

EDUCATION AT A GLANCE 2015 OECD INDICATORS

A Country Profile for Ireland

STATISTICS SECTION November 2015

Introduction

The latest edition of **Education at a Glance (EAG)** was published by the OECD on Tuesday **November 24th, 2015**. The reference year for data in this publication is the school year 2012/2013 (or the financial year 2012 or the calendar year 2013 in the case of earnings and educational attainment and the calendar year 2014 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 <u>Technical Note 1, page 22</u>). An EU21 average is also shown for some indicators in respect of those 21 countries that are member states of both the European Union and the OECD (refer to <u>Technical Note 2, page 22</u>). Levels of education are classified in EAG by a system referred to as ISCED (see <u>Technical Note 3, page 22</u>).

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 FÁS, Teagasc, Fáilte Ireland, Forfás and various other public bodies are included along with voted expenditure by the Department of Education and Skills in 2012. Payments of Child Benefit by the Department of Social Protection conditional on student status in 2012 are included.

The classification of levels of education used in EAG is based on the International Standard Classification of Education (ISCED). ISCED-97 was recently revised, and the new International Standard Classification of Education (ISCED 2011) classification is used for the first time in this edition of Education at a Glance.

The entire pdf copy of Education at a Glance Indicators 2015 and the detailed Excel data tables can be downloaded here: http://www.oecd.org/edu/Education-at-a-Glance-2015.pdf http://www.oecd.org/edu/education-at-a-glance-2015-indicators-by-chapter.htm If you wish to consult or download data from last year's publication – EAG2014 – go to:

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 and the International Civic and Citizenship Study were gathered by the Educational Research Centre in Ireland but sourced directly from the OECD.

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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)

1

In 2014, 59% of persons aged between 55 and 64 had completed upper-secondary education (Leaving Certificate or equivalent) or higher. The corresponding figure was, on average, 66% across the OECD. However, 90% of 25-34 year olds here had completed upper-secondary education compared to 83% 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 31 percentage points – and was fifth highest (behind Korea, Portugal, Chile and Greece) of any OECD country in 2014 (*A1.2a; P40*).



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 (*A1.4a; P44*) in Ireland was above the OECD average (41% compared to 34%). However, the proportion of adults without a Leaving Certificate or above was 21% which was slightly less than the OECD average proportion, at 24%. 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.

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.

Attainment at higher education level (whether university or other higher education) was particularly high among 25-34 year olds in Ireland where, at 51%, Ireland was above the OECD average of 41% (or EU21 at 39%) – refer to A1.3a; P41.



1.1.3 Educational Attainment and Skill Levels

Education at a Glance 2015 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 <u>here</u>.

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. This proportion increases to 18% among those who have attained upper-secondary or post-secondary non-tertiary education, and to 45% among adults with tertiary education. The corresponding average OECD figures were 7%, 25% and 52% respectively (Table A1.6; P46). Caution is advised when considering the problem-solving data for Ireland (see page 5 of the national <u>report</u>).

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 (2013) as a percentage of each single year of age cohort (18 years of age). Using this last measure (A2.1; P55), the OECD-average first-time graduation rate was 85% (and 85% for EU21). The corresponding figure for Ireland in 2013 was 98%. In Ireland the rate was 99% and 97% for females and males, respectively.

A comparison, over time, of upper-secondary first-time graduation rates (A2.4; P58) shows an increase between 2005 and 2013 in rates of completion in many countries. The figures from Ireland increased from 92% in 2005 to 98% in 2013. The corresponding figures for the OECD average were 80% in 2005 and 85% in 2013.

Note that the data for Ireland in relation to overall graduation rates for upper secondary (as opposed to first-time graduation rates) is not available in this year's EAG.

1.2.2 Tertiary completion rates (A3)

Unlike earlier versions of EAG, EAG 2015 focused on first-time tertiary graduation rates. Ireland was not in a position to provide data on first-time graduates in higher education other than for PhDs and hence is missing from the majority of the tables in this indicator (A3.1; P72)

The graduation rate of 2.2% at PhD level here was above the OECD average of 1.7%.

	PhD
	2013
Ireland	2.2
OECD average	1.7
EU21 average	1.8
Ranking (OECD)	10 th of 33

A3.1: First-Time Tertiary graduation Rates (2013)

Percentage of higher education graduates to the population at the typical age of graduation

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

EAG 2015 provides data on the educational attainment of different groups in the labour force using data for 2014 – the sixth 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. Across the OECD, differences emerge in labour market profiles between men and women; these differences are sharper in those countries where, traditionally, women work on a part-time basis or withdraw for a period from the labour force.

Calculated as the number employed as a percentage of the total population group, employment rates in Ireland were higher for men than for women for all levels of educational completion combined. The 2015 OECD averages were 80% for men and 66% for women (*A5.1b; web only*). The corresponding rates in Ireland were 75% and 62% for men and women respectively. Employment rates vary sharply by educational attainment.

In 2012 the unemployment rate for males in Ireland at 12.0 which was significantly above the OECD average of 7.1% whereas the unemployment rate for females at 8.3% was above the OECD average of 7.6% (*A5.2b; web only*).

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 7.1% in 2000, to 19.4% in 2010 and dropped down to 18.7% in 2014. The corresponding figures for those with upper-secondary or post-secondary non-tertiary attainment were 2.6% in 2000, 13.8% in 2010 and 11.9% in 2014. The rates for tertiary graduates were1.6% in 2000, 7.0% in 2010 and decreased to 6.1% in 2014 for tertiary graduates (*A5.4a; P110*).

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 2013 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, 84% more than the benchmark (*A6.1a; P125*). The corresponding OECD average was 60%. In Ireland, individuals with less than upper-secondary completion and in employment earned on average 17% less than those at the benchmark. The OECD average was 23% (*A6.1a; P125*). In Australia, 22% of 25-64 year-old men with below upper secondary education have earnings from a full-time employment. Among 25-64 year-old women, 10% of those that have income from employment work full time. The corresponding OECD averages were 51% and 24% (A6.3a; 129)

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 2015, 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, 2013a).

Higher levels of both educational attainment and literacy and numeracy proficiency are positively associated with these social outcome measures (Charts A8.1, A8.2, A8.3, A8.4 and A8.5, Tables A8.1, A8.2, A8.3 and A8.4; 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.

1.6 Impact of skills on employment and earnings (A9)

On average across countries that participated in PIAAC, employment rates and earnings increase with educational attainment and, to a lesser extent, with higher skills. The highest returns to greater skills proficiency accrue to individuals who have attained tertiary education.

In Ireland a person with tertiary education and a literacy proficiency of Level 4 or 5 is 6 times as likely of being employed as someone with below upper secondary education and a literacy proficiency of Level 1 or below (A9.1 L; P176) and a person with tertiary education and a numeracy proficiency of Level 4 or 5 is 3.6 times as likely of being employed as someone with below upper-secondary education and a numeracy proficiency of Level 1 or below (A9.1 N; P178). A person with tertiary education and a literacy proficiency of Level 4 or 5 is earning 43% more, compared with someone with below upper-secondary education and a literacy proficiency of Level 4 or 5 is earning 43% more, compared with someone with tertiary education and a person with tertiary education and a numeracy proficiency of Level 1 or below (A9.2 L; P181) and a person with tertiary education and a numeracy proficiency of Level 4 or 5 is earning 56% more, compared with someone with below upper-secondary education and a numeracy proficiency of a numeracy proficiency of Level 1 or below (A9.2 L; P181) and a person with tertiary education and a numeracy proficiency of a numeracy proficiency of Level 4 or 5 is earning 56% more, compared with someone with below upper-secondary education and a numeracy proficiency of Level 1 or below (A9.2 N; P183).

1.7 Gender gaps in education and employment (A10)

Indicator A10 focuses on the gender gaps in education attainment and employment using data from PISA, PIAAC and the Labour Force Survey. The OECD note that the key message emerging is that new gender gaps in education are opening and that young men are significantly more likely than young women to have low skills and poor academic achievement; while in tertiary education and beyond, young women are still under-represented in the fields of mathematics, physical science and computing.

In PISA 2012, Ireland was the fourth highest country in the ranking of the percentage of boys who are not low achievers in any of the PISA domains (mathematics, reading and science), at 81%. The OECD average was 70% (A10.1; P199). The percentage of girls who were not low achievers in any of the PISA domains for Ireland, at 80%, was also above the OECD average of 73%. Ireland was among three countries in which the percentage of girls who were not low achievers in the three domains was lower that the percentage of boys in the same category (80% versus 81%). Ireland was also well below the OECD average for the percentage of both boys and girls who were low achievers in each of the three domains separately. PIAAC data shows that for Irish tertiary-educated women, the largest gap in the field of study of their highest level of education attained, when compared to their male counterparts, was in the field of engineering, manufacturing and construction (A10.3; P203).

2 Financial and Human Resources Invested in Education

2.1 Trends in education spending (B1)

The latest available international data on expenditure refer to 2012 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 2005 and 2012, in real terms (allowing for inflation), total public and private spending increased in Ireland by 39% (compared to 14% on average across OECD countries) for all levels of education combined below Higher Education (HE) (*B1.5a; P222*)³. In Higher Education (HE), expenditure in Ireland grew by 25%, compared to a 27% rise across the OECD (*B1.5b; P223*).

B1.5: Change in *public and private* expenditure on educational institutions between 2005 & 2012 (2005=100) – constant prices

	'Below HE' - Primary to Post-secondary Level	Third Level
Ireland	139	125
OECD average	114	127
Ranking (OECD)	4th of 28	12th of 26

Source: Table B1.5a & B1.5b

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

Total spending as % of national income (B2.1; P233): Expenditure on education (public and private combined) in 2012 was 5.6% of Gross Domestic Product, which is now slightly above average OECD expenditure at 5.3% of GDP and above the EU21 average of 4.9% of GDP. A contraction in GDP in 2009 and 2010 explains some of this increase. This figure reflects Ireland's continued maintenance of higher levels of spending on education as the economy contracted. The percentage of GDP spent on higher education in Ireland was 1.3% of GDP in 2012 - just below the OECD average (at 1.5% of GDP) whereas at below-HE level, the proportion was higher than the OECD average (4.4% compared to 3.7%).

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 5.1 of MIP2012).

Extract of an OECD note from EAG 2015

Effect of the economic crisis on public expenditure on educational institutions between 2008 and 2012

The global economic crisis that began in 2008 had – and is still having – major adverse effects on different sectors of the economy. Data from 2008 to 2012 show clearly the impact of the crisis on the funding of educational institutions, especially when comparing the periods 2008-10 and 2010-12. Between 2008 and 2010, GDP (expressed in constant prices) fell in the majority of the countries (20 out of 36 countries with available data), and by 5% or more in Estonia, Finland, Greece, Hungary, Iceland, Ireland and Slovenia. As more than 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 36 countries with available data for the 2008-10 period, only six countries cut (in real terms) public expenditure on educational institutions: Estonia (by 10%), Hungary (by 11%), Iceland (by 11%), Italy (by 6%), the Russian Federation (by 4%) and the United States (by 1%). In Hungary, Iceland and Italy, this translated into a decrease in expenditure on educational institutions as a percentage of GDP (as the reduction in expenditure was larger than the decrease in GDP, or as GDP increased at the same time). In the three other countries, the share of GDP devoted to education did not change or increased as the decrease in expenditure was balanced with similar or larger decreases in GDP. In all other countries, public expenditure on educational institutions increased or was stable, while GDP decreased in some of them. As a result, the share of GDP devoted to education continued to rise between 2008 and 2010 (by 6%, on average across OECD countries), except in Chile and Poland. In Chile and Poland, GDP increased at a faster rate than public expenditure on educational institutions, resulting in a slight decrease of public expenditure on educational institution as a percentage of GDP (Table B2.4).

During 2010-12, the crisis had a stronger impact on public expenditure on education. While GDP decreased between 2008 and 2010 in two-thirds of the countries with available data, it stayed constant or increased between 2010 and 2012 in all countries except five. The GDP decreased in Greece (by 15%), Italy (by 2%), Portugal (by 5%), Slovenia (by 2%) and Spain (by 3%) (Chart B2.4).

Public expenditure on educational institutions started to fall between 2010 and 2012 – later than decreases in GDP, as a result of the necessary time gap to adjust public budgets. Public expenditure decreased between 2010 and 2011, or between 2011 and 2012, or continuously over the two-year period in a larger number of countries than between 2008 and 2010. Over the whole period 2010-12, public expenditure on educational institutions decreased in 11 countries, and by 5% or more in Hungary, Italy, Portugal, Slovenia and Spain. Combined with increases in GDP, this led to decreases of public expenditure on education as a percentage of GDP in all of these 11 countries, most significantly in Estonia (by 14%) and Hungary (by 13%).

Public expenditure on education as a % of total public expenditure (*B4.2; P260*): As a percentage of total public expenditure, public spending on education was 14.2% in 2012 compared to 12.9% in 2011. The 2012 OECD average was 11.6%. The lower figure of 12.9% recorded in 2011 is the result of very significant increases in public expenditure recorded due to huge capital transfers to Irish banks as a result of the recapitalisation programme.

2.3 Expenditure on education per student (B1, B3)

Total expenditure per student in Ireland exceeded the OECD average for primary and secondary levels in 2012 (refer to B1.1a below)⁴. Expenditure per student increased, respectively, for 'below HE' and HE by 39% and 10% in real terms between 2005 and 2012 (*Tables B1.5a and B1.5b; P222*). While over time, in Ireland, the relative gap between expenditure per student at primary and tertiary level had narrowed, due to a decrease in the expenditure at third level and an increase in the number of students the gap has increased for 2012.

For a different view of comparative expenditure, one can focus solely on public expenditure for public educational institutions (refer to Table B3.3 below). As in B1.1a Ireland was above the OECD average in 2012 for spending per student at all levels.

	Primary	Secondary	Tertiary (including research and development)	Primary to tertiary
Ireland	8,631	11,298	14,922	10,740
OECD average	8,247	9,518	15,028	10,220
Ranking (OECD)	13th of 33	8th of 32	16 th of 32	13 th of 31

B1.1a: Annual expenditure on educational institutions per student (2012) (In equivalent US\$ converted using purchasing power parities for GDP)

B3.3: Annual public expenditure on public* educational institutions per student (2012)

	Primary thru post-secondary, non-tertiary	Tertiary	All levels
Ireland	9,546	11,539	9,881
OECD average	8,683	11,913	9,317
Ranking	10 th of 31	12th of 28	12 th of 29
(OECD)			

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

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; P221*). Average expenditure per pupil across all levels in Ireland relative to

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

GDP per capita (primary to higher education) was, in past years, amongst the lowest among OECD countries (refer to B1.4 below). In recent years Ireland's ranking has improved for this measure, most significantly for expenditure at second-level education. However, Ireland's overall ranking remains slightly below the OECD average.

	Primary	Secondary	Tertiary (Including research and development)	Primary to tertiary
Ireland	19	25	33	24
OECD average	22	25	41	27
Ranking (OECD)	26 th of 33	18 th of 32	29 th of 32	28th of 31

B1.4: Annual expenditure on educational institutions per student relative to GDP per capita

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 2012, on average across the OECD, they accounted for 62.4% of total current expenditure at primary, secondary and post-secondary, non-tertiary levels. In Ireland the corresponding figure was 65.8% (*B6.2; P288*). Correspondingly, 16.6% of current expenditure in primary, secondary and post-secondary non-tertiary education combined, goes towards compensation of non-teaching staff in Ireland compared to the OECD average of 15.2%. Compared to other countries, Ireland also spends slightly less on non-pay current items, at 17.6% compared to the OECD average of 21.4% (*B6.2; P288*).

2.7 Which factors influence level of spending? (B7)

As in last year's EAG, Tables B7.1a to B7.1c 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:

- instruction time of students
- teaching time of teachers
- teachers' salaries
- 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 210 "Countries have different priorities for allocating their resources (see Indicator B7). For example, among the ten OECD countries with the largest expenditure per student by educational institutions at the lower secondary level (Table B1.1a), Denmark, Ireland, Luxembourg, Switzerland and the United States have among the highest teachers' salaries after 15 years of experience at the lower secondary level, and Austria, Finland, Luxembourg and Norway have some of the lowest student-teacher ratios at that level (see Table B7.2b)."

3 Access to Education, Participation and Progression

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

Early childhood education: In 2012/2013 the enrolment rate in Ireland for children aged 3 was 46%. These were enrolled in pre-primary education. The enrolment rate for those and aged 4 was 95% in 2012/113 (57% of 4 year olds were in pre-primary and 37% were enrolled in primary). This compared to OECD averages of 74% and 88% respectively and EU21 averages of 80% and 91% (*C2.1; P 333*). 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. Table C2.1: P333 shows the enrolment rates of children aged 3, 4, 5 and 6 in pre-primary and primary education. The data for Ireland show that 57% of 4-year-olds are enrolled in pre-primary education, the third lowest of all countries shown. However, this is because a further 37% of 4-year-olds are enrolled in primary education. Ireland, the UK and (for a very small number) Australia are the only countries with 4-year-olds enrolled in primary education. Moving across the table, 99% of Irish 5-year-olds are enrolled in pre-primary education.

Transition to adulthood and further/higher education: The enrolment rates for 15-19 year-olds in Ireland exceeds the OECD and EU21 averages but rates for all the older age groups trail the international averages (*C1.1a; P316*). 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 rates for the older age groups (20–29, 30–39 and 40+) here trail the international averages for the OECD and EU21 averages respectively, illustrating a strong emphasis in Ireland on initial formal education and training and relatively less emphasis for older age-groups.



Access to higher education: Indicator *C1.3; P318* shows distributions of higher education students by full- and part-time. 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 and ISCED 8 programmes.

3.2 Student mobility in higher education (C4)

Among full-time international tertiary students in Ireland, 41.2% were from Asia; 35.7% were from a European country (other than Ireland); 16.5% were from North America (C4.3; P 365). For those students from Ireland studying abroad (including part-timers) at tertiary level, 76.4% were studying in the UK (many of whom in Northern Ireland) (C4.4; P367). 7.2% of UK citizens enrolled in tertiary education abroad study in Ireland.

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

The proportion of young people aged 15-19 who were unemployed or not in employment, education or training (NEET) was 7.2% on average across OECD countries in 2014 (*C5.2a; web version*). The corresponding figure for Ireland was 9.1% down from 9.6% in 2012, 9.4% in 2011, 10.1% in 2010 and 11.0% in 2009.

The proportions for 20-24-year-olds were 21.1% and 17.9% for Ireland and for the OECD average, respectively. Looking at gender, the NEET rates for 20-24 year olds for males in Ireland was 20.5% compared to the OECD average of 16.4% and the rates for females were 21.7% and 19.4% respectively (*C5.2a; web version*).

Taking all young people aged 15-29 the NEET rate in Ireland was 18.0%. The corresponding rate for the OECD average was 15.5% (*C5.2a; web version*).

4 The Learning Environment and Organisation of Schools

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. 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 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 <u>Technical Note 7</u>).

	Primary		Lower secondary	
	Intended	Compulsory	Intended	Compulsory
Ireland	915	915	935	935
OECD average	m	804	m	916
EU21 average	m	776	m	895
Ranking (OECD)		8 th highest of 33*		14 th highest of 33*

D1.1: Instruction time in compulsory general education (2014/2015)

Total Number of hours

* 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.

In the case of primary schools, 17% of compulsory instruction time was allocated to Mathematics compared with an OECD average of 15%. Science accounts for 4% of instruction time compared with 7% across the OECD. By contrast, 10% of compulsory instruction time was given to Religion, Ethnics and Moral education in Ireland (the second highest in this table behind Israel) compared with an OECD average of 5%.

20% of compulsory instruction time in primary schools was given to 'Reading, writing and literature' - below the OECD average of 22%. This would appear to indicate a significant drop in time allocation to literacy compared with previous years (EAG 2013 and earlier editions of EAG). However, it should be noted that this figure relates only to the first language of the school: English in English-medium schools and Irish in Irish-medium schools. Previous surveys allowed us to combine the instruction time in 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 line with the revised guidance for the most recent data collection, the instruction time for the second language of the school amounted to 14% (D1.3a; P414).

Note that the instruction time referred to above for 'Reading, writing and 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 EU and a negligible amount for that age group in Ireland. The highest country was Luxembourg where 18% of instruction time is devoted to modern languages at primary level.

Up to 2012, 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 a third or more languages 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 *D1.3b; P415*. Technical Note 5 contains more information.

The new 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 on 29 August will provide an opportunity to reflect on provision for foreign languages in post-primary schools.

Caution is needed in making these comparisons by subject area. For example, in relation to 'Reading, writing and literature', both English and Irish, as national languages, are taught in all schools. However, the time allocated to Reading, writing and literature' reflects only the first language of the school. –

(D1.3a; P414 and D1.3b; P415). Refer to Technical Note 5.

	Reading, writing and literature	Maths	Science	Social studies	Second language	Arts	Physical Education and Health	Religion, Ethics and 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	5	3
EU21 average	21	14	6	4	5	9	8	5	2

D1.3a: Instruction time per subject in primary education (2014/20115)

As a percentage of total compulsory instruction time

4.2 Class size and pupil-teacher ratio (D2)

Average class size (ACS) and pupil-teacher ratio (PTR) (*D2.1 and D2.2; P423-424*): 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 16.2% in 2011/2012 and was 16 (16.4%) in 2012/2013. Average class size in Ireland increased from 24.3 in 2011/2012 to 25 (24.7) in 2012/2013.

D2.1/2.2: Pupil-teacher ratios and average class size in public primary schools in 1999/2	& 000
2012/2013	

	19	99/00	2012/13		
	Pupil-teacher ratio Average class size		Pupil-teacher ratio	Average class size	
Ireland	21.5	24.8	16	25	
OECD average	17.7	22.1	15	21	
Rank position (OECD)	4 th highest of 27	5 th highest of 23	12 th highest of 33	5 th highest of 29	

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 & 2012/2013

	1999/00		2012/13		
	Pupil-teacher ratio	Average class size	Pupil-teacher ratio	Average class size	
Ireland	15.9	22.7*	14	-	
OECD average	14.3	23.6	13	24	
Rank position (OECD)	6 th highest of 24	15 th highest of 23	9 th highest of 31	-	

^ 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 D/ES Teacher Timetable Database).

The PTR for second level in EAG differs to the figure shown in the DES Statistical Report (14.3) for the same year (2012/2013), 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; P424).

	2012/2013
Ireland (publicly funded only)	20
OECD average (public and private institutions)	16
Rank position (OECD)	4 th highest of 23

D2.2 Student-staff ratio in higher education

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 2012/13. 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 (D3.1; P440) 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 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).

	Primary	Primary Lower second level	
Ireland	56,057	56,667	56,667
OECD average	41,245	42,825	44,600
EU21 average	40,519	42,485	44,507
Ranking	6 th highest of 35*	6 th highest of 35*	8 th highest of 34*

D3.1: Teachers' salaries (2012/2013) after 15 years of experience

(in equivalent US\$ converted using PPPs)

* 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 2013 was 1.09 for primary and 1.09 for lower and upper secondary (*D3.5a; P445*). This value was higher than the corresponding OECD average of 1.03 for primary, 1.02 for lower secondary and 1.01 for upper secondary.

Yet another way of looking at comparisons of teacher pay is to compare teachers' salaries to those of other tertiary-educated workers (*D3.2; P442*). On average in OECD countries, primary teachers earn 78% of the salary of a tertiary-educated, 25-64 year-old full-time, full-year worker; lower-secondary teachers are paid 80% and upper-secondary teachers are paid 82% of that benchmark salary. 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 and non-teaching attivities. 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.

	Ireland	OECD average	EU21 average
Number of weeks of instruction	37	38	38
Number of days of instruction	183	183	180
Net teaching time, in hours	915	772	756
Working time required at school, in hours	1,073	1,196	1,104
Total statutory working time, in hours	Not applicable	1,600	1,549

D4.1: Details of primary teachers' working time 2012/2013 (page 458)

	Ireland	OECD average	EU21 average
Number of weeks of instruction	33	37	37
Number of days of instruction	167	182	179
Net teaching time, in hours	735	694	656
Working time required at school, in hours	768	1,172	1,074
Total statutory working time, in hours	Not applicable	1,618	1,588

D4.1: Details of lower-second-level teachers' working time 2012/2013 (page 458)

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% (D5.1; P468).

As in the majority of other countries, the teaching profession in Ireland continues to be dominated by females (at primary level 86% in 2013) (D5.3; P470).

Technical Notes

- 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 2013, the OECD comprised 34 member countries of which 21 are members of the European Union. These are referred to as the EU21 (Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, the Republic of Slovenia, Spain, Sweden and the United Kingdom). Hence, there are 7EU member states (28minus 21) 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 2012 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 1^{st} to 6^{th} 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 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 & & 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 2012/2013. 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.

The revised methodology for the completion of the data collection tool posed difficulties for Ireland in relation to recording the second language of the school (Irish in English-medium schools and English in Irish-medium schools). The given definitions of *Reading, writing, and literature, Modern foreign languages* and *Ancient Greek and/or Latin* do not appear to make provision for a system where there are two national languages. As Irish does not fall into either the category of Modern Foreign language or Ancient Greek and/or Latin, it was recorded, in line with the instructions, under 'Other' subjects. Thus, it is not as visible as it should be and the tables, as presented, do not adequately reflect the provision made for the teaching of languages in Ireland. Ireland has made representation that the survey should properly capture the place of the Irish language in our curriculum.

Curriculum: Note in Annex III for Ireland (EAG2014): '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 minutes; 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 2012 NESLI Survey on Teachers and the Curriculum Data. Data presented in EAG 2014 for starting salary refers to the second point of the salary scale for primary teachers and the third point of the scale for post-primary teachers appointed prior to 01 January 2011. The reported data do not include any additional allowances including qualification allowances. New pay scales were introduced (Circular 0040/2011) for new appointees to teaching as part of Budget 2011. The new scales reflected a 10% reduction in basic pay and allowances. The circular also stipulated that new appointees should commence on Point 1 of the salary scale.