers education programmes](#) (2014); (3) introduction of an evaluation exam for teachers with a professional qualification and/or fixed-term contract for teachers with less than five years of practice ([Prova de avaliação de conhecimentos e capacidades](#)) and (4) introduction of a lifelong training framework for teachers (2014) that links continuing professional development to career progression and aims to improve the quality of teaching.



Figure 5. The learning environment, PISA 2012



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



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

Defining evaluation and assessment strategies is important both for improving student outcomes and to develop a better and more equitable school system. Student assessment, school evaluation, teacher appraisal and system evaluations are in place at the national level in Portugal. In early 2011, an *OECD study* found that these systems were not yet integrated into an evaluation and assessment framework. The General Inspectorate of Education and Science (*Inspecção-Geral da Educação e Ciência*, IGEC) monitors system evaluations, school evaluation and teacher appraisal.

System evaluations use national assessments of learning outcomes and international student assessments to monitor performance of the education system. National examinations in grades 4, 6 and 9 provide information on student learning outcomes. An Education Indicators Framework provides data to analyse the education system, monitor trends, and provide information.

School evaluation includes self-evaluation and external evaluation. Schools organise internal student assessments for all subjects and the Educational Evaluation Institute (*Instituto de Avaliação Educativa*, IAVE I.P, 2013) carries out external student assessments for mathematics and Portuguese. At upper secondary level, additional external assessments also organised by IAVE cover most subjects and are used for admission to tertiary education. External evaluation is to take place every four years, and a first cycle has been completed (2006-11). While schools are expected to perform self-evaluations, the process is in early stages of development and there is no general prescribed approach. Schools have varied capacity to implement and conduct self-evaluations and have limited information on how these can contribute to overall improvement and development.

Teacher appraisal is recent in Portugal. The current national teacher appraisal system is mostly based on peer evaluation (2007). It includes teaching standards, criteria and instruments for appraisals, and consequences on career progression. The system focuses more on accountability (career progression) than on improvement and provides limited opportunities for feedback on strengths and weaknesses in teaching practice. While classroom observation is part of regular performance management *in most countries*, classroom observations in Portugal are only mandatory in specific cases, such as to obtain an *excellent* mark in the probationary year or if the teacher received an *insufficient* mark on the previous appraisal. In the Teaching and Learning International Survey (TALIS), lower secondary teachers in Portugal reported comparatively fewer benefits of appraisal on their practice: 58.8% on confidence as a teacher (compared to the TALIS average of 70.6%), 48.9% on teaching practices (compared to 62.0%), and 53.1% on student assessment to improve student learning (compared to 59.4%). Portugal could strengthen teacher appraisal for improvement and establish a clearer link between teacher appraisal and professional development. School leaders could also play a greater role in the appraisals.

Student assessment includes summative and formative assessments as part of progress tests at intermediate stages and at the end of cycles and also of national examinations. Internal student assessments (for all subjects) and external student assessments (for mathematics and Portuguese) both take place in schools. Although assessment is seen as an important part of the teachers' role, formative assessment is not used systematically. Evaluation and assessment should aim to put students at the centre, by fully engaging them in their learning and empowering them to assess their own progress.

The challenge: Developing a coherent evaluation and assessment framework for student learning.

Recent policies and practices

The *national examination* was expanded (2011/12) to grades 4 and 6. These national exams replaced the National Monitoring Educational Progress Test (2001) and are now used to assess and monitor learning progress.

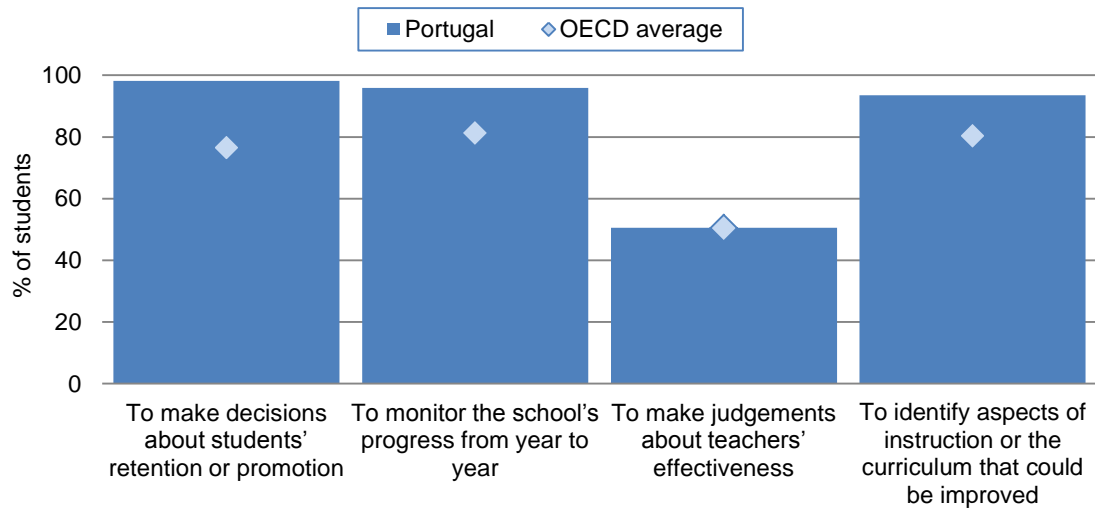
The Educational Evaluation Institute (*Instituto de Avaliação Educativa*, IAVE I.P, 2013), an independent autonomous institute specialising in external evaluation, replaced the Office for Educational Evaluation (*Gabinete de Avaliação Educativa*, GAVE), which reported directly to the minister. IAVE now aims to generalise the use of external evaluation in primary and secondary education and evaluate the impact of school clusters on learning outcomes and their surrounding communities.

A *new model* of the national system of performance appraisal for teachers and *school leaders* (2012/13) relies on external and internal appraisal and targets three dimensions: scientific and pedagogic; participation in school life and relationship with community; and continuing training and professional development. In 2014, the ministry required and carried out an entrance exam for all new teachers in compulsory education.

Evaluation and monitoring guidelines for pre-school education were set up (2011), and an external evaluation of pre-school education undertaken in 2013 led to a revision of the curriculum.



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



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



GOVERNANCE: A CENTRALISED SYSTEM WITH INCREASED DECISION MAKING AT THE LOCAL LEVEL

Governance of Portugal's education system is centralised. The *Ministry of Education and Science* is responsible for defining the curriculum, guidelines for national examinations prepared by an independent institute, teacher recruitment and deployment, and the budget at pre-primary, compulsory, and higher education levels. Other bodies that shape education policy include:

- ministry services such as the General Secretariat (SG), six Directorate Generals (for School Administration, Education, Planning and Financial Management, Education and Science Statistics, Higher Education and Schools), the Educational Evaluation Institute (IAVE), the National Agency for Qualification and Vocational Education (ANQEP), the Scientific and Pedagogical Council for Continuous Training (CCPFC) and the General Inspectorate of Education and Science (IGEC)
- stakeholder engagement participation advisory bodies such as the National Education Council (CNE), where stakeholders provide the government with advice on national education issues, the Schools Council, parents' organisations, the National Association of Portuguese Municipalities and teachers' professional associations (including disciplinary bodies)
- the Co-ordinating Council for Higher Education (CRUP), the Co-ordinating Council for Polytechnic Institutions (CCISP), and the National Agency for Evaluation and Accreditation of Higher Education Programs (A3ES).

Portugal is gradually increasing **decision-making at sub-national levels** while trying to improve the efficiency of public services (see Spotlight 4). Since 2008, municipalities have been given more responsibilities, mostly from pre-primary to lower secondary education. These include offering curricular enrichment activities in the first cycle, providing social support (school meals and transportation), managing school infrastructure, and hiring and dismissing non-teaching staff (Figure 7). At upper secondary level, no decision-making power currently rests with local or regional authorities.

Portuguese schools have acquired more decision-making capacities in recent years (see Spotlight 3), reaching 22% at the lower secondary level in 2011. This remains modest compared to school decision-making capacities in other OECD countries (41%).

Higher education institutions have autonomy on how funding received from the government is allocated and used. Portugal has 55 universities and 88 polytechnic schools, including public and private institutions (2012/13). Autonomy and governance of public universities and polytechnics are defined by law, while the government has, at times, limited autonomy through regulation or intervention. Introducing comprehensive higher education legislation which clearly defines the autonomy of institutions can help foster autonomy at the institutional level.

The challenge: Enhancing capacities at local and school levels to deliver quality education through a national vision.

Recent policies and practices

The *education web portal* provides information on education statistics, including data on participation and completion.

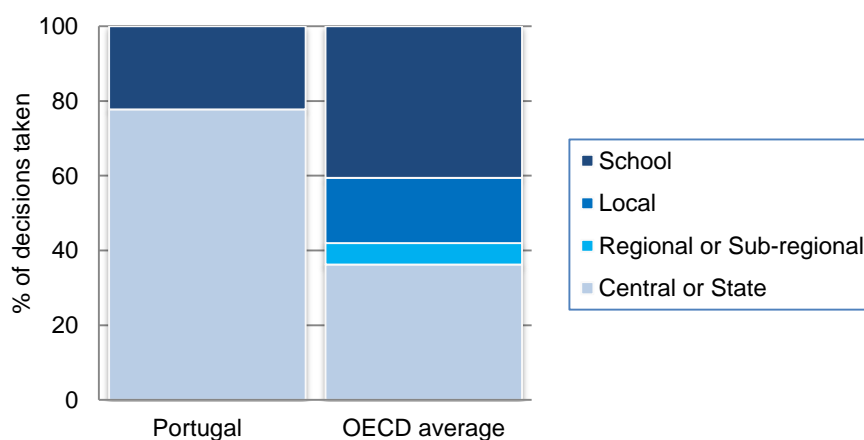
As part of the effort to rationalise public services (*Plano de Redução e Melhoria da Administração Central*, PREMAC, 2011), Regional Directorates for Education responsible for co-ordinating policy implementation within their respective regions were dismantled (2013).

At the tertiary level, a new Legal Regime of Higher Education Institutions (*Regime jurídico das instituições de ensino superior*, RJIES, 2007) aims to give some tertiary education institutions an autonomous status and to increase the autonomy of all tertiary institutions to make decisions on curricula, research and financial administration.

Schools gained more autonomy over the curriculum and administration in recent years (See Spotlight 3).



Figure 7. Percentage of decisions taken in public lower secondary schools at each level of government (2011)



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

Spotlight 3. Reorganisation of the education system and increased local and school governance

Portugal reorganised its education system in recent years to reduce central administration and increase involvement of local and school authorities in the decision-making process. In late 2011 and 2012, the Ministry of Education and Science took actions to rationalise its services as part of the Plan for the Reduction and Improvement of Central Administration (*Plano de Redução e Melhoria da Administração Central*, PREMAC). The Directorate General for Schools (*Direcção-Geral dos Estabelecimentos Escolar*, DGEstE) took over the responsibilities of the former Regional Directorates for Education (dismantled in 2013), but it has less power of intervention over the school network, which now has more autonomy. Other services were merged to create a more cohesive governance system. For instance, the Directorate General for Education also took over the responsibilities of the Directorate General for Innovation and Curricular Development.

Starting in 2005, Portugal reorganised the school network by closing schools considered too small (fewer than 21 students), or performing below average, and implementing the school cluster policy (see School Improvement). Municipalities participated in this effort through the Agreement on the Reorganisation of the School Network (*Acordo Relativo à Reorganização da Rede Escolar*, 2010) between the central government and the National Association of Portuguese Municipalities (*Associação Nacional dos Municípios Portugueses*). Under this agreement, municipalities identified which schools needed to be closed and co-ordinated redeployment measures with the central government.

At the school level, the *curriculum reform* and *legal framework* (2012) give schools more autonomy over curriculum management, instruction time and flexibility in planning teachers training. As noted in an *OECD report on teacher evaluation*, Portugal launched a major reform on school leadership in 2008, which established three councils in schools: the General Council (with representatives of school staff, teachers, parents and local authorities), which is in charge of operational and strategic planning and monitoring and selecting the school leader; the Pedagogical Council, which supervises and co-ordinates pedagogical activities; and the Administrative Council, which is responsible for administrative and financial matters.

Primary and secondary schools can obtain more autonomy by signing an *autonomy agreement* with the Ministry of Education and Science (2008). Conditions for granting of an autonomy contract include a school self-evaluation and receiving a positive external school evaluation. These contracts allow for greater autonomy in areas such as pedagogical organisation, curriculum organisation, human resources, school social support and financial management. The number of schools with an autonomy contract grew from 22 schools in 2010 to 212 schools in 2013 (26% of the school clusters).



FUNDING: MAINLY FROM PUBLIC SOURCES

Portugal's **investment in educational institutions** at all educational levels is 5.5% of GDP, below the OECD average of 6.1% (Figure 8). Over 2000-11, it has increased by 0.34 percentage points (well below the OECD average increase of 0.7 percentage points), and *budget cuts* have been imposed. Almost all expenditure on educational institutions is from public sources (92.5% in 2011 compared to the OECD average of 83.9%), and the share of private expenditure on educational institutions (7.5%) is less than half the OECD average (16.1%). Private funding is higher in tertiary education (about 31.4% of all expenditure, just above the OECD average of 30.8%). As in many OECD countries, the current financial crisis has had an impact on available funding and Portugal is trying to optimise the use of financial resources for education and training.

The **annual expenditure per student** from primary to tertiary education (including R&D activities) is USD 7 741 in 2011, below the OECD average of USD 9 487. From 2005 to 2011, expenditure per student increased by 5% in primary, secondary and post-secondary non-tertiary education (compared to the OECD average increase of 17%), while enrolment decreased by 3% (the OECD average decrease was also 3%). At tertiary level, expenditure per student decreased by 3% in 2011 (compared to the OECD average increase of 10%), while enrolment increased by 10% (compared to the OECD average increase of 15%).

The state is the main source of **funding** for education in Portugal. The Ministry of Education and Science also has responsibility over public funding of education. Public schools receive funding directly from the state budget, and private schools that have a charter agreement are partially funded by the ministry. As part of the decentralised approach, local authorities (municipalities) can finance costs for managing educational facilities, transport and extra-curricular activities. Families pay for school supplies and are charged school fees in non-compulsory education.

Higher education institutions in Portugal have traditionally been mainly state-funded, while tuition and private funds have increased in recent years. Private institutions generally do not receive direct state funding. Students from private institutions can receive financial support, including scholarships and grants for living costs. Scholarships and other grants to households amount to 15.4% of public expenditure for tertiary education, above the OECD average of 11.6%.

Following the 2008 financial crisis and the decrease of the budget allocated to education, a range of measures have been taken to rationalise spending and optimise the use of resources at all levels of the education system (see below).

The challenge: Increasing efficiency and effectiveness of the funding system to provide quality education.

Recent policies and practices

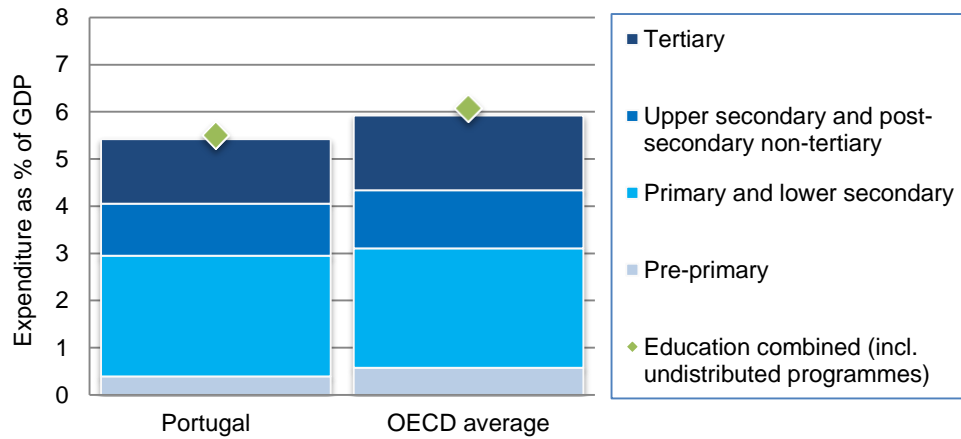
According to ministry sources, education spending in Portugal has been revised in order to reduce operational costs by increasing the average number of students per class, reducing teaching hours in the curricular reform and in sports, integrating more schools into school clusters and merging existing school clusters; optimising resources of the Mathematics Programme (*Programas de Matemática II*), the National Reading Plan (*Programa Nacional de Leitura*) and the School Library Network (*Rede de Bibliotecas Escolares*); and continuing the reduction of the number of teachers hired on fixed term contracts (not integrated in the public education system) and non-replacement of retired teachers.

At the tertiary education level, cost revision *measures* include reducing operating costs and revising the *criteria for setting the number of vacancies in public tertiary institutions*, while trying to adjust educational offer to the country's needs. Two public universities in the Lisbon Region, the University of Lisbon (*Universidade de Lisboa*) and the Technical University of Lisbon (*Universidade Técnica de Lisboa*), merged into a single institution. The ministry provides student grants based on financial needs to limit the impact on student enrolment of current budget cuts due to the financial crisis. Portugal also supports research and development through the Graduate Studies Grant Programme (*Bolsas de Formação Avançada*, 2013), managed by the Foundation for Science and Technology.

In 2008, a *decree* expanded the funding responsibilities of municipalities to lower secondary education (municipalities have been responsible for funding pre-primary and primary schools since 1999). Municipalities are in charge of funding such areas as management of non-teaching staff, school social action, construction, maintenance and provision of equipment of primary and lower secondary schools, and lower secondary school busing. These transfers are made through the signing of implementation contracts.



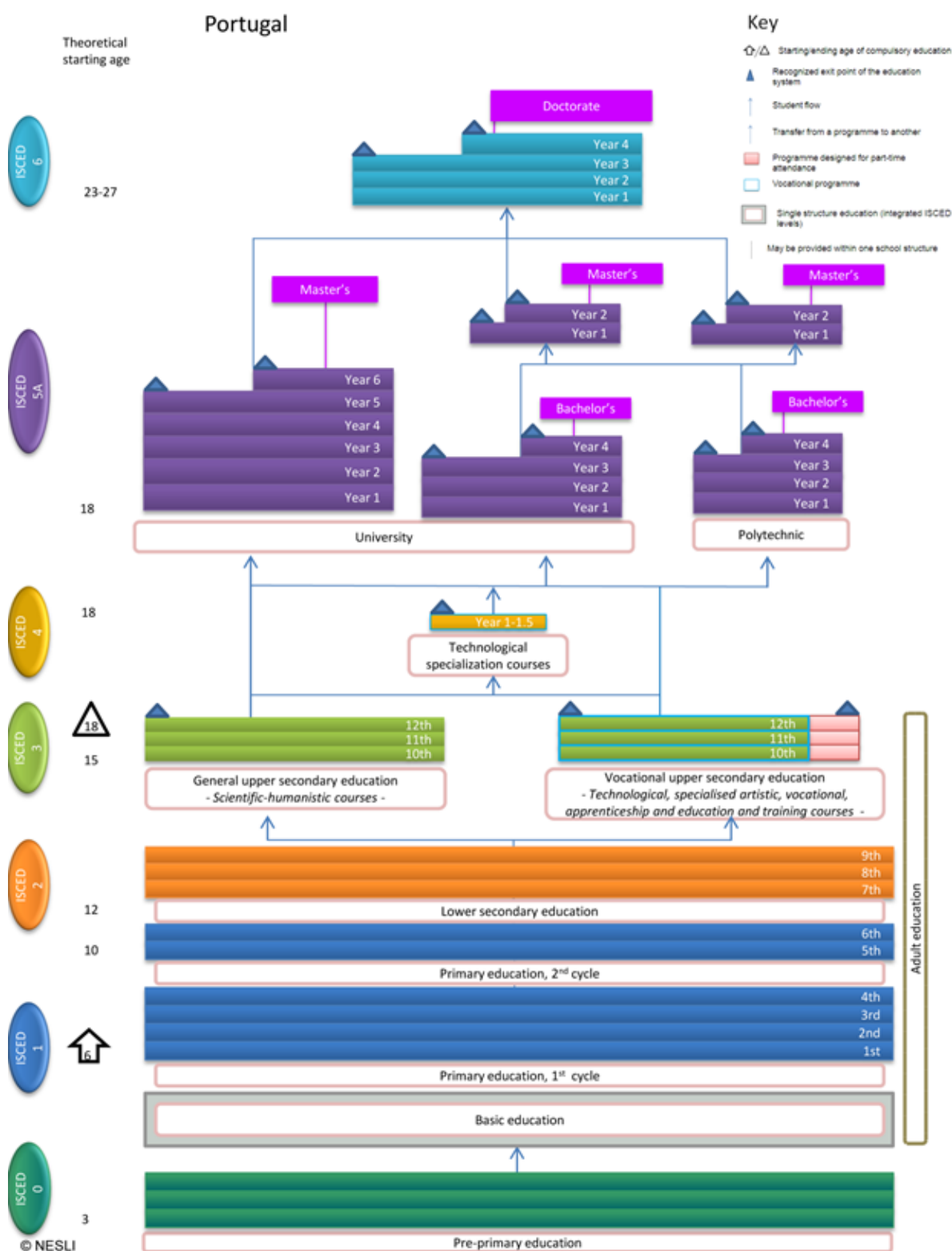
Figure 8. Expenditure on educational institutions as a percentage of GDP, by level of education (2012)



Source: OECD (2014), Education at a Glance 2014: OECD Indicators, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-en>.



ANNEX A: STRUCTURE OF PORTUGAL'S EDUCATION SYSTEM





ANNEX B: STATISTICS

#	List of key indicators	Portugal	Average or total	Min OECD	Max OECD
Background information					
<i>Political context</i>					
1	Public expenditure on education as a percentage of GDP, 2011 (EAG 2014)	5.3%	5.6%	3.8%	8.7%
<i>Economy</i>					
2	GDP per capita, 2011, in equivalent USD converted using PPPs (EAG 2014)	25 672	n/a	17 125	88 668
3	GDP growth 2013 (OECD National Accounts)	-1.4%	1.3%	-3.9%	4.1%
<i>Society</i>					
4	Population density, inhab/km ² , 2010 (OECD Statistics)	115	138	3	492
5	Population aged less than 15 as a percentage of total population, 2010 (OECD Factbook 2014)	15.2%	18.6%	13.1%	29.6%
6	Foreign-born population as a percentage of total population, 2011 or latest available year (OECD Factbook 2014)	8.3%	n/a	0.3%	42.1%
Education outcomes					
7	Mean performance in mathematics (PISA 2012)	487	494	413	554
8	Annualised change in mathematics performance across PISA assessments (PISA 2012) ^{4,5}	2.8	-0.1	-3.3	4.2
9	Annualised change in reading performance across PISA assessments (PISA 2012) ^{4,5}	1.6	0.0	-2.8	4.1
10	Annualised change in science performance across PISA assessments (PISA 2012) ^{4,5}	2.5	1.0	-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, 2012 (EAG 2014)	85%	76%	12%	99%
12	% of 25-64 year-olds whose highest level of attainment is lower secondary education or below, 2012 (EAG 2014)	62%	24%	7%	66%
13	% of 25-34 year-olds whose highest level of attainment is at least upper secondary education, 2012 (EAG 2014)	58%	82%	46%	98%
14	% of 25-34 year-olds whose highest level of attainment is tertiary education, 2012 (EAG 2014)	28%	39%	21%	66%
15	% of 25-64 year-olds whose highest level of attainment is vocational upper-secondary or post-secondary non-tertiary education, 2012 (EAG 2014)	m	32.6%	8.2%	73.0%
Unemployment rates of 25-64 year-olds by educational attainment, 2012 (EAG 2014)					
16	Below upper secondary	16.0%	13.6%	2.6%	41.5%
	Upper secondary and post-secondary non-tertiary	14.5%	7.8%	2.3%	24.4%
	Tertiary education	10.5%	5.0%	1.6%	17.0%
Students: Raising outcomes					
<i>Policy lever 1: Equity and quality</i>					
17	First age of selection in the education system (PISA 2012)	15	14	10	16
Students performing at the highest or lowest levels in mathematics (%), (PISA 2012)					
18	Students performing below Level 2	24.9%	23%	9.1%	54.7%
	Students performing at Level 5 or above	10.6%	12.6%	0.6%	30.9%
Variance in mathematics performance between schools and within schools as a percentage of the OECD average variance in mathematics performance (PISA 2012)					
19	Between-schools percentage of variance	31%	37%	6%	65%
	Within-schools percentage of variance	73%	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)	34.3%	12.4%	0.0%	36.1%



#	List of key indicators	Portugal	average or total	Min OECD	Max OECD
21	Percentage of variance in mathematics performance in PISA test explained by ESCS (PISA 2012) ⁴	19.6%	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	39%	21%	-29	66
23	Score differences between boys and girls in mathematics (PISA 2012) ⁴	11	11	-6	25
<i>Policy lever 2: Preparing students for the future</i>					
Adjusted mean proficiency in literacy among adults on a scale of 500 (Survey of Adult Skills, 2012)					
24	Among 16-65 year-olds (adjusted)	NP	270.7	249.4	293.6
	Among 16-24 year-olds (adjusted)	NP	278.0	260.0	297.0
Upper secondary graduation rates in % by programme of orientation, 2012 (EAG 2014)					
25	General programmes	51%	52%	18%	85%
	Pre-vocational/ vocational programmes	50%	48%	4%	97%
26	Average annual growth rate of upper secondary graduation between 1995-2012 (EAG 2014)	m	m	0%	0%
First-time graduation rates by programme of orientation, 2012 (EAG 2014)					
27	Graduation rate tertiary-type A (general programme)	41%	39%	9%	60%
	Graduation rate tertiary-type B (technical programme)	0%	11%	0%	30%
28	% of 15-29 years-old not in education, employment or training, 2012 (EAG 2014)	16.6%	15.1%	6.7%	29.2%
Institutions: Improving schools					
<i>Policy lever 3: School improvement</i>					
29	Mean index of teacher-student relations based on students' reports (PISA 2012)	0.32	0.00	-0.42	0.47
30	Mean index of disciplinary climate based on students' reports (PISA 2012)	0.00	0.00	-0.33	0.67
% of teachers above the age of 50 by education level, 2012 (EAG 2014)					
31	Primary education	31%	31%	16%	52%
	Lower secondary education	28%	34%	19%	58%
	Upper secondary education	25%	38%	25%	65%
Number of teaching hours per year in public institutions per education level, 2012 (EAG 2014)					
32	Primary education	756	782	569	1 131
	Lower secondary education	616	694	415	1 103
	Upper secondary education	616	655	369	1 103
Ratio of teachers' salaries to earnings for full-time, full-year adult workers with tertiary education, 2011 (EAG 2014)					
33	Primary education	1.23	0.85	0.43	1.36
	Lower secondary education	1.23	0.88	0.43	1.36
	Upper secondary education	1.23	0.92	0.43	1.36
34	Growth rate of teachers' salaries between 2005 and 2012 in lower secondary education, 2012 (EAG 2014)	-7%	2%	-29%	31%
35	% 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)	37.7%	53.5%	26.7%	86.2%



#	List of key indicators	Portugal	average or total	Min OECD	Max OECD
<i>Policy level 4: Evaluation and assessment to improve student outcomes</i>					
36	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	92.1%	88.8%	58.5%	99.5%
% of students whose school principals reported that assessments are used for the following purposes (PISA 2012)					
37	To make decisions about students' retention or promotion	98%	77%	1%	98%
	To monitor the school's progress from year to year	96%	81%	48%	100%
	To make judgements about teachers' effectiveness	50%	50%	14%	88%
	To identify aspects of instruction or the curriculum that could be improved	93%	80%	49%	99%
% of lower secondary education teachers reporting appraisal/feedback from the school principal on their work with this frequency (TALIS 2013)					
38	Once every two years or less	73.4%	33.9%	3.2%	88.8%
	Once per year	25.0%	41.5%	9.5%	82.1%
	Twice or more per year	1.6%	24.7%	1.0%	49.6%
Systems: Organising the system					
<i>Policy level 5: Governance</i>					
% of decisions taken at each level of government in public lower secondary education, 2011 (EAG 2012)					
39	Central or state government	78%	36%	0%	87%
	Regional or sub-regional government	0%	6%	0%	36%
	Local government	m	17%	4%	100%
	School government	22%	41%	5%	86%
<i>Policy level 6: Funding</i>					
Annual expenditure per student by educational institutions, for all services, in equivalent USD converted using PPPs for GDP, 2011 (EAG 2014)					
40	Pre-primary education	5 674	7 428	2 412	25 074
	Primary education	5 865	8 296	2 218	23 871
	Secondary education	8 676	9 280	2 736	16 182
	Tertiary education	9 640	13 958	7 868	26 021
Relative proportions of public and private expenditure on educational institutions, 2011 (EAG 2014)					
41	Public sources	92.5%	83.9%	59.9%	97.6%
	All private sources	7.5%	16.1%	2.4%	40.1%
	Index of change in expenditure on educational institutions, public sources, (constant prices, 2005=100)	100	118	87	186
	Index of change in expenditure on educational institutions, all private sources, (constant prices, 2005=100)	101	119	76	170
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.					



REFERENCES AND FURTHER READING

- Education Evaluation Cabinet (*Gabinete de Avaliação Educacional*, GAVE), website www.gave.min-edu.pt/np3/39.html.
- Education GPS, <http://gpseducation.oecd.org/>
- European Commission (2013), *Education and Training Monitor 2013: Portugal*, http://ec.europa.eu/education/tools/docs/etm2013-country-reports_en.pdf.
- European Commission (2013), Euryedia: European Encyclopaedia on National Education Systems, “Portugal: Overview”, <https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Overview>.
- European Commission (2013), Euryedia: European Encyclopaedia on National Education Systems, “Portugal: Education in the Europe 2020 Strategy”, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Education_in_the_Europe_2020_Strategy.
- European Commission (2013), Euryedia: European Encyclopaedia on National Education Systems, “Portugal: Ongoing Reforms and Policy Developments”, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Ongoing_Reforms_and_Policy_Developments.
- European Commission (2013), Euryedia: European Encyclopaedia on National Education Systems, “Portugal: Administration and Governance at Central and/or Regional Level”, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Administration_and_Governance_at_Central_and/or_Regional_Level.
- European Commission (2013), Euryedia: European Encyclopaedia on National Education Systems, “Portugal: Administration and Governance at Local and/or Institutional Level”, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Administration_and_Governance_at_Local_and/or_Institutional_Level.
- European Commission (2013), Euryedia: European Encyclopaedia on National Education Systems, “Portugal: Organisation of Vocational Upper Secondary Education”, https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Portugal:Organisation_of_Vocational_Upper_Secondary_Education.
- European Commission (2013), Eurostat: “Europe 2020 Indicators” http://epp.eurostat.ec.europa.eu/portal/page/portal/europe_2020_indicators/headline_indicators.
- General Directorate for Curricular Innovation and Development, (Direção-Geral de Inovação e Desenvolvimento Curricular, DGIDC) (2008), *Educação Especial: Manual de Apoio à Prática* (Special Education: Practice Guide), Ministry of Education and Science, www.dgicd.min-edu.pt/.
- General Directorate for Education and Science Statistics, (Direção-Geral de Estatísticas da Educação e Ciência, DGEEC), website www.dgeec.mec.pt/np4/245.html.
- General Directorate for Education and Science Statistics, *Estatísticas da Educação (Education Statistics)*, <http://estatisticas.gepe.min-edu.pt/>.
- General Directorate for Higher Education, (Direção Geral do Ensino Superior, DGES), www.dges.mctes.pt/DGES/pt.
- General Directorate for Higher Education, Dispatches with the criteria for setting the number of openings for the school year of 2013-2014, www.dges.mctes.pt/DGES/pt/Instituicoes/InstrucaoProcessos/FixacaoVagas/.
- General Inspectorate of Education and Science (Inspeção Geral da Educação e Ciência, IGEC), www.ige.min-edu.pt/.
- High Commissariat for Immigration and Intercultural Dialogue (Alto Comissariado para a Imigração e Diálogo Intercultural, ACIDI) (2013), *Estratégia Nacional Para A Integração Das Comunidades Ciganas 2013 – 2020* (National Strategy for the Integration of Roma Communities 2013-2020), www.acidi.gov.pt/cfn/51d2a4fd86705/live/Estrat%C3%A9gia+Nacional+para+a+Integra%C3%A7%C3%A3o+das+Comunidades+Ciganas.
- Lima F. (ed.) (2012), *Os Processos de Reconhecimento, Validação e Certificação de Competências e o Desempenho no Mercado de Trabalho* (The Processes of Recognition, Validation and Certification of



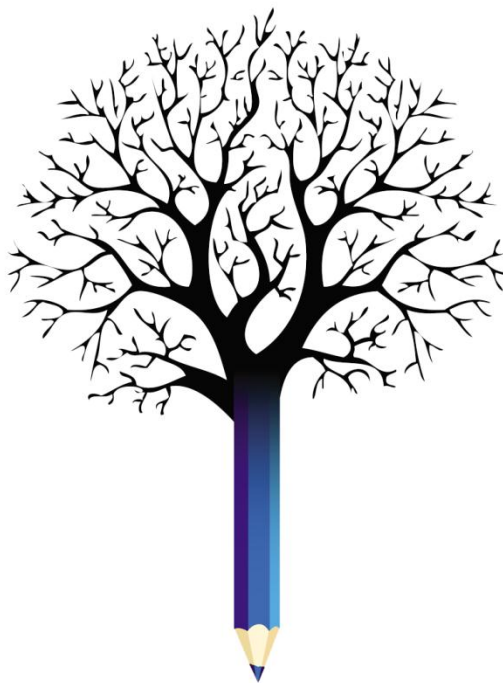
- Competences Performance and the Labour Market), Instituto Superior Técnico, Universidade Técnica de Lisboa, Lisbon, www.portugal.gov.pt/media/599104/2012_avaliacao_rvcc.pdf.
- Ministry of Education and Science (*Ministro da Educação e Ciência*, MEC), website <http://www.portugal.gov.pt/en/the-ministries/ministry-of-education-and-science.aspx>.
- Ministry of Education and Science, “Legislação sobre Educação” (Education legislation), <http://legislacao.min-edu.pt/np4/133>.
- Ministry of Education and Science, Strategic guidelines for tertiary education: www.portugal.gov.pt/pt/os-ministerios/ministerio-da-educacao-e-ciencia/documentos-oficiais/20140510-mec-estrategia-enssup.aspx.
- Ministry of Education and Science (2012), *Programa Escolar De Reforço Alimentar* (School Food Support Programme), http://pera.portaldasescolas.pt/Documento_Orientador.pdf.
- Ministry of Education and Science (2007), *Improving School Leadership: Country Background Report for Portugal*, Ministry of Education and Science, Lisbon, <http://www.oecd.org/education/school/40710632.pdf>.
- Ministry of Finance (Direção-Geral do Orçamento, DGO), State Budget laws for 2012, 2013 and 2014: www.dgo.pt/politicaorcamental/Paginas/OEpagina.aspx?Ano=2014&TipoOE=Alterar%20a7%20a3o%20ao%20Or%20a7amento%20do%20Estado&TipoDocumentos=Lei%20%20Mapas%20Lei%20%20Relat%20c3%b3rio.
- OECD Directorate for Education and Skills, www.oecd.org/edu.
- OECD (2014), *Education at a Glance 2014: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2014-en>.
- OECD (2014), *PISA 2012 Results: What Students Know and Can Do (Volume I, Revised edition, February 2014): Student Performance in Mathematics, Reading, and Science*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264208780-en>.
- OECD (2014), *PISA 2012 Results: Creative Problem Solving (Volume V): Students' Skills in Tackling Real-Life Problems*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264208070-en>.
- OECD (2014), *TALIS 2013 Results: An International Perspective on Teaching and Learning*, TALIS, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264196261-en>.
- OECD, (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264204256-en>.
- OECD (2013), *PISA 2012 Results: Excellence through Equity: Giving Every Student the Chance to Succeed (Volume II)*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264201132-en>.
- OECD (2013), *PISA 2012 Results: Ready to Learn: Students' Engagement, Drive and Self-Beliefs (Volume III)*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264201170-en>.
- OECD (2013), *PISA 2012 Results: What Makes Schools Successful: Resources, Policies and Practices (Volume IV)*, PISA, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264201156-en>.
- OECD (2013), *Teachers for the 21st Century: Using Evaluation to Improve Teaching, International Summit on the Teaching Profession*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264193864-en>.
- OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264190658-en>.
- OECD (2012), *Education at a Glance 2012: OECD Indicators*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/eag-2012-en>.
- OECD (2012), *OECD Economic Survey: Portugal 2012*, OECD Publishing, Paris, http://dx.doi.org/10.1787/eco_surveys-prt-2012-en.
- OECD (2012), *Equity and Quality in Education: Supporting Disadvantaged Students and Schools*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264130852-en>.
- OECD (2009), *Creating Effective Teaching and Learning Environments: First Results from TALIS*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264072992-en>.



- OECD (2009), "Overview of Country Results in TALIS: Portugal", OECD Publishing, Paris, www.oecd.org/edu/school/43072714.pdf.
- OECD (2007), *Reviews of National Policies for Education: Tertiary Education in Portugal 2007*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264009769-en>.
- OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264035461-en>.
- Pearson Foundation (2013), *Strong Performers Successful Reformers in Education*, A video series profiling policies and practices of education systems that demonstrate high or improving performance in the PISA tests. "Portugal", www.pearsonfoundation.org/oecd/portugal.html.
- Technological Plan for Education (*Plano Tecnológico da Educação*, PTE), www.pte.gov.pt/pte/EN/.
- Santiago, P. et al. (2012), *OECD Reviews of Evaluation and Assessment in Education: Portugal 2012*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264117020-en>.
- Santiago, P. et al. (2009), *Teacher Evaluation in Portugal: OECD Review*, OECD, Paris, <http://www.oecd.org/portugal/43327186.pdf>
- Science and Technology Foundation (Fundação para a Ciência e a Tecnologia, FTC), www.fct.pt/.
- Taguma, M., I. Litjens and K. Makowiecki (2012), *Quality Matters in Early Childhood Education and Care: Portugal 2012*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264176720-en>.



Disclaimer: This paper is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries. This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.



www.oecd.org/edu/policyoutlook.htm

