

An Roinn Oideachais Department of Education

# National Briefing Note on Education at a Glance 2022 OECD Indicators A Country Profile for Ireland

#### Introduction

The 2022 edition of Education at a Glance (EAG) was published by the OECD on Monday 2<sup>nd</sup> October. EAG has been published by the OECD on a yearly basis since 1992. The reference year for data in this publication is the school year 2019/2020 for enrolments, the financial year 2019 for spending data, the calendar year 2020 for earnings and educational attainment (CSO) and the calendar year 2021 for labour market status (CSO).

EAG is organised into four chapters:

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

This summary document aims to highlight some key indicators with a main focus on how Ireland compares with the OECD or EU22 averages. Levels of education are classified by a system referred to as ISCED-2011. For more details on OECD/EU22 average and classification of levels of education see <u>Technical Note 11.</u>

The data presented in EAG is largely based on information provided through the annual UOE (UNESCO, OECD and Eurostat) data collection by the Department of Education and Skills. See <u>Technical Note 1</u>. Other sources such as Labour Force Survey (CSO), the EU Survey on Income and Living Conditions (CSO), 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) are also used.

Chapter C covers financial and human resources and includes estimates of education expenditure. The methodology used when compiling expenditure on education is laid out in a detailed manual on concepts, definitions and classifications published by the OECD. Expenditure covers not just government expenditure but also expenditure by households, by other private sources and international expenditure

A review of data sources and methods undertaken in 2019 and early 2020 has resulted in a number of significant changes to the estimates provided to the OECD. In particular:

- Retirement expenditure no longer includes pensions paid to former employees resulting in a fall in public expenditure in the primary and post-primary sectors in particular.
- Revisions to the treatment of expenditure by the National Training Fund.
- The inclusion of additional components of educational expenditure by the Department of Social Protection such as supports for clothes, books and transport.
- Improved estimates of household expenditure resulting in increases in private expenditure across all sectors.
- Revised estimates of expenditure on research and development to bring it into line with the UOE manual.

As a result of these revisions the overall figure for education expenditure has been revised upwards while the split between public and private expenditure has shifted and is now more in line with the OECD average. The OECD average for 2019 is 83% public and 17% private while the split for Ireland is 85% public and 15% private. Prior to these revisions the split between for Ireland was around 91% public and 9% private.

It is important to note that due to these extensive revisions the expenditure data for pre-2015 is not comparable with expenditure data post-2015.

The entire pdf copy of Education at a Glance Indicators 2022 and the detailed Excel data tables can be downloaded here:

Education at a Glance - OECD

If you wish to consult or download data from last year's publication EAG 2021 go to:

ht https://www.oecd.org/education/education-at-a-glance-19991487.htm/?refcode=20190209ig

#### A. The Output of Educational Institutions and the Impact of Learning

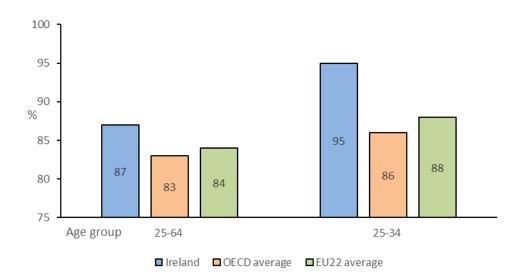
#### Educational attainment in the adult population (A1)

#### Upper-secondary educational attainment

In 2021, 87 per cent of persons aged between 25 and 64 had completed uppersecondary education or higher (Leaving Certificate or equivalent), leaving Ireland ranked fifteenth out of <u>38</u><sup>1</sup> in this indicator. The corresponding figure in 2020 was 85 per cent, and also ranked eighteenth. For the younger age group of 25-34-year olds Ireland was ranked fourth with 95 per cent educated to upper-secondary or above, compared to 86 per cent across the OECD. In 2020 the figure was 94 per cent leaving Ireland ranked seventh.

EAG tables A1.1 & A1.2

Figure A1: Population with least upper secondary education, by age group, 2021

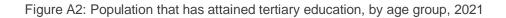


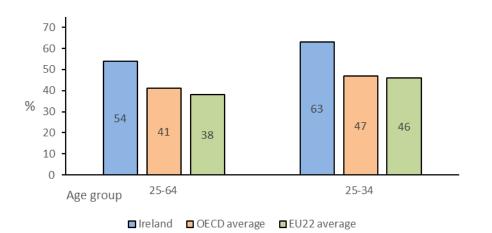
<sup>&</sup>lt;sup>1</sup> On 15<sup>th</sup> May 2020 OECD countries unanimously decided to invite Costa Rica to become a member of the Organisation. Costa Rica's accession, extending the OECD's membership to 38 countries, will take effect after the country has taken the appropriate steps at the national level to accede to the OECD Convention, and deposited its instrument of accession with the French government, the depository of the Convention.

#### Educational attainment - other levels of education

Taking the adult population as a whole (aged 25-64), the rate of tertiary attainment in Ireland was above the OECD average (54% compared to 41%). Ireland ranked third for this indicator with Canada and Japan being the two top-ranked countries. The corresponding figure in 2020 was 50 per cent, with Ireland being ranked seventh for this indicator. *EAG table A1.1*.

Among the younger age group of 25-34-year olds Ireland ranked fifth in terms of tertiary attainment with 63 per cent, well above the OECD average of 47 per cent (or EU22 average of 46%). Figure A2. The Republic of Korea, Canada, Japan and Luxembourg were the four top-ranked countries. The corresponding figure for this age group in 2020 was 58 per cent, with Ireland being ranked fourth for this indicator. *EAG table A1.2.* 





#### Transition from education to work (A2)

On average across the OECD 16.1 per cent of young people (aged 18-24) were not in employment, education or training (NEET) in 2021; in Ireland the corresponding figure was 12.1 per cent, down from 13 per cent in 2020. The three top-ranking countries for this indicator were the Netherlands, Norway and Iceland. In Ireland 25 per cent of 18-24-year olds were at work leaving Ireland ranked twenty-fifth. New Zealand, Israel and

United Kingdom are the three top-ranking countries for this indicator with OECD and EU22 averages of 31 and 26 per cent, respectively. 63 per cent of 18-24-year olds were in education; Ireland was ranked sixth with OECD and EU22 averages of 54 and 59 per cent, respectively. The three top-ranking countries for this indicator are Slovenia, the Netherlands and Greece. *EAG table A2.2.* 

#### Educational and skill attainment and the labour market (A3)

It is well-recognised that participation in the labour force, occupations held and earnings from employment are all strongly related to educational attainment.

Rates of employment for adults (25-34 year-olds) with below upper-secondary education rose from 41 per cent in 2011 to 45 per cent in 2021. Ireland ranked 36th for this indicator with Luxembourg and Iceland ranked top. The corresponding figures for those with upper-secondary or post-secondary non-tertiary attainment in Ireland were 65 per cent in 2011 and 72 per cent in 2021 with Ireland ranked 26th. The rates for tertiary graduates were 82 per cent in 2011 and 88 per cent in 2021 with Ireland ranked 12th. *EAG table A3.2.* 

## Individual labour market returns to education and social outcomes related to education (A4 and A6)

In all OECD countries, adults with tertiary education earn more than adults with uppersecondary education who, in turn, earn more than adults with below upper-secondary education. In this way education may be viewed as an investment in future earnings with a 'premium' income arising from higher education and the associated skills and productivity of the person.

Using upper-secondary as a benchmark in 2021 adults aged 25-64 with short-cycle tertiary qualifications earned 16 per cent more; those with a Bachelor's degree earned 58 per cent more; and those with a Master's or Doctoral degree earned 93 per cent more on average. The corresponding OECD averages were 20, 44 and 88 per cent, respectively. *EAG table A4.1.* 

In the indicator A4, 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 (*EAG A6*) are provided to illustrate likely societal benefits from additional education.

Across the OECD in, 55-74 year olds are more likely to use the internet at least once a week the higher the level of education they have attained. 57% of those with below

upper secondary education used the internet at least once a week, compared with 80% of those with upper secondary or post-secondary non-tertiary education or 95% of those with tertiary education. The figures for Ireland are well above the OECD averages with 95% of those with below upper secondary education, 94% of those with upper secondary or post-secondary non-tertiary education and 98% of those with tertiary education using the internet at least once a week. *EAG Table A6.1*.

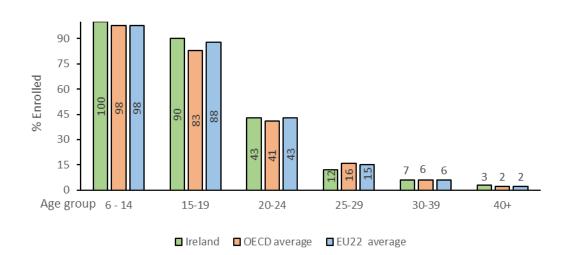
#### B. Access to Education, Participation and Progression

#### Participation outside of compulsory education (B1, B2, B3, B4)

*Early childhood education*: EAG table B2.1 shows the enrolments rates of children aged under 3 and children aged 3 to 5 in pre-primary and primary education. For the 2020 academic year 100% of 3-5 year olds were enrolled in either early childhood education or primary education, with 60% of this cohort enrolled in early childhood education and 40% in primary education. Ireland ranked joint 1st for this indicator along with France, the United Kingdom and Israel.

*Transition to adulthood and further/higher education:* The enrolment rates (at all levels) among 15-19-year olds in Ireland, at 90 per cent, exceed the OECD and EU22 averages and place Ireland at rank 7th, with Slovenia, Lithuania and Belgium ranked top. Ireland shares, in common with some other OECD countries, a pronounced pattern of 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 was 43 per cent, higher than the OECD average of 41 per cent, illustrating a strong emphasis in Ireland on initial formal education and training with relatively less emphasis for older age groups. The three top-ranking countries for enrolment rates of 20-24-year olds are Slovenia, Greece and the Netherlands. *EAG table B1.1.* 

Figure B1: Participation in education, by age group, 2020



In Ireland women accounted for 33 percent of new entrants into bachelor's courses in STEM and 19 percent of new entrants in bachelor's courses in information and communication technologies with OECD averages of 31 and 19 percent respectively. *EAG table B4.3.* In 2017 in Ireland the share of women amongst new entrants into bachelor's courses in STEM was 29% (EAG 2019 Table B4.2). The 2020 figures therefore represent an increase of 4 percent of female new entrants into tertiary education bachelor's courses in STEM.

#### C. Financial and Human Resources Invested in Education

#### Expenditure on education relative to national income or public spending (C4)

Public expenditure on education in Ireland stood at 12 per cent of total public expenditure in 2019. Ireland was ranked sixth for this indicator with Chile, Mexico and Switzerland in the top ranks. The OECD average for 2019 was 10.6 per cent. *EAG table C4.1.* 

#### Expenditure on education per pupil (C1.1)

Expenditure on education per primary student in Ireland was \$8,687 (PPP adjusted) in 2019, below the OECD average of \$9,923. Similarly, among secondary students Ireland was below the OECD average with expenditure of \$10,383 and \$11,400 respectively (refer to Table 1 below). *EAG table C1.1.* 

	Primary	Secondary	Tertiary (Incl. R&D)	Primary to Tertiary
Ireland	8,687	10,383	16,997	11,158
OECD average	9,923	11,400	17,559	11,990
Ranking (OECD)	24 <sup>th</sup> of 36	22 <sup>nd</sup> of 36	18 <sup>th</sup> of 36	19 <sup>th</sup> of 36

Table 1: Annual expenditure on educational institutions per student, \$ (PPP adjusted), 2019

#### D. The Learning Environment and Organisation of Schools

#### Organisation of teachers' working time (D4)

Table 2 presents the number of net teaching hours in general education in the academic year 2021/2022. For primary school teachers in Ireland net teaching hours stood at 900 hours compared with an OECD average of 784, while at lower secondary level the figure for net teaching hours in Ireland was 700 hours, compared to the OECD average of 711. Caution is needed, however, in comparing countries as the exact interpretation of 'teaching time' may not be consistent in every case. See <u>Technical Note 2</u>. *EAG table D4.1*.

Table 2 <sup>.</sup>	Net	teaching	time	in	hours	2021/2022
	INCI	teaching	unite		nours,	2021/2022

	Primary	Lower secondary
Ireland	900	700
OECD average	784	711
Ranking (OECD)	7 <sup>th</sup> of 32	14 <sup>th</sup> of 32

#### Ratio of students to academic staff (D8)

The ratio of students to academic staff in third level institutions in Ireland during the 2019/2020 academic year, as presented in table 7, was 22.4, the third highest in the OECD where the average was 15. *EAG Table D8.1*.

Table 7: Student-staff ratio in higher education

	2019/2020
Ireland (publicly funded only)	22.4
OECD average (public and private institutions)	15.0
Rank position (OECD)	3 <sup>rd</sup> highest of 29
Highest-ranking OECD Countries	Colombia, Belgium, Ireland

#### **Teachers' salaries (D3)**

EAG Table D3.1 summarises data on salary levels of teachers in 2021 at primary and secondary level in absolute amounts. The data reflect statutory entitlements based on minimum qualification requirements and relate to salaries scales for full-time teachers only. For Ireland the starting salaries for teachers at primary, lower- and upper-

secondary level are set according to the common salary scale<sup>2</sup>, whereas internationally it varies by level within secondary. Secondly, teacher allowances based on qualifications are not included in the data for Ireland. Note: 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. Salary data is reported in US dollars adjusted for purchasing power parity. Refer to <u>Technical Note 5</u> for further details.

When examined by change over time salaries in 2021 for all teachers in Ireland (primary, lower and upper secondary) were 2 per cent lower than in 2010, compared with the OECD averages of 7 per cent higher for primary, 6 per cent for lower secondary and 7 per cent for upper secondary. *EAG table D3.6* 

	Primary	Lower-second Level	Upper-second Level
Ireland	62,337 <sup>2</sup>	62,948 <sup>2</sup>	62,948 <sup>2</sup>
OECD average	49,245	51,246	53,268
EU22 average	49,022	51,507	53,273
Ranking	7 <sup>th</sup> highest of 32	7 <sup>th</sup> highest of 32	10 <sup>th</sup> highest of 32
Highest-Ranking OECD Countries	Luxembourg, Germany, Netherlands	Luxembourg, Germany, Netherlands	Luxembourg, Germany, Netherlands

Table 8: Teachers' s	salaries after	15 years o	f experience,	\$ (PPF	adjusted), 2021
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<sup>&</sup>lt;sup>2</sup> This is the case for primary and post-primary teachers who were appointed from the 1st January 2011 as they are on a common salary scale that incorporates previous additional allowances such as academic allowances. There is a difference in the salaries of primary and post-primary teachers appointed before 1 January 2011 as they started on different points of the common salary scale (primary on the 2nd point and post-primary on the 3rd point) and different academic allowances were added.

#### **Technical Notes**

Note: for Ireland the changes from 2014 to 2015 are largely driven by the substantial increase in GDP in 2015. For more information on this increase see <a href="http://www.cso.ie/en/media/csoie/newsevents/documents/pr\_GDPexplanatorynote.pdf">http://www.cso.ie/en/media/csoie/newsevents/documents/pr\_GDPexplanatorynote.pdf</a>.

In 2016 Ireland produced a modified GNI (GNI\*) that was recommended by the Economic Statistics Review Group and is designed to exclude globalisation effects that are disproportionately impacting the measurement size of the Irish Economy.

- Data source: The data drawn from the Labour Force Survey or the European Survey on Income and Living Conditions, together with data on GDP and population, have been drawn directly from Eurostat or the Central Statistics Office. Data on enrolment, graduates, entrants, expenditure and numbers of teachers have been supplied by the Statistics Section of the Department of Education and Skills, while data on statutory teacher salaries, working hours and surveys of school accountability have been provided by the Inspectorate following consultation with relevant sections of the Department. Data from the Programme of International Student Assessment were gathered by the Educational Research Centre in Ireland but sourced directly from the OECD.
- 2. Due to the COVID-19 pandemic, the statutory requirements on organisation of teachers' teaching time may have been adjusted temporarily in some countries. Data available at http://stats.oecd.org, Education at a Glance Database. Also, there are five different definitions of teaching time that countries reported to the OECD typical teaching time (teaching time required from most teachers when no specific circumstances apply to teachers), maximum teaching time, minimum teaching time, average planned teaching time and actual teaching time. Ireland reports typical teaching time.
- 3. 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. Table 6 : \*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).

- 4. *PTR for second level* in EAG differs from the figure shown in the DES Statistical Report (13.1) for the same year (2017/2018), due to the inclusion of pupils and teachers in other settings such as STTC, Youthreach and SOLAS.
- 5. Teachers' Salaries: Data on statutory teacher salaries are based on the salary scales and are derived from the 2021 NESLI Survey on Teachers and the Curriculum Data. Data presented in EAG 2022 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.
- Number of days a teacher teaches per year: The minimum school year for preprimary and primary education is 183 days; for secondary education it is 167 days. In actuality, minimum = maximum.
- 7. 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.

As of 2021, the OECD comprised 37 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, Lithuania, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, the Republic of Slovenia, Spain and Sweden). Hence, there are five EU member states (27 minus 22) that are not members of the OECD (and are not included in EAG) while there are 14 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. On 28 April 2020, Colombia had formally become an OECD Member, the 37th country to do so in the Organisation's near 60-year history. On 15<sup>th</sup> May 2020 OECD countries unanimously decided to invite Costa Rica to become a member of the Organisation.

<sup>1</sup>Costa Rica's accession, extending the OECD's membership to 38 countries, will take effect after the country has taken the appropriate steps at the national level to accede to the OECD Convention, and deposited its instrument of accession with the French government, the depository of the Convention.

Comparative data on education and training may be accessed at the following website: <u>https://ec.europa.eu/eurostat/data/database</u> and follow links to Database -> Population and Social Conditions -> Education and Training.

8. The methodology used when compiling expenditure on education is laid out in a detailed manual on concepts, definitions and classifications published by the OECD. Expenditure covers not just government expenditure but also expenditure by households, by other private sources and international expenditure.

A review of data sources and methods undertaken in 2019 and early 2020 has resulted in a number of significant changes to the estimates provided to the OECD. In particular:

- Retirement expenditure no longer includes pensions paid to former employees resulting in a fall in public expenditure in the primary and postprimary sectors in particular.
- Revisions to the treatment of expenditure by the National Training Fund.
- The inclusion of additional components of educational expenditure by the Department of Social Protection such as supports for clothes, books and transport.
- Improved estimates of household expenditure resulting in increases in private expenditure across all sectors.
- Revised estimates of expenditure on research and development to bring it into line with the UOE manual.

As a result of these revisions (2017 data reported in 2020) the overall figure for education expenditure has been revised upwards while the split between public and private expenditure has shifted and is now more in line with the OECD average. The OECD average is 83% public and 17% private while the revised split for Ireland is 82.5% public and 17.5% private; previously this had been 91% public and 9% private.

It is important to note that due to these extensive revisions expenditure data pre-2015 is not comparable with expenditure data post-2015. Revised estimates for 2015 and 2016 have been updated on the OECD website available <u>here</u>.

- 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.
- 10. 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.

### 11. ISCED Coding (as applied to Ireland)

ISCED- 2011 Level	Level of Education	Description
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. The information provided in indicators D1 focussed 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, Solas, Fáilte programmes at NFQ levels 4 and 5; General: Transition Year, Leaving Certificate, LCVP, LCA and VTOS; Vocational: some SOLAS programmes
ISCED 4	Post- secondary, non-tertiary	Post-Leaving Certificate courses + apprenticeships + Fáilte, Teagasc programmes at NFQ levels 5 or 6 (but not Higher Certificate). ISCED 4C programmes are not designed to lead directly to ISCED 5A or 5B. These programmes lead directly to labour market or other ISCED 4 programmes. Examples include apprenticeships, Teagasc farming or horticulture certificate/diploma and the National Craft Certificate at NFQ levels 5 or 6
ISCED 5	Tertiary	NFQ levels 6 (higher). First Higher Certificate (typically 2 yrs)
ISCED 6	Tertiary	NFQ levels 7 & 8. Ordinary Bachelor Degree (typically 3 yrs); Second Ordinary Bachelor Degree (3 yrs). First Honours Bachelor's Degree (3-4 yrs); Honours Bachelor's Degree in (Veterinary) Medicine/Dental Science/Architecture (5-6 yrs); Second Postgraduate Diploma (1 yr)

ISCED 7	Tertiary	NFQ level 9. Master's Degree (taught) (1 yr); Master's Degree (whether taught or by research) (2 yrs)
ISCED 8	Tertiary PhD	Doctoral Degree (PhD)