



EDUCATION AT A GLANCE 2016

OECD INDICATORS

A Country Profile for Ireland

STATISTICS SECTION
September 2016

Introduction

The latest edition of **Education at a Glance (EAG)** was published by the OECD on Thursday **September 15th, 2016**. The reference year for data in this publication is the school year 2013/2014 (or the financial year 2013 or the calendar year 2014 in the case of earnings and educational attainment and the calendar year 2015 for labour market status and educational attainment. EAG has been published by the OECD on a yearly basis since 1992. Many of the indicators form a stable series for which Ireland's position can be ranked in relation to up to 33 other OECD countries.

EAG is organised into four chapters:

- A. The Output of Educational Institutions and the Impact of Learning
- B. Financial and Human Resources Invested in Education
- C. Access to Education, Participation and Progression
- D. The Learning Environment and Organisation of Schools

This document, following the structure of EAG according to the above four chapters, highlights some key indicators. The main focus is on how Ireland compares with the OECD average (see [Technical Note 1, page 23](#)). An EU22 average is also shown for some indicators in respect of those 22 countries that are member states of both the European Union and the OECD (refer to Technical Note 2, page 22). Levels of education are classified in EAG by a system referred to as ISCED (see Technical Note 3, page 23).

Most of the data presented in EAG are based on detailed information provided through the UOE Data Collection (UNESCO, OECD and Eurostat) each year by all OECD countries and, in the case of Ireland, the Department of Education and Skills¹. Some indicators are based on other sources such as the Quarterly National Household Survey, the EU Survey on Income and Living Conditions, the OECD-INES Network for the Collection and Adjudication of System-level Descriptive Information on Educational Structures, Policies and Practices (NESLI) and the OECD-INES Network on Labour Market, Economic and Social Outcomes of Learning (LSO).

In regard to expenditure, data are provided in relation to nearly all areas of public provision of education and training, following international guidelines. Hence, data on expenditure for education, training and educational research by SOLAS, Teagasc, Fáilte Ireland, Forfás and various other public bodies are included along with voted expenditure by the Department of Education and Skills in 2013. Payments of Child Benefit by the Department of Social Protection conditional on student status in 2013 are included.

The classification of levels of education used in EAG is based on the International Standard Classification of Education (ISCED). ISCED-2011.

The entire pdf copy of Education at a Glance Indicators 2016 and the detailed Excel data tables can be downloaded here: <http://www.oecd.org/edu/Education-at-a-Glance-2016.pdf>

<http://www.oecd.org/edu/education-at-a-glance-2016-indicators-by-chapter.htm>

If you wish to consult or download data from last year's publication – EAG2015 – go to:

<http://www.oecd.org/edu/eag2015>

¹ However, data drawn from the Quarterly National Household Survey or the European Survey on Income and Living Conditions, together with data on GDP and population, have been drawn directly from Eurostat or the Central Statistics Office. Data on enrolment, graduates, entrants, expenditure and numbers of teachers have been supplied by the Statistics Section of the Department of Education and Skills, while data on statutory teacher salaries, working hours and surveys of school accountability have been provided by the Inspectorate following consultation with relevant sections of the Department. Data from the Programme of International Student Assessment were gathered by the Educational Research Centre in Ireland but sourced directly from the OECD.

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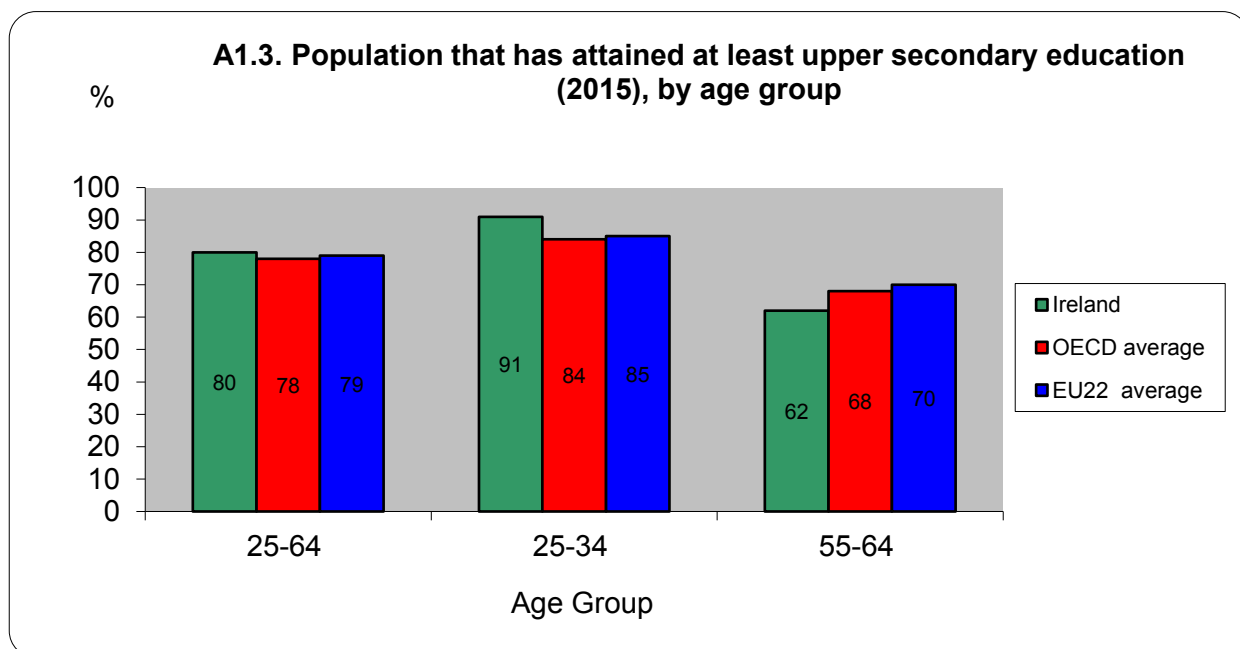
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1 The Output of Educational Institutions and the Impact of Learning

1.1 Educational attainment in the adult population (how many people in the adult population have completed a particular level of education)

1.1.1 Upper-secondary educational attainment (A1)

In 2015, 62% of persons aged between 55 and 64 had completed upper-secondary education (Leaving Certificate or equivalent) or higher. The corresponding figure was, on average, 68% across the OECD. However, 91% of 25-34-year olds here had completed upper-secondary education or higher compared to 84% across the OECD. So, the gap in attainment levels in Ireland² between 55-64-year olds and 25-34-year olds was very large at 29 percentage points – and was seventh highest (behind Australia, Portugal, Korea, Chile, Greece and Turkey) of any OECD country in 2015 (A1.3; P43).



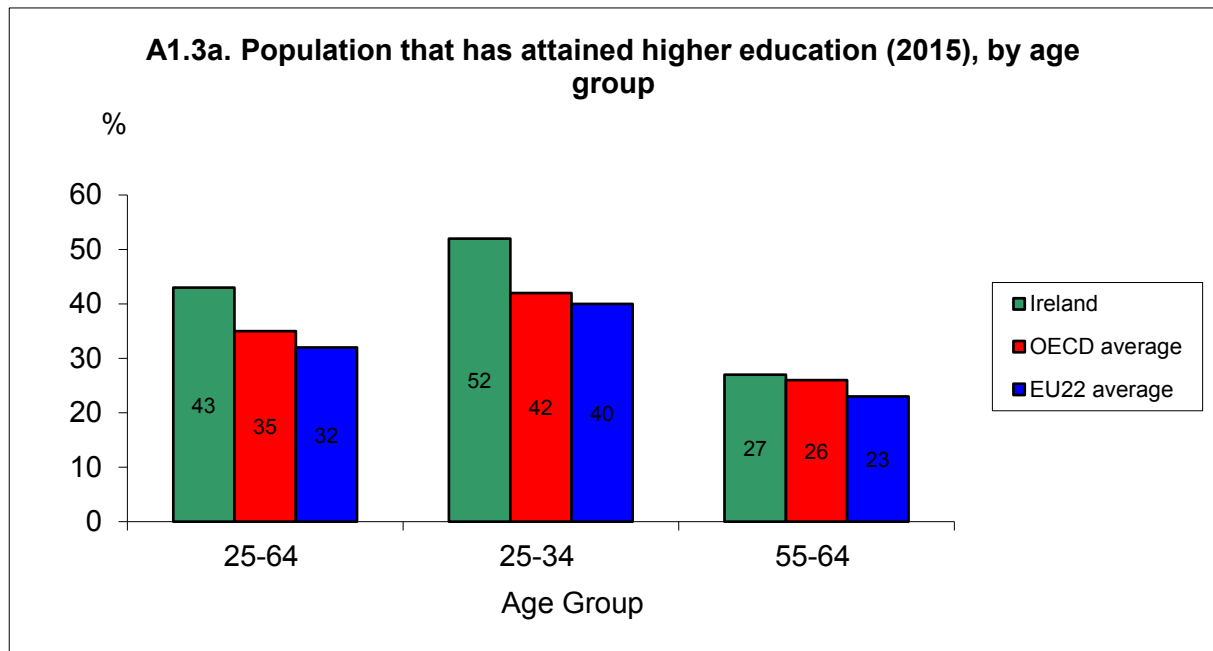
1.1.2 Educational attainment - other levels of education (A1)

Taking the adult population as a whole (aged 25-64), the rate of tertiary attainment (A1.3; P43) in Ireland was above the OECD average (43% compared to 35%); Ireland was ranked eighth. The three countries that are ranked the highest for this indicator are Canada, Japan and Israel. However, the proportion of adults without a Leaving Certificate or above was 20% which was slightly less than the OECD average proportion, at 23% (the three countries that with the lowest proportion of adults without a Leaving Certificate equivalent or above are the Czech Republic, the Slovak

² These figures also include migrants who have completed their education outside Ireland. The overall impact on educational attainment arising from inward migration is limited; however it does have the effect of raising levels of attainment, especially among the young age groups where recent migrants tend to have a higher level of educational attainment.

Republic and Estonia). Hence, there is a greater disparity in educational attainment here, with a relatively better educated youth cohort and a relatively poorly-educated cohort over the age of 50.

Attainment at higher education level (whether university or other higher education) was particularly high among 25-34-year olds in Ireland where, at 52%, Ireland was above the OECD average of 42% (or EU22 at 40%). The three countries that ranked the highest for this indicator were Korea, Japan and Canada (A1.3; P43).



1.1.3 Educational Attainment and Skill Levels

Education at a Glance 2016 also includes some results and analyses from PIAAC. PIAAC is designed to collect information about adult skills in the traditional domains of literacy and numeracy, in addition to the new area of problem-solving skills in technology-rich environments. The survey was carried out in Ireland between August 2011 and March 2012 by the Central Statistics Office on behalf of the Department of Education and Skills. The national report for PIAAC is located [here](#).

Skills and readiness to use ICT for problem solving increase as the level of education increases, but decrease with age. In Ireland, 1% of adults who have not attained upper-secondary education have good ICT and problem-solving skills (New Zealand, Norway and Australia are ranked the highest for adults with good ICT and problem-solving skills who have not attained upper-secondary education). This proportion increases to 21% among those who have attained upper-secondary or post-secondary non-tertiary education (New Zealand, Sweden and the Netherlands are ranked highest for this indicator) and to 45% among adults with tertiary education (Netherlands, Sweden and Czech Republic are ranked highest among adults with tertiary education). The corresponding average OECD figures were 7%, 23% and 48% respectively (A1.6 (P); web only). Caution is advised when considering the problem-solving data for Ireland (see page 5 of the national [report](#)).

1.2 Upper-secondary and tertiary graduation rates (A2)

1.2.1 Upper-secondary rates

Completion of upper-secondary level education (or equivalent) is an important education milestone and benchmark indicator internationally. Even prior to the recent economic downturn, retention to Leaving Certificate had been increasing and many adults are availing of continuing education opportunities to top up their initial education to Leaving Certificate level or higher.

There are, broadly, three ways of measuring completion at this level: (i) track individual pupils through secondary level to completion, (ii) examine the attainment of various age cohorts at one point in time or (iii) sum the number of ‘graduates’ (e.g. Leaving Certificate candidates) by single year of age in a given year (2014) as a percentage of each single year of age cohort (18 years of age). Using this last measure (*A2.1; P56*), the OECD-average first-time graduation rate was 85% (and 88% for EU22). The corresponding figure for Ireland are not available for 2014. The three highest-ranking countries for this indicator were Portugal, Finland and Japan, respectively.

1.2.2 Tertiary completion rates (A3)

Ireland was not in a position to provide data on first-time graduates in higher education for EAG 2016 and hence is missing from the tables in this indicator (*A3.1; P68*).

1.3 Educational and skill attainment and the labour market (A5)

EAG 2016 provides data on the educational attainment of different groups in the labour force using data for 2015 – the seventh year since the economic downturn. It is a well-recognised finding that, in all countries for which data are available, the rate of participation in the labour force, occupations held and earnings from employment are all strongly related to educational attainment.

The economic downturn has impacted particularly sharply on adults with below-upper-secondary attainment. Rates of unemployment in Ireland of adults with below-upper-secondary attainment rose from 6.0% in 2005 to 26.9% in 2015. The three countries with the lowest unemployment rates for adults with below-upper-secondary attainment are Korea, Mexico and Iceland, respectively; Ireland ranks 29th. The corresponding figures for those with upper-secondary or post-secondary non-tertiary attainment in Ireland were 3.1% in 2005 and 5.1% in 2015. Iceland, Korea and Norway had the lowest unemployment rates, respectively, for this level of education attainment; Ireland ranks 30th. The rates for tertiary graduates were 2.0% in 2005 and 5.1% in 2015. Hungary, the Czech Republic and Germany, respectively, were the three countries with the lowest unemployment rate for adults with tertiary attainment; Ireland ranks 26th. (*A5.4; P106*).

1.4 Individual labour market returns to education (A6, A7)

In all OECD countries, adults with tertiary education earn more than adults with upper-secondary education who, in turn, earn more than adults with below-upper-secondary education.

Education may be viewed as an investment in future earnings from employment with a ‘premium’, or additional, income arising from higher education and the associated skills and productivity of the person. Due to issues with data availability Ireland does not appear in indicator A7 this year.

Using 2014 data and benchmarking on upper-secondary and post-secondary non-tertiary education (ISCED 3 and 4 combined) and comparing for the whole population aged 25-64, tertiary graduates in employment in Ireland earned, on average, 63% more than the benchmark (*A6.1; P125*). The corresponding OECD average was 55%. The three highest-ranking countries for earnings of tertiary graduates are Chile, Hungary and Mexico. In Ireland, individuals with less than upper-secondary completion and in employment earned on average 8% less than those at the benchmark. The OECD average was 19% (*A6.1; P125*). The three countries that fared best for this indicator are Finland, New Zealand and Ireland, respectively. In Ireland, 25% of 25-64 year-old men with below-upper-secondary education have earnings from a full-time employment. The top three countries are Mexico, New Zealand and Switzerland; Ireland ranks last. Among 25-64-year old women, 11% of those that have income from employment work full time. The top three countries for this indicator are Estonia, New Zealand and Finland; Ireland ranks last. The corresponding OECD averages were 51% and 24% (*A6.3; P128*).

In indicators A6 and A7, no account is taken of the various social, cultural and non-market benefits of education – to the individual as well as the wider community. However, other indicators are provided to illustrate likely societal benefits from additional education (see sections 1.5, 1.6 and 1.7 below).

1.5 Social outcomes of education and skills (A8)

Levels of education and skill may also be associated with social outcomes such as levels of health, trust, democracy and social cohesion.

Indicator A8 gives various measures of social outcomes by level of education. For EAG 2016, the indicator focus is on self-reported health, volunteering, interpersonal trust and political efficacy, as assessed in the PIAAC background questionnaire. These four social outcome measures are considered among the key indicators of individual and national well-being (OECD, 2014a).

Higher levels of both educational attainment and literacy and numeracy proficiency are positively associated with these social outcome measures (Figures A8.1, A8.2, A8.3, A8.4 and A8.5; P154 - 159 and Tables A8.1 (L), A8.2a and A8.3a; P152 – 164 and tables available on the web only). Ireland follows the general pattern across OECD countries for this indicator, where the proportion of the population with the highest levels of education, literary and numeracy skills also had the highest levels of self-reported health, volunteerism, political efficacy and interpersonal trust.

2.1 Trends in education spending (B1)

The latest available international data on expenditure refer to 2013 financial year and reflect the position of the continuing economic downturn. With rapid growth in national income as well as public expenditure in the decade up to 2007, spending by public authorities on education also grew rapidly in Ireland, as it did in most other OECD countries. Between 2008 and 2013 however, in real terms (allowing for inflation), there was no change in total public and private spending (compared to an increase of 6% on average across OECD countries) for all levels of education combined below Higher Education (HE). The countries that ranked highest for this indicator were Turkey, Portugal and Israel (*B1.5a; P196*)³.

2.2 Expenditure on education relative to national income or public spending (B2)

Total spending as % of national income (B2.1; P205): Expenditure on education (public and private combined) in 2013 was 5.2% of Gross Domestic Product, which is now the same as average OECD expenditure and slightly above the EU22 average of 4.9% of GDP. The percentage of GDP spent on higher education in Ireland was 1.2% of GDP in 2013 - below the OECD average (at 1.6% of GDP) whereas at below-HE level, the proportion was higher than the OECD average (4.0% compared to 3.8 %).

Extract of an OECD note from EAG 2016

“Public expenditure and GDP variation after the crisis

The global economic crisis that began in 2008 had major adverse effects on different sectors of the economy. Data from 2008 to 2013 show clearly the impact of the crisis on the funding of educational institutions, especially when comparing the periods 2008-10 and 2010-13.

Between 2008 and 2010, GDP (expressed in constant prices) fell in the majority of the countries (20 out of 35 OECD countries), and by 5% or more in Estonia, Finland, Greece, Hungary, Iceland, Ireland, Latvia and Slovenia. As over three-quarters of education expenditure in most countries comes from public sources, how did the downturn in GDP growth affect public spending on education? Available figures show that the education sector was still relatively untouched by early budget cuts.

Since public budgets in most countries are approved many months before the funds are actually spent, there are certain built-in rigidities to the funding of education. Moreover, most governments try to protect education from dramatic reductions in public investment.

Among the 29 OECD countries with available data for the period between 2008 and 2010, only 5 countries cut public expenditure on educational institutions (in real terms): Estonia (by 10%), Hungary (by 11%), Iceland (by 12%), Italy (by 6%) and the United States (by 1%). In Hungary, Iceland and Italy, this translated into a decrease in expenditure on educational institutions as a

³ In deflating current price data, OECD uses the GDP price deflator. Alternative methods, including the use of a public current expenditure price deflator by CSO in the publication ‘Measuring Ireland’s Progress’, give different (typically lower) estimates of growth in expenditure per student over time (refer to Table 4.1 of MIP2013).

percentage of GDP (as the reduction in expenditure was larger than the decrease in GDP). In Estonia, the Russian Federation and the United States, the share of GDP devoted to education did not change or even increased, as the decrease in expenditure was balanced out with similar or larger decreases in GDP.

In all other countries, public expenditure on educational institutions increased or remained stable, while GDP decreased in some of them. As a result, the share of GDP devoted to education rose by 7% on average across OECD countries between 2008 and 2010.

Between 2010 and 2013, the crisis had a stronger impact on public expenditure on education. While GDP decreased between 2008 and 2010 in 20 of the 35 OECD countries with available data, it stayed constant or increased between 2010 and 2013 in all countries except 5. The countries where GDP decreased between 2010 and 2013 are Greece (by 18%), Italy (by 4%), Portugal (by 7%), Slovenia (by 3%) and Spain (by 5%). On average, GDP increased by 4% across the OECD countries and by 8% across the G20 economies over this period.

Public expenditure on educational institutions, on the other hand, remained quite stable during this period, increasing by a mere 2% between 2010 and 2013 on average across OECD countries. The combination of an accelerating economy and stable public expenditure on education resulted in a decrease in public expenditure as a percentage of GDP in all but nine countries for which data are available, averaging a 3% decrease across the OECD (*Figure B2.3; P202*).

In conclusion, in the five years following the crisis, public expenditure on educational institutions increased in the first two years and then stagnated between 2010 and 2013. On the other hand, GDP decreased slightly in the period between 2008 and 2010 and grew by 4% in the following three years. These factors combined resulted in a strong increase of 7% in public expenditure on educational institutions as a percentage of GDP in the aftermath of the crisis (2008-10), followed by a 3% decrease in the 2010-13 period. All countries except Israel, Italy, the Russian Federation and Turkey, observed a more positive variation in the share of public expenditure on educational institutions as a percentage of GDP between 2008 and 2010 than between 2010 and 2013 (*Figure B2.4; P203*)."

Public expenditure on education as a % of total public expenditure (B4.2; P231): As a percentage of total public expenditure, public spending on education was 13.2% in 2013 compared to 9.2% in 2010. Public spending on education as a percentage of total public expenditure was highest in New Zealand, Mexico and Chile, respectively. Ireland was ranked seventh of 31 OECD countries for this indicator; the OECD average for 2013 was 11.2%.

2.3 Expenditure on education per student (B1, B3)

Total expenditure per student in Ireland was less than the OECD average for primary level in 2013, however it exceeded the OECD average for secondary level (refer to B1.1 below)⁴.

For a different view of comparative expenditure, one can focus solely on public expenditure for public educational institutions (refer to Table B3.3 below).

B1.1: Annual expenditure on educational institutions per student (2013)

(In equivalent US\$ converted using purchasing power parities for GDP)

	Primary	Secondary	Tertiary (Including Research and Development)	Primary to Tertiary
Ireland	8,002	10,804	13,663	10,065
OECD average	8,477	9,811	15,772	10,493
Ranking (OECD)	19 th of 34	14 th of 33	19 th of 34	18 th of 34

B3.3: Annual public expenditure on public* educational institutions per student (2013)

(In equivalent US\$ converted using purchasing power parities for GDP)

	Primary	Lower Secondary	Upper Secondary	Tertiary	All levels
Ireland	7,845	10,064	10,216	10,321	9,201
OECD average	8,383	9,774	9,252	12,263	9,433
Ranking (OECD)	19 th of 32	15 th of 30	12 th of 32	15 th of 31	15 th of 32

Source: Table B3.3

* Definitions of public and private vary across countries.

2.4 Annual expenditure on educational institutions per student relative to GDP per capita (B1)

The absolute amount spent per student reflects a number of factors including widely-varying levels of GDP per capita across OECD member countries. To adjust for relative prosperity, total annual expenditure per student at each level of education (primary, secondary and tertiary) is divided by GDP per capita (B1.4; P195). Average expenditure per pupil across all levels in Ireland relative to GDP per capita (primary to higher education) has been, in past years, amongst the lowest among OECD countries. Ireland remains well below the 2013 OECD average for this indicator. The countries that ranked the highest for this indicator are: primary level: Slovenia, Poland and the United Kingdom; secondary level: Portugal, Switzerland and Austria; tertiary level: United Kingdom, Turkey and United States.

⁴ It should be borne in mind that the OECD average itself has been impacted by the addition of new member countries over time.

2.5 Allocation of expenditure by resource category (B6)

Most of expenditure on education in OECD countries is accounted for by salaries – in particular teacher salaries. In 2013, on average across the OECD, they accounted for 61% of total current expenditure at primary level and 61% at secondary level. In Ireland the corresponding figures were 75% and 69%. The countries that ranked highest for expenditure on teacher salaries at primary level were Mexico, Ireland and Luxembourg. At secondary level, Luxembourg, Mexico and Spain ranked highest for this indicator. (B6.2; P260). Correspondingly, 11% of current expenditure in primary and 9% in secondary goes towards compensation of non-teaching staff in Ireland compared to the OECD averages of 16% and 15%, respectively. United States, Estonia and Belgium have the highest expenditure on non-teaching staff at primary level; at secondary level, Estonia, United States and France ranked highest. Compared to other countries, Ireland also spends less on non-pay current items, at 13% for primary and 22% for secondary, compared to the OECD averages of 23% for both primary and secondary. Czech Republic, Finland and Slovak Republic ranked highest at primary level for this indicator: at secondary level, the Czech Republic, Finland and Sweden ranked the highest (B6.2; P260).

2.6 Which factors influence level of spending? (B7)

As in last year's EAG, Tables B7.2a to B7.2c show a breakdown of the contribution of the following four factors to differences in teacher salary cost per pupil at a given level of education:

- teachers' salaries
- instruction time of students
- teaching time of teachers
- class size

B7 takes the differences between the OECD average and each individual country's value at each level of education from primary to upper secondary, for teachers' salary cost per student, and looks at which of the above four factors are the main drivers for the difference. For Ireland, which has a higher salary cost per student than the OECD average, the main factor behind the difference between Ireland and the OECD's teacher salary cost per student, is the relative size of our teachers' salaries.

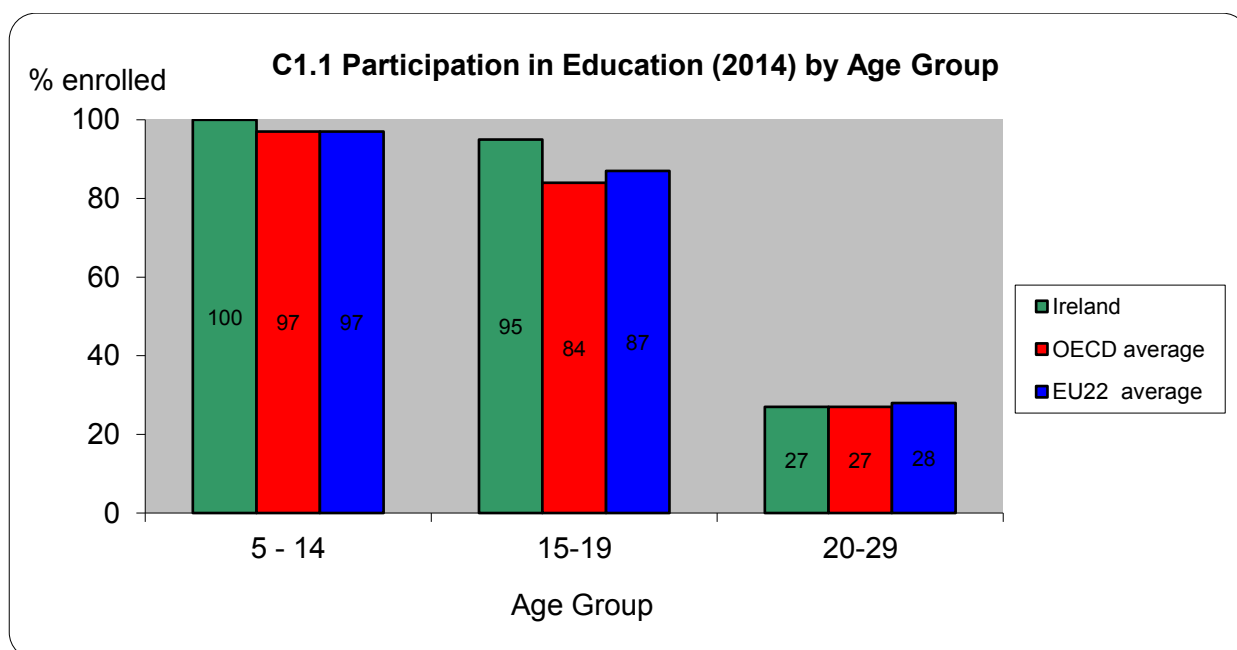
This indicator serves to highlight that, often, educational outcomes are not simply a function of the level of expenditure, since the same level of expenditure can be allocated in many different ways. Expenditure may have differing resultant effects on outcomes depending on whether it is used to increase teachers' salaries, provide extra instruction time for students or facilitate smaller classes.

The OECD note on page 182 *“Even when spending per student from primary through tertiary education is similar among some OECD countries, the ways in which resources are allocated to the different levels of education vary widely. Spending per student by educational institutions in a typical OECD country (as represented by the simple mean among all OECD countries) amounts to USD 8 477 at the primary level, USD 9 811 at the secondary level and USD 15 772 at the tertiary level (Table B1.1 and Figure B1.2). The average spending per tertiary student is affected by high expenditure – more than USD 20 000 – in a few OECD countries, notably Canada, Luxembourg, Norway, Sweden, Switzerland, the United Kingdom and the United States.”*

3.1 Participation outside of compulsory education (C1, C2, C3)

Early childhood education: Table C2.1: P308 shows the enrolment rates of children aged 3, 4, 5 and 6 in pre-primary and primary education. In 2013/2014, the enrolment rate in Ireland for children aged 3 was 46%, the sixth lowest of all countries shown; these were enrolled in pre-primary education. The countries with the highest enrolment rates for 3-year olds in pre-primary education are France, Belgium and Israel. Ireland, the UK and (for a very small number) Australia are the only countries with 4-year olds enrolled in primary education. The enrolment rate for those aged 4 was 92% in 2013/2014 (56% of 4-year olds were in pre-primary and 36% were enrolled in primary). This compares to OECD averages of 71% and 86% for 3- and 4-year olds respectively and corresponding EU22 averages of 77% and 89%. The countries with the highest enrolment rates for this indicator were France, Israel and Denmark (3-year olds) and France, Israel and Belgium (4-year olds) (C2.1; P 308). Note that a high proportion of children enrolled in the ECCE scheme had turned age 4 at the reference point in time at which the statistics are drawn. Moving across the table, 98% of Irish 5-year olds are enrolled in primary education whereas 81% of 5-year olds across the OECD are enrolled in pre-primary education. The highest primary enrolment rates for 5-year olds were in the United Kingdom, Ireland and New Zealand. The highest ranking countries for 5-year olds enrolled in pre-primary are France, the Netherlands and Germany.

Transition to adulthood and further/higher education: The enrolment rates for 15-19-year olds in Ireland exceeds the OECD and EU22 averages and ranks highest ahead of Japan and Slovenia. (C1.1; P292). Ireland shares, in common with some other OECD countries, a pronounced pattern of early completion of upper-secondary education and commencement of further and higher education around the age of 18. The enrolment rate for 20–29-year olds here matches the OECD average. It trails the EU22 average, illustrating a strong emphasis in Ireland on initial formal education and training and relatively less emphasis for older age groups. The three top-ranking countries for enrolment rates of 20-29-year olds are Denmark, Finland and Germany.



Access to higher education: Indicator *C1.4; P295* shows distributions of part-time higher education students. There are relatively high numbers of part-time higher education students in Ireland at short-cycle tertiary programmes (ISCED 5, NFQ level 6 (higher)) and masters or equivalent (ISCED 7, NFQ 9) compared to ISCED 6 programmes.

3.2 Student mobility in higher education (C4)

Among full-time international tertiary students in Ireland in master's and doctorate or equivalent programmes, 38.2% were from Asia; 35.4% were from a European country (other than Ireland); 11.9% were from North America. For those students from Ireland studying at master's or doctorate level abroad (including part-timers), 2.5% were studying in the UK (many of whom in Northern Ireland) (*C4.4; P 342*). 7.7% of UK citizens enrolled in tertiary education abroad at master's or doctorate level study in Ireland.

3.3 How successful are students in moving from education to work? (C5)

The proportion of young people aged 15-29 who were unemployed or not in employment, education or training (NEET) was 14.6% on average across OECD countries in 2015 (*C5.2; P358*). The corresponding figure for Ireland was 16.2% down from 10.5% in 2005. The three top-ranking countries for this indicator were Iceland, the Netherlands and Switzerland. The proportions for 20-24 year-olds were 19.8% and 17.0% for Ireland and for the OECD average, respectively. The countries that fared best for this indicator were Iceland, the Netherlands and Germany. Looking at gender, the NEET rates for 20-24 year olds for males in Ireland was 20.1% compared to the OECD average of 15.5% and the rates for females were 19.6% and 18.5% respectively. The countries with the lowest NEET rates for males were Iceland, Germany and the Netherlands. Those with the lowest rates for females were Iceland, Netherlands and Luxembourg (*C5.2; P358*).

4.1 Instruction time in schools (D1)

The quantity of time spent in formal instruction or teaching is an important measure of educational input. In each EAG, OECD publishes comparative data on instruction time according to the formal policy in each country distinguishing between time that is considered compulsory and time that is intended for instruction in a given curriculum area. Table D1.1 outlines instruction time in compulsory general education (2015/2016) for Ireland relative to OECD and EU averages. At both primary and lower-secondary level, instruction time (compulsory or intended) here was greater than the OECD average. Caution is needed, however, in comparing countries because (a) intended instruction time can deviate significantly from actual instruction time and this deviation may not be the same across countries and (b) the exact interpretation of ‘instruction’ may not be consistent in every case (refer to [Technical Note 7](#)).

D1.1: Instruction time in compulsory general education (2015/2016)

	Average Number of Hours			
	Primary		Lower Secondary	
	<i>Intended</i>	<i>Compulsory</i>	<i>Intended</i>	<i>Compulsory</i>
Ireland	915	915	935	935
OECD average	m	799	m	915
EU22 average	m	775	m	895
Ranking (OECD)	-	9 th highest of 34*	-	14 th highest of 34*
Highest-ranking OECD Countries	Greece, Denmark, Portugal	Denmark, Chile, Australia	Denmark, Mexico, France	Denmark, Mexico, Chile

* In the tables on instruction time, the Flemish Community of Belgium and the French Community of Belgium are counted separately, as are England and Scotland.

D1.3a outlines the instruction time given to each subject in primary education in Ireland relative to the OECD average. Note that caution is needed in making these comparisons by subject area. For example, in relation to ‘reading, writing & literature’, both English and Irish, as national languages, are taught in all schools. However, the time allocated to ‘reading, writing & literature’ reflects only the first language of the school (*D1.3a; P392 and D1.3b; P393*). Refer to Technical Note 5.

In the case of primary schools, 17% of compulsory instruction time was allocated to mathematics compared with an OECD average of 15%. Mexico, Portugal and France allocate the most instruction time to mathematics. Science accounts for 4% of instruction time compared with 7% across the OECD. Mexico, Austria and Finland devoted the most time to mathematics instruction.

By contrast, 10% of compulsory instruction time was given to ‘religion, ethics & moral education’ in Ireland (the second highest in this table behind Israel, with Austria ranking third) compared with an OECD average of 4%.

20% of compulsory instruction time in primary schools was given to ‘reading, writing & literature’ which was below the OECD average of 22%. The countries that spent the most instruction time on this subject are France, Mexico and the Slovak Republic.

However, it should be noted that this figure relates only to the first language of the school which is English in English-medium schools and Irish in Irish-medium schools. Previous surveys allowed us to combine the instruction time for both English and Irish, regardless of their status as either first language or second language of the school and to report the total under ‘literacy’. In the most recent data collection, this would amount to 34% of instruction time, in which case Ireland would have ranked third behind France and Mexico for instruction time of a first language. In line with the revised guidance for the most recent data collection, the instruction time for the second language of the school amounted to 14%, highest in the OECD, ahead of Spain and Poland. (*DI.3a; P392*).

Note that the above-mentioned instruction times for ‘reading, writing & literature’ and mathematics includes the additional time allocated to literacy (i.e. one hour per week) and to numeracy (i.e. 70 minutes per week) provided for under the implementation of the National Literacy and Numeracy Strategy.

In the case of primary schools, modern foreign languages accounted for an average of 1% of compulsory instruction time across the OECD, and 1% of compulsory instruction time across the EU22 and a negligible amount for that age group in Ireland. The country with the most time devoted to modern languages at primary level was Luxembourg, at 18%, followed by Israel and Greece (both at 2%).

Up to 2013, when the Modern Languages in Primary School Initiative was abolished, modern languages had been taught in approximately 15% of primary schools. The focus now at this level is on the development of learners’ competence in the two national languages, English and Irish, and facilitating the transfer of skills in a manner that will create a solid foundation for the learning of additional language(s) in post-primary school.

In this year’s EAG, at lower secondary, instruction time is devoted to modern languages at lower secondary has been included in another category. As a consequence it is not possible to compare values to other countries. Refer to *DI.3b; P393*. Technical Note 5 contains more information.

The Junior Cycle, with its emphasis on the need for all students to engage with learning in at least one modern foreign language, and new opportunities for language learning such as the study of Chinese Language and Culture, will help to improve Ireland’s foreign language proficiency overall. The DES consultation on foreign languages in Irish education launched in 2014 and a Foreign Languages in Education Policy has been prepared.

12% of compulsory instruction time in post primary schools was given to ‘reading, writing & literature’ which was below the OECD average of 14%. Caution is needed in making these comparisons by subject area. For example, in relation to ‘reading, writing & literature’, both English and Irish, as national languages, are taught in all schools. However, the time allocated to ‘reading, writing & literature’ reflects only the first language of the school (*DI.3a; P392 and DI.3b; P393*). Refer to Technical Note 5.

D1.3a: Instruction time per subject in primary education (2015/2016)

(As a percentage of total compulsory instruction time)

	Reading, Writing & Literature	Maths	Science	Social Studies	Second Language	Arts	Physical Education and Health	Religion, Ethics & Moral Education	Other (including flexible curriculum)
Ireland	20	17	4	8	14	12	4	10	11
OECD average	22	15	7	6	5	9	8	4	3
EU22 average	21	14	6	4	6	9	8	4	3

4.2 Class size and pupil-teacher ratio (D2)

Average class size (ACS) and pupil-teacher ratio (PTR) (*D2.1 and D2.2; P401-403*): The pupil-teacher ratio at primary level declined gradually in Ireland from 21.5 in 1999/00 (when the OECD average was 17.7) to 15.7 in 2010/2011, increased to 16.4% in 2012/2013 and was 16 (16.3%) in 2013/2014. Average class size in Ireland increased from 24.7 in 2012/2013 to 25 (24.8) in 2013/2014.

D2.1/2.2: Pupil-teacher ratios and average class size in public primary schools in 1999/2000 and 2013/2014

	<i>1999/00</i>		<i>2013/14</i>	
	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>
Ireland	21.5	24.8	16	24.8
OECD average	17.7	22.1	15	21.2
Rank position (OECD)	4 th highest of 27	5 th highest of 23	13 th highest of 34	5 th highest of 28
Highest-ranking OECD Countries 2013/2014	-	-	Mexico, Chile, United Kingdom	Chile, Israel, Japan

At second level, the PTR in Ireland was 14. Refer to Technical Note 6 for further information on the estimation of class size at lower-secondary level.

D2.1/2.2: Pupil-teacher ratios and average class size in public[^] secondary schools in 1999/2000 and 2013/2014

	<i>1999/00</i>		<i>2013/14</i>	
	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>
Ireland	15.9	22.7*	13.9	-
OECD average	14.3	23.6	13.3	23
Rank position (OECD)	6 th highest of 24	15 th highest of 23	9 th highest of 30	-
Highest-ranking OECD Countries 2013/2014	-	-	Mexico, Chile, Netherlands	Japan, Korea, Chile

[^] Public secondary schools in Ireland include all voluntary secondary schools (both fee-paying and non-fee-paying) along with community, comprehensive and VEC schools.

* Lower secondary only (based on DES Teacher Timetable Database).

The PTR for second level in EAG differs from the figure shown in the DES Statistical Report (14.3) for the same year (2013/2014), due to the inclusion of pupils and teachers in other settings such as STTC, Youthreach and FÁS.

The student-staff ratio at third level in Ireland, as reported in this year's EAG, refers to public institutions only (*D2.2; P403*).

D2.2: Student-staff ratio in higher education

	2013/2014
Ireland (publicly funded only)	20
OECD average (public and private institutions)	17
Rank position (OECD)	6 th highest of 27
Highest-ranking OECD Countries	Greece, Belgium, Czech Republic

4.3 Teachers' salaries (D3)

Gross salaries paid to teachers in Ireland reflect salaries paid to higher education graduates as well as wage, salary and GDP levels prevailing in Ireland. The reference year used in this year's EAG is 2013/14. Data were derived from the OECD-INES Survey on Teachers and the Curriculum. Data were reported in accordance with 'formal policies for public institutions'. Statutory salaries reported in this indicator are not the same as actual expenditures on salaries. Differences in taxation, pension provision and various non-salary benefits are not factored into these comparisons. Refer to Technical Note 11 for further details.

Indicator (D3.1a; P420) summarises data on salary levels of teachers at primary and secondary level in absolute amounts. All national or Euro-currency values have been converted into US dollars at purchasing power parity (thus adjusting for price differences between different economies). All salary amounts reflect statutory entitlements based on minimum qualification requirements. In the case of Ireland, teacher allowances based on qualifications are not included in the statutory salaries reported. Salary levels are assumed to be identical for teachers at lower- and upper-secondary level in Ireland due to the common salary scale, whereas internationally it varies by level within secondary. There is, in the case of Ireland, no gap in statutory salaries between teachers at primary and second level and between teachers at lower- and upper-secondary level whereas in most other countries, salaries increase with level.

Note that these figures relate to salary scales for full-time teachers only (and hence not representative of teachers engaged on a part-time basis).

D3.1a: Teachers' salaries (2013/2014) after 15 years of experience

(in equivalent US\$ converted using PPPs)

	Primary	Lower-second Level	Upper-second Level
Ireland	57,597	58,190	58,190
OECD average	42,675	44,407	46,379
EU22 average	42,285	44,204	46,420
Ranking	5 th highest of 33*	6 th highest of 33*	9 th highest of 33*
Highest-Ranking OECD Countries	Luxembourg, Canada, Germany	Luxembourg, Germany, Netherlands	Luxembourg, Germany, Netherlands

* In the tables on teachers' salaries, the Flemish Community of Belgium and the French Community of Belgium are counted separately, as are England and Scotland.

Another way of looking at comparisons of teacher pay is to look at an index of change in salaries. Starting with the year 2005 as 100, the figure for Ireland for 2014 was 115 for primary, lower and upper secondary (D3.5a; P425). This value was higher than the corresponding OECD averages of 104 for primary, 103 for lower secondary and 101 for upper secondary. The countries that ranked the highest for this indicator for primary were Luxembourg, Israel and Poland. For lower secondary, the top three countries were Israel, Poland and Turkey; in the case of upper secondary, Poland, Turkey and Luxembourg ranked the highest.

Yet another way of looking at comparisons of teacher pay is to compare teachers' salaries to those of other tertiary-educated workers (*D3.2a; P422*). In OECD countries, primary teachers earn, on average, 81% of the salary of a tertiary-educated, 25-64 year-old full-time, full-year worker. Lower-secondary teachers are paid 85% and upper-secondary teachers are paid 89% of that benchmark salary. The three countries that rank highest for this indicator are Luxembourg, Greece and Israel (primary and lower secondary) and Luxembourg, Belgium and Finland in the case of upper secondary. The corresponding figures for Ireland are not available.

4.4 Teachers' working time (D4)

The teaching contract for Irish teachers focuses primarily (if not exclusively) on teaching time. This is unusual by international standards because the teachers' contract in many OECD countries includes additional specifics on working time required at school and the overall statutory working time of teachers extends well beyond their compulsory teaching time.

The following tables illustrate this key point because the OECD average 'total statutory working time' of teachers was more than double the international average 'teaching time' at both primary and second level. Therefore, while the teaching time of Irish teachers was relatively high by international standards, their 'working time required at school' was one of the lowest in the OECD at primary and second level.

The regulation of teachers' working time varies widely among countries. While some countries formally regulate contact time only, others establish working hours as well. In some countries, time was allocated for teaching and non-teaching activities within the formally established working time. In most countries, teachers are formally required to work a specified number of hours per week to earn their full-time salary; this includes teaching and non-teaching time. Within this framework, however, countries differ in the allocation of time to teaching and non-teaching activities. Typically, the number of hours for teaching was specified, but some countries also regulate at the national level the time that a teacher has to be present in the school. Refer to Technical Notes 9 to 11 for further information on the definition of teaching and working time.

D4.1: Details of primary teachers' working time 2013/2014 (page 436)

	Ireland	OECD Average	EU22 Average	Highest-ranking OECD Countries
Number of weeks of instruction	37	38	37	Mexico, Japan, Australia
Number of days of instruction	183	183	180	Japan, Mexico, Australia
Net teaching time, in hours	915	776	754	Chile, Netherlands, France
Working time required at school, in hours	1,073	1,178	1,107	Chile, Estonia, New Zealand
Total statutory working time, in hours	N/a	1,585	1,538	Chile, United States, Japan

D4.1: Details of lower-second-level teachers' working time 2013/2014 (page 436)

	Ireland	OECD Average	EU22 Average	Highest-ranking OECD Countries
Number of weeks of instruction	33	37	37	Mexico, Japan, Australia
Number of days of instruction	167	181	177	Japan, Mexico, Australia
Net teaching time, in hours	735	694	652	Chile, Mexico, United States
Working time required at school, in hours	768	1,160	1,081	Chile, Estonia, United States
Total statutory working time, in hours	N/a	1,609	1,576	Chile, United States, Japan

4.5 Age and gender distribution of teachers (D5)

Indicator D5 presents data on the gender and age distribution of teachers at each level. Over a sixth (18%) of primary teachers in Ireland were under 30; this compares to the OECD average of 13%. The countries with the highest numbers of primary teachers aged under 30 are United Kingdom, Luxembourg and Chile (*D5.1; P447*).

As in the majority of other countries, the teaching profession in Ireland continues to be dominated by females (at primary level 87% in 2014). Hungary, Slovenia and Italy have the highest proportions of female teachers (*D5.3; P449*).

1. For most indicators, an OECD average is shown along with an OECD total measure. The OECD average is calculated as the unweighted mean of the data values of all OECD countries for which data are available or can be estimated. It refers to an average of data values at the level of the national systems and can be used to determine how an indicator value for a given country compares with the value for a typical or average country. It does not take into account the absolute size of the education system in each country. The OECD total measure is calculated as a weighted mean of the data values of all OECD countries for which data are available or can be estimated. It reflects the value for a given indicator when the OECD area is considered as a whole.
2. As of 2014, the OECD comprised 35 member countries of which 22 are members of the European Union. These are referred to as the EU22 (Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Latvia, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, the Republic of Slovenia, Spain, Sweden and the United Kingdom). Hence, there are six EU member states (28 minus 22) that are not members of the OECD (and are not included in EAG) while there are 13 OECD member countries that are not members of the European Union but are included in EAG. Data for a number of countries that are in partnership with the OECD including China, Russia and Brazil, are shown in some tables but these are shown separately within the table and are not included in the calculation of the OECD averages.

Comparative data on education and training for EU member states up to the year 2013 may be accessed at the following website:

<http://ec.europa.eu/eurostat/data/database>

and follow links to Database -> Population and Social Conditions -> Education and Training

3. ISCED Coding (as applied to Ireland)

ISCED 0 (Pre-primary)

The Early Childhood Care and Education (ECCE) Scheme. Early Start classes in primary schools

ISCED 1 (Primary)

All classes in National Schools including Junior and Senior Infant classes plus 1st to 6th class.

However, the information provided in indicators D1 focussed on the period of 1st Class to 6th Class: the six years of compulsory education in primary education: It should be noted that ISCED 1 includes the two years of Infant Education but the data in relation to Infants for Indicator D1 was not requested. This is because the infant classes fall outside the definition of compulsory schooling.

ISCED 2 (Lower Secondary)

Junior Cycle + some FETAC NFQ level 2 courses.

ISCED 3 (Upper Secondary)

Senior Cycle + BIM, Teagasc, FÁS, Fáilte programmes at NFQ levels 4 and 5.

General: Transition Year, Leaving Certificate, LCVP, LCA and VTOS

Vocational: some FÁS programmes

ISCED 4 (Post-secondary, non-tertiary)

Post-Leaving Certificate courses + apprenticeships + Fáilte, Teagasc programmes at NFQ levels 5 or 6 (but not Higher Certificate). ISCED 4C programmes are not designed to lead directly to ISCED 5A or 5B. These programmes lead directly to labour market or other ISCED 4 programmes. Examples include apprenticeships, Teagasc farming or horticulture certificate/diploma and the National Craft Certificate at NFQ levels 5 or 6.

ISCED 5 (Tertiary)

NFQ levels 6 (higher). First Higher Certificate (typically 2 yrs)

ISCED 6 (Tertiary)

NFQ levels 7 & 8. Ordinary Bachelor Degree (typically 3 yrs); Second Ordinary Bachelor Degree (3 yrs). First Honours Bachelors Degree (3-4 yrs); Honours Bachelors Degree in (Veterinary) Medicine/Dental Science/Architecture (5-6 yrs); Second Postgraduate Diploma (1 yr);

ISCED 7 (Tertiary)

NFQ level 9. Masters Degree (taught) (1 yr); Masters Degree (whether taught or by research) (2 yrs)

ISCED 8 (Tertiary PhD)

Doctoral Degree (PhD)

4. It should be noted that increases in per-student expenditure at second level over time in Ireland as published by the Department of Education and Skills and the Central Statistics Office differ from trends in per-student expenditure as published by OECD in EAG for a number of reasons including:
 - Capital spending is included in the OECD estimate but not in the Department of Education and Skills/CSO data which refer to recurrent spending only.
 - Private spending is included in the OECD estimate but not in DES/CSO figures.
 - In line with international guidelines, spending by other public bodies (FÁS, other Departments etc.) are included in the OECD estimates but not in DES/CSO figures up to 2011.

5. *Instruction time* in Indicator D1 refers to intended (or separately compulsory) instruction time based on policy documents (e.g. curricula) in countries where a formal policy exists. In countries where such formal policies do not exist, the number of hours was estimated from survey data. Data are based on countries' responses to questionnaire CURR 1 of the system-level annual data collection of INES NESLI network's Survey of Teachers and the Curriculum.

Data were collected on classroom sessions per year in public institutions, by subject in the modal grades of students age 7 to 15 for the referenced school year 2013/2014. Hours lost when schools were closed for festivities and celebrations (such as national holidays) were excluded. Intended instruction time does not include non-compulsory time outside the school day, homework, individual tutoring or private study done before or after school.

Curriculum: Note in Annex III for Ireland (EAG2015): ‘The curriculum for primary schools is an integrated curriculum and envisages an integrated learning experience for children which should facilitate cross-curricular activity. To assist schools in planning the implementation of the curriculum, a time framework is suggested that allocates a minimum time to each of the curriculum areas. Four hours each day must be set aside for secular instruction. A period of two hours a week of discretionary time is allowed to accommodate different school needs and circumstances and to provide for the differing aptitudes and abilities of the pupils.

Time allocation is based on the following weekly framework for a 36.6-week school year in primary education: English (5 hours); Irish (3.5 hours); Mathematics (4.17 hours); Social, Environment and Scientific Education (3 hours, divided between Science and Social Sciences); Social, Personal and Health Education (0.5 hours, included in “other”); Physical Education (1 hour); Arts Education (3 hours); Religious Education (2.5 hours); assembly/roll call (2.33 hours, included in “other”) total 25 hours. Whilst the curriculum also makes provision for discretionary curriculum time (2 hours), for the purposes of these tables, the additional time allocated to Literacy (1 hour) and Numeracy (70 minutes) has been deducted from the discretionary time. Note however that Circular 0056/2011 allows schools to make provision for the increased time through a combination of approaches such as:

- integrating literacy and numeracy skills with other curriculum areas
- using some or all of discretionary curriculum time for literacy and numeracy activities
- re-allocating time spent on the other subjects in the curriculum to the development of literacy and numeracy
- prioritising the curriculum objectives which are considered most valuable in supporting children’s learning and delaying the introduction of elements of some subjects (for example, by delaying the introduction of strands and strand units from the history and geography curriculum for the infant classes and first and second classes to later in the primary cycle).

6. *Average class size* at junior cycle was previously estimated from data provided by the Post-Primary Timetables Database. During one reference week in September, all schools were asked to provide class-size information for all periods of instruction (classes). The total number of pupils in attendance in all periods of instruction is divided by the total number of periods of instruction during the reference week. This data source is no longer available.
7. *Teaching time* is defined as the number of hours per year that a full-time teacher teaches a group or class of students according to policy. It is normally calculated as the number of teaching days per annum multiplied by the number of hours a teacher teaches per day (excluding periods of time formally allowed for breaks between lessons or groups of lessons). Number of *teaching weeks* refers to the number of weeks of instruction excluding holiday weeks. The number of *teaching days* is the number of teaching weeks multiplied by the number of days a teacher teaches per week, less the number of days that the school is closed for festivities. Some countries, however, provide estimates of teaching time based on survey data. At the primary

level, short breaks between lessons are included if the classroom teacher is responsible for the class during these breaks.

8. *Teacher working time* refers to the normal working hours of a full-time teacher. According to formal policy in a given country, working time can variously refer only to the time directly associated with teaching (and other curricular activities for students such as assignments and tests, but excluding annual examinations) or the time directly associated with teaching and hours devoted to other activities related to teaching, such as lesson preparation, counselling students, correcting assignments and tests, professional development, meetings with parents, staff meetings and general school tasks. Working time does not include paid overtime.
9. *Number of days a teacher teaches per year*: The minimum school year for pre-primary and primary education is 183 days; for secondary education it is 167 days. In actuality, minimum = maximum.
10. *Number of hours a teacher teaches per day*: For primary education: (5 hours 40 minutes) – (40 minutes breaks and recreation) = 5 hours; for secondary education, 22 hours per week (maximum) are required = 4.4 teaching hours on average per day.
11. *Teachers' Salaries*: Data on statutory teacher salaries are based on the salary scales and are derived from the 2013 NESLI Survey on Teachers and the Curriculum Data. Data presented in EAG 2016 for starting salary (or salary with minimum qualification) refers to the first point on the scale on revised salary scale for new entrants to teaching at primary and post-primary level in accordance with Circular 0032/2013 and Circular 0005/2014. Unlike teachers appointed prior to -1 January 2011, the reported data do not include any additional allowances including qualification allowances. These were cut from the salaries of all new entrants to teaching in 2012