COUNTRY NOTE

EDUCATION AT A GLANCE 2015

Education at a Glance: OECD Indicators is the authoritative source for information on the state of education around the world. It provides data on the structure, finances and performance of education systems in the 34 OECD countries and a number of partner countries.

SPAIN

This Country Note focuses on five major topics covered in the 2015 edition of *Education at a Glance: OECD Indicators*. These topics are: early childhood through upper secondary education, tertiary education (based on the new ISCED 2011 classification), the teaching profession, educational attainment, skills and participation in the labour market, and equity in education and the labour market.

The table *Key facts for Spain in Education at a Glance 2015* presents a summary of figures for Spain and the OECD average.

Early childhood through upper secondary education

In Spain, and in a majority of OECD countries, education now begins for most children well before they are 5 years old. About 97% of 3-, 4- and 5-year-old Spanish children are enrolled in pre-primary education.

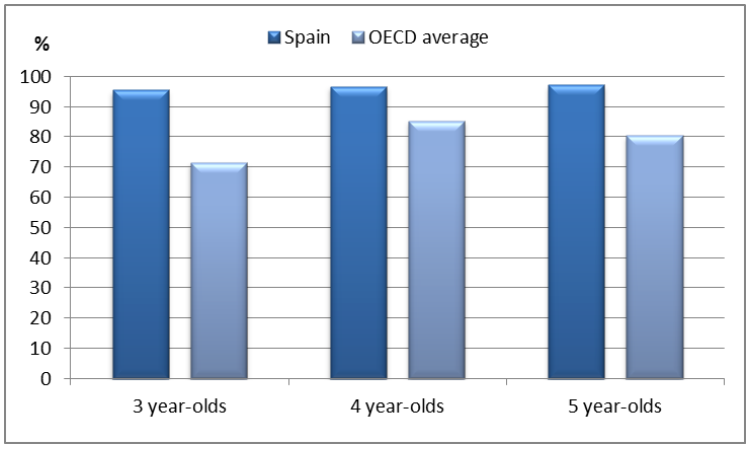
There is increasing awareness of the key role that early childhood education plays in the cognitive and emotional development of the young. As a result, ensuring the quality of early childhood education and care (ECEC) has become a policy priority in many countries.

Enrolling children in early childhood education can also mitigate social inequalities and promote better student outcomes overall. Fifteen-year-old students who had attended at least one year of pre-primary education perform better on the OECD Programme for International Student Assessment (PISA) test than those who had not, even after accounting for their socio-economic backgrounds. Moreover, among 15-year-old immigrant students who arrived in their OECD host country before the age of 6, the gap in performance between those who had attended pre-primary education and those who had not is equivalent to around two years of schooling.

- In Spain, children up to 3 years old can attend early childhood development programmes. Some 52% of 2-year-olds do. Most children between 3 and 5 years old attend pre-primary education (about 97% of 3-, 4-, and 5-year-olds). On average across OECD countries, 33% of 2-year-olds attend early childhood development programmes, while enrolment in pre-primary education varies with age: 72% of 3-year-olds, 85% of 4-year-olds, and 81% of 5-year-olds (Table C2.1).
- The highest pre-primary enrolment rates of 3-year-olds are found in Belgium, Denmark, France, Iceland, Italy, New Zealand, Norway, Spain and the United Kingdom (Table C2.1).

- Enrolment rates in pre-primary and primary education of 4-year-olds vary from 95% or more in Belgium, Denmark, France, Germany, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Spain and the United Kingdom, to less than 60% in Colombia, Indonesia, Saudi Arabia and Turkey (Table C2.1).
- Some countries have made access to pre-primary education almost universal for children by the time they are three. On average among OECD countries with 2005 and 2013 data, enrolments rose from 52% of 3-year-olds in 2005 to 72% in 2013 and from 69% of 4-year-olds in 2005 to 85% in 2013. In Spain, the universality of this level of education was already evident in 2005: 94% of 3-year-olds and 99% of 4-year-olds were enrolled (Table C2.1).

Figure1: Enrolment rates in pre-primary education, by age (2013)



Source: OECD. Table C2.1
See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm) .
StatLink http://dx.doi.org/10.1787/888933285815 (*Education at a Glance 2015*, Table C2.1)

- On average across OECD countries, 57% of children enrolled in early childhood development programmes attend private institutions. This can result in heavy financial burdens for parents, even when government subsidies are provided. In Spain this percentage is 48% (Table C2.2).
- The ratio of children to teaching staff is an indicator of the resources devoted to early childhood education. In Spain, there are 9 pupils per teacher in early childhood educational development programmes, on average, and 15 in pre-primary programmes. The OECD average is 14 pupils per teacher at both levels (Table C2.2).

The average lower secondary class in Spain is 25 students, slightly higher than the OECD average (24 students), and the reported percentage of time spent keeping order in the classroom is similar in Spain to the average of countries that participated in the OECD Teaching and Learning International Survey (TALIS).

Class size and student-teacher ratios are much-discussed aspects of education and, along with students' instruction time, teachers' working time, and the division of teachers' time between teaching and other duties, are among the determinants of the demand for teachers. Together with teachers' salaries and the age distribution of teachers, class size and student-teacher ratios also have a considerable impact on the level of current expenditure on education.

Smaller classes are often seen as beneficial because they allow teachers to focus more on the needs of individual students and reduce the amount of class time needed to deal with disruptions. Given

findings from TALIS 2013, larger classes seem to be associated with a higher percentage of students with behavioural problems and with more class time spent keeping order as opposed to teaching and learning.

- The average primary school class in Spain has 22 students compared to the OECD average of 21 students. The average lower secondary class in Spain (25 students) also exceeds slightly the OECD average (24 students) by one student. In Spain, classes at public primary and lower secondary institutions are smaller than those in private institutions. By contrast, on average across OCDE countries, primary classes have 21 pupils regardless of the type of institution; and at the lower secondary level, classes are larger in public (24 students) than in private institutions (22 students) (Table D2.1).
- When analysing class size and time spent on actual teaching and learning across countries, results show that larger classes are correlated with less time spent on actual teaching and learning and with more time spent on keeping order in the classroom. Specifically, one additional student added to an average-size class is associated with a 0.5 percentage-point decrease in time spent on teaching and learning activities. However, in Spain, the average lower secondary class has one student more than the OECD average, and the reported percentage of time spent keeping order in the classroom is 1 percentage point less than average among the countries that participated in TALIS (Box D2.a).

In Spain, 15-year-old boys perform better in print reading than in digital reading while the reverse is true on average across OECD countries. Results also show that familiarity with computers helps boys with digital reading; but using computers intensively at school is associated with significantly poorer student performance.

Information and communication technology (ICT) is a major component of economic growth in all OECD countries. Given the rapid advances in technology, and the central role ICT now plays in all aspects of life, education policy makers need to consider how to ensure that ICT resources and students' access to those resources are provided equitably within education systems. Schools need sufficient ICT resources to help students both to learn how to use and benefit from these technologies and to acquire new knowledge and skills, in other subjects, through using them. However, basic ICT skills may not add value unless they are well paired with cognitive skills and other skills, such as creativity, communication skills, team work and perseverance.

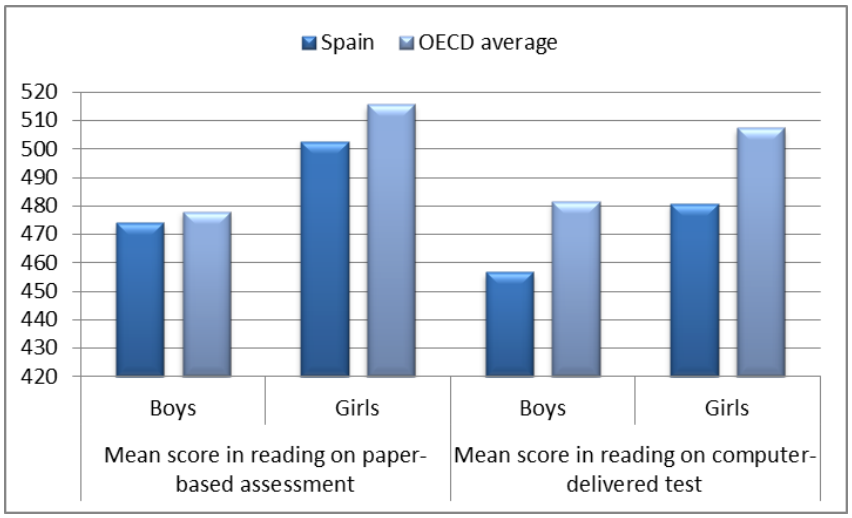
The association between the intensity of Internet use at school and PISA performance in reading is not linear. Thus, while PISA results suggest that limited use of computers at school may be better than not using computers at all, using computers more intensively than the OECD average tends to be associated with significantly poorer student performance.

- Fifteen-year-old boys in Spain perform better in print reading than in digital reading (17 points higher), while the reverse is observed on average across OECD countries (boys score 4 points lower in print reading than in digital reading). For girls, the situation in Spain is comparable to that observed on average across OECD countries: 15-year-old girls score lower in digital reading than in paper-based reading (a difference of 22 points, compared with the OECD average difference of 8 points) (Table D8.3).
- In all countries and economies that participated in PISA in 2012, the gender gap in reading performance is narrower in digital reading than in print reading. Girls outperform boys in digital reading by an average of 26 score points, compared to an average of 38 score points – the equivalent of nearly one year of schooling – in print reading. The gender gap in Spain is

narrower: girls outperform boys in digital reading by 24 score points, compared to the gender gap of 29 score points in print reading (Table D8.3).

Figure 2: PISA score in reading for 15-year-olds on paper-and-pencil and computer-delivered reading test, by gender (2012)

Mean score



Source: OECD Table D8.3.
See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm) .
StatLink http://dx.doi.org/10.1787/888933286476 (*Education at a Glance*, Table D8.3)

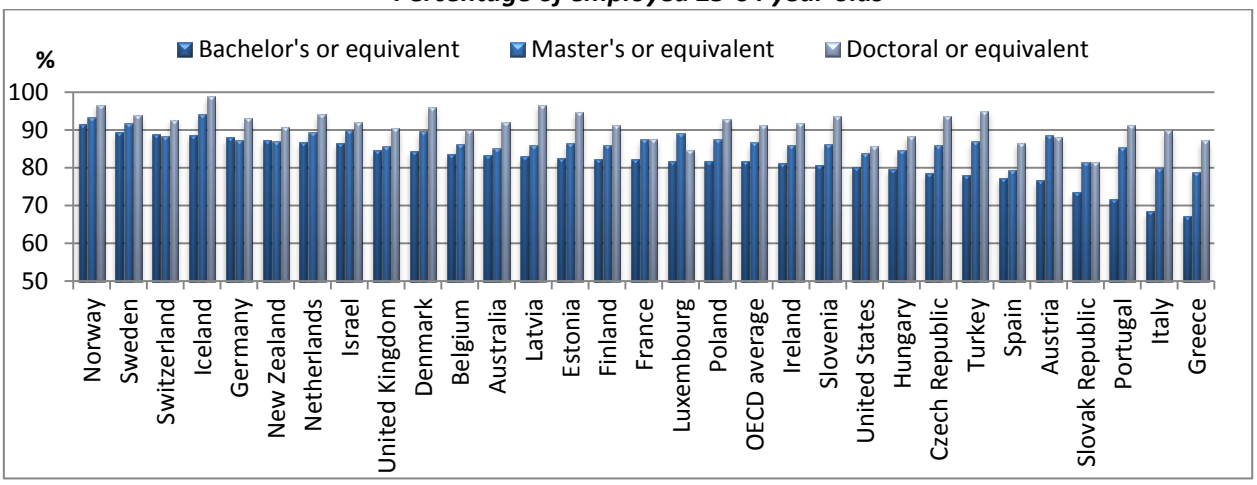
Tertiary education: Short cycle, bachelor's, master's and doctoral programmes (based on the new ISCED 2011 classification)

In Spain, there are more labour market opportunities for adults with a doctoral degree than for those with only a bachelor's or a master's degree: 77% of adults with a bachelor's degree are employed, as are 79% of those with a master's degree and 87% of those with a doctoral degree.

- The proportion of 25-64 year-olds in Spain with tertiary education (35%) is slightly higher to the average across OECD countries (34%). However, the distribution across the different levels of tertiary education differs from the average. In Spain, 11% of 25-64 year-olds have short-cycle tertiary as their highest attainment (OECD average: 8%); 9% have a bachelor's or equivalent degree as their highest attainment (OECD average: 16%); 14% have a master's or equivalent degree as their highest attainment (OECD average: 11%); and 1% of 25-64 year-olds both in Spain and on average across OECD countries have completed a doctoral or equivalent degree (Table A1.1a).
- Upward mobility to tertiary education has been particularly important among 25-34 year-old Spanish women. About a third attained tertiary education even though their parents haven't. On average, across countries and sub-national entities that participated in the Survey of Adult Skills (PIAAC) in 2012, 26% of women experienced upward mobility to tertiary education (Table A4.1c).
- In most OECD and partner countries, labour market opportunities are better for adults with a doctoral or equivalent degree than for adults with a bachelor's degree. In Spain, the employment rate among adults with a doctoral or equivalent degree is 10 percentage points higher than the employment rate among adults with a bachelor's or equivalent degree (87% and 77%, respectively), and the respective unemployment rates are also lower for the first group (8.2% and 12.9%, respectively). Across OECD countries, the average improvements in

labour conditions that come with higher educational attainment are similar: 91% of those with a doctoral degree are employed compared to 82% of those with a bachelor's or equivalent degree, and 3.4% of those with a doctoral degree are unemployed compared to 5.6% of those with a bachelor's or equivalent degree (Tables A5.1a and A5.2a).

Figure 3: Employment rates, by educational attainment (2014)
Percentage of employed 25-64 year-olds



Countries are ranked in descending order of the employment rate of 25-64 year-olds with bachelor's or equivalent degree.
Source: OECD Table A5.1a.
See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm) .
StatLink http://dx.doi.org/10.1787/888933284983 (*Education at a Glance*, Table A5.1a)

The teaching profession

Regular teacher appraisals are most often used to inform decisions about further training. In Spain, teachers in public schools (around 70% of the total teacher workforce) are appraised to access the profession but not regularly afterwards.

- Teacher appraisal is legislated/required by policy or regulation in three-quarters of OECD and partner countries with available data. In Spain, teacher registration is mandatory in the public system to access the profession. Teacher registration is the process designed to determine and officially confirm a teacher as competent for teaching (Table D7.3b).
- In Spain, other forms of teacher appraisal are not legislated, including regular appraisal (this typically involves a process internal to the school that is regulated by general labour-law provisions), appraisal for promotion (this is often voluntary and takes place in relation to decisions on employment status), and reward schemes (this involves teacher appraisal explicitly designed to identify a select number of high-performing teachers to reward and acknowledge) (Table D7.3b).
- In most countries, results from regular teacher appraisal inform decisions about teachers' professional development activities. In Spain teacher appraisal results influence decisions on access to permanent positions. In 11 countries, regular teacher appraisal affects teachers' pay, but it is not the case in Spain, where teachers´ appraisal is mainly limited to access the profession (Table D7.5b).
- Underperformance in regular appraisal has consequences for teachers, the most common being the need for further appraisal (16 countries) and compulsory training (10 countries). In

Spain, the only consequence of underperformance noted in an appraisal is the failure to progress to registered or certified teacher status (Table D7.5b).

- In Spain, to become school director, candidates need a positive appraisal. It is mandatory to complete a specific course on school leadership. Moreover, school directors are appraised regularly to renew their employment status (Tables D7.7 and D7.8b).

The ratio of 15-year-old-students to computers is lower in Spain than on average across OECD countries (2.2 in Spain and 4.7 for the OECD average); but there is a larger proportion of students in schools whose principal reported that the school's capacity to provide instruction is hindered a lot by a shortage or inadequacy of computers for instruction.

In 2012, the OECD Programme for International Student Assessment (PISA) asked school principals to report their school's capacity in terms of computers for instruction and computer software for instruction. And it is also important that teachers can make good use of the resources. In 2013, the OECD Teaching and Learning International Survey (TALIS) asked lower secondary school teachers about the frequency with which they used ICT (information and communication technologies) for projects or class work to assess whether teachers were systematically using these tools in their teaching.

- With some variation in the ratio of students to computers, virtually all students in OECD and partner countries that participated in PISA are in schools that make at least one computer available to them. In Spain, there are 2.2 15-year-old-students per computer, on average. This is better than what is observed in the neighbouring countries of France (2.9 students per computer) and Portugal (3.7 students per computer) or on average across OECD countries (4.7 students per computer), but not yet a one-to-one ratio as in Australia (0.9 student per computer) (Table D8.1).
- Despite an increasing number of new initiatives to develop ICT skills for teaching and greater investments in new technologies, teachers are still not systematically using these tools in their teaching. In Spain, this may be because, among other things, there is a lack of computers for instruction. About 10% of Spanish students are in schools whose principal reported that the school's capacity to provide instruction is hindered a lot by a shortage or inadequacy of computers for instruction. This is slightly higher than the OECD average of 8.7% of students who attend such schools (Table D8.2).
- Teachers who participated in TALIS 2013 reported that the areas in which they most need professional development are in teaching students with special needs and developing ICT skills for teaching. In Spain, 14% of lower secondary teachers reported they have a high need for professional development in ICT skills for teaching – less than the OECD average (18%) but larger than the proportion of teachers in Portugal who so reported (9%) (Table D8.2).

Educational attainment, skills and participation in the labour market

Spanish adults with tertiary education are 24 percentage points more likely than those with upper secondary or post-secondary non-tertiary education as their highest level of education to be among the top 25% in monthly earnings.

- In Spain, as in other countries that participated in the Survey of Adult Skills (PIAAC) (2012), parents' education has less impact on individuals' earnings than one's own level of education. After accounting for parents' education, adults with tertiary education are 24 percentage points more likely than those with upper secondary or post-secondary non-tertiary education as their highest level of education to be among the top 25% in monthly earnings. This is

similar to the average across participating countries (23 percentage points more likely) (Table A4.3a).

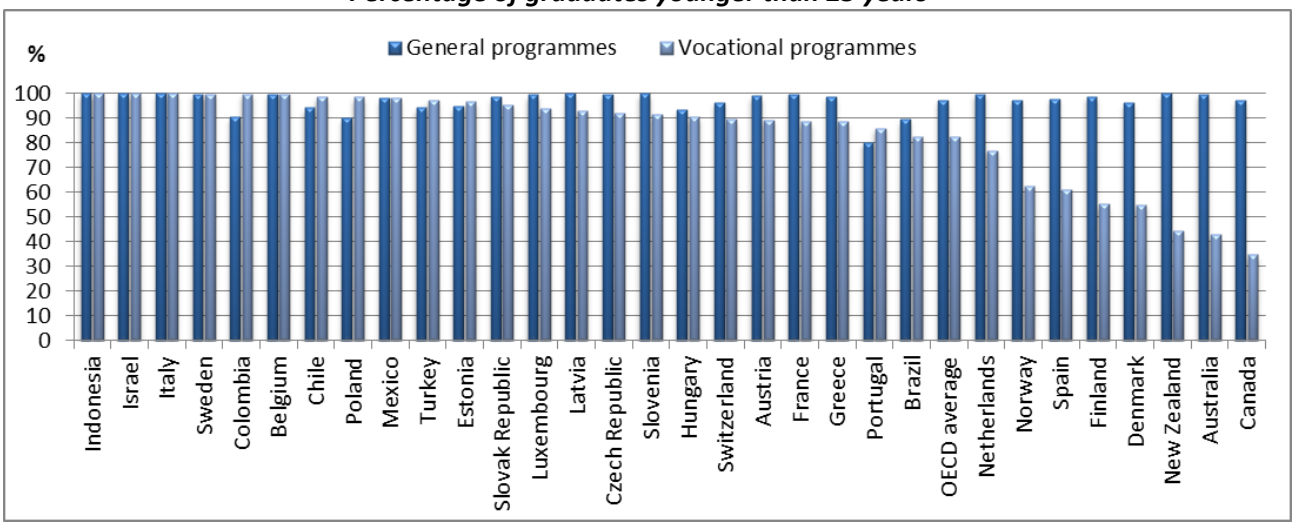
- On average across the countries and sub-national entities that participated in the Survey of Adult Skills, first generation tertiary-educated adults and tertiary-educated adults whose parents also hold a tertiary degree share similar employment rates and pursue similar fields of study. In Spain, this is true for employment rates, but some differences are observed in fields of study. About 25% of first generation tertiary-educated adults studied social sciences, business and law compared to 19% of those whose parents also hold a tertiary degree. In contrast, in engineering, manufacturing and construction, the percentages are 19% and 25%, respectively (Tables A4.2c and d).

Equity in education and the labour market

In Spain, 98% of students graduating from general upper secondary programmes are younger than 25, while 61% of students graduating from vocational programmes are that age.

- Students' age at graduation can be related to changes in the education system, such as when opportunities become available to complete upper secondary education later on in life, or when the duration of general and vocational programmes are altered. On average across OECD countries, 97% of students graduating from general upper secondary programmes are younger than 25. A similar proportion is observed in Spain (98%). The share of older students in vocational programmes is considerably larger. On average among OECD countries, only 83% of graduates are younger than 25, while in Spain 61% of vocational graduates are that age (Table A2.2).

Figure 4: Profile of upper secondary graduates (2013)
Percentage of graduates younger than 25 years



Countries are ranked in descending order of the percentage of graduates younger than 25 years in vocational programmes.
Source: OECD Table A2.2.
See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm) .
StatLink http://dx.doi.org/10.1787/888933284810 (*Education at Glance 2015*, Table A2.2)

- Across OECD countries, labour market opportunities are better for men and women with tertiary education, and the gender difference is smaller as the level of education increases. On average, across OECD countries, there is a difference of 20 percentage points in the

employment rate of men and women without upper secondary education while the gap is 9 percentage points for those with tertiary education. In Spain, differences are smaller and also decrease as the level of education increases. The gender gap is 17 percentage points for those without upper secondary education and 7 for those with tertiary education (Tables A5.3b and c).

* EU21 countries are those that are members of both the European Union and the OECD. These 21 countries are Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Poland, Portugal, Slovenia, the Slovak Republic, Spain, Sweden and the United Kingdom.

References

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

Sub-national comparisons

Education at a Glance provides an authoritative compilation of international comparisons of key education statistics. While countries attain specific values in these comparisons, readers should not assume that countries themselves are homogeneous. The country averages include significant variations among sub-national jurisdictions.

Regional policy makers can benefit most from the comparisons presented in *Education at a Glance* when they can compare the results from their own sub-national areas with national and sub-national data from other countries. To this end, the OECD, with support from the U.S. National Center for Education Statistics, is, for the first time, releasing select sub-national data for six *Education at a Glance* Indicators in this edition (see http://nces.ed.gov/surveys/annualreports/oecd/index.asp). These include data on educational attainment by selected age groups (Indicator A1), employment rates by educational attainment (Indicator A5), annual expenditure per student (Indicator B1), enrolment rates by age (Indicator C1), enrolment rates in early childhood and primary education (Indicator C2), and enrolment rates and work status of 15-29 year-olds (Indicator C5).

Ten countries participated in this pilot compilation of sub-national estimates by providing information for some or all of the Indicators included: Belgium, Brazil, Canada, Germany, Ireland, the Russian Federation, Slovenia, Spain, Sweden and the United States. Sub-national estimates were provided by countries using national data sources or were calculated by Eurostat using NUTS2 data.

Although the variation between the highest- and lowest-ranked countries for a given Indicator, on average, was larger than the variation within most countries, variations within both federal and non-federal pilot countries were substantial. For example, for the Indicator on tertiary attainment, the ratio of the highest-ranked jurisdictions to the lowest-ranked, within countries, was nearly 2:1 or more in many of the participating countries.

Note regarding data from Israel
The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

For more information on *Education at a Glance 2015* and to access the full set of Indicators, visit www.oecd.org/education/education-at-a-glance-19991487.htm.

Updates of the data can be found on line at http://dx.doi.org/10.1787/eag-data-en and by following the StatLinks under the tables and charts in the publication.

Explore, compare and visualise more data and analysis using: Education GPS
http://gpseducation.oecd.org/CountryProfile?primaryCountry=ESP&treshold=10&topic=EO.

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Key Facts for Spain in Education at a Glance 2015

Table	Indicator	Spain	OECD average
	Educational Access and Output		
	Enrolment rates	**2013**	**2013**
C2.1	3-year-olds (in early childhood education)	96%	74%
	Highest educational attainment level of 25-64 year-olds	**2014**	**2014**
A1.4a	Below upper secondary	43%	24%
	Upper secondary or post-secondary non-tertiary	22%	43%
	Tertiary	35%	34%
	Highest educational attainment level of 25-64 year-olds (disaggregation at tertiary level)	**2014**	**2014**
A1.1a	Short cycle tertiary	11%	8%
	Bachelor's or equivalent	9%	16%
	Master's or equivalent	14%	11%
	Doctoral or equivalent	1%	1%
	Entry and graduation rates	**2013**	**2013**
C3.1	Percentage of today's young people expected to enter tertiary education at least once during their lifetime	70%	67%
A3.1	Percentage of today's young people expected to graduate with a bachelor's or equivalent degree in their lifetime[1]	18%	36%
	Economic and Labour Market Outcomes		
	Unemployment rate of 25-64 year-olds	**2014**	**2014**
A5.4a	Below upper secondary	31.4%	12.8%
	Upper secondary and post-secondary non-tertiary	21.6%	7.7%
	Tertiary	13.8%	5.1%
	Average earnings premium for tertiary-educated 25-64 year-olds (upper secondary = 100)	**2013**	**2013**
A6.1a	Short cycle tertiary	**	125
	Bachelor's or equivalent	**	157
	Master's, Doctoral or equivalent	**	214
	All tertiary	151	160
	Percentage of people not in employment, education or training (NEET) for 15-29 year-olds	**2014**	**2014**
C5.2b	Men	26%	13.2%
	Women	25.7%	17.9%
	Financial Investment in Education		
	Annual expenditure per student (in equivalent USD, using PPPs)	**2012**	**2012**
B1.1a	Primary education	7111 USD	8247 USD
	Secondary education	9141 USD	9518 USD
	Tertiary (including R&D activities)	12356 USD	15028 USD
	Total expenditure on primary to tertiary educational institutions	**2012**	**2012**
B2.2	As a percentage of GDP	4.3%	5.2%
	Total public expenditure on primary to tertiary education	**2012**	**2012**
B4.2	As a percentage of total public expenditure	8%	11.6%
	Schools and Teachers		
	Ratio of students to teaching staff	**2013**	**2013**
D2.2	Primary education	14 students per teacher	15 students per teacher
	Secondary education	11 students per teacher	13 students per teacher
	Average actual teachers' salaries	**2013**	**2013**
D3.4	Pre-primary school teachers	**	37798 USD
	Primary school teachers	**	41248 USD
	Lower secondary school teachers (general programmes)	**	43626 USD
	Upper secondary school teachers (general programmes)	**	47702 USD

The reference year is the year cited or the latest year for which data are available.
1. 52% for Spain and 50% for OECD average when all tertiary degrees are considered.
*** Please refer to the source table for details on this data.*