



Starting Strong IV

Early Childhood Education and Care Data Country Note

IRELAND

This Data Spotlight note on Early Childhood Education and Care (ECEC) provides a summary of ECEC policy inputs, outputs and outcomes in Ireland. It uses data available within the OECD Secretariat — *Education at a Glance*, the Programme for International Student Assessment (PISA) and the OECD Family Database — to make comparisons between Ireland's ECEC system and the systems in other OECD countries (see Box 1 for definition and comparability issues). This note complements the 2015 OECD publication, *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*.

Key characteristics of ECEC in Ireland:

Resources that are put in the ECEC system

- Ireland does not report on expenditure of early childhood educational development (ISCED 01), only on pre-primary education (ISCED 02). Annual expenditure per student in pre-primary education (ISCED 02) in Ireland was USD 6 532¹, lower than the OECD average of USD 8 070.
- The number of children per staff in pre-primary education (ISCED 02) is comparatively low: there are about 11 children per teacher in Ireland, which is 3 children fewer per teacher than the OECD average of 14 children per teacher, excluding the non-teaching staff, such as auxiliary staff.

Access and participation

- Ireland provides early childhood care and education (ECCE in Ireland) free of charge to all children from the age of 3 for 3 hours a day, 5 days of the week, during the school period.
- Participation of 0-2 year-olds in formal care is around the OECD average (30% and 33%, respectively).
- Participation of 3-5 year-olds in pre-primary education (ISCED 02) is also lower than the OECD average (e.g. for 3-year-olds rates were 46% in Ireland compared with 71% across the OECD), but there is an early start of primary education.
- More than 90% of 4-year-olds are enrolled in pre-primary or primary education.
- There are high enrolment rates of pre-primary pupils in private institutions (98% compared with 32% across the OECD).

Monitoring Quality

- In Ireland there is a national curriculum framework in place for the entire ECEC age group.
- Monitoring early childhood education and care settings for service and staff quality is common practice. Despite numerous initiatives to monitor quality, some challenges remain. These include making wider use of children's views on monitoring practices and evaluations; having a common internal monitoring procedure; and, developing a framework for monitoring children's development (see <u>Ireland's country note on Monitoring Quality in ECEC</u>).

Student performance at age 15 by participation in pre-primary education

- The percentage of 15-year-olds in Ireland who reported not attending pre-primary education in PISA 2012 was significantly above average (13.6% compared with 7.1% across the OECD). Notably, children from lower socio-economic backgrounds and in socio-economically disadvantaged schools were less likely to have participated in pre-primary education. In Ireland, the relationship between attending pre-primary education and mathematics performance of 15-year-olds is smaller than the OECD average, and is not statistically significant after controlling for students' socio-economic background.

Introduction

Participation in ECEC can have a positive effect on children's early learning and development, as well as on subsequent outcomes, such as academic success, labour market performance and socioeconomic mobility. The benefits of ECEC on child outcomes, however, depend on high quality. Settings and programmes that have a high level of quality are positively associated with children's cognitive, social and behavioural development, with disadvantaged children benefitting significantly from high-quality settings (OECD, 2011; Gambaro et al., 2014). Policy outcomes are associated with both policy inputs and policy outputs.

For simplicity purposes, this note uses the term early childhood education and care (ECEC) to refer to arrangements providing care and education for children under compulsory school age. This term differs from those used by other sources in this note, including the ISCED 2011 classification (see Box 1 for the ISCED 2011 methodological distinction between childcare and pre-primary education). Because of these differences in definitions, caution is needed when comparing data presented here.

The note is structured in three different sections:

- **Policy inputs**: This section presents indicators of the resources that are put into a system, such as the level and type of sources to finance ECEC, and the regulations of staff-child ratios to achieve outputs or a result.
- **Policy outputs**: This section covers indicators that are the result of the policy inputs put in place, such as enrolment rates by age. Trend data is presented to examine the changes in early childhood education in the past years.
- **Policy outcomes**: This section covers indicators on the outcomes of children that are associated with both policy inputs and policy outputs. For example, indicators on student performance at age 15 by participation in pre-primary education (drawn from PISA 2012 data).

Section 1. Policy inputs

Access to early childhood education and care services

The organisation of early childhood education and care services varies greatly from country to country in terms of structures, but also regarding the age of children attending different types of settings or the intensity of child participation in different settings (see Box 1). Ireland offers integrated programmes that include education and childcare services. Children are eligible for the Early Childhood Care and Education (ECCE) Scheme, which provides services for children of pre-school age — i.e. children aged over 3 years and not older than 5 and a half years. From September 2016, there has been a significant expansion to pre-school provision under the ECCE programme with children's eligibility for ECCE has increased from 38 weeks for all children, to an average of 61 weeks (ranging from 51 to 88 weeks depending on date of birth and age starting school). This expansion will see the number of children benefitting from the Programme rise from 67,000 (approx.) in September 2015 to around 127,000 (approx.) by April 2017. The State pays a capitation fee to participating playschools and daycare services. In return, they provide a pre-school service free of charge to all children within the qualifying age range for 3 hours a day, 5 days a week, over the school year (www.citizensinformation.ie/en/education/pre school education and childcare/early childhood care a nd education scheme.html).

Early childhood educational development programmes (ISCED 01), as defined in ISCED 2011, are not formally structured in Ireland, but some ECEC services for children under 3 years have an intentional

educational aim (however, they may be outside the definition of ISCED 2011 and hence not included here). Pre-primary education programmes (ISCED 02) are attended by children aged 3 to 5 years (OECD, 2016a) in pre-primary ECEC services in Ireland. With many 4 and 5-year-olds in Ireland enrolled in primary education (OECD, 2016a) they are also included in ISCED 02, as the compulsory primary education age in Ireland is 6 years.

Funding of early childhood education and care services

The level of governance responsible for early childhood education and care services differs according to the area concerned, such as funding, and across countries. In Ireland, all responsibilities are at the national level, including responsibility for the financing system of ECEC, minimum standard setting, curriculum development and monitoring of ECEC (OECD, 2015a).

Expenditure per student in pre-primary education is lower than the OECD average

The financial investment in ECEC settings and equipment is a key requirement for the development of good and high quality learning environments, and indicates the political priority given to the care and education of young children. Ireland does not report on the public funding of early childhood educational development (ISCED 01), only on pre-primary education and pre-compulsory education within primary schools (ISCED 02). Expenditure per student (ISCED 02) in Ireland was USD 6 532,² lower than the OECD average of USD 8 070 in 2013 (see Figure 1).

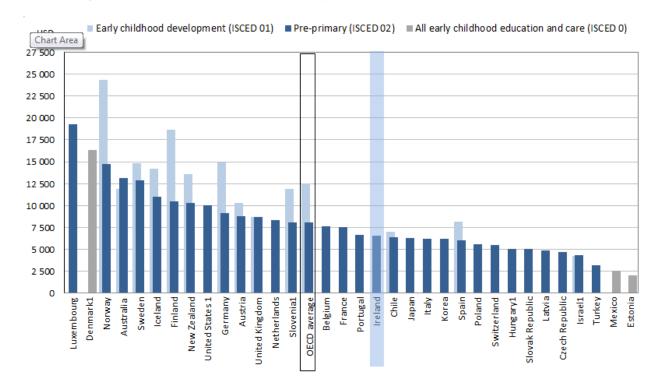


Figure 1. Annual expenditure per student by educational institutions for all services (2013)

Notes: Countries are ranked in descending order of annual expenditure per student by educational institutions for pre-primary education.

1. Includes some expenditure on child care.

Source: OECD (2016), Education at a Glance 2016: OECD Indicators, Table C2.3, http://dx.doi.org/10.1787/888933398316.

Box 1. Distinction between early childhood educational development and pre-primary education: The revised ISCED 2011 classification

There are many different ECEC systems and structures within OECD countries. Consequently, there is also a range of different approaches to identifying the boundary between early childhood education and childcare.

The International Standard Classification of Education (ISCED) defines internationally comparable levels of education. In ISCED 2011, level 0 covers early childhood education for all ages, including very young children. As the educational properties of ISCED 0 programmes can be difficult to assess directly, several criteria are used to come up with a technical definition. For a programme to be reported as ISCED level 0 it must have: adequate intentional educational properties; be delivered by qualified staff members; take place in an institutionalised setting; meet a minimum intensity/duration; and be targeted at children from age 0 until entry into ISCED level 1 (OECD, 2016). Programmes classified at ISCED level 0 may be referred to in many ways nationally, for example: early childhood education and development, play school, reception, pre-primary, pre-school, *Kindergarten*, *Kita*, *Krippe* or *educación inicial*. For programmes provided in *crèches*, daycare centres, private homes, nurseries, *Tagespflege* or *guarderías*, it is important to ensure that they meet the ISCED level 0 classification criteria specified in ISCED 2011.

In ISCED 2011, programmes are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). ISCED 01 programmes are generally designed for children younger than 3 (OECD, 2016). This is a new category not covered by ISCED 1997. ISCED 02 is designed for children from age 3 years to the start of primary education. It corresponds exactly to level 0 in ISCED 1997.

The comparability of programmes at ISCED level 0 depends on each country's ability to report data according to the standard international definition. Early childhood programmes that are offered in some countries do not necessarily meet the criteria or definition of ISCED 01. This is the case of Belgium (except in the Flemish Community), the Czech Republic, France, Ireland, Italy, Japan, Luxembourg, the Netherlands, Poland, Portugal, the Slovak Republic, Switzerland and the United States. On the other hand, the coverage of ISCED 02 (pre--primary education) is larger, with 32 countries reporting data on enrolment rates at ages 3 and 4. Because of these differences, caution is needed when comparing available data on ISCED 01 drawn from Education at a Glance.

The definition of ECEC in the OECD's Starting Strong series differs from the ISCED 2011 definition. The OECD definition states that "the term early childhood education and care (ECEC) includes all arrangements providing care and education for children under compulsory school age, regardless of setting, funding, opening hours or programme content" (OECD, 2001). This means that settings considered an integral part of countries' ECEC systems, but not covered by the ISCED classification, still fall under the terminology of ECEC.

Data reported in *Education at a Glance 2016*, and presented here as ISCED level 0, use the ISCED 2011 classification (Figures 1, 3). PISA 2012 uses the ISCED 1997 classification (Figure 4). The OECD Family Database definition of "formal" childcare among children aged 0-2 years includes centre-based services, organised day care, pre-school and professional child-minders (Figures 2). That is, it includes ISCED 01 and other registered ECEC services.

Sources: OECD (2016), Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris, http://dx.doi.org/10.1787/eag-2016-en; OECD (2001), Starting Strong I: Early Childhood Education and Care, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264192829-en.

Quality of early childhood education and care services

Curriculum frameworks can play a pivotal role in ensuring the quality of ECEC services. In Ireland there is a national curriculum framework in place for the entire ECEC age group. The National Council for Curriculum and Assessment worked with a small number of early years services to produce a curriculum toolkit, entitled Aistear in Action, for use in early years settings. Some other countries have opted for an integrated curriculum for both ECEC and primary education, which may foster the quality of CEC services across age groups. Ireland is considering moving to a more aligned approach (OECD, 2015a).

The number of children per staff member is limited in ECEC settings

In some countries, there are regulations in place regarding the maximum number of children per adult in childcare services. In Ireland, the maximum number of children per teaching staff member in pre-primary education institutions (ISCED 02) is 11^3 (excluding auxiliary staff) (OECD, forthcoming), which is 3 children fewer per teacher than the OECD average of 14 (OECD, 2016a, Table C2.2); Latvia and Luxembourg have a similar ratio. Chile, France and Mexico have the highest number of children per staff member (more than 20 children per staff member). In Australia, New Zealand and Sweden there are less than ten children per staff member (OECD, 2016a, Table C2.2).

Monitoring of early childhood education and care settings is common practice

While monitoring systems and practices vary widely, certain common trends can be observed. All 24 countries and jurisdictions surveyed for *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care* monitor service and staff quality, and 21 monitor child development and outcomes. In Ireland, all formal pre-primary ECEC and childcare services for children 0-6 years are externally monitored for service and staff quality through inspections carried out by the Child and Family Agency. Ireland is one of three jurisdictions out of the 24 surveyed in the Starting Strong IV study that reported not monitoring child development and outcomes. In countries where child development is monitored, this is most frequently done using observational or narrative tools. These practices are usually internal (defined at the ECEC setting) and they are often complemented with monitoring of external agencies (OECD, 2015a).

Monitoring practices in Ireland, have evolved since the data for Starting Strong IV was collected in 2014. For example, today, staff in Early Years settings observe child outcomes on a regular basis, and the quality of children's learning experiences and achievements is assessed through Early Years Education-focused Inspections (Department of Education and Skills, 2016). However, there are several monitoring challenges in Ireland. The monitoring of children's views can contribute to improving ECEC services, but children's experience of ECEC is not yet widely monitored in Ireland. In addition, there is no common, widely implemented internal monitoring procedure to gain a more comprehensive picture of quality and inform practices. Developing a common internal monitoring tool, such as self-evaluations, and linking this to external monitoring practices can create greater coherence. Lastly, an already existing child development monitoring tool that has proven to be effective can be adapted to the Irish context to create alignment in, and a more coherent framework for, monitoring children's development. This is discussed in further detail in Ireland's country note on Monitoring Quality in ECEC (OECD, 2016b).

Section 2. Policy outputs

Participation of 0-2 year-olds in formal childcare is close to the OECD average

Early childhood educational development programmes (ISCED 01), as defined in ISCED 2011, are not formally structured in Ireland, but some ECEC services for children under 3 years have an intentional educational aim. In Ireland, 30% of 0-2 year-olds attend some form of formal ECEC, which is close to the OECD average of 33%. Participation in Ireland increased between 2004 and 2013 by around five percentage points, which is a positive step but still less than the growth in many other OECD countries. Denmark, Iceland, Luxembourg, Norway and the Netherlands stand out with participation rates above 50% (see Figure 2).

Participation rates in formal childcare do not provide information about the intensity of participation in childcare services (whether children participate full time or part time), which varies considerably across countries. In Ireland, a child attended formal childcare for an average of 27 hours per week in 2013, which is three hours below the 30 hours that corresponds to full-time care. The full-time equivalent participation rate (adjusted for the intensity of use of childcare services) for 0-2 year-olds in formal childcare is the participation rate if all 0-2 year-olds that use formal childcare do so on a full-time basis.⁵

In Ireland, the full-time equivalent participation rate is lower than in other countries (28% compared with the OECD average of 35%). This figure reflects the average participation rate and children's relatively lower intensity use of, on average, less than 30 hours per week. In Portugal, the exceptionally long average weekly hours produce a full-time equivalent participation rate of 59%, despite a relatively moderate headcount participation rate of 45% (OECD, 2015b).

Low participation of young children in informal care

The average level of participation in formal care does not necessarily imply a larger participation in informal care (generally unregulated care arranged by the child's parent either in the child's home or elsewhere, provided by relatives, friends, neighbours, babysitters or nannies). In 2013, 16% of 0-2 year-olds in Ireland attended informal ECEC.⁶ The proportion was lower for older age groups (3-5 year-olds and 6-12 year-olds both at 13%) (OECD, 2015b). Few OECD countries with available data - Denmark, Finland, Norway, Spain and Sweden - have lower shares of young children in informal care. The availability of formal and informal childcare is a key factor for parental employment decisions. In Ireland, 60% of mothers whose youngest child was under the age of 3 were employed in 2013, compared with 54% across the OECD (27 country average) (OECD, 2015b).

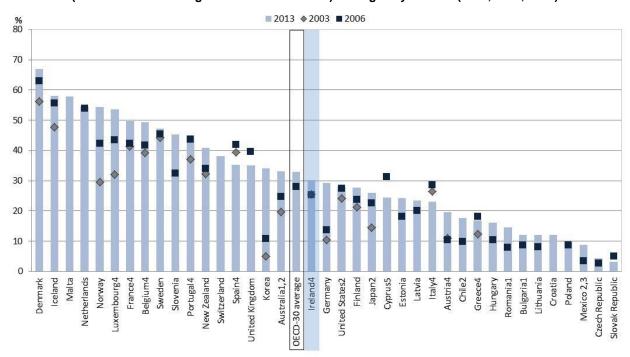


Figure 2. Participation rates in formal childcare (ISCED 0 and other registered ECEC services) among 0-2 year-olds (2003, 2006, 2013)

Notes: Data reflect children in day-care centres and pre-school (both public and private) and those who are cared for by licensed childminders. It excludes informal services provided by relatives, friends or neighbours regardless of whether or not the service is paid for.

Countries are ranked in descending order of the percentage of children under 3-years of age in formal childcare.

- 1. 2006 data for Australia refer to 2005, and for Bulgaria and Romania to 2007.
- 2. 2013 data for Japan refer to 2010, and for Australia, Chile, Mexico, and the United States to 2011.
- 3. Data do not include services provided by the private sector.
- 4. 2003 data for Austria, Belgium, Luxembourg, France, Greece, Ireland, Italy, Spain refers to 2004, and for Australia and the United States to 2002.
- 5. Note by Turkey: The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the "Cyprus issue".

Note by all the European Union Member States of the OECD and the European Commission: The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

Source: OECD (2015b), OECD Family Database, Table PF3.2.A. www.oecd.org/social/family/database.

Participation in pre-primary education is lower than the OECD average, but there is an early start of primary schooling

Early childhood education and care (ISCED 0)⁷ is the first stage of organised instruction for many children and can, as such, play an important role in their development. While enrolment in these programmes is usually not mandatory and children can enter them at different ages, the majority of 3-4 year-olds in OECD countries are enrolled in early childhood education (mostly pre-primary education). On average across OECD countries, 71% of 3-year-olds and 86% of 4-year-olds attended ECEC programmes (ISCED 0) in 2014, although this varies widely across countries.

Ireland belongs to the few OECD countries (together with Mexico, the United States, Turkey and Switzerland) where less than half of 3-year-olds participate in pre-primary education (ISCED 02) (46 %) (see Figure 3). The participation rate of 4-year-olds in pre-primary education is higher (56%), and it is notable that children in Ireland start primary school early: 36% of 4-year-olds attend primary school (ISCED 1), which is an exception among OECD countries. Hence, 92% of 4-year-olds are in school (ICED 02 or ISCED 1). Most OECD countries achieve full enrolment in ECEC for 5-year-olds, whereas in Ireland nearly all 5-year-olds already attend primary school (OECD, 2016a).

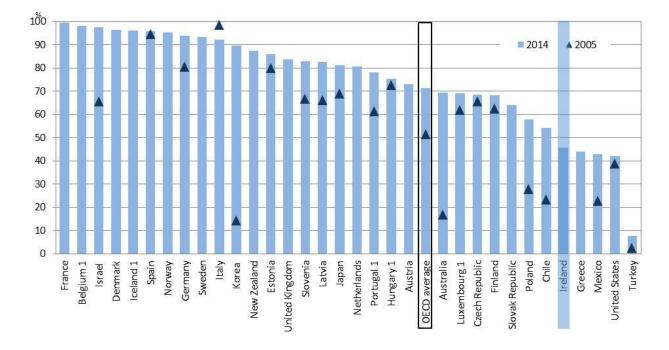


Figure 3. Enrolment rates at age 3 in early childhood education (2005 and 2014)

Notes: Countries are ranked in descending order of the enrolment rates of 3-year-olds in 2013.

2005 data is missing for Austria, Belgium, Denmark, France, Greece, Iceland, Ireland, Latvia, Netherlands, New Zealand, Norway, Slovak Republic, Sweden and United Kingdom.

1. Year of reference 2013 instead of 2014.

Source: OECD (2016), Education at a Glance 2016: OECD Indicators, Table C2.1, http://dx.doi.org/10.1787/888933398291.

Early childhood, primary and secondary education are mostly organised in public institutions in OECD countries and, on average, 68% of pre-primary education children (ISCED 02, 3-5 year-olds) were enrolled in public institutions in 2014. In Ireland, almost all pre-primary pupils were enrolled in independent private institutions (98%) and only 2% of pre-primary pupils attend a public setting. No other OECD country has a similarly low proportion of pupils in public institutions (OECD, 2015c, Table C2.2). However, it must be noted that an important share of 4- and most 5-year-olds in Ireland are attending primary education institutions, the majority of which are public settings.

Section 3. Policy outcomes

The relationship between attending pre-primary education and mathematics performance of 15-year-olds is smaller than the OECD average and not statistically significant after controlling for students' socio-economic background

Research in neurosciences has shown that the brain sensitivity of highly important developmental areas, such as emotional control, social skills, language and numeracy, peak in the first three years of a child's life (Gambaro et al., 2014). These findings indicate that the first years of children's life are crucial for their later development and learning. High quality ECEC can stimulate the development of these skills, which highlights the importance of early development programmes and their level of quality (OECD, 2006, 2011).

A strong start in education through ECEC is associated with higher performance in adolescence. PISA results show that 15-year-olds who attended a pre-primary education programme (ISCED 02) tended to perform better than students who did not attend pre-primary education. The percentage of 15-year-olds in Ireland who reported not attending pre-primary education in PISA 2012 was significantly above the OECD average (13.6% compared with 7.1% across the OECD, see Figure 4). Notably, children from a lower socio-economic background and in socio-economically disadvantaged schools were less likely to have participated in pre-primary education. Nevertheless, the benefits associated with pre-primary education remain statistically significant in most countries after accounting for students' socio-economic background. In Ireland, by contrast, the relationship between attending at least one year in pre-primary education (ISCED 02) and performance is smaller than the OECD average, and is not statistically significant after controlling for students' socio-economic background (see Figure 4).

PISA data also show that the correlation between enrolment in pre-primary education and performance at the age of 15 is generally stronger in education systems where participation in pre-primary education lasts longer, and the link is more pronounced in settings where the student-to-teaching-staff ratio and public expenditure per child are higher (OECD, 2013). In other words: input policies, such as the student-to-teaching-staff ratio, may be associated with learning outcomes. Despite increased participation and public investment in early childhood education and care services in OECD countries, little comparative data exists to determine under what conditions ECEC services are most beneficial for children, and what aspects are the most beneficial to the child. The OECD is developing a study that will provide information on the factors that support quality and equity in the early years (see Box 2).

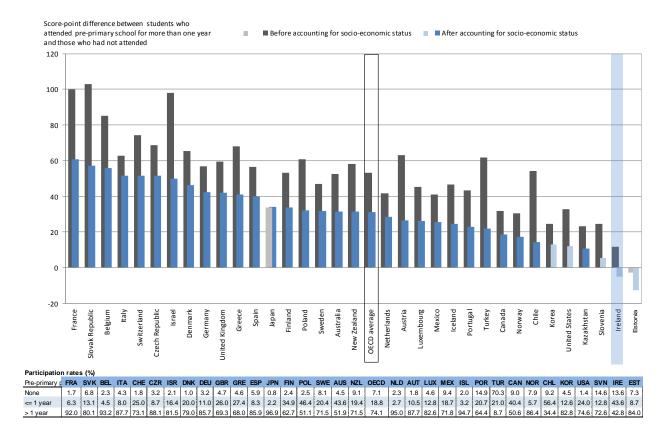


Figure 4. Difference in mathematics performance of 15-year-olds, by attendance in pre-primary education (2012)

Notes: Countries and economies are ranked in descending order of the score-point difference in mathematics performance between students who reported that they had attended pre-primary education (ISCED 0) for more than one year and those who had not attended pre-primary education, after accounting for socio-economic status.

Score-point differences that are statistically significant are marked in a darker tone.

Participation rates in pre-primary education are drawn from reports of 15-year old students participating in PISA 2012.

Source: OECD (2013), PISA 2012 Results: Excellence through Equity (Volume II): Giving Every Student the Chance to Succeed. Figure II.4.11, http://dx.doi.org/10.1787/9789264201132-en.

Box 2. The development of international data on quality in early education and care

The OECD programme of work on ECEC includes a series of projects to develop the extent of available data on ECEC. These include:

The TALIS Starting Strong Survey: is an international survey of ECEC staff and the quality of the learning and well-being environment in different ECEC settings across OECD member and non-member economies. The objective is to collect data on staff characteristics, pre-service and in-service education, pedagogical practices and beliefs, organisation and management, and working conditions to give countries an internationally framed assessment of what actually happens in their ECEC settings, i.e. the quality of the learning and well-being environment children experience (instrument development and pilot study in 20116, field trial in 2017, main study in 2018 and reporting in 2019).

The International Early Learning (for Child Well-being) Study seeks to provide reliable, comparative information on the social, emotional and cognitive development of children to assist countries to improve children's outcomes. It will measure children's early learning outcomes, at approximately five years of age, in the context of their ECEC experiences and home environments. The study will include a child assessment component as well as a parent questionnaire to gather information about the home learning environment. The study will be conducted in 3-6 countries from 2016 to 2019. Results on the study will be released in 2020.

A **thematic study on transitions** from ECEC to primary school will analyse country policies and practices in stimulating quality transitions from ECEC to primary education. This study will be based on existing literature and country background notes, which will form the basis of a comparative analytical report in 2017.

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NOTES:

- 1. This figure does not fully represent the expenditure per child in pre-primary education It represents the expenditure of pre-compulsory education within primary schools.
- 2. This figure does not fully represent the expenditure per child in pre-primary education in Ireland. It represents mainly the expenditure of 4 to 5 year-olds at primary education level. Direct expenditure per student for 3 to 4 year-olds in pre-primary education is lower, at approximately USD 2 667 per child with some additional expenditure in place to support service quality development, figures for which are not recorded at a per child level.
- 3. The average number of children per adult for 4- to 5-year-olds attending primary education settings is 25 in Ireland.
- 4. The OECD Family Database definition of "formal" childcare among children aged 0-2 years includes centre-based services, organised day care, pre-school and professional childminders.
- 5. The full-time equivalent (FTE) participation rate is calculated as follows: FTE participation rate = participation rates for 0-2 year olds in formal childcare * (average weekly hours for 0-2 year-olds in formal childcare / 30).
- 6. More recent data available from the Eurostat database http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_caindother&lang=en) do not necessarily show progress in this proportion.
- 7. Early childhood education and care refers to programmes classified as ISCED 01 (early childhood educational development) and ISCED 02 (pre-primary education) depending on the age of the child (see Box 1). In Germany, all 3-5 year-olds using ECEC were registered as attending an ISCED 02 programme (pre-primary).

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Table 1. Summary of ECEC indicators, Ireland and OECD average

Indicator	Ireland	OECD average	Ref. year	Table	Source
Policy inputs					
Expenditure					
Total expenditure on early childhood educational development (ISCED 01) as a percentage of GDP (%)	m	0.2	2013	Table C2.3	OECD (2016)
Total expenditure on pre-primary education (ISCED 02) as a percentage of GDP (%)	0.1	0.6	2013	Table C2.3	OECD (2016)
Total expenditure on all early childhood education (ISCED 0) as a percentage of GDP (%)	m	0.8	2013	Table C2.3	OECD (2016)
Proportion of total expenditure on early childhood educational development (ISCED 01) from public sources (%)	m	68.6	2013	Table C2.3	OECD (2016)
Proportion of total expenditure on pre-primary education (ISCED 02) from public sources (%)	100.0	82.9	2013	Table C2.3	OECD (2016)
Proportion of total expenditure on early childhood education (ISCED 01 & ISCED 02) from public sources (%)	m	81.2	2013	Table C2.3	OECD (2016)
Annual expenditure per student in pre-primary education (ISCED 02)(in USD)	6 532*	8 070	2013	Table C2.3	OECD (2016)
Quality of early childhood education and care services					
Ratio of pupils to teaching staff (in full-time equivalents) in pre-primary education (ISCED 02)	11	14	2014	Table C2.2	OECD (2016)
Ratio of pupils to contact staff (teachers and teachers' aides) in pre-primary education (in full-time equivalents) (ISCED 02)	m	12	2014	Table C2.2	OECD (2016)
Teachers' salaries					
Annual starting salary, typical training of pre-primary teachers in public institutions (in USD)	m	29 494	2014	Table D3.1a	OECD (2016)
Annual salary after 10 years of experience, typical training of pre-primary teachers in public institutions (in USD)	m	36 491	2014	Table D3.1a	OECD (2016)
Annual salary after 15 years of experience, typical training of pre-primary teachers in public institutions (in USD)	m	39 245	2014	Table D3.1a	OECD (2016)
Annual salary at top of scale, typical training of pre-primary teachers in public institutions (in USD)	m	47 826	2014	Table D3.1a	OECD (2016)
Pre-primary teachers' salaries relative to earnings for full-time, full-year with tertiary-education workers based on teachers' attainment level (25-64 years-old) (ratio)	m	0.74	2014	Table D3.2a	OECD (2016)
Teachers' characteristics					
Annual net teaching time of pre-primary teachers (in hours)	m	1005	2014	Table D4.1	OECD (2016)
Number of annual days of teaching (in days)	m	190	2014	Table D4.1	OECD (2016)

Table 1. Summary of ECEC indicators, Ireland and OECD average (continued)

Indicator	Ireland	OECD average	Ref. year	Table	Source
Policy outputs					
Participation in early childhood education and care services					
Participation rate in formal care and pre-school services for children under 3 years (%)	30	33	2013	Chart PF3.2.A	OECD (2015b)
Participation rate in formal care and pre-school services for children under 3 years, full-time equivalent (%)	28	35	2013	Chart PF3.2.B	OECD (2015b)
Average weekly hours in childcare among children under 3 years of age (in hours per week)	27	30	2013	Chart PF3.2.B	OECD (2015b)
Participation rates for 3 year olds in pre-primary education (ISCED 02) (%)	46	71	2014	Table C2.1	OECD (2016)
Participation rates for 4-year-olds in pre-primary and primary education (ISCED 02 + ISCED 1) (%)	92	86	2014	Table C2.1	OECD (2016)
Participation rates for 5-year-olds in pre-primary and primary education (ISCED 02 + ISCED 1) (%)	100	95	2014	Table C2.1	OECD (2016)
D.P. Commission					
Policy outcomes Average mathematics performance of students with					
No pre-primary education attendance (score points)	491	451	2012	Table II.4.12	OECD (2013)
Pre-primary education attendance for one year or less (score points)	506	475	2012	Table II.4.12	OECD (2013)
Pre-primary education attendance for more than one year (score points)	503	504	2012	Table II.4.12	OECD (2013)
Difference in mathematics performance between students (after accounting for students' economic, social and cultural status)					
Difference between those who reported having attended pre-primary school for one year or less and those who had not attended pre-primary education (score points)	5	15	2012	Table II.4.12	OECD (2013)
Difference between those who reported having attended pre-primary school for more than one year and those who had not attended pre-primary education (score points)	-5	31	2012	Table II.4.12	OECD (2013)

Notes: a - data are not applicable because the category does not apply; m - data are not available.

^{*} This figure does not fully represent the expenditure per child in pre-primary education in Ireland. It represents mainly the expenditure of 4 to 5 year-olds at primary education level. Direct expenditure per student for 3 to 4 year-olds in pre-primary education is lower, at approximately USD 2 667 per child with some additional expenditure in place to support service quality development, figures for which are not recorded at a per child level.