

**EDUCATION AT A GLANCE 2017**  
**OECD INDICATORS**



**AN ROINN DEPARTMENT OF  
OIDEACHAIS EDUCATION  
AGUS SCILEANNA AND SKILLS**

A Country Profile for Ireland  
STATISTICS SECTION  
September 2017

# Contents

List of Tables . . . . .	iv
List of Figures . . . . .	iv
Acronyms . . . . .	iv
<b>Introduction</b>	<b>1</b>
<b>1 The Output of Educational Institutions and the Impact of Learning</b>	<b>3</b>
1.1 Educational attainment in the adult population . . . . .	3
1.1.1 Upper-secondary educational attainment (A1) . . . . .	3
1.1.2 Educational attainment - other levels of education (A1) . . . . .	4
1.2 Upper-secondary and tertiary graduation rates (A2) . . . . .	5
1.2.1 Upper-secondary rates . . . . .	5
1.2.2 Tertiary completion rates (A3) . . . . .	5
1.3 Educational and skill attainment and the labour market (A5) . . . . .	5
1.4 Individual labour market returns to education (A6, A7) . . . . .	6
<b>2 Financial and Human Resources Invested in Education</b>	<b>8</b>
2.1 Trends in education spending (B1) . . . . .	8
2.2 Expenditure on education relative to national income or public spending (B2) . . . . .	8
2.3 Expenditure on education per student (B1, B3) . . . . .	9
2.4 Annual expenditure on educational institutions per student relative to GDP per capita (B1) . . . . .	10
2.5 Allocation of expenditure by resource category . . . . .	10
2.6 Which factors influence level of spending? . . . . .	11
<b>3 Access to Education, Participation and Progression</b>	<b>13</b>
3.1 Participation outside of compulsory education (C1, C2, C3) . . . . .	13

3.2	How successful are students in moving from education to work? (C5)	14
<b>4</b>	<b>The Learning Environment and Organisation of Schools</b>	<b>16</b>
4.1	Instruction time in schools (D1)	16
4.2	Class size and pupil-teacher ratio (D2)	20
4.3	Teachers' salaries (D3)	21
4.4	Teachers' working time (D4)	23
4.5	Age and gender distribution of teachers (D5)	24
	<b>Technical Notes</b>	<b>26</b>

## List of Tables

B1.1	Annual expenditure on educational institutions per student (2014)	9
B3.3	Annual public expenditure on public educational institutions per student (2014) . . . . .	9
D1.1	Instruction time in compulsory general education (2016/2017) . .	16
D1.3a	Instruction time per subject in primary education (2016/2017) . .	17
D1.3b	Instruction time per subject in lower secondary education (2016/2017)	19
D2.1/2.2	Pupil-teacher ratios and average class size in public primary schools in 1999/2000 and 2014/2015 . . . . .	20
D2.1/2.2	Pupil-teacher ratios and average class size in public secondary schools in 1999/2000 and 2014/2015 . . . . .	21
D2.2	Student-staff ratio in higher education . . . . .	21
D3.1a	Teachers' salaries (2014/2015) after 15 years of experience . . . .	22
D4.1	Details of primary teachers' working time 2014/2015 . . . . .	24
D4.1	Details of lower-second-level teachers' working time 2014/2015 . .	25

## List of Figures

A1.1.1	Population that has attained at least upper secondary education (2016), by age group . . . . .	3
A1.1.2	Population that has attained higher education (2016), by age group	4
C1.1	Population that has attained higher education (2016), by age group	14

## Acronyms

ACS - Average Class Size

CSO - Central Statistics Office

DES - Department of Education and Skills

EAG - Education at a Glance

ECCE - Early Childhood Care and Education

GDP - Gross Domestic Product

ISCED - International Standard Classification of Education

NEET - Not in Employment, Education or Training

NFQ - National Framework of Qualifications

OECD - Organisation for Economic Co-operation and Development

PPP - Purchasing Power Parties

PTR - Pupil-Teacher Ratio

UOE - UNESCO, OECD and Eurostat

UNESCO - United Nations Educational, Scientific and Cultural Organization

## Introduction

The latest edition of **Education at a Glance (EAG)** was published by the OECD on Tuesday **September 12th, 2017**. The reference year for data in this publication is the school year 2014/2015, or the financial year 2014, or the calendar year 2015 in the case of earnings and educational attainment and the calendar year 2016 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 35 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 26). 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 20). Levels of education are classified in EAG by a system referred to as ISCED (see [Technical Note 3](#), page 27).

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 Skills<sup>1</sup>. Some

---

<sup>1</sup>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

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 2014. Payments of Child Benefit by the Department of Social Protection conditional on student status in 2014 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 2017 and the detailed Excel data tables can be downloaded here: <http://www.oecd.org/edu/education-at-a-glance-19991487.htm>

If you wish to consult or download data from last year's publication - EAG2016 - go to: <http://www.oecd.org/education/skills-beyond-school/education-at-a-glance-2016-indicators.htm>

---

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.

# 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 2016, 80% of persons aged between 25 and 64 had completed upper-secondary education (Leaving Certificate or equivalent) or higher, which is the same as OECD average. See Figure A1.1.1. The three countries that are ranked the highest for this indicator are Japan, the Slovak Republic and Poland. Ireland was ranked twentieth (Tab A1.1; p.50). However, 91% of 25-34-year olds had completed upper-secondary education or higher, compared to 85% across the OECD (Fig A1.1.1). The three countries that are ranked the highest for this indicator are Korea, Slovenia and Poland, with Ireland being ranked tenth (Fig A1.2; p.44).

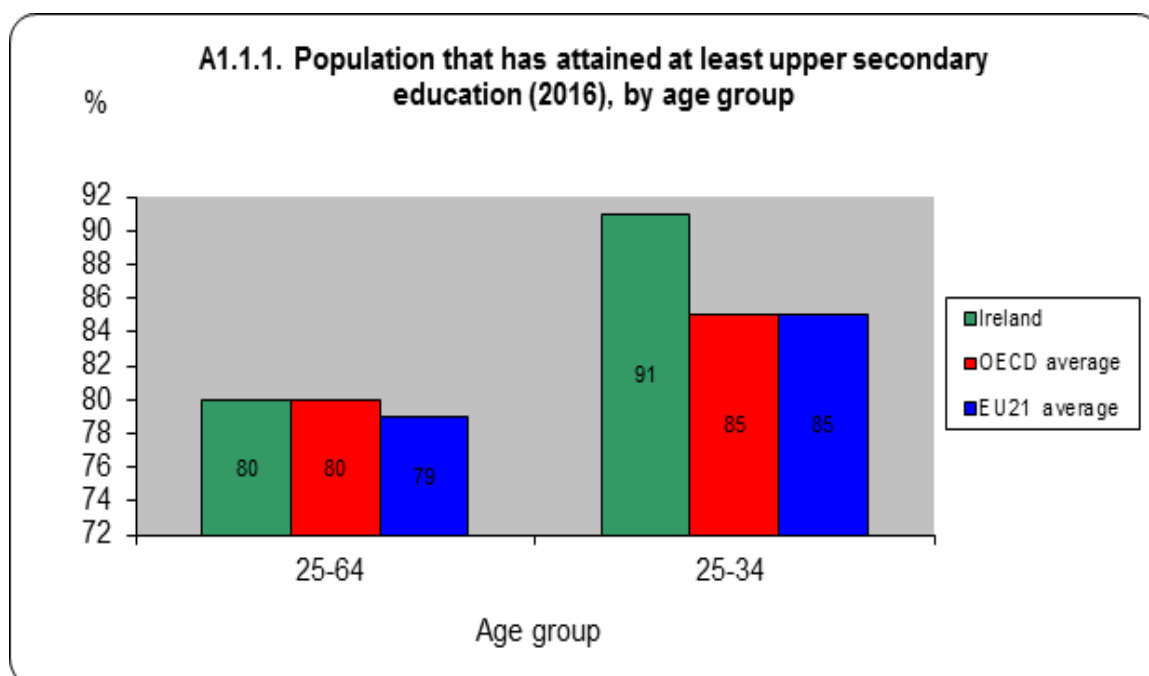


Figure A1.1.1:



### 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 (Tab A1.1; p.50) in Ireland was above the OECD average (43% compared to 37%). Ireland was ranked eleventh. 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 with the lowest proportion of adults without a Leaving Certificate equivalent or above are the Slovak Republic, Latvia and Canada). 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%). See Figure A1.1.2. The three countries that ranked the highest for this indicator were Korea, Japan and Canada (Tab A1.2; p.51).

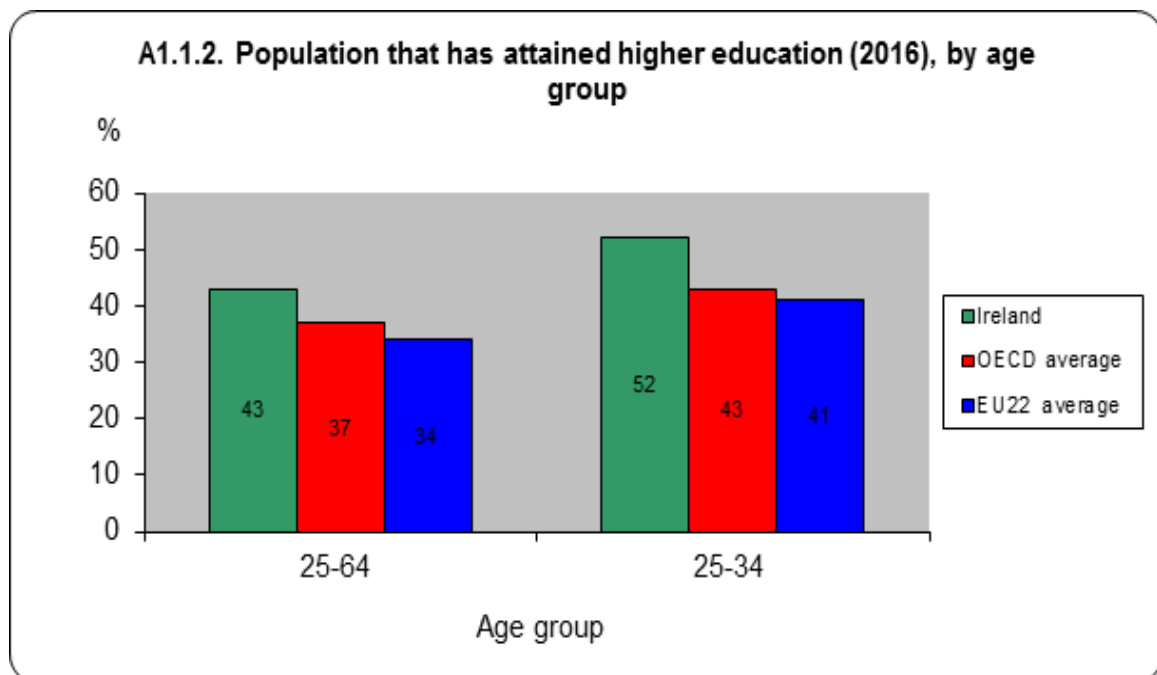


Figure A1.1.2:

## **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 (2015) as a percentage of each single year of age cohort (18 years of age). Using this last measure (Tab A2.2; p.62), the OECD-average first-time graduation rate was 84% (and 84% for EU22). The corresponding figure for Ireland was above 95%. The three highest-ranking countries for this indicator were Finland, Japan and New Zealand, 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 2017 and hence is missing from the tables in this indicator (Tab A3.3; p.74).

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

EAG 2017 provides data on the educational attainment of different groups in the labour force using data for 2016 - the eighth 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 young adults (25-34 y.o.) with below-upper-secondary attainment. Rates of unemployment in Ireland of

adults with below-upper-secondary attainment rose from 10.4% in 2005 to 26.9% in 2016. The three countries with the lowest unemployment rates for adults with below-upper-secondary attainment are Mexico, Iceland and Korea, respectively; Ireland ranks 29th. The corresponding figures for those with upper-secondary or post-secondary non-tertiary attainment in Ireland were 3.7% in 2005 and 14.1% in 2016. Germany, Czech Republic and Iceland had the lowest unemployment rates, respectively, for this level of education attainment; Ireland ranked 31st. The rates for tertiary graduates were 2.4% in 2005 and 6.1% in 2016. Hungary, the United States and Iceland were the three countries with the lowest unemployment rate for adults with tertiary attainment; Ireland ranked 23rd. (Fig A5.4; p.95).

#### **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.

Using 2015 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, 66% more than the benchmark (Tab A6.1; p.114). The corresponding OECD average was 56%. The three highest-ranking countries for earnings of tertiary graduates are Chile, Mexico and Hungary. In Ireland, individuals with less than upper-secondary completion and in employment earned on average 18% less than those at the benchmark. The OECD average was 22% (Tab A6.1; p.114). The three countries that fared best for this indicator are Finland, Estonia and Canada, respectively.

EAG 2017 Figures A7.2 and A7.3 show that net financial returns on investment for governments are generally closely related to private returns. Countries where individu-

als benefit the most from pursuing tertiary education are also those where governments gain the largest returns. This is the case in Luxembourg, Ireland and Portugal - countries with very large net financial private and public returns. The opposite is observed in Denmark, Estonia and the Slovak Republic, where net financial private and public returns are lowest (Figs A7.2 and A7.3; pp.121-122).

EAG 2017 Figure A7.2 shows that the earning advantages of higher education bring considerable benefits for individuals, but how men and women benefit can depend on country-specific labour market outcomes. On average, the total benefit for a tertiary-educated man is USD 313,900, while the total benefit for a tertiary-educated woman is USD 223,400, where in Ireland the total benefit for a tertiary-educated man is USD 449,300 and for a woman is USD 337,700; Ireland ranks 2<sup>nd</sup> with the Luxembourg being 1<sup>st</sup>.

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.

## 2 Financial and Human Resources Invested in Education

### 2.1 Trends in education spending (B1)

The latest available international data on expenditure refer to 2014 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. However, between 2010 and 2014 there was a decrease by 10% in total public and private spending (compared to an increase of 4% 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, Israel and United Kingdom (Tab B1.3; p.179)<sup>2</sup>.

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

*Total spending as % of national income* (Tab B2.1; p.187): Expenditure on education (public and private combined) in 2014 was 4.8% of Gross Domestic Product, which is now lower than average OECD expenditure and the same as the EU22 average of 4.8% of GDP. The percentage of GDP spent on higher education in Ireland was 1.1% of GDP in 2014 - below the OECD average (at 1.5% of GDP) whereas at below-HE level, the proportion was same as the OECD average of 3.7%.

*Public expenditure on education as a % of total public expenditure* (Tab B4.2; p.210): As a percentage of total public expenditure, public spending on education was 12.9% in 2014 compared to 9.1% 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 ninth of 35 OECD countries for this indicator; the OECD average for 2014 was 11.3%.

---

<sup>2</sup>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).

## 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 2014, however, it exceeded the OECD average for secondary level (refer to Table B1.1 below)<sup>3</sup>.

Table B1.1: Annual expenditure on educational institutions per student (2014)  
(In equivalent US\$ converted using purchasing power parities for GDP)

	Primary	Secondary	Tertiary (Including Research and Devel- opment)	Primary to Tertiary
<b>Ireland</b>	7,933	10,524	13,672	9,772
<b>OECD average</b>	8,725	10,091	16,133	10,749
<b>Ranking (OECD)</b>	20 <sup>th</sup> of 34	16 <sup>th</sup> of 34	18 <sup>th</sup> of 34	20 <sup>th</sup> of 34

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

Table B3.3: Annual public\* expenditure on public educational institutions per student (2014) (In equivalent US\$ converted using purchasing power parities for GDP)

	Primary	Lower Sec- ondary	Upper Sec- ondary	Tertiary	All Levels
<b>Ireland</b>	7,738	9,718	9,944	10,291	8,878
<b>OECD average</b>	8,658	10,208	9,784	12,711	9,832
<b>Ranking (OECD)</b>	19 <sup>th</sup> of 32	16 <sup>th</sup> of 30	14 <sup>th</sup> of 32	16 <sup>th</sup> of 31	17 <sup>th</sup> of 32

Source: Table B3.3

\*Definitions of public and private vary across countries.

<sup>3</sup>It should be borne in mind that the OECD average itself has been impacted by the addition of new member countries over time.

## **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 ([Tab B1.5](#)). 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 2014 OECD average for this indicator. The countries that ranked the highest for this indicator are: primary level: Slovenia, Korea and the United Kingdom; secondary level: Austria, Portugal and Korea; tertiary level: United Kingdom, United States and Sweden.

## **2.5 Allocation of expenditure by resource category**

Most of expenditure on education in OECD countries is accounted for by salaries - in particular teacher salaries. In 2014, on average across the OECD, they accounted for 62% of total current expenditure at primary level and 63% at lower secondary and 61% at upper secondary level. In Ireland, the corresponding figures were 76%, 69% and 68%. The countries that ranked highest for expenditure on teacher salaries at primary level were Mexico, Luxembourg and Portugal. Also, at lower secondary level, Mexico, Luxembourg and Portugal ranked highest for this indicator and at upper secondary level, Luxembourg, Switzerland and Spain ranked the highest score ([Tab B6.2; p.231](#)). 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 France 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, 21% for lower and 23% for upper secondary, compared to the OECD averages of 22%, 22% and 23%, respectively. Hungary, Finland and the Czech Republic ranked highest at primary level for this indicator: at lower secondary level, the Czech Republic, Finland and Hungary ranked

the highest, and at upper level, the Czech Republic, Slovak Republic and Finland are at the top of the list (Tab B6.2; p.231).

## 2.6 Which factors influence level of spending?

As in last years EAG, Table B7.2 shows 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 170: *"Even in those countries where per-student expenditures are similar, allocations of resources to the various levels of education can vary widely. The OECD average amount spent by educational institutions per primary student amounts to USD 8,733, but ranges from less than USD 1,500 per student in Indonesia, to more than USD 21,000 in Luxembourg (TableB1.1 and FigureB1.2). While the typical amount spent on each secondary student is USD 10,106, this average spans a per-student expenditure of USD 1,175 per student in Indonesia to more than USD*



21,500 in Luxembourg. For tertiary level students, the higher average of USD 16,143 is explained by high expenditures - more than USD 20,000 - in a few OECD countries, notably Canada, Luxembourg, Norway, Sweden, Switzerland, the United Kingdom and the United States.”

## 3 Access to Education, Participation and Progression

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

*Early childhood education:* Table C2.1; p shows the enrolment rates of children aged 3, 4, 5 and 6 in pre-primary and primary education. In 2014/2015, the enrolment rate in Ireland for children aged 3 was 38%, the second 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 Israel, United Kingdom and France. 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 89% in 2014/2015 (56% of 4-year olds were in pre-primary and 33% were enrolled in primary). This compares to OECD averages of 78% and 88% for 3- and 4-year olds respectively and corresponding EU22 averages of 80% and 92%. The countries with the highest enrolment rates for this indicator were the United Kingdom, Israel and France (3-year olds) and France, United Kingdom and Israel (4-year olds) (Tab C2.1; p.269). 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, 96% 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 Slovenia and the Netherlands. (Tab C1.1; p.256). 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 20-24-year olds here is higher than the OECD average. It is

also higher than the EU22 average, illustrating a strong emphasis in Ireland on initial formal education and training and relatively less emphasis for older age groups. See Figure C1.1 below. The three top-ranking countries for enrolment rates of 20-24-year olds are Australia, Denmark and Slovenia.

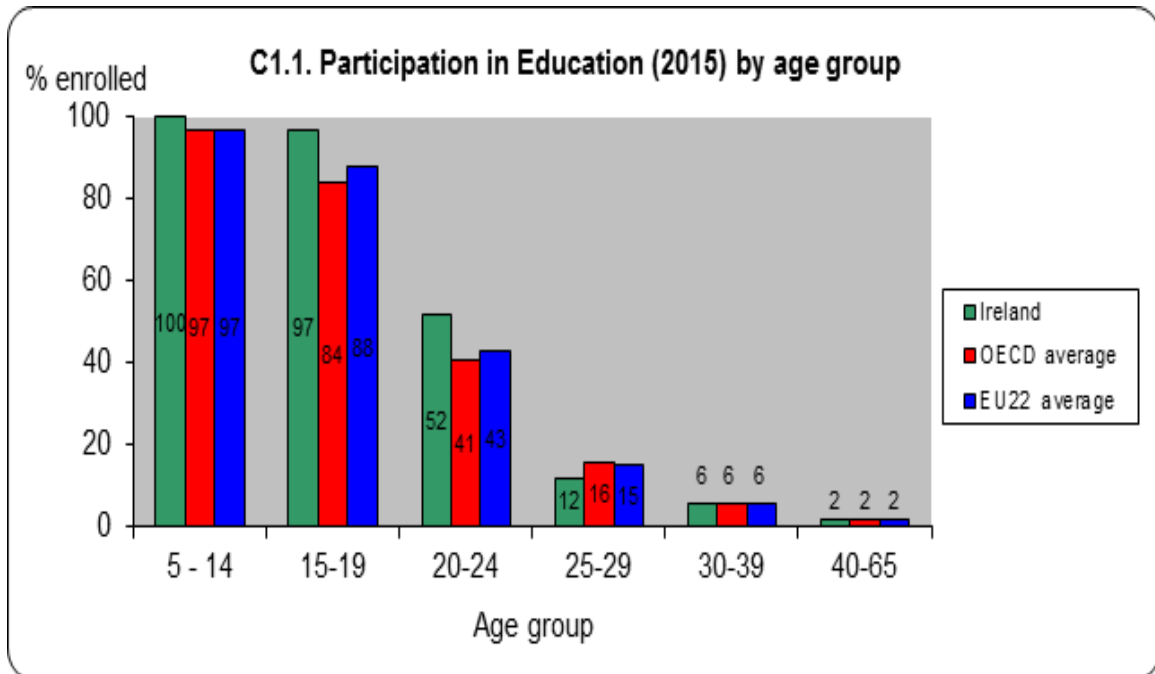


Figure C1.1:

### 3.2 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 13.9% on average across OECD countries in 2016 (Tab C5.2; p.314). The corresponding 2016 data are not available for Ireland, but the 2015 figure for Ireland was 16.2% up from 10.5% in 2005. The three top-ranking countries for this indicator were Iceland, Luxembourg and the Netherlands. The proportions for 20-24 year-olds were 16.3 for the OECD average, with missing data for Ireland. The 2015 figure for Ireland was 19.8% up from 12.3% in 2005. The countries that fared best for this indicator were Iceland, the Netherlands and Denmark. Looking at gender, the NEET rates for 18-24 year olds for males in Ireland was 19.1% compared to the OECD average of 14.5% and the rates for females were 17.3% and

16.9% respectively. The countries with the lowest NEET rates for males were Iceland, the Netherlands and Germany. Those with the lowest rates for females were Iceland, Denmark and the Netherlands (Fig C5.2; p.306).

## 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. Table D1.1 outlines instruction time in compulsory general education 2016/2017 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](#)).

Table D1.1: Instruction time in compulsory general education (2016/2017)

	Average Number of Hours			
	Primary		Lower Secondary	
	<i>Intended</i>	<i>Compulsory</i>	<i>Intended</i>	<i>Compulsory</i>
<b>Ireland</b>	910	910	918	918
<b>OECD average</b>	m	800	m	913
<b>EU22 average</b>	m	776	m	892
<b>Ranking (OECD)</b>	-	9 <sup>th</sup> highest of 33*	-	13 <sup>th</sup> highest of 33*
<b>Highest-ranking OECD Countries</b>	Denmark, Chile, Portugal	Denmark, Chile, Australia	Denmark, Mexico, Chile	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.

Tables D1.3a and D1.3b outline the instruction time given to each subject in primary and post-primary education in Ireland, respectively, relative to the OECD average. Note that 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 (Tabs D1.3a and D1.3b; pp.348-349). Refer to [Technical Note 5](#).

Table D1.3a: Instruction time per subject in primary education (2016/2017)  
(As a percentage of total compulsory instruction time)

	Reading, Writing and Literature	Maths	Natural Sciences	Social Studies	Second Language	Arts	Physical Education and Health	Religion, Ethics and Moral Education	Other (including flexible curriculum)
<b>Ireland</b>	20	17	4	8	14	12	4	10	11
<b>OECD average</b>	24	17	7	6	6	10	9	5	5
<b>EU22 average</b>	25	17	7	5	7	11	10	4	4

In the case of primary schools, 17% of compulsory instruction time was allocated to mathematics, similar to the OECD average. Mexico, Portugal and France allocate the most instruction time to mathematics. By contrast, 10% of compulsory instruction time was given to 'religion, ethics and moral education' in Ireland (the second highest in this table behind Israel, with Austria ranking third) compared with an OECD average of 5%. Natural sciences account for 4% of instruction time compared with 7% across the OECD.

20% of compulsory instruction time in primary schools was given to 'reading, writing and literature' which was below the OECD average of 24%. 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%, second highest in the OECD, after Luxembourg and ahead of Spain and Poland. (Tab D1.3a; p.348).

Note that the above-mentioned instruction times 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.

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 both levels, instruction time devoted to modern languages has been included in another category. As a consequence, it is not possible to compare values to other countries. Refer to Table D1.3b; p.349. [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 was launched in 2014 and a Foreign Languages in Education Policy has been prepared.

9% of compulsory instruction time in post-primary schools was given to 'reading, writing and 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 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 (Tabs D1.3a and D1.3b; pp.348-349). Refer to [Technical Note 5](#).

In the case of post-primary schools, 12% of compulsory instruction time was allocated to mathematics, same as the OECD average. Similar to the primary school results by countries for this indicator, Mexico, Portugal and France allocate the most instruction time to mathematics. 17% of compulsory instruction time in post-primary schools was given to 'social studies' which was above the OECD average of 10%. In this indicator Ireland ranked 1<sup>st</sup> ahead of Israel and Korea.

Table D1.3b: Instruction time per subject in lower secondary education (2016/2017)  
(As a percentage of total compulsory instruction time)

	Reading, Writing and Literature	Maths	Natural Sciences	Social Studies	Second Language	Arts	Physical Education and Health	Religion, Ethics and Moral Education	Other (including flexible curriculum)
<b>Ireland</b>	9	12	*	17	**	*	7	**	2
<b>OECD average</b>	14	12	12	10	9	6	8	4	3
<b>EU22 average</b>	15	12	12	10	9	7	8	3	2

\*The subject is included in EAG 2017 Table B1.3b as compulsory option chosen by the student but with no specific allocation of time.

\*\* The subject is included in EAG 2017 Table B1.3b as compulsory subject with flexible timetable but with no specific allocation of time.



## 4.2 Class size and pupil-teacher ratio (D2)

Average class size (ACS) and pupil-teacher ratio (PTR) (Tabs D2.1 and D2.2; pp): The pupil-teacher ratio at primary level declined gradually in Ireland from 21.5 in 1999/2000 (when the OECD average was 17.7) to 15.7 in 2010/2011, increased to 16.4 in 2012/2013 and was 16 (16.2) in 2014/2015. Average class size in Ireland increased from 24.7 in 2012/2013 to 25 (24.9) in 2014/2015.

Table D2.1/2.2: Pupil-teacher ratios and average class size in public primary schools in 1999/2000 and 2014/2015

	1999/2000		2014/2015	
	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>
<b>Ireland</b>	21.5	24.8	16	24.9
<b>OECD average</b>	17.7	22.1	15	21
<b>Rank position (OECD)</b>	4 <sup>th</sup> highest of 27	5 <sup>th</sup> highest of 23	12 <sup>th</sup> highest of 32	5 <sup>th</sup> highest of 31
<b>Highest-ranking OECD Countries 2014/2015</b>	-	-	Mexico, Chile, France, Czech Republic	Chile, Israel, Japan, United Kingdom

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.

The PTR for second level in EAG differs from the figure shown in the DES Statistical Report (14.2) for the same year (2014/2015), 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 (Tab D2.2; p.358).

Table D2.1/2.2: Pupil-teacher ratios and average class size in public\* secondary schools in 1999/2000 and 2014/2015

	1999/2000		2014/2015	
	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>	<i>Pupil-teacher Ratio</i>	<i>Average Class Size</i>
<b>Ireland</b>	15.9	22.7**	13.9	-
<b>OECD average</b>	14.3	23.6	13	23
<b>Rank position (OECD)</b>	6 <sup>th</sup> highest of 24	15 <sup>th</sup> highest of 23	8 <sup>th</sup> highest of 29	-
<b>Highest-ranking OECD Countries 2014/2015</b>	-	-	Mexico, Chile, Netherlands	Turkey, Japan, Korea

\*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).

Table D2.2: Student-staff ratio in higher education

	2014/2015
<b>Ireland (publicly funded only)</b>	20
<b>OECD average (public and private institutions)</b>	16
<b>Rank position (OECD)</b>	3 <sup>rd</sup> highest of 23
<b>Highest-ranking OECD Countries</b>	Czech Republic, Belgium

### 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 2014/15. 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 (Tab D3.1a; p.374) 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 are not representative of teachers engaged on a part-time basis).

Table D3.1a: Teachers' salaries (2014/2015) after 15 years of experience  
(in equivalent US\$ converted using PPPs)

	<b>Primary</b>	<b>Lower-second Level</b>	<b>Upper-second Level</b>
<b>Ireland</b>	57,449	58,040	58,040
<b>OECD average</b>	42,710	44,444	46,453
<b>EU22 average</b>	42,049	43,989	46,151
<b>Ranking</b>	6 <sup>th</sup> highest of 30*	7 <sup>th</sup> highest of 30*	8 <sup>th</sup> highest of 30*
<b>Highest-ranking OECD Countries</b>	Luxembourg, Germany, Canada	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 2015 was 113 for primary, lower and upper secondary ([Tab D3.5a](#)). This value was higher than the corresponding OECD averages of 106 for primary, 105 for lower secondary and 104 for upper secondary. The countries that ranked the highest for this indicator for primary were Luxembourg, Latvia and Israel. For lower secondary, the top three countries were Latvia, Israel and Poland; in the case of upper secondary, Latvia, Poland and Norway 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 (Tab D3.2a; p.375). In OECD countries, primary teachers earn, on average, 85% of the salary of a tertiary-educated, 25-64 year-old full-time, full-year worker. Lower-secondary teachers are paid 88% and upper-secondary teachers are paid 94% of that benchmark salary. The three countries that rank highest for this indicator are Portugal, Latvia and Luxembourg (primary and lower secondary) and Portugal, Luxembourg and Latvia 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.

Table D4.1: Details of primary teachers' working time 2014/2015 (p.388)

	Ireland	OECD Average	EU22 Average	Highest-ranking OECD Countries
<b>Number of weeks of instruction</b>	37	38	37	Mexico, Japan, Australia, Netherlands, Germany
<b>Number of days of instruction</b>	183	183	180	Japan, Mexico, Australia
<b>Net teaching time, in hours</b>	915	799	767	Chile, Switzerland, Netherlands
<b>Working time required at school, in hours</b>	1,073	1,144	1,067	Chile, Estonia, New Zealand
<b>Total statutory working time, in hours</b>	N/a	1,612	1,557	Chile, United States, Switzerland

#### 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 12%. The countries with the highest numbers of primary teachers aged under 30 are United Kingdom, Luxembourg, Belgium and Chile (Tab

Table D4.1: Details of lower-second-level teachers' working time 2014/2015 (p.388)

	<b>Ireland</b>	<b>OECD Average</b>	<b>EU22 Average</b>	<b>Highest-ranking OECD Countries</b>
<b>Number of weeks of instruction</b>	33	38	37	Mexico, Australia, Japan, Germany
<b>Number of days of instruction</b>	167	182	178	Japan, Mexico, Australia
<b>Net teaching time, in hours</b>	735	721	668	Chile, Switzerland, Mexico
<b>Working time required at school, in hours</b>	768	1,125	1,033	Chile, Estonia, United States
<b>Total statutory working time, in hours</b>	N/a	1,636	1,593	Chile, United States, Switzerland

D5.1; p.399).

As in the majority of other countries, the teaching profession in Ireland continues to be dominated by females (at primary level 87% in 2015). Hungary, Slovenia and Italy have the highest proportions of female teachers (Tab D5.2; p.400).

## 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 2015, 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 2015 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<sup>st</sup> to 6<sup>th</sup> class.*

*However, the information provided in indicators D1 focused on the period of 1<sup>st</sup> Class to 6<sup>th</sup> 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, Fáiilte 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 + Fáiilte, 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 and 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 2014/2015. 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 (EAG2016): 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 2016 NESLI Survey on Teachers and the Curriculum Data. Data presented in EAG 2017 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.