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EDUCATION AT A GLANCE 2012
OECD INDICATORS

A Country Profile for Ireland

STATISTICS SECTION
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0 Introduction

The latest edition of ***Education at a Glance (EAG)*** was published by the OECD on Tuesday **11th September 2012**. The reference year for data in this publication is the school year 2009/2010 (or the financial year 2009 or the calendar year 2010 in the case of labour market status). EAG has been published by 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 4 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 highlights some key indicators – following the structure of EAG according to the above four chapters. The main focus is on how Ireland compares with the 'OECD average' (see technical note 1 on page 29). 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 technical note 2, page 29). Levels of education are classified in EAG – by a system referred to as ISCED (see Technical Note 3 below).

Most of the data presented in EAG are based on detailed information provided through the 'UOE Data Collection' (UNESCO, OECD and Eurostat) supplied, each year, by all OECD countries and, in the case of Ireland, the Department of Education and Skills[1]. 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 Science in 2009. Payments of child benefit by the Department of Social and Family Affairs conditional on student status in 2009 are included.

The entire pdf copy of Education at a Glance Indicators 2012, as well as the detailed data tables in Excel format can be downloaded here http://www.oecd.org/edu/eag2012.htm

If you wish to consult or download data from last year's publication – EAG2011 – go to: http://www.oecd.org/edu/eag2011

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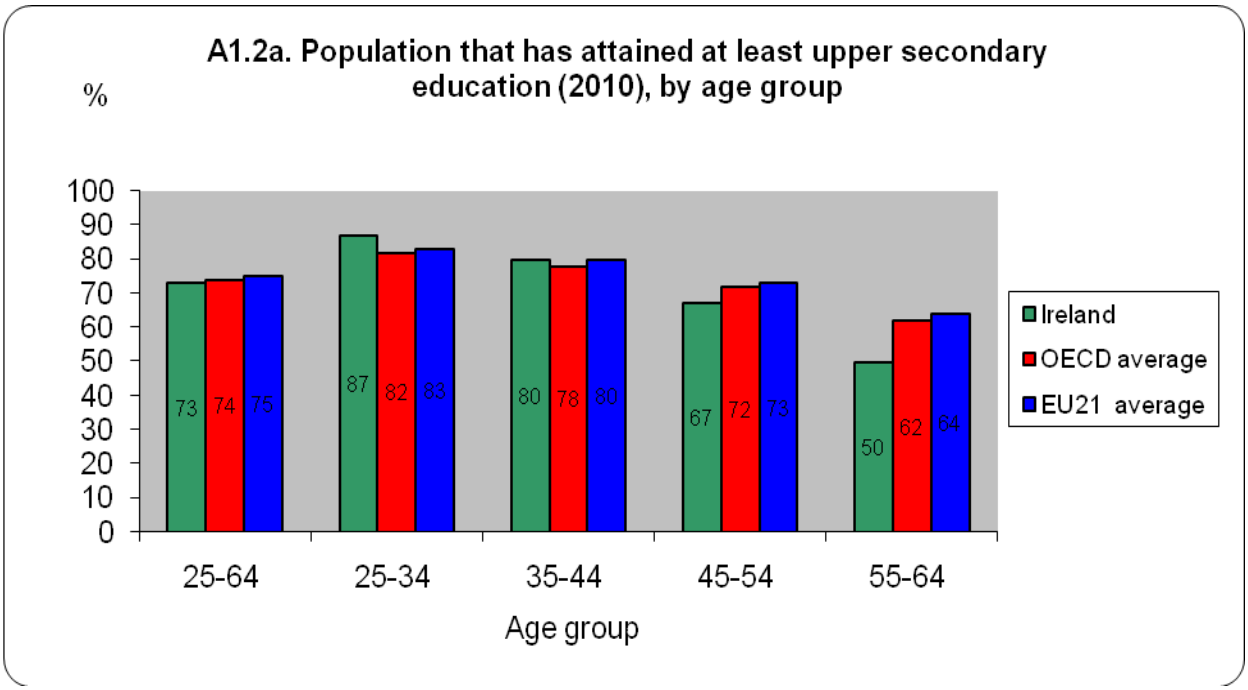
1.1 Educational attainment in the Adult population (how many people in the adult population have completed a particular level of education).

1.1.1 Upper secondary educational attainment (A1)

Ireland, starting from a position of a relatively low level of completion of education in the population as a whole in the mid-20th Century, has been catching up with other economically developed countries. There has been a steady increase over recent decades with a particularly fast catching-up by groups who completed their initial education in the 1970s and later. In 2010, 50% of persons aged between 55 and 64 had completed upper Secondary or higher (Leaving Certificate or equivalent or higher). The corresponding figure was 62% on average across the OECD. However, 87% of 25-34 year olds, here, had completed upper Secondary education compared to 82% across the OECD. So, the gap in attainment levels in Ireland[2] between 55-64 year olds and 25-34 year olds was very large at 37 percentage points – and was second highest (behind Korea) of any OECD country in 2010 (A1.2a; page 35[3]). Note that for the first time the OECD have been able to include data for China in this table, however the data relate to 2000 and hence are somewhat outdated in comparison.



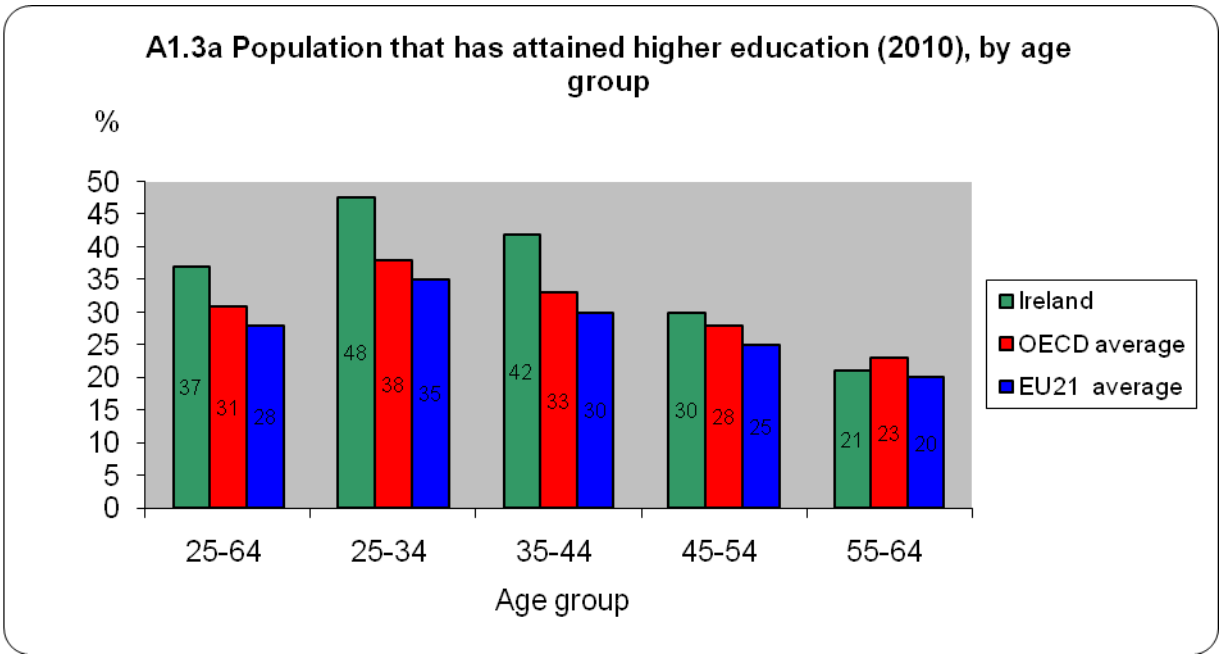
[2] These figures also include migrants who have completed their education outside Ireland. The overall impact on educational attainment arising from inward migration is limited – however it does have the effect of raising levels of attainment especially among the young age-groups where recent migrants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

[3] The exact cross-reference to the information in EAG is given throughout this document in the following way (example): A1.2a; P35 = Indicator A1.2a on Page 35 of the published EAG 2012.

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 (A1.4; P37-38) in Ireland was above the OECD average (37% compared to 30%). However, the proportion of adults without a Leaving Certificate or above was 27% and was slightly more than the OECD average proportion, at 26%. 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. Of all OECD countries, Ireland recorded the highest growth in tertiary attainment among the adult population between 2000 and 2010. The proportion of adults aged 25-64 with a third level qualification increased by 94 percentage points in Ireland since 2000 (A1.4; P37).

Attainment at higher education level (whether university or other higher education) was particularly high among 25-34 year olds in Ireland where, at 48%, Ireland was above the OECD average of 38% (or EU21 at 35%) – refer to A1.3a; P36.



1.2 Upper Secondary 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 (2010) as a percentage of each single year of age cohort (18 years of age). Using this last measure (A2.1; P53), the OECD-average graduation rate was 84% (or 87% for EU21). The corresponding figure for Ireland in 2010 was 94%. In Ireland the rate was 93% and 95% for females and males, respectively.

The numbers of upper secondary graduates also include a range of education pathways, including FÁS and other FETAC awards. As for the vast majority of OECD countries, there is a much higher graduation rate among females than among males.

A comparison, over time, of upper Secondary graduation rates (A2.3; P55) shows an increase followed by a stabilisation of rates of completion in many countries including Ireland. However, in the case of Ireland, some of the increase was associated with the inclusion of particular FETAC awards from 2003 onwards that were not previously included in statistical returns made to the international organisations. Also, the drop in estimated completion between 2005 and 2006 is associated with the reclassification of a number of FETAC awards from ISCED level 3 to level 4.

Indicator A2.5; P57 on successful completion of upper secondary programmes is based on tracking an entry cohort. The methodology used varies for each country but in the Irish case is the same methodology employed in the 2011 Retention Rates of Pupils in Second Level Schools report, but rather than starting with first years, the analysis starts with pupils in their first year after completing the Junior Certificate. Of the countries that supplied data, Ireland had the fifth highest proportion of pupils who completed upper secondary after the theoretical duration of the program, at 87% and Iceland had the lowest at 44% (Chart A2.4: P47).

1.2.2 Tertiary Completion Rates (A3)

As with upper Secondary education, it is possible to contrast countries in terms of the ratio of graduates to the typical age cohort. The data shown in A3.1; P67 distinguishes 'Tertiary type B' (Higher Certificate/Ordinary Bachelor Degree) and 'Tertiary type A qualifications' (Honours Bachelor Degree). Ireland was well above the international averages in tertiary graduation with a particularly strong lead in terms of Tertiary type B (or ISCED level 5B) where it was the fifth highest in the OECD in 2010 at 25.4% well above the OECD average of 10.4%. By contrast, the graduation rate of 1.6% at PhD level here, while on par with the OECD (1.6%) just below and the EU21 average (1.7%) was the 14th highest. The OECD has included an estimate of graduation rates when the impact of international/foreign students was excluded (A3.3; P67). A number of countries – especially English-speaking – stand out as having large numbers of foreign graduates from postgraduate programmes including PhD (UK, Australia, New Zealand and the US). This year data

for Ireland were included which show that the graduation rate for postgraduates was 1.3% when international students were excluded (A3.3, page 69).

A3.1\A3.2: Tertiary Graduation rates (2000 and 2010)

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

	Higher Certificate/ Ordinary Bachelor Degree (Type B)		Honours Bachelor Degree (Type A)		PhD
	2000	**2010**	**2000**	**2010**	**2010**
Ireland	15	22	30	47	1.6
OECD average	9	10	28	39	1.6
EU21 average	7	8	27	40	1.7
Ranking (OECD)	3rd of 17	5th of 28	11th of 23	Joint 7th of 25	Joint 14th of 32

1.3 Programme for International Student Assessment (PISA) (A4, A5)

The *Programme for International Student Assessment* (PISA) survey is carried out in every OECD country every three years as part of a nine-year cycle of surveys in which all assessment domains – Reading, Mathematics and Science – are tested in uniform conditions across the world. One particular domain is the main focus of the survey in each survey. In the last survey, undertaken in 2009, Reading was the main focus. The international results from 2009 can be viewed here and the detailed tables at the following link.

A national report on PISA is available from the Educational Research Centre.

EAG2012 shows a selection of data from PISA 2006 and 2009, focussing on PISA career aspirations versus the fields young person's study (A4) and how immigrant students, foreign-language speakers and socio-economic disadvantage in schools affects student performance (A5).

In PISA 2006 15-year-old students were asked what they expect to be doing at around the age of 30. Many of those surveyed expected to pursue highly skilled lines of employment, dominated by professional and managerial positions. In general girls have higher career aspirations than boys. Gender gaps are exhibited between chosen subjects. The difference between the percentage of girls and boys who plan to work in high level employment for Ireland was 11.3%, slightly higher than the OECD average of 10.9% (A4.1; P81). Just over a third (33.5%) of those surveyed in Ireland plan a career in science (A4.2: P82) and 16.9% plan a career in Health and Service (A4.3; P83). This compares to the OECD averages of 33.2% and 13.6% respectively.

In comparison the indicator goes on to present data on the entry rates to tertiary education (A4.4; P84) for males and the percentage of qualifications at tertiary level awarded to females (A4.5; P85) also showing a breakdown by field of study (A4.6: P86). In Ireland in 2010, (A4.6; P86) women dominated qualifications in Honours Bachelor Degrees and Post Graduate Programmes in Health and Welfare (80%) followed by Education (76%). This is change from 2000, when the two subjects were reversed in order of popularity.

Based on PISA 2009 data, indicator A5.1; P97 shows that for immigrant students in Ireland there is a statistically significant correlation between performance in reading and concentration of immigrant students in schools and also between performance in reading and concentration of immigrant students speaking another language at home in schools. For non immigrant students there is a statistically significant correlation between performance in reading and concentration of students with mothers who have attained less than upper secondary education in schools.

The OECD note on page 92

A higher proportion of immigrant students with low-educated mothers than of non-immigrant students with low-educated mothers – 56% and 50%, respectively – are in disadvantaged schools in most countries. The exceptions are Ireland, Israel, Italy, New Zealand, Portugal and Spain.

1.4 Educational attainment and the labour market (A7)

EAG2012 provides data on the educational attainment of different groups in the labour force using data for 2010 – the third year of 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 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 were higher for men than for women in every country for all levels of educational completion combined. The 2010 OECD averages were 80.0% for men and 65.0% for women (A7.1a; P128/129). The corresponding rates, in Ireland, were 72.0% and 61.5% for men and women respectively. Employment rates vary sharply by educational attainment. For those women who have left school before Junior/Intermediate Certificate (taking the whole population aged 25-64), only 25.8% were in employment compared to 35.7% on average across the OECD. These patterns suggest the pervasiveness of disincentives in relation to employment for women with lower levels of education (and correspondingly lower levels of pay from work if they were employed in the labour market). The corresponding rates at university degree level and higher (ISCED5A and ISCED 6) were 81.6% (Ireland) and 79.3% (OECD average).

In 2010 unemployment rate for males in Ireland at 15.2% was more than double the OECD average of 7.3% whereas the unemployment rate for females at 7.9% was above the OECD average of 7.2% (A7.2a; P130/131).

The economic downturn, has impacted particularly sharply on adults with below upper secondary attainment. Rates of unemployment in Ireland rose from 6.1% in 2007 to 19.5% in 2010 for adults with below upper secondary attainment and from 2.3% to 6.8% for tertiary graduates (A7.4a: P134).

The OECD note on page 121

Estonia, Iceland, Ireland, Spain and the United States reported the most significant increase in unemployment rates among people without an upper secondary education between 2008 and 2009. This continued in 2010 for Estonia, Ireland and Spain, although the increase was smaller than in 2009 (Table A7.4a and Chart A7.2).

1.5 Individual labour market returns to education (A8, A9)

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. The 'premium' to higher education takes no account of differences in tax-take between countries. A number of other factors apart from education impact on earnings, including experience, sector of employment, market power and wage-bargaining arrangements in each country and sector. The 'premium' to higher education was lower in countries with more egalitarian earnings structures. With upper Secondary education as the baseline level of education for most workers in recent decades, investment in higher education gives a clear earnings gain to those who complete this level of education. Leaving aside the cost and forgone earnings during higher education studies, the additional earnings (before deduction of income and consumption taxes) associated with higher education vary considerably by country.

Using 2010 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, 75% more than the benchmark (A8.2a; P152/153). The corresponding OECD average was 59%. In Ireland, individuals with less than upper Secondary completion and in employment earned on average 15% less than those at the benchmark. The OECD average was 24% (A8.2a; P152/153).

Looked at from another angle - comparing male and female earnings for a given level of education - there was a large pay-gap between men and women in the case of low levels of educational completion. For women who left school before the Leaving Certificate and were in employment in 2010, earnings were, on average, only 60% of earnings of men who left school before the Leaving Certificate (A8.3b; P159). Indicator A8.4a (available on the web only) provides a crude indication of relative poverty based on the earnings distribution for those on employment by level of education. 37.8% of persons with below upper secondary attainment earned one half or less of median earnings compared to 13.8% in the case of tertiary 5A/6 graduates. Overall, 25.9% of persons in employment in Ireland earned one half or less than median earnings compared to 16.2% on average across the OECD.

Indicator A9 (pages 174 – 181) provides information on incentives to invest in education by estimating the economic 'value' of education in terms of lifetime earnings. In this indicator, 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 section 1.7 below). An individual incurs costs when investing in education (direct costs such as tuition fees and indirect costs such as forgone earnings while in school). The overall benefits of this investment are assessed by estimating the 'economic value' of the investment, which essentially measures the degree to which the investment costs of attaining higher levels of education translate into higher levels of earnings. The approach used is to estimate the Net Present Value (NPV) defined as the amount which would have to be invested to achieve a comparable flow of future returns based on the estimated additional earnings to individuals over a lifetime of employment. Costs and benefits in different periods are discounted back to the beginning of the investment period by means of an estimated internal rate of interest.

This estimation may be divided into two components:

- Monetary value of investment by individuals = individual's earnings less costs; and
- Monetary value of investment by public authorities (section 1.5 below) = higher income taxes + social contributions + lower social transfers to individuals less costs borne by the government.

Clearly, the estimated financial return to individuals or Government is based on a very partial and historic relationship between different variables. Short-term changes in labour market conditions as well as long-term shifts in patterns of behaviour may change the actual outcome very significantly compared to the estimates shown here which are based on average and stable relationships between variables. Moreover, no account is taken of macro-economic impacts such as spill-over effects on productivity at the firm or regional level of investment in human capital. The joint impact of investing in the skills of many individuals may exceed the sum of the individual parts.

The private net present value for an individual obtaining **upper secondary** or post-secondary, non-tertiary education as part of initial education in Ireland was US$162,975 for males and US$161,723 for females – refer to A9.1; P174/175. At **tertiary** level (Indicator A9.3, P178/179) the figures for Ireland are US$223,821 for males and US$164,087 for females.

A range of factors may explain the high additional earnings to more highly educated persons in Ireland including: greater wage dispersion in the labour force and concentrations of highly educated workers in modern exporting sectors.

Using a combination of information on costs and benefits it is possible to calculate the 'internal rate of return' to investment by level and for men and women.

A9.1/A9.3: Private Internal Rates of Return for an individual (*in equivalent USD - 2008 or latest available year)*

	Upper Secondary + Post-Secondary (non-tertiary)		**Tertiary**	
	Men	Women	Men	Women
Ireland	14.7	23.5	12.8	11.5
OECD average *(for those countries for which estimates were made)*	13.4	13.0	12.4	11.4

Source: Indicator A9.1 & A9.3: Page 174, 178

In regard to additional gross earnings over a lifetime, EAG comments (page 163):

In Austria, Ireland, Norway, Portugal, the United Kingdom and the United States, a man with an upper secondary or post-secondary non-tertiary education can expect a gross earnings premium of more than USD 200 000 over his working life, compared with a man who has not attained that level of education.

1.6 Public (fiscal) labour market returns to education (A9)

The Net Present Value of public investments in **upper secondary** or post-secondary non-tertiary education (A9.2; P176/177) was US$80,742 for males and US$13,247 for females. The corresponding figures for tertiary level were US$172,602 for males and US$81,699 for females. These are hypothetical estimates of returns to additional Government expenditure taking account of the impact on individual earnings, social transfers, savings in unemployment and additional upfront cost. Costs and benefits are projected forward on the basis of data observations at one point in time (2008).

Note that there have been some changes to the methodology used for indicators A9.1, A9.2, A9.3 and A9.4 when compared to previous years EAGs.

A9.2/A9.4: Public Internal Rates of Return for an individual (*in equivalent USD - 2008 or latest available year)*

	Upper Secondary + Post-Secondary (non-tertiary)		**Tertiary**	
	Men	Women	Men	Women
Ireland	9.3	4.9	13.3	9.6
OECD average *(for those countries for which estimates were made)*	7.8	6.6	10.8	8.8

Source: Indicator A9.2 & A9.4: Page 176, 180

1.7 Labour costs and earnings (A10)

Indicator A10 includes new information on the contribution of education to GDP growth (Chart 10.1; P182 and table A10.1; P192/193/194). More than half (55%) of the GDP growth in OECD countries in 2010 was related to labour income growth among tertiary-educated individuals. In Ireland, the labour income growth for tertiary-education individuals exceeded GDP growth.

Table A10.2 (P195/196/197) presents annual labour costs, gross earnings and net earnings comparison for three broad educational levels. The figures show that in 2009, tertiary educated individuals in Ireland could expect to earn USD 35,479 a year. This compares to USD 25,778 for the OECD average. Using a three-year average exchange rate for the calculation yields higher figures. The OECD note on Page 182

The most attractive wages for tertiary-educated individuals are found in Australia, Austria, Ireland, Luxembourg, the Netherlands, the United Kingdom and the United States, where average spending power exceeds USD 40 000 per year.

1.8 Social Outcomes of Education (A11)

Just as education is associated with labour market and public fiscal returns to education, it may also be associated with higher levels of health, trust, democracy and social cohesion. The indicators in EAG on social outcomes this year are based on Life Expectancy, Voting, Engagement in Social Activities and Attitudes towards Equal Rights for Ethnic Minorities (Indicator A11; P209–212). These outcomes are more difficult to measure and prove. Nevertheless, even when controlling for population differences in age, gender and income, there is a clearly positive relationship between level of education completed and various social outcomes. Indicator A11 is based on developmental work involving the INES Network on Labour Market, Economic and Social Outcomes of Learning (LSO). A number of new indicators have been included using micro-data from the European Social Survey.

The indicators show that for Ireland, a tertiary educated 30 year old male can expect to live for a further 52 years compared to 45 years for a male with below upper secondary education. This compares to 51 and 43 years respectively for the OECD average. For 30 year old females in Ireland the outlook is longer, a tertiary education female can expect to live for a further 55 years and a female with below upper secondary attainment a further 50 years. When rounded the OECD averages are the same as the Irish figures. (A11.1; P209).

Indicator A11.2; P210 shows that in Ireland, persons with upper secondary education in both the younger (25-34) and older (55-64) age groups are more likely to have voted than those with either lower than upper secondary education and those with tertiary education. This is in contrast with the OECD averages which show that likelihood to vote increases with educational attainment.

2 Financial and Human Resources Invested in Education

2.1 Trends in education spending (B1)

The latest available international data on expenditure refer to 2009 financial year and reflect the position at the beginning of the continuing economic downturn. With rapid growth in national income as well as in 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 2009, in real terms (allowing for inflation), total public and private spending increased, in Ireland, by 38% (compared to 12% on average across OECD countries) for all levels of education combined below Higher Education ('below HE')[4]. In Higher Education (HE), expenditure in Ireland grew at 43%, slightly higher than at other levels[5]. **It should be noted that, in the case of Ireland, some of this increase is due to the inclusion of greater amounts of private expenditure in the estimates for the total, from 2008 financial year onwards.**

B1.5: Change in *public and private* expenditure on educational institutions between 2005 & 2009 *(2005=100)* **– constant prices**

	'below HE' - Primary to Post-secondary level	**Third level**
Ireland	138	143
OECD average	112	118
Ranking (OECD)	1st of 32	3rd of 31*

Source: Table B1.5: Pages 232 and 233

*Some of this is due to the increase in coverage of private expenditure in Ireland from 2008 onwards, rather than a genuine increase.

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

Total spending as % of national income *(indicator B2.1, page 244):* Expenditure on education (public and private combined) in 2009, was 6.3% of Gross Domestic Product in 2009 up from 5.6 % in 2008, which is now, for the first time in recent years, in line with average OECD expenditure at 6.2% of GDP, and above the EU-21 average of 5.9% of GDP. A contraction in GDP in 2008 and 2009 explains some of this increase. This figure reflects Ireland's maintenance of higher spending levels on education as the economy shrunk. The percentage of GDP spent on higher education, in Ireland, was the same as the OECD average, at 1.6% of GDP, whereas at below HE level the proportion was higher than the OECD average (4.7% compared to 4.0%)

[4] 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 'Measuring Ireland's Progress' gives different (typically lower) estimates of growth in expenditure per student over time (refer to Table 5.1 of MIP2011).

Public expenditure on education as a % of total public expenditure *(Indicator B431, page 271)*: As a percentage of total public expenditure, public spending on education has decreased slightly from 13.7% in 2000 to 13.4% in 2009. The 2009 OECD average was 13.0%.

2.3 Expenditure on education per student (B1, B3)

Total expenditure per student, in Ireland, exceeded the OECD average for all levels in 2009 (refer to B1.1 below)[6]. It should be noted that the increase in expenditure per student at tertiary level compared to the previous year, reflects a number of underlying factors including the impact of increased public spending in 2009 as well as the effect of including expenditure not previously included (refer to technical note 4 in this document). Expenditure per student increased, respectively, for 'below HE' and HE by 30% and 36% in real terms between 2005 and 2009 (Tables B1.5a and B1.5b, page 232 and 233). Over time, in Ireland, the relative gap between expenditure per student at primary and tertiary level has narrowed.

It should be noted that cumulative expenditure per student by educational institutions over the average duration of tertiary studies is somewhat less than the OECD average in Ireland because of the shorter average duration of studies, here (Table B1.3a, Page 230). For a different view of comparative expenditure, focusing only on public expenditure for public educational institutions refer to Table B3.4 below. As in B1.1a Ireland was above the OECD average in 2009, for spending per student at all levels.

B1.1a: Annual expenditure on educational institutions per student (2009) *(In equivalent US$ converted using Purchasing Power Parities for GDP)*

	Primary	**Secondary**	**Tertiary (including research and development)**	**Primary to tertiary**
Ireland	8,219	11,831	16,420	10,713
OECD average	7,719	9,312	13,728	9,252
Ranking (OECD)	14th of 31	6th of 32	9th of 31	9th of 30

Source: Table B1.1a: Page 228

B3.4: Annual public expenditure on public* educational institutions per student (2009)

(In equivalent US$ converted using Purchasing Power Parities for GDP)

	Primary thru post-secondary, non-tertiary	**Tertiary**	**All levels**
Ireland	9,098	13,902	9,873
OECD average	8,511	10,906	8,329
Ranking (OECD)	9th of 28	6th of 25	8th of 26

*Source: Table B3.4: Page 261 * definitions of public and private vary across countries.*

[6] 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 (B4)

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 (refer to B1.4). Average expenditure per pupil across all levels, in Ireland, relative to GDP per capita (Primary to Higher education) was in recent years amongst the lowest among OECD countries (refer to B1.4 below). In 2009, Ireland, while still remaining below the OECD average overall, has improved its ranking in primary and tertiary level, while surpassing the OECD average for secondary education.[7]

B1.4: Annual expenditure on educational institutions per student relative to GDP per capita (2009)

	Primary	Secondary	Tertiary (including research and development)	Primary to tertiary
Ireland	21	30	41	27
OECD average	23	27	42	29
Ranking (OECD)	Joint 20th of 31	9th of 32	Joint 18th of 31	Joint 20th of 30

Source: Table B1.4: Page 231

2.5 Public Subsidies for education to Private Entities (B5)

A significant portion of public spending on higher education, internationally, goes towards subsidies to households for tuition or student living costs. These may take the form of direct grants, subsidies, student loans and services-in-kind. In Ireland the proportion of public education expenditure dedicated to directly subsidising higher education students was significantly above the OECD average – 13.2% for Ireland and 10.4% for the OECD average (B5.3; P285).

2.6 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 2009, 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 even higher at 71.1% (B6.2: page 292). Correspondingly, 9.2% 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 15.5 per cent. Compared to other countries, Ireland also spends slightly less on non-pay current items (B6.2).

[7] The fact that, in the case of Ireland, the overall figure is less than that for any of the Levels reflects the make-up by level within the overall total across all levels.

2.7 Which factors influence level of spending (B7)

As in last year's EAG, Tables B7.1a to B7.1c (page 305-307) 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:

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

B7 takes the differences between the OECD average and each individual country 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, which are larger than the OECD average.

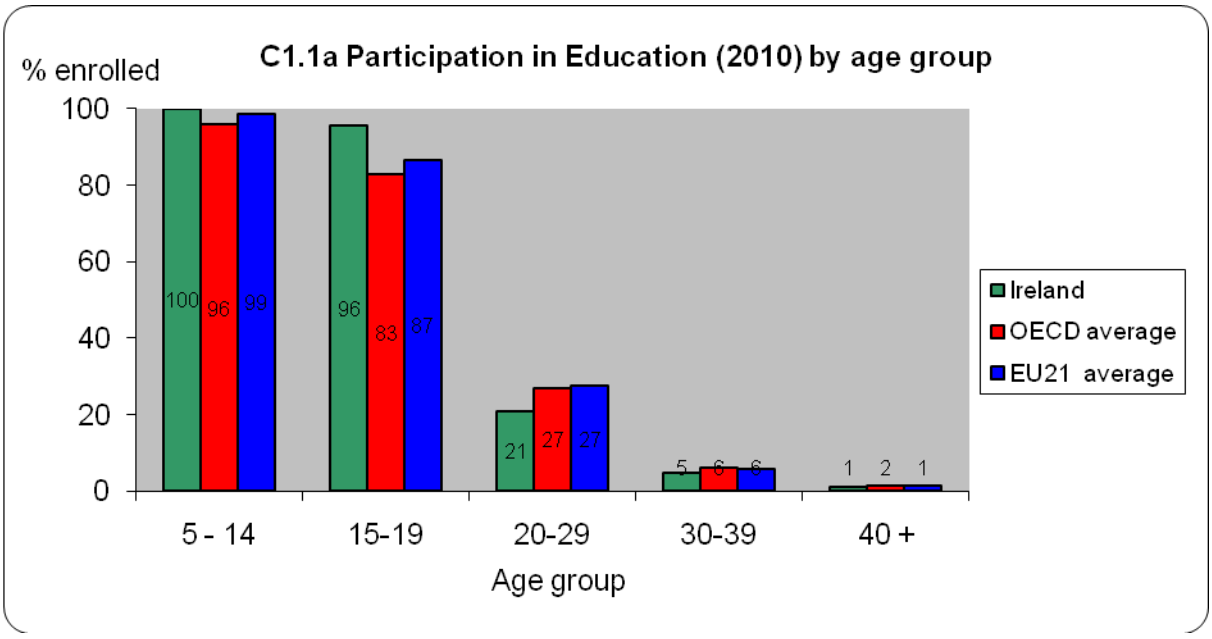
This indicator serves to highlight that, often, educational outcomes are not simply a function of the level of expenditure, as the same level of expenditure can be allocated in many different ways, and may have differing resultant effects on outcomes depending on whether the expenditure is used on higher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

3 Access to Education, Participation and Progression

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

Early childhood education: The enrolment rate for children aged 3 to 4 and under, in Ireland was 66.9% in 2009/10 compared to an OECD average of 71.9 % and a EU21 average of 78.1 % (C1.1a; P 330). In this year's EAG the OECD have included a new indicator (C2; P345 – 347) on Early Childhood Education. Table C2.1: P345 showed the enrolment rates of children aged 3, 4, 5 and 6 in pre-primary and primary education. The data for Ireland show that 27% of 4 year olds are enrolled in pre-primary education, the second lowest of all countries shown. However, this is because a further 41% of 4 year olds are enrolled in primary education. Ireland and 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, 100% of Irish 5 year olds are enrolled in primary education whereas 78% of 5 year olds across the OECD are enrolled in pre-primary education. This indicator also shows Expenditure on Pre-Primary Education as a % of GDP (C2.2; P346) drawing on information from the Finance section of EAG. The table shows that Ireland spends 0.1% of GDP on pre-primary education compared to an OECD average of 0.5% of GDP. Note that this is the first year for which data on participation in ECCE has been included in the EAG returns, and does not constitute full coverage of enrolment on the scheme.

Transition to adulthood and further/higher education: The enrolment rates for 15-19 year olds, here, exceeds the OECD and EU21 averages but rates for all the older age groups trail the international averages (C1.1a; P 330). 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 for older age-groups. However, while the rates here for 20 – 29 year olds are lower than the OECD average (C1.2; P321), they have increased by 2 percentage points in the year to 2010 to 21% possibly showing a return to education among unemployed persons.



Examining trends over time (C1.2;P 331) shows that enrolment among 20-29 year olds increased from 14% to 21% between 1995 and 2005 but fell back to 18% in 2008 – suggesting a possible negative impact on enrolment arising from rapid economic growth in the 2004-2008 period. The rate increased in 2009 and again in 2010 back to 21%.

Access to higher education: Indicator C1.5 (page 334) 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 ISCED5B (NFQ Level 6 (higher) and 7). The age-profile of new entrants to higher education is shown in C3.2 (page 356). 25% of entrants, in Ireland, were aged 25 or older in the case of ISCED5B programmes compared to 42% on average across the OECD. There has been a steady increase in the rate of entry to higher education, here, at ISCED level 5A, up from 32% to 56% of the age-cohort between 2000 and 2010 (C3.3; P357). The rate of entry at ISCED level 5B increased from 25% in 2009 to 28% in 2010 (C3.1; P355). This is significantly higher than the figures for the OECD average of 17% in both 2009 and 2010. (Note that the Irish entry rate to ISCED 5B also increased from 20% in 2008 to 25% in 2009 but this was due to increased coverage).

Projections of enrolment: The OECD has included a new indicator on projections on enrolment. The methodology differs from that used in our own report and are based on OECD demographic projections and on the assumption that enrolment rates will remain at 2010 levels (C1.6; 335). The OECD are projected enrolment for age cohorts, not levels of education so the figures cannot be compared with our own report. The table (and also chart C1.3: P322) shows that unlike the majority of OECD countries, that enrolment in Ireland is likely to increase by 19% compared to 2005 level for the 5 – 14 year old age group. This compares to an overall decrease of 2% for the OECD average. The highest projected increase for this age group is in Israel at 20% and the lowest is a decrease of 29% in Poland.

3.2 Student mobility in higher education (C4)

Among full-time international tertiary students in Ireland, over a third (35.1%) were from Asia; 40.5% were from a European country (other than Ireland); 12.0% were from North America (C4.3; P 376/377). For those students from Ireland studying abroad (including part-timers) at Tertiary Level, 85.2% were studying in the UK (many of whom in Northern Ireland) (C4.4; P378/379). 11.0% 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 8.1% on average across OECD countries in 2010 (C5.4a; P401-406). The corresponding figure for Ireland was 10.4%, down from 11.0% in 2009 (figure for earlier years were 8.5% in 2008 and 5.1% in 2007). These proportions for 20-24 year olds were 17.7% and 26.4% for the OECD average and Ireland, respectively. Taking all young people aged 15-29, only Turkey, Israel, Mexico and Italy (at 36.6%, 27.4%, 24.4% and 23.0% respectively) recorded higher NEET rates than in Ireland (21.0%). The corresponding rate was 15.9% in the UK while it was 7.1% in Luxembourg, the OECD average was 15.8%.

3.4 Adult Education (C6)

Data from the pilot of EU Adult Education Survey (AES) and other comparable data sources for non-EU countries are presented in indicator C6 (P418 - 421). While Ireland did not participate in the pilot AES, the CSO conducted a module on Lifelong Learning in 2008 as part of the QNHS which generated some comparable statistics. Table C6.4a; P420 shows that in Ireland, 26% of persons aged 25- 34 participated in non-formal education, the vast majority of them for job-related reasons (23%), This compares to OECD average of 37% of which 26% for job-related reasons. Table C6.11; P421 focuses on the older age cohorts. In Ireland, 16% of persons aged 55-64, and 8% of those aged 65-74 participated in formal and/or non-formal education. Only 6 countries were able to provide data for this table, of the 6, Ireland was lowest in terms of participation rates for the 55-64 age group and second lowest to Spain for the 65 to 74 age group. The highest rates were reported by the United States.

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 Primary Level, instruction time (compulsory or intended) here was greater than the OECD average, while at age 15, intended instruction time was less than the OECD average where as compulsory instruction time was greater than the OECD average. (D1.1; P435 and chart D1.1; P424). Caution is needed, however, in comparing countries because (a) intended instruction can diverge significantly from actual instruction time and this divergence 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 6.

D1.1: Average number of hours per year of total INTENDED instruction time (2009/2010)

	Age 7 to 8	***Age 9 to 11***	***Age 12-14***	***Age 15 (typical programme)***
Ireland	915	915	929	935
OECD average	790	838	922	948
EU21 average	767	819	907	941
Ranking (OECD)	7rd highest of 32*	9th highest of 32*	14th highest of 32*	15th highest of 30*

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

D1.1: Average number of hours per year of total COMPULSORY instruction time (2009/2010)

	Age 7 to 8	*Age 9 to 11*	*Age 12-14*	*Age 15 (typical programme)*
Ireland	915	915	929	935
OECD average	774	821	899	920
EU19 average	750	800	877	907
Ranking (OECD)	6th highest of 31*	8th highest of 31*	11th highest of 31*	13th highest of 29*

In the case of 9-11 year olds, 12% of compulsory instruction time was given to Mathematics compared to an OECD average of 16%. Science accounts for 4% of instruction time compared to 8% across the OECD. By contrast, 10% of compulsory instruction time was given to Religion in Ireland (the second highest in this table after Israel) compared to an OECD average of 4% and 30% of compulsory instruction time is given to Reading, Writing and Literature, above the OECD average of 22%. Modern foreign languages for 9-11 year olds accounted for an average of 8% of compulsory instruction time across the OECD, and 7% of compulsory instruction time across the EU in contrast to a near negligible amount in Ireland for that age group.

Caution is needed in making these comparisons by subject area. For example, time given to 'Reading, writing and literature' reflects the combined total of both official languages – Irish and English (D1.2a: P436 and D1.2b; P437). Refer to technical note 6.

D1.2b: Instruction time for particular subjects as a percentage of total compulsory instruction time for 9-to-11-year-olds (2009/2010)

	Reading, writing and literature	**Maths**	**Science**	**Social studies**	**Modern languages**	**Arts**	**Physical education**	**Religion**	**Other including flexible curriculum**
Ireland	30	12	4	8	-	12	4	10	20
OECD average	22	16	8	9	8	11	9	4	11
EU21 average	23	16	7	8	10	12	9	4	10

Young people begin to study foreign languages at a relatively late age in Ireland (D1.2b, above). The highest country was Luxembourg where 21% of instruction time is devoted to modern languages (for 9 to 11 year olds).

When pupils enter second level, instruction time in modern languages is very low – at the bottom of 27 OECD countries reporting. Refer to D1.2c; P438 where modern foreign languages accounted for 6% of instruction time in the case of 12-14 year olds in Ireland compared to an OECD average of 13%. Technical note 6 contains more information.

4.2 Class size and Pupil-Teacher ratio (D2)

Average class size (ACS) and pupil-teacher ratio (PTR) (D2.1 and D2.2; P450-451): The Rate at primary level declined gradually in Ireland from 21.5 in 1999/00 (when the OECD average was 17.7 to 15.9 in 2008/2009 and has remained constant for 2009/2010 at 15.9.

D2.1/2.2 Pupil-teacher ratios and average class size in public Primary schools in 1999/2000 & 2009/2010

	1999/00		*2009/10*	
	Pupil-Teacher Ratio	***Average Class size***	***Pupil-Teacher Ratio***	***Average Class size***
Ireland	21.5	24.8	15.9	24.1
OECD average	17.7	22.1	15.9	21.3
Rank position (OECD)	4th highest of 27	5th highest of 23	15th highest of 30	7th highest of 30

At second level, the PTR in Ireland was 14.4. Refer to technical note 7 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 & 2009/2010

	1999/00		*2009/10*	
	Pupil-Teacher Ratio	***Average Class size***	***Pupil-Teacher Ratio***	***Average Class size***
Ireland	15.9	22.7*	14.4	-
OECD average	14.3	23.6	13.8	23.4
Rank position (OECD)	6th highest of 24	15th highest of 23	11th highest of 32	-

^ 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 (13.6) for the same year (2009/2010), due to the inclusion of pupils and teachers in other settings such as STTC, Youthreach and FAS.

The student-staff ratio at third level, in Ireland, as reported in this year's EAG refers to Public Institutions only and hence is not comparable with data published in previous years (D2.2; P451).

D2.2 Student-Staff Ratio in Higher Education

	2009/2010
Ireland (publicly funded only)	15.6
OECD average (public and private institutions)	15.5
Rank position (OECD)	12th highest of 23

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 2009/10. 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. As teachers' salaries were reduced from 1st of January 2010, a weighted mean of the 2009 and 2010 salary scales was used for the data submission. Refer to technical note 12 for further details.

Indicator (D3.1; P 465) 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. 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.

At Primary Level, Irish teachers are better paid in absolute terms than teachers in other countries. The relative position of primary level teachers, here, improves as they move from the minimum to

the maximum of the pay scale. At Secondary level, Irish teachers are also better paid than elsewhere.

D3.1: Teachers' salaries (2009/2010) after 15 years of experience

in equivalent US $ converted using PPPs

	Primary	Lower second level	Upper Second level
Ireland	53,677	53,677	53,677
OECD average	37,603	39,401	41,182
EU21 average	38,280	40,211	42,470
Ranking	4th highest of 35*	5th highest of 34*	8th highest of 34*

* 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 2000 as 100, the figure for Ireland for 2010 was 1.28. (D3.2; P468) This value was higher than the corresponding OECD average of 1.22 for primary, 1.16 for lower secondary and 1.19 for upper secondary. (D3.4; P467).

Yet another way of looking at comparisons of teacher pay is on ratio of salaries to GDP per capita. This table is only available on the web this year (D3.6). In other words, it is possible to compare countries by focussing on the average salary received by teachers with 15 years of experience in 2009/2010 by the level of GDP per capita in Ireland in the same year to give a figure of 1.51. This value was significantly higher than the corresponding OECD average of 1.23 in 2010. The ratio, in Ireland, remained constant at a level somewhat above the OECD average from 2000 to 2008 and rose sharply from 1.27 to 1.47 between 2008 and 2009 as GDP per capita contracted sharply in Ireland in 2009 and rose slightly in 2010 to 1.51.

4.4 Teachers' working time (D4)

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

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

The regulation of teachers' working time varies widely among countries. While some countries formally regulate contact time only, others establish working hours as well. In some countries, time was allocated for teaching and non-teaching activities within the formally established working time.

In most countries, teachers are formally required to work a specified number of hours per week to earn their full-time salary; this includes teaching and non-teaching time. Within this framework, however, countries differ in the allocation of time to teaching and non-teaching activities. Typically, the number of hours for teaching was specified, but some countries also regulate at the national level the time that a teacher has to be present in the school. Refer to technical notes 9 to 11 for further information on the definition of teaching and working time.

D4.1: Details of Primary teachers' working time 2009/2010 (page 481)

	Ireland	**OECD average**	**EU21 average**
Number of weeks of instruction	37	38	38
Number of days of instruction	183	187	185
Net teaching time in hours	915	782	758
Working time required at school in hours	1,037	1,178	1,085
Total statutory working time in hours	Not applicable	1,678	1,599

D4.1: Details of lower second level teachers' working time 2009/2010 (page 481)

	Ireland	**OECD average**	**EU21 average**
Number of weeks of instruction	33	38	38
Number of days of instruction	167	185	182
Net teaching time in hours	735	704	660
Working time required at school in hours	735	1,171	1,057
Total statutory working time in hours	Not applicable	1,673	1,598

4.5 Age and Gender Distribution of Teachers (D5)

Indicator D5 presents data on the gender and age distribution of teachers at each level. There is a marked difference in age-distribution of teachers at primary level in Ireland compared to elsewhere with a much higher proportion of teachers under the age of 30 (D5.1; P493). Slightly under a quarter (23%), of primary teachers in Ireland were under 30; this compares to the OECD average of 14%. At second-level however, the proportion of teachers aged 40 or more is high in Ireland when compared to many other countries, however it is not higher than the OECD average.

The teaching profession in Ireland continues to be dominated by females (D5.3; P495).

New tables (D5.4, D5.5; P 496 - 499) have been included in EAG this year on pre-service training requirements to enter the teaching profession.

4.6 Decision Making in Education and Pathways to Tertiary Education (D6, D7)

Indicators D6 and D7 present the results of surveys undertaken by the OECD-INES Network for the Collection and Adjudication of System-level descriptive Information on Educational Structures, Policies and Practices (NESLI) during 2010/2011.

The main findings of indicator D6 show that at second level, in most countries, including Ireland decisions on the organisation of instruction are predominantly taken at the school level. However decisions related to personnel management, planning and structures, and resources are more likely to be made at higher levels of authority, although countries vary widely.

Indicator D7 shows that twenty countries (including Ireland) reported that they have alternative routes or flexible pathways that can be used to gain access to tertiary education.

Technical Notes

1. For most indicators an '**OECD average'** (or unweighted mean) 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. The OECD average refers to an average of data values at the level of the national systems and can be used to answer the question of 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 August 2012, OECD comprised 34 Member Countries of which 21 are members of the European Union. These are referred to as EU21 and comprise: Austria, Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Italy, Ireland, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden and the United Kingdom. Hence, there are 6 EU Member States (27-21) 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 in partnership with 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 2011 may be accessed at the following website:

   http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database

   (and follow links to Database -> Population and Social Conditions -> Education)

3. **ISCED Coding (as applied to Ireland)**

   ISCED 0 (Pre-primary)

   Early Start Classes in Primary schools and pre-school Traveller centres (note that Early Childhood Care and Education will be included in EAG2012)

   ISCED 1 Primary

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

   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: Leaving Certificate & Transition year

   Vocational: some FÁS programmes

   Pre-vocational: LCVP, LCA and VTOS

   ISCED 3A

   Leaving Cert (Traditional) and Vocational programmes

   ISCED 3B

   Programmes at level 3 designed to provide direct access to ISCED 5B. Category is not relevant in the Irish context.

ISCED 3C

Leaving Cert Applied, Transition year, VTOS and some FÁS programmes

Programmes at this level are not designed to lead directly to ISCED 5A or 5B. Therefore, these programmes lead directly to labour market, ISCED 4 programmes or other ISCED 3 programmes and in terms of Irish reporting consists of FETAC level 4 and 5 awards such as FETAC specific skills certificate and FETAC national skills certificate.

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 5A (Tertiary)

NFQ level 8. First Honours Bachelors Degree (3-4 yrs); Honours Bachelors Degree in (Veterinary) Medicine/ Dental Science/ Architecture (5-6 yrs); Second Post-graduate Diploma (1 yr); Masters Degree (taught) (1 yr); Masters Degree (whether taught or by research) (2 yrs)

ISCED 5B (Tertiary)

NFQ levels 6 (higher) and 7. First Higher Certificate (typically 2 yrs); Ordinary Bachelor Degree (typically 3 yrs); Second Ordinary Bachelor Degree (3 yrs)

Tertiary-type B programmes (Higher Certificate/ Ordinary Bachelor Degree) are classified at the same level of competencies as tertiary-type A programmes, but are more occupationally oriented and usually lead to direct labour market access. The programmes are typically of shorter duration than type A programmes – usually two to three years.

ISCED 6 (Tertiary PhD)

Doctoral Degree (PhD)

4. Compared to data published in *Education at a Glance 2011*, expenditure per student increased significantly, by about 15% at all levels of education combined and by nearly 30% at the tertiary level. At the tertiary level, apart from changes in the number of students (and PPPs), one half of this increase per student can be accounted for by increases in public funding for tertiary education, 32% accounted for by wider coverage of private expenditure and the remaining 18% accounted for by wider data coverage in public expenditure

5. 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 (FAS, other Departments etc) are included in the OECD estimates but not in DES / CSO figures up to 2009.

6. *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 2009/2010. 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 (EAG2012): '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. This is included under the compulsory flexible curriculum.

   Time allocation is based on the following weekly framework for a 36.6-week school year in primary education: English (4.5 hours); Irish (3 hours); mathematics (3 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); discretionary curriculum time (2 hours); religious education (2.5 hours); assembly/roll call (2.5 hours, included in "other"); and small breaks (0.8 hours, included in "other"). Total 25.8 hours. Recreation (typically 2.5 hours) is not included in the curriculum tables: - (EAG2011, Annex III www.oecd.org/edu/eag2012)

7. *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 (classes) is divided by the total number of periods of instruction (classes) during the reference week. This data source is no longer available.

8. *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.

9. *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.

10. *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. Please note that ISCED 'Pre-primary' is in effect the first 2 years of primary schooling in Ireland where children begin primary education between the ages of 4 and 5.
11. *Number of hours a teacher teaches per* day: For primary education: (5 hours 40 min) – (30 minutes recreation) = 5.0 hours 10 minutes; for pre-primary one hour less teaching is required, i.e. 4 hours. For secondary education, 22 hours per week (maximum) are required = 4.4 teaching hours on average per day.
12. *Teachers Salaries*: Data on statutory teacher salaries are based on the salary scales and are derived from the 2011 NESLI Survey on Teachers and the Curriculum Data. Data presented in EAG 2012 for starting salary refers to the second point of the salary scale and do not include any allowances.