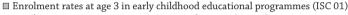
INDICATOR C2

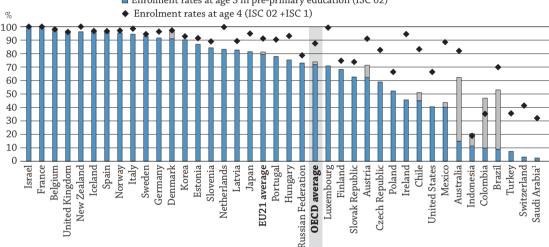
HOW DO EARLY CHILDHOOD EDUCATION SYSTEMS DIFFER AROUND THE WORLD?

- Fifteen-year-old students who had attended at least one year of pre-primary education perform better on the OECD Programme for International Student Assessment (PISA) test than those who did not, even after accounting for their socio-economic backgrounds.
- Early childhood education is particularly beneficial for students with an immigrant background. Among 15-year-old immigrant students who arrived in their OECD host country before the age of 6, the gap in performance between those who had attended pre-primary education and those who had not is equivalent to around two years of schooling.
- In a majority of OECD countries, education now begins for most children well before they are 5 years old. Some 74% of 3-year-olds are enrolled in early childhood education across OECD countries; among OECD countries that are part of the European Union, 80% of 3-year-olds are enrolled.

Chart C2.1. Enrolment rates at age 3 and 4 in early childhood education (2013)



■ Enrolment rates at age 3 in pre-primary education (ISC 02)



1. Year of reference 2014.

Countries are ranked in descending order of the enrolment rates of 3 year-olds in pre-primary programmes. Source: OECD. Table C2.1. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933284184

Context

As family structures change, so do the relative ages of parents. More women and men are waiting until later in life to begin their families. They do so for a number of reasons, including planning for greater financial security and emotional maturity, taking more time to find a stable relationship, and committing to their careers before turning their attention to having children. As younger and older parents are also more likely to be in the workforce today, there is a growing need for early childhood education. In addition, there is increasing awareness of the key role that early childhood education plays in the cognitive and emotional development of the young. As a result, ensuring the quality of early childhood education and care (ECEC) has become a policy priority in many countries.

Enrolling children in early childhood education can also mitigate social inequalities and promote better student outcomes overall. Many of the inequalities found in education systems are already evident when children enter formal schooling and persist as they progress through the school system. Because inequalities tend to grow when school is not compulsory, earlier entrance into the school system may reduce these inequalities. In addition, pre-primary education helps to prepare children to enter and succeed in formal schooling.

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 (Box C2.1 and see the Definitions section). These differences should be taken into account when drawing conclusions from international comparisons.

Other findings

- Almost nine out of ten 4-year-olds (88%) are enrolled in early childhood or primary education across OECD countries.
- Some 84% of funding of pre-primary educational institutions in European OECD countries come from public sources compared to 80% on average across OECD countries.
- Expenditure on pre-primary education accounts for an average of 0.6% of GDP while expenditure on early childhood education development accounts for an average of 0.4% of GDP.
- In most countries, the proportions of children enrolled in private early childhood education are considerably larger than those enrolled in private primary and secondary educational institutions. Thus, more than 50% of children enrolled in early childhood development programmes attend private institutions, on average. This can result in heavy financial burdens for parents, even when government subsidies are provided.
- The ratio of children to teaching staff is an indicator of the resources devoted to early childhood education. The child-teacher ratio at the pre-primary level, excluding non-teaching staff (e.g. teachers' aides), ranges from more than 20 children per teacher in Chile, China, Colombia, France, Indonesia and Mexico, to fewer than 10 in Estonia, Iceland, New Zealand, the Russian Federation, Slovenia, Sweden and the United Kingdom.
- Some countries make extensive use of teachers' aides in pre-primary education. Twelve countries reported smaller ratios of children to contact staff than of children to teaching staff. As a result, the ratios of children to contact staff in pre-primary education are substantially lower than the ratios of children to teaching staff (more than two fewer children) in Austria, Chile, China, France, Norway and the Russian Federation.

Trends

Over the past decade, many countries have expanded early childhood education. This increased focus has resulted in the extension of compulsory education to lower ages in some countries, free early childhood education, universal provision of early childhood education, and the creation of programmes that integrate care with formal pre-primary education.

On average among those OECD countries with 2005 and 2013 data, enrolments in pre-primary education rose from 52% of 3-year-olds in 2005 to 72% in 2013, and from 69% of 4-year-olds in 2005 to 85% in 2013. The enrolment rates of 4-year-olds in pre-primary education increased by 20 percentage points or more in Australia, Chile, Korea, Mexico, Poland, Russian Federation and Turkey between 2005 and 2013.

Note

ISCED level 0 refers to early childhood programmes that have an intentional education component. ISCED level 0 programmes target children below the age of entry into primary education (ISCED level 1). These programmes aim to develop cognitive, physical and socio-emotional skills necessary for participation and well-being in school and society.

Thanks to the new ISCED classification, level 0 covers now early childhood education for all ages, including very young children. Programmes are sub-classified into two categories, depending on the level of complexity of the educational content: early childhood educational development (code 01) and pre-primary education (code 02). Early childhood educational development programmes (code 01) are generally designed for children younger than 3. They are introduced as a new category in ISCED 2011 and were not covered by ISCED-97. Pre-primary education (code 02) corresponds exactly to level 0 in ISCED-97. Early childhood educational development programmes are not provided in Belgium (except in the Flemish Community), the Czech Republic, France, Ireland, Italy, Japan, Luxembourg, Poland, Portugal, the Slovak Republic and Switzerland. In these countries, other structures exist, but the programmes providing ECEC are outside the scope of ISCED 2011 or outside the scope of the UOE data collection (see more details in Box C2.1 and in the *Definitions* section).

INDICATOR C2

Analysis

In a majority of OECD countries, ECEC policy has paralleled the evolution of women's participation in the labour force. More and more women have become salaried employees since the 1970s, as the service- and knowledge-based economies expanded. Because economic prosperity depends on maintaining a high employment-to-population ratio, encouraging more women to enter the labour market has prompted greater government interest in expanding ECEC services. In the 1970s and 1980s, European governments, in particular, put family and childcare policies into place to encourage couples to have children and ensure that it is feasible for women to combine work and family responsibilities (OECD, 2013a; 2011a).

There is a growing body of evidence that children who start strong in their learning and well-being will have better outcomes when they grow older. Such evidence has prompted policy makers to design early interventions and re-think their education spending patterns to gain "value for money".

Enrolment in early childhood education

Early childhood education, as defined in the ISCED 2011 classification, is the initial stage of organised instruction for many children and can play a significant role in their development. While primary and lower secondary enrolment patterns are fairly similar throughout OECD countries, there is significant variation in early childhood education programmes among OECD and other G20 countries. This includes the overall level of participation in programmes, the typical starting age for children, financing and the duration of the programme (Table C2.5).

In most OECD countries, education now begins for most children well before they are 5 years old. Almost nine out of ten 4-year-olds (88%) are enrolled in pre-primary and primary education across OECD countries. In the OECD countries that are part of the European Union, 91% of 4-year-olds are enrolled. Enrolment rates for pre-primary and primary education at this age vary from 95% or more in Belgium, Denmark, France, Germany, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Spain and the United Kingdom, to less than 60% in Colombia, Indonesia, Saudi Arabia and Turkey. Switzerland also falls into this group, but because enrolment in integrated programmes is not reported for those countries (see the Definitions section), the true enrolment rate cannot be calculated and is likely to be higher than that reported here. In Switzerland, the enrolment rate in early childhood education is highest among 5-year-old children (Table C2.1).

Enrolment in early childhood education and PISA performance at age 15

On average across OECD countries, 74% of the 15-year-old students assessed by the OECD Programme for International Student Assessment (PISA) reported that they had attended more than one year of pre-primary education. According to students' responses, enrolment in more than one year of pre-primary education was nearly universal about ten years ago in Belgium, France, Hungary, Iceland, Japan and the Netherlands, where over 90% of 15-year-olds reported that they had attended pre-primary education for more than one year. Pre-primary education is rare in Turkey, where fewer than 30% of 15-year-olds had attended pre-primary education for any period of time. More than one year of pre-primary education is uncommon in Australia, Chile, Ireland and Poland, where fewer than 52% of students reported that they had attended pre-primary education for that length of time (see OECD, 2013b, Table IV.3.33).

Box C2.1. Coverage of early childhood education programmes (ISCED 01 and ISCED 02) in Indicator C2

In ISCED 2011 (and now for the first time in Education at a Glance 2015), level 0 covers early childhood education for all ages, including very young children. Programmes are sub-classified into two categories depending on age and the level of complexity of the educational content: early childhood educational development (code 010) and pre-primary education (code 020). Early childhood educational development programmes (code 010) are generally designed for children younger than 3. They are introduced as a new category in ISCED 2011 and were not covered by ISCED 1997. Pre-primary education (code 020) corresponds exactly to level 0 in ISCED 1997.

Data from age-integrated programmes designed to include children both younger and older than 3 should be allocated to 010 and 020, according to the age of the children, as indicated above. This may involve estimation of expenditures and personnel at levels 010 and 020, respectively.

However, some countries internally define early childhood education more broadly than others. Thus, the comparability of international statistics on programmes at ISCED level 0 depends on each country's willingness and ability to report data for this level according to a standard international definition, even if that definition diverges from the one that the country uses in compiling its own national statistics. In this regard, the data reported in Education at a Glance as ISCED level 0 programmes may differ from national reporting of early childhood education.

To ensure international comparability of data, several criteria need to be met to determine whether or not a programme should be classified as ISCED level 0 and included in reporting. For a programme to be reported as ISCED level 0, it <u>must</u>:

- Have adequate intentional educational properties; and
- Be institutionalised; *and*
- Be targeted at children within the age range starting from age 0 up to the age of entry into ISCED level 1 education; and also
- Meet the minimum intensity/duration (an intensity of at least 2 hours per day; and a duration of at least 100 days a year).

Programmes should wherever possible also:

- Have a regulatory framework recognised by the relevant national authorities; and
- Have trained or accredited staff as per the appropriate regulatory framework. Programmes that provide childcare only (i.e. supervision, nutrition and health) are excluded from this Indicator. Where both educational and non-educational programmes exist and it is possible to enrol in each independently, only the educational programmes are reported in Indicator C2. For example, in an institution that offers a daytime educational programme as well as extended afternoon or evening childcare programmes, and where parents may choose to enrol their child in either or both programmes, only the daytime educational programme is reported in Indicator C2. Integrated programmes in which the non-educational portion is greater than the educational portion may be included as long as the educational portion meets certain criteria.

ISCED level 0 also excludes purely family-based arrangements that may be purposeful but do not meet the UOE definition of a "programme" (e.g. informal learning by children from their parents, other relatives or friends is not included under ISCED level 0). Also excluded are learning activities delivered from private homes or other institutionalised centres that are outside the jurisdiction of an appropriate national early childhood education authority or regulatory body, regardless of whether the activities are organised in the style of an approved early childhood education programme. An example of this would be a private citizen who, of his or her own volition, provides learning opportunities for young children that nominally meet the ISCED level criteria around intentional education, intensity/duration and staff qualification requirements, but who is not recognised by an authorising body.

Examples of programmes to be excluded from reporting include:

- Programmes where attendance can be ad-hoc or of a drop-in style where individual children will not experience a continuity of structured learning opportunities.
- Short-duration programmes, such as vacation care, which may have an educational curriculum but not a sustained period of instruction or learning opportunities.
- Programmes with intentional educational properties but with no minimum level of attendance, such as when parents are free to choose an intensity and duration of their child's attendance that does not meet the ISCED level 0 criteria.
- Early childhood services that are open for extended hours and provide intentional educational activities during these hours, but do not require a minimum intensity/duration of attendance or enrolment.

OECD countries will continue working together to improve methods of reporting statistics on early childhood education. Country-specific information can be found in Annex 3 of this publication and in Table C2.5.

PISA analyses find that in most countries, students who had attended at least one year of pre-primary education tend to perform better than those who had not, even after accounting for students' socio-economic background. PISA research also shows that the relationship between pre-primary attendance and performance tends to be stronger in school systems with longer duration pre-primary education, smaller child-to-teacher ratios in pre-primary education, and higher public expenditure per child at the pre-primary level (OECD 2013b, Table IV.3.33).

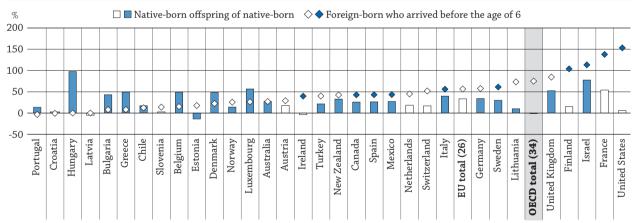
Participation in early childhood education is particularly beneficial for children with an immigrant background. Across OECD countries, an average of 69% of 3-6 year-old immigrant children were enrolled in pre-primary education in 2012 - an attendance rate that was 7 percentage points lower than among their native-born peers. In the European Union, immigrant children are only marginally less likely than native-born children to attend pre-primary education. There are, however, some exceptions: in the Czech Republic, Italy and Norway, for example, attendance rates are 10 percentage points lower among immigrant children (see Figure 13.5 in Indicators of Immigrant Integration 2015: Settling In [OECD/European Union, 2015]).

Among immigrant children of comparable socio-economic backgrounds who had arrived in their OECD host country before the age of 6, those who had attended pre-primary education scored better in the PISA reading assessment, when they were 15 years old, than those who had not attended pre-primary education in their OECD host country. The performance gap between the two groups is 75 score points, equivalent to around two years of schooling (the performance gap related to pre-school attendance is narrower, but still considerable, among non-immigrant 15-year-old students). The benefits of early childhood education for immigrant children are particularly significant in France, Finland, Israel and the United States. This finding has special resonance in the United States, where proportion of immigrant children who are enrolled in early childhood education is relatively small (Chart C2.2).

In addition, early arrival in the host country (e.g. before the age of six) contributes to better results among immigrant children. Thus, those who arrived in their OECD host country between the ages of 6 and 10 earn PISA reading scores that are, on average, 19 points lower compared to those who had arrived in their host country before the age of 6. The gap exceeds 39 score points (the equivalent of around one year of schooling) in Belgium, Finland, France, Germany, Iceland and Israel (see Table 13.A1.6 in Indicators of Immigrant Integration 2015: Settling In [OECD/European Union, 2015]).

Chart C2.2. Mean PISA scores of 15-year-old students who did or did not attend preschool in the host country (2012)

Differences in PISA reading scores after accounting for socio-economic background



Note: White bars and markers indicate differences which are not statistically significant (with a probability of 0.05). Positive figures means that those who had attended preschool scored better in the PISA reading assessment than those who had not attended preschool.

Countries are ranked in ascending order of the difference in PISA reading scores between the immigrants who arrived in their OECD host country before the age of 6 and who had attended pre-primary education and those who had not attended pre-primary education.

Source: OECD Programme of International Student Assessment (PISA). Indicators of Immigrant Integration 2015: Settling In (http://dx.doi.org/ 10.1787/9789264234024-en), Figure 13.6. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933284199

Early childhood education programmes for even younger children are not as extensive. In some countries, demand for early childhood education for children aged 3 and under far outstrips supply, even in countries that provide for long parental leave. Four out of ten 2-year-olds are enrolled in early childhood education across OECD countries, as a whole, growing to almost three out of four (74%) for 3-year-olds. The highest enrolment rates of 3-year-olds in early

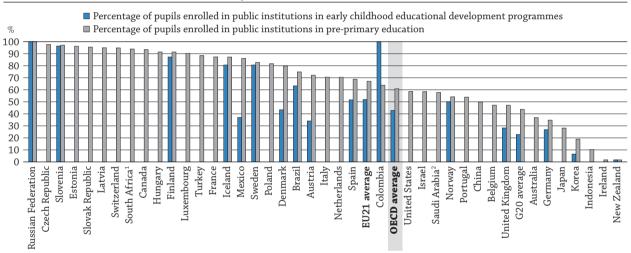
childhood education are found in Belgium, Denmark, France, Iceland, Italy, New Zealand, Norway, Spain and the United Kingdom. In countries where public funding for parental leave is limited, many working parents must either look to the private market, where parents' ability to pay significantly influences access to quality services, or else rely on informal arrangements with family, friends and neighbours (Table C2.1, Chart C2.1 and Starting Strong III [OECD, 2011b]).

Some countries have made access to pre-primary education almost universal for children by the time they are three. The availability of early childhood education is growing quickly in most countries. On average among OECD countries with 2005 and 2013 data, enrolments in pre-primary education rose from 52% of 3-year-olds in 2005 to 72% in 2013, and from 69% of 4-year-olds in 2005 to 85% in 2013 (Table C2.1).

Early childhood education, by type of institutions

As countries continue to expand their early childhood education programmes, it will be important to consider parents' needs and expectations regarding accessibility, cost, programme and staff quality and accountability. When parents' needs for quality, accessibility or accountability are not met in public institutions, some parents may be more inclined to send their children to private pre-primary institutions, childcare programmes, or extracurricular activities. (Shin et al., 2009).

Chart C2.3. Percentage of pupils enrolled in public institutions in early childhood education (2013)



- 1. Year of reference 2012.
- 2. Year of reference 2014.

Countries are ranked in descending order of the percentage of pupils enrolled in public institutions in pre-primary education. Source: OECD. Table C2.2. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933284204

In most countries, a minority of students attends private schools at the primary through upper secondary levels. However, the proportions of children enrolled in private pre-primary schools are considerably larger: some 15% of children in pre-primary education are enrolled in independent private schools on average across OECD countries. When considering pre-primary independent private and government-dependent private schools together, 39% of children are enrolled in private pre-primary programmes. This proportion exceeds 50% in Australia, Belgium, Germany, Indonesia, Ireland, Japan, Korea, New Zealand and the United Kingdom (Table C2.2 and Chart C2.3). Moreover, in 12 out of 13 OECD countries with available data, except New Zealand, the share of children enrolled in private (both independent and government-dependent) early childhood education development programmes (ISCED 01) is larger than the share enrolled in private pre-primary (ISCED 02) schools. In New Zealand, almost all early childhood education institutions are private government-dependent, and these cover 98% of enrolled children at both ISCED 01 and ISCED 02 levels. On average, about 58% of all children enrolled in early childhood development programmes are in independent or government-dependent private schools while only 39% of preprimary children are. In most of these countries, the proportion of private funding is also larger for early childhood education development programmes (ISCED 01) than for pre-primary programmes (ISCED 02). This can result in heavy financial burdens for parents, even when government subsidies are provided (Table C2.2 and Chart C2.3).

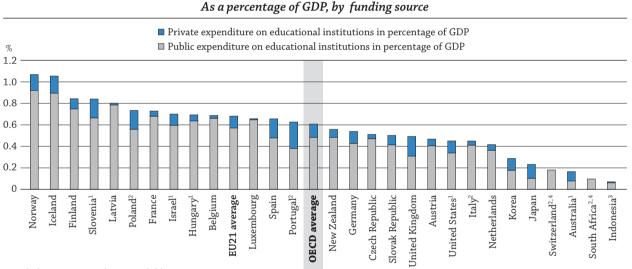
Financing early childhood education

Sustained public funding is critical for supporting the growth and quality of early childhood education programmes. Appropriate funding helps to recruit professional staff who are qualified to support children's cognitive, social and emotional development. Investment in early childhood facilities and materials also helps support the development of child-centred environments for learning. In countries that do not channel sufficient public funding to cover both quantity and quality, some parents may be more inclined to send their children to private ECEC services, which implies heavy financial burdens (OECD, 2011b); others may prefer to stay home, which can hinder a parent's participation in the labour force (OECD, 2011a).

Public expenditure on pre-primary education is mainly used to support public institutions, but in some countries it also funds private institutions, to varying degrees. At the pre-primary level, annual expenditure, from both public and private sources, per child for both public and private institutions averages USD 8 008 in OECD countries. However, expenditure varies from USD 4 000 or less in Israel, Latvia and South Africa, to more than USD 10 000 in Australia, Iceland, Luxembourg, Sweden, the United Kingdom and the United States (Table C2.3, and see Table B1.1a in Indicator B1).

At the early childhood educational development level, annual expenditure, from both public and private sources, per child, for both public and private institutions averages USD 12 324 in OECD countries with available data.

Chart C2.4. Expenditure on pre-primary educational institutions (2012)



- 1. Includes some expenditure on childcare.
- 2. Public institutions only.
- 3. Year of reference 2013.
- 4. Public expenditure only.

Countries are ranked in descending order of the total public and private expenditure on pre-primary educational institutions as a percentage of GDP. Source: OECD. Table C2.3. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933291276

Expenditure on pre-primary education accounts for an average of 0.6% of the collective GDP. Differences between countries are significant. For example, while 0.1% or less of GDP is spent on pre-primary education in Indonesia and South Africa, 0.8% or more is spent in Finland, Iceland, Latvia, Norway, Slovenia, and Sweden (Table C2.3 and Chart C2.4). These differences are largely explained by enrolment rates, legal entitlements and costs, and the different starting age for primary education; they are also influenced by the extent to which this indicator covers private early childhood education. In Switzerland, the absence of data on integrated programmes at this level is also likely to understate the true level of expenditure and enrolments in early childhood education programmes (see more details in Box C2.1), and may affect the comparability of the data to that of other countries. Inferences on access to and quality of ECEC should therefore be made with caution (Table C2.3 and Box C2.1). Differences in expenditure as a percentage of GDP could be influenced by the duration of programmes. In some countries, like New Zealand, pre-primary education spans two years, while in other countries it spans three or even four years (see Table C2.5). The duration of a programme has an impact on the level of expenditure devoted to early childhood education.

Publicly funded pre-primary education tends to be more strongly developed in the European than the non-European countries of the OECD. In Europe, the concept of universal access to education for 3-6 year-olds is generally accepted. Most countries in this region provide all children with at least two years of free, publicly funded pre-primary education in schools before they begin primary education. With the exception of Ireland and the Netherlands, such access is generally a statutory right from the age of 3, and in some countries, even before then. Compared to primary, secondary and post-secondary non-tertiary education, pre-primary institutions receive the largest proportion of funds (20%) from private sources. However, this proportion varies widely, ranging from 5% or less in Belgium, Latvia and Luxembourg, to 50% or more in Australia and Japan (Table C2.3 and Starting Strong II [OECD, 2006]).

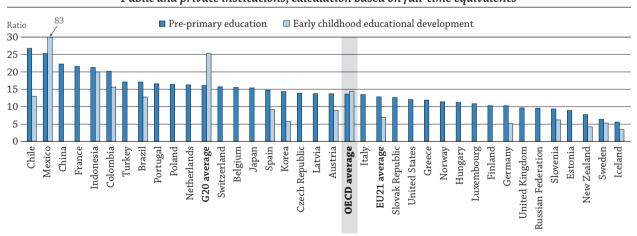
The child-teacher ratio varies considerably across OECD countries

Research demonstrates that enriched, stimulating environments and high-quality pedagogy are fostered by betterqualified practitioners, and that better-quality staff-child interactions facilitate better learning outcomes. While qualifications are one of the strongest predictors of staff quality, the level of qualification tells only part of the story. Qualifications indicate how much specialised and practical training is included in initial staff education, what types of professional development and education are available to, and taken up by, staff, and how many years of experience staff have accumulated. In addition, working conditions can influence professional satisfaction, which is likely to affect the ability and willingness of professionals to build relationships and interact attentively with children (Shin et al., 2009). High turnover disrupts the continuity of care, undermines professional development efforts, lowers overall quality, and adversely affects child outcomes.

The ratio of children to teaching staff is also an important indicator of the resources devoted to education. That ratio is obtained by dividing the number of full-time equivalent children at a given level of education by the number of full-time equivalent teachers at that level and in similar types of institutions. However, this ratio does not take into account instruction time for students, nor how much time teachers spend teaching. Therefore, it cannot be interpreted in terms of class size. The number of children per class summarises different factors, but distinguishing between these factors helps to identify differences in the quality of education systems (see Indicator D2).

Table C2.2 shows the ratio of children to teaching staff and also the ratio of children to contact staff (e.g. teachers and non-professional staff [teachers' aides]) in early childhood education. Some countries make extensive use of teachers' aides at the pre-primary level. Twelve out of 24 OECD and G20 countries reported smaller ratios of children to contact staff (Column 10 of Table C2.2) than of children to teaching staff. The ratios of children to contact staff are substantially lower in Austria, Chile, China, France, Norway and the Russia Federation. On average across OECD countries, there are 14 children for every teacher in pre-primary education. The child-teacher ratio, excluding teachers' aides, ranges from more than 20 children per teacher in Chile, China, Colombia, France, Indonesia and Mexico, to fewer than 10 in Estonia, Iceland, New Zealand, the Russian Federation, Slovenia, Sweden and the United Kingdom (Table C2.2 and Chart C2.5).

Chart C2.5. Ratio of pupils to teaching staff in early childhood education (2013) Public and private institutions, calculation based on full-time equivalents



Note: The figures should be interpreted with some caution because the indicator compares the teacher/student ratios in countries with "education-only" and "integrated education and daycare" programmes. In some countries, the staff requirements in these two types of provision are very different. Countries are ranked in descending order of students to teaching staff ratios in pre-primary education.

Source: OECD. Table C2.2. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm)

Definitions

Education-only programmes in early childhood education are those that primarily offer education services for a short period of the day. Working parents usually have to use additional care services in the morning and/or afternoon.

Integrated programmes in early childhood education are those that provide both early childhood education and care in the same programme.

Some variations at the national level cannot be presented, and information on the "characteristics of programmes" has been simplified in some cases. For example, in some countries, the starting age of early childhood education programmes differs among jurisdictions or regions. In these instances, the information that is the most common or typical is reported.

ISCED level 0 refers to early childhood programmes that have an intentional education component. ISCED level 0 programmes target children below the age of entry into primary education (ISCED level 1).

Programmes at ISCED level 0 are typically designed with a holistic approach to support children's early cognitive, language, physical, social and emotional development and to introduce young children to organised instruction in an institutionalised setting. At this level, programmes are not necessarily highly structured, but they are designed to provide an organised and purposeful set of learning activities in a safe environment. They allow children to learn through interaction with other children under the guidance of staff/educators, typically through creative and play-based activities.

ISCED level 0 refers to those early childhood programmes that have an intentional education component. These programmes aim to develop the socio-emotional skills necessary for participation in school and society, to develop some of the skills needed for academic readiness, and to prepare children for entry into primary education.

Along with an intentional child-development and education focus, a key defining factor of ISCED level 0 programmes is the sustained intensity and duration of delivery of intentional educational activities. These are what differentiate ISCED level 0 from other programmes, such as childcare and occasional, after hours or vacation care.

ISCED level 0 programmes target children below the age of entry into ISCED level 1. There are two categories of ISCED level 0 programmes: ISCED 010 - early childhood educational development, and ISCED 020 - pre-primary education. ISCED 010 has intentional educational content designed for younger children (typically in the age range of 0 to 2 years), while ISCED 020 is typically designed for children from age 3 to the start of primary education (ISCED level 1).

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 below. For international comparability purposes, the term "early childhood education" is used to label ISCED level 0 (see also Box C2.1 and ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications (OECD/Eurostat/UNESCO Institute for Statistics [2015]).

In addition to the above, the educational properties of ISCED level 0 programmes can be further described as follows:

ISCED 010 - Early childhood educational development

The learning environment is visually stimulating and language rich, and fosters self-expression with an emphasis on language acquisition and the use of language for meaningful communication. There are opportunities for active play so that children can exercise their co-ordination and motor skills under supervision and in interaction with staff. Typically aimed at very young children aged 0-2.

■ ISCED 020 - Pre-primary education

Through interaction with peers and educators, children improve their use of language and their social skills, start to develop logical and reasoning skills, and talk through their thought processes. They are also introduced to alphabetical and mathematical concepts, understanding and use of language, and are encouraged to explore their surrounding world and environment. Supervised gross motor activities (i.e. physical exercise through games and other activities) and play-based activities can be used as learning opportunities to promote social interactions with peers and to develop skills, autonomy and school readiness. Aimed at children in the years immediately prior to starting compulsory schooling, typically aged 3-5.

Methodology

ISCED level 0 programmes are usually school-based or otherwise institutionalised for a group of children. As the institutions authorised to provide ISCED level 0 programmes vary between jurisdictions (e.g. centre-based, community-based, home-based), to be reported in the UOE collection both the programme and the mode or institution of delivery should be recognised within the respective early childhood education system. Particular care is given to programmes delivered from home-based settings: if the programme meets the criteria as set out above and is recognised under the respective regulations, it is included in reporting.

To further ensure international comparability of data, once a programme has been identified as an ISCED level 0 early childhood education programme by meeting the criteria above, the following rules apply when collecting data on the programmes for UOE purposes. These rules are applied to programmes in their entirety (not just to the intentional education component):

Full-time equivalents for enrolments

The concepts used to define full-time and part-time participation at other ISCED levels, such as study load, student participation, and the academic value or progress that the study represents, are not easily applicable to ISCED level 0. In addition, the daily or weekly hours that represent a typical full-time enrolment in an education programme at ISCED level 0 varies widely between countries. Because of this, full-time-equivalents cannot be calculated for ISCED level 0 programmes in the same way as for other ISCED levels.

A consensus has not been reached on a methodology for calculating FTE for enrolments at ISCED 0 level but it is recommended in UOE reporting to estimate children enrolled in full-time equivalents by ISCED 0 enrolment headcount (i.e. all enrolments counted as full-time). Headcount is not a satisfying criterion for full-time equivalent for indicators, such as expenditure per student (even if it is accepted for enrolment comparisons), but most countries are in favour of this solution; the same guarantee was not offered by other estimation methods.

Institutions that provide both education programmes and childcare programmes

In some countries, institutions providing early childhood education also provide extended day or evening childcare programmes. Education programmes traditionally provided during the day may now be provided outside these hours to offer further flexibility to parents and carers of children. These are given special consideration in reporting.

Where the childcare components are distinctly separate from early childhood education components (for example, the two components are offered as individual programmes in which children must enrol separately), the childcare components are excluded from reporting. If the programme is in the form of extended day or evening programmes that meet all of the criteria listed above, they are included in reporting as educational programmes.

Where both education and noneducation programmes exist and it is possible to enrol in each independently, only the education programmes are reported. Integrated programmes are included when the non-education portion is greater than the education portion, only when the education portion meets the criteria listed above. For example, in an institution that offers a daytime education programme as well as extended afternoon or evening childcare programmes, and parents may choose to enrol their child in either or both programmes, only the daytime educational programme is reported in the UOE data collection.

Note regarding data from Israel

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

References

OECD (2013a), "How Do Early Childhood Education and Care (ECEC) Policies, Systems and Quality Vary Across OECD Countries?", Education Indicators in Focus, No. 11, OECD Publishing, Paris, http://dx.doi.org/10.1787/5k49czkz4bq2-en.

OECD (2013b), PISA 2012 Results: What Makes Schools Successful (Volume IV): Resources, Policies and Practices, PISA, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264201156-en.

OECD (2011a), How's Life?: Measuring Well-being, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264121164-en.

OECD (2011b), Starting Strong III: A Quality Toolbox for Early Childhood Education and Care, OECD Publishing, Paris, http://dx.doi. org/10.1787/9789264123564-en.

OECD (2006), Starting Strong II: Early Childhood Education and Care, OECD Publishing, Paris, http://dx.doi.org/10.1787/ 9789<u>264035461-en</u>.

OECD/European Union (2015), Indicators of Immigrant Integration 2015: Settling In, OECD Publishing, Paris, http://dx.doi.org/ 10.1787/9789264234024-en.

OECD/Eurostat/UNESCO Institute for Statistics (2015), ISCED 2011 Operational Manual: Guidelines for Classifying National Education Programmes and Related Qualifications, OECD Publishing, Paris, http://dx.doi.org/10.1787/9789264228368-en.

Shin, E., M. Jung and E. Park (2009), "A Survey on the Development of the Pre-school Free Service Model", Research Report of the Korean Educational Development Institute, Seoul.

Indicator C2 Tables

StatLink http://dx.doi.org/10.1787/888933285801											
Table C2.1	Enrolment rates in early childhood education and primary education, by age (2005, 2013)										
Table C2.2	Profile of early childhood educational development programmes and pre-primary education (2013)										
Table C2.3	Expenditure on early childhood educational institutions (2012)										
Table C2.4	Profile of education-only and integrated pre-primary programmes (2013)										
Table C2.5	Coverage of early childhood education programmes in OECD and partner countries										

Cut-off date for the data: 23 October 2015. Updates can be found on line at http://dx.doi.org/10.1787/eag-data-en.

Table C2.1. Enrolment rates in early childhood education and primary education, by age (2005, 2013)

						I	nrolme	ent rate	s (2013	3)						Enro	lment	rates (2	2005)
		Age 2			Age 3			Age 4			Age 5			Age 6		Age 3		Age 4	
	ISCED 01	ISCED 02	Total	ISCED 01	ISCED 02	Total	ISCED 02	ISCED 1	Total	ISCED 02	(I) ISCED 1	Total	ISCED 02	ISCED 1	Total	ISCED 02	ISCED 02	ISCED 1	Total
Australia	(1) 55	(2)	(3) 55	(4) 47	(5) 15	(6) 62	(7) 80	(8)	(9) 82	(10)	85	(12)	(13)	(14)	(15)	(16) 17	(17) 51	(18)	(19)
Australia Austria	27	7	34	9	62	71	91	0	91	96	0	96	40	58	98	17 m	m	m	m
Belgium	a	51	51	a	98	98	98	0	98	97	1	98	40	93	98	m	m	0	m
Canada	m	m	m	m	m	m	m	0	m	92	0	92	m	99	m	m	m	m	m
Chile	27	2	29	6	45	51	83	0	83	93	0	93	13	84	97	23	30	12	42
Czech Republic	a	18	18	a	59	59	83	0	83	89	0	89	48	48	97	66	91	0	91
Denmark	91	1	92	5	91	96	97	0	97	97	2	99	8	92	99	m	m	m	m
Estonia	x(2)	67 ^d	67	x(5)	87 ^d	87	91 ^d	0	91	90 ^d	0	90	79 ^d	14	92	80	84	0	84
Finland	52	0	52	0	68	68	75	0	75	80	0	80	97	0	98	62	69	0	69
France	a	11	11	a	100	100	100	0	100	100	1	100	2	99	100	101	101	0	101
Germany	59	0	59	0	92	92	96	0	96	97	0	98	34	62	96	80	89	0	89
Greece	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	a	56	0	56
Hungary	m	9	m	m	75	m	93	0	93	96	0	96	69	23	92	73	91	0	91
Iceland	95	0	95	0	96	96	97	0	97	95	0	96	0	99	99	m	m	m	m
Ireland	a	0	0	a	46	46	57	37	95	3	99	100	0	100	100	m	m	44	m
Israel	45	0	45	0	100	100	100	0	100	99	0	99	15	83	98	66	84	0	84
Italy	a	16	16	a	94	94	98	a	98	90	9	99	1	99	100	99	102	0	102
Japan	a	a	a	a	81	81	95	a	95	97	a	97	a	100	100	69	95	a	95
Korea	83	0	83	0	90	90	93	0	93	91	1	91	0	93	93	14	30	0	30
Luxembourg	a	5	5	a	71	71	99	0	99	95	5	100	5	91	96	62	95	a	95
Mexico	5	0	5	3	40	44	89	0	89	84	28	100	1	100	100	23	69	0	69
Netherlands	a	0	0	a	83	83	100	0	100	99	0	99	0	100	100	m	98	0	98
New Zealand	65	0	65	0	96	96	100	0	100	4	97	100	0	100	100	m	m	0	m
Norway	90	0	90	0	95	95	97	0	97	98	0	98	1	100	100	m	m	0	m
Poland	a	6	6	a	52	52	66	a	66	92	8	100	78	9	86	28	38	0	38
Portugal	a	0	0	a	78	78	90	0	90	97	0	98	6	96	100	61	84	0	84
Slovak Republic	a	12	12	a	63	63	74	0	74	81	0	81	41	50	90	m	m	0	m
Slovenia	68	0	68	0	84	84	89	0	89	91	0	91	5	92	98	67	76	0	76
Spain	52	0	52	0	96	96	97	0	97	97	0	97	1	96	97	94	99	0	99
Sweden	88	0	88	0	93	93	94	0	94	95	0	95	96	1	97	m	m	m	m
Switzerland	a	0	0	a	3	3	41	0	41	96	0	97	58	42	100	9	39	0	39
Turkey	m	m	m	a	7	7	36	a	36	41	32	74	a	99	99	2	5	0	5
United Kingdom	32	0	32	0	97	97	62	34	96	0	97	97	0	97	97	m	m	32	m
United States	m	m	m	a	41	41	66	0	66	85	5	90	21	76	97	39	68	0	68
OECD average	33	6	39	2	72	74	85	2	88	81	14	95	22	75	97	52	69	3	72
EU21 average	26	10	35	1	79	80	88	4	91	84	11	95	31	66	97	67	84	4	84
Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Brazil	31	1	32	44	9	53	70	0	70	81	7	88	10	85	95	m	m	m	m
Cillia	a	m	m	a	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Colombia	31	2	33	37	10	47	34	1	35	60	19	79	8	78	86	m	m	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	7	0	7	9	11	21	19	0	19	23	4	27	50	70	100	m	m	m	m
Latvia	a	0	0	a	83	83	89	0	89	96	0	96	93	4	97	66	73	0	73
Russian Federation	51	0	51	0	73	73	79	a	79	80	1	81	75	13	88	55	55	0	55
Saudi Arabia ¹	a	m	m	a	2	2	32	0	32	15	0	15	0	83	83	m	m	m	m
South Africa ²	a	m	m	a	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: In cases where a category is not applicable (code "a") in a country, the value zero has been imputed for the purpose of calculating the OECD and EU21 averages. Early childhood education target children aged below the age of entry into ISCED level 1. There are two categories of ISCED level 0 programmes: early childhood educational development (ISCED 01) and pre-primary education (ISCED 02). Enrolment rates at young ages should be interpreted with care; mismatches between the coverage of the population data and the enrolment data mean that the participation rates may be underestimated for countries such as Luxembourg that are net exporters of students and may be overestimated for those that are net importers.

Source: OECD. Argentina, China, Colombia, Indonesia: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (<a href="www.oecd.org/education/education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-education-educati at-a-glance-19991487.htm).

 $Please\ refer\ to\ the\ Reader's\ Guide\ for\ information\ concerning\ symbols\ for\ missing\ data\ and\ abbreviations.$

^{1.} Year of reference 2014.

^{2.} Year of reference 2012.

Table C2.2. Profile of early childhood educational development programmes and pre-primary education (2013)

Early childhood educational development programmes=ISCED 01, pre-primary education=ISCED 02

		r education total enrolment ISCED 01+	of j IS by ins	tribut pupils CED 0 type stituti (2013)	in 1, of on	of IS by ins	tribut pupils CED 0 type stituti (2013)	in 2, of on	to teach in ful equiva	f pupils ing staff -time ents in 1 (2013)	to teach in ful	f pupils ing staff l-time lents in 2 (2013)	Characteristics of early childhood e programmes					d educati	education	
		Pupils enrolled in pre-primary education (ISCED 02) as a percentage of total enrolment in early childhood education (ISCED 01+ ISCED 02)	Public	Government-dependent private	Independent private	Public	Government-dependent private	Independent private	Pupils to contact staff (teachers and teachers aides)	Pupils to teaching staff	Pupils to contact staff (teachers and teachers aides)	Pupils to teaching staff	Earliest starting age	Usual starting age	Usual duration (in years)	Usual starting age in ISCED 1	Entry age for compulsory programmes (if applicable)	Length of compulsory programmes (if applicable) (in years)	Full-time (FT) / Part-time (PT)	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	
OECD	Australia	42	m	m	a (2)	37	63	a (C)	m	m	m	m	3	4	1 3	5	a	a	PT FT	
Ö	Austria Belgium	87 m	34 a	66 ^d	x(3)	72 47	28 ^d 53	x(6)	6 a	9 a	9 m	14 16	3	3	3 to 4	6 6	5 a	1 a	FT	
	Canada	m	m	m	m	93	7 ^d	x(6)	m	m	m	m	m	m	m	6	m	m	m	
	Chile	80	m	m	m	m	m	m	9	13	19	27	0	4	2	m	a	a	FT/PT	
	Czech Republic	100	a	a	a	98	2	a	a	a	14 ^d	14	3	3	3	6	a	a	FT	
	Denmark Estonia	63	43	12	45	80 96 ^d	20	0 4 ^d	m	m (11)	m	m 9d	0	1 3	5	6 7	m	m	FT FT	
	Finland	m 79	x(5) 87	13	x(6)	91	a 9	a	m m	x(11) m	m m	10	0	1	4 5 to 6	7	m a	m a	FT	
	France	100	a	a	a	87	12	0	a	a	15	22	2	2 to 3	3	6	a	a	FT	
	Germany	77	27	73 ^d	x(3)	35	65 ^d	x(6)	5	5	9	10	3	3	3	6	a	a	FT	
	Greece	m	m	m	m	m	m	m	m	m	12	12	4	4	1 to 2	6	5	1	FT	
	Hungary	m	m	m	m	91	9	a	m	m	11	11	3	3	3	7	5	1	FT	
	Iceland	69	81	19	0	87	13	0	3	3	6	6	0	2	4	6	a	a	FT/PT	
	Ireland Israel	m 76	a a	a 73	27	2 58	0 29	98 12	a m	a m	m m	m m	3	3	1 3	4 to 5	а 3	а 3	FT/PT FT	
	Italy	m	a	a	a	70	a	30	a	a	14	14	m	m	m	m	a	a	FT	
	Japan	100	a	a	a	28	a	72	a	a	14	15	3	3	3	6	a	a	FT	
	Korea	59	7	93	a	19	81	a	6	6	14	14	3	3 to 5	3	6	m	m	FT	
	Luxembourg	100	a	a	a	90	0	10	a	a	11	11	3	3	3	6	4	2	FT	
	Mexico Netherlands	95 100	37	a	63	86 70	a	14 30	26	83	25 14	25 16	3	4 to 5 3 to 4	3 2 to 3	6 6	3 5	3 1	FT FT	
	New Zealand	62	2	98	a 0	2	98	0	a m	a 4	m	8	0	3 10 4	2 10 3	5	a	a	FT/PT	
	Norway	64	50	50	0	54	46	0	x(10)	x(11)	5d	11 ^d	0	1	5	6	a	a	FT/PT	
	Poland	100	a	a	a	82	2	17	a	a	m	16	3	2 to 3	4	7	6	1	FT	
	Portugal	m	a	a	a	54	30	16	a	a	m	17	3	3	3	6	a	a	FT	
	Slovak Republic	100	a	a	a	95	5	a	a	a	13	13	2	3	3	6	a	a	FT	
	Slovenia Spain	70 77	96 52	3 16	0 32	97 69	3 27	0	6 m	6 9	9 m	9 15	3	3 2 to 3	3 3 to 4	6 6	a	a	FT FT	
	Sweden	73	81	19	0	83	17	0	m	5	6	6	1	1 to 2	4 to 5	7	a a	a a	FT/PT	
	Switzerland	m	a	a	a	95	1	4	a	a	m	16	4	5	2	6	4	2	FT	
	Turkey	m	m	m	m	88	a	12	m	m	m	17	3	4 to 5	1 to 3	6	a	a	FT	
	United Kingdom	83	28	42	30	47	44	9	m	m	m	10	3	3	2	5	a	a	FT/PT	
	United States	m	m	a	m	59	a	41	a	a	10	12	3	4	1	6	a	a	FT/PT	
	OECD average	81	43	40	18	61	24	15	9	14	12	14								
	EU21 average	86	52	28	20	67	18	15	6	7	11	13								
SIS	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	FT	
ıtı	Argentina Brazil China	64	63	a	37	75	a	25	8	13	15	17	0	1	5	6	4	2	FT	
<u>8</u>	China Colombia	100 42	a 100	a 0	a m	50 64	50 ^d 0	x(6) 36	a m	a 16	17 20	22 20	m m	m m	m m	m m	m m	m m	FT m	
	India	m m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Indonesia	61	0	a	100	10	a	90	m	20	19	21	m	m	m	m	m	m	FT	
	Latvia	100	a	a	a	95	a	5	m	a	m	14	m	m	m	m	m	m	m	
	Russian Federation	84	100	a	a	100	a	a	x(10)	x(11)	4 ^d	10 ^d	m	m	m	m	m	m	m	
	Saudi Arabia ¹ South Africa ²	100	a	a	a	58	m	m	m	m	m	m	m	m	m	m	m	m	m	
		100	a	a	a	94	m	m	m	m	m	m	m	m	m	m	m	m	m	
	G20 average	82	23	42	35	44	33	23	11	23	14	16								

^{1.} Year of reference 2014.

^{2.} Year of reference 2012.

Source: OECD. Argentina, China, Colombia, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes $(\underline{www.oecd.org/education/education-at-a-glance-19991487.htm}).$

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink http://dx.doi.org/10.1787/888933285821

Table C2.3. Expenditure on early childhood educational institutions (2012)

		on educational percentage of C			ons of total exp om public sourc			xpenditure per ll institutions fo	
	Early childhood educational development	Pre-primary	All early childhood education	Early childhood educational development	Pre-primary	All early childhood education	Early childhood educational development	Pre-primary	All early childhood education
	(1)	(2)	(3)				(7)	(8)	
Australia ¹	0.3	0.2	0.4	4	47	21	10 054	10 298	10 146
Australia ¹ Austria	0.1	0.5	0.6	69	87	84	9 434	7 716	7 954
Belgium	m	0.7	m	m	96	m	m	6 975	m
Canada	m	m	m	m	m	m	m	m	m
Chile ²	x(3)	x(3)	0.9	x(6)	x(6)	82	x(9)	x(9)	4 599
Czech Republic	a	0.5	0.5	a	92	92	a	4 447	4 447
Denmark ¹	x(3)	x(3)	1.4	x(6)	x(6)	81	x(9)	x(9)	10 911
Estonia	x(3)	x(3)	0.4	x(6)	x(6)	99	x(9)	x(9)	2 193
Finland	0.4	0.8	1.2	90	89	89	17 860	9 998	11 559
France	a	0.7	0.7	a	93	93	a	6 969	6 969
Germany	0.3	0.5	0.8	70	79	76	13 720	8 568	9 744
Greece	m	m	m	m	m	m	m	m	m
Hungary ¹	m	0.7	m	m	92	m	m	4 539	m
Iceland	0.6	1.1	1.7	88	85	86	12 969	10 250	11 096
Ireland	m	m	m	m	m	m	m	m	m
Israel ¹	m	0.7	m	m	85	m	m	3 416	m
Italy ³	a	0.4	0.4	a	91	91	a	7 892	7 892
Japan			0.2	a	44	44	a	5 872	5 872
Korea	m	0.3	m	m	62	m	m	5 674	m
Luxembourg	m	0.7	m	m	99	m	m	19 719	m
Mexico	x(3)	x(3)	0.6	x(6)	x(6)	83	x(9)	x(9)	2 445
Netherlands	a	0.4	0.4	a	87	87	a	8 176	8 176
New Zealand	0.4	0.6	1.0	72	87	80	12 656	9 670	10 726
Norway	1.0	1.1	2.1	86	86	86	15 604	9 050	11 383
Poland ³	a	0.7	0.7	a	76	76	a	6 505	6 505
Portugal ³	m	0.6	m	m	61	m	m	5 713	m
Slovak Republic	a	0.5	0.5	a	83	83	a	4 694	4 694
Slovenia ¹	0.4	0.8	1.3	75	79	78	11 665	7 472	8 726
Spain	0.2	0.7	0.9	62	73	70	7 924	6 182	6 588
Sweden	0.5	1.2	1.8	m	m	m	14 180	12 212	12 752
Switzerland ³	a	0.2	0.2	a	m	m	a	5 457	5 457
Turkey	m	m	m	m	m	m	m	m	m
United Kingdom	0.1	0.5	0.6	64	63	63	9 495	10 699	10 548
United States ¹	m	0.5	m	m	75	m	m	10 042	m
OECD average EU21 average	0.4 0.3	0.6 0.7	0.8	68 72	80 84	78 83	12 324 12 040	8 008 8 146	7 886 7 977
	m	m	m	m	m	m	m	m	m
Argentina Brazil ^{1, 3}	x(3)	x(3)	0.6	m	m	m	x(9)	x(9)	2 939
China									2 333 m
Colombia ²	m x(3)	m x(3)	m 0.5	m x(6)	m x(6)	m 57	m x(9)	m x(9)	1 236
India	m m	m m	m	m m	m m	m	m x(9)	m m	1 230 m
Indonesia ²		m 0.1			m 88				
Latvia	m	0.1	m 0.8	m	98	m 98	m	m 3 067	m 3 067
Russian Federation	a v(3)			a v(6)		98 89	a v(0)		4 887
Saudi Arabia	x(3)	x(3)	0.8	x(6)	x(6)		x(9)	x(9)	
South Africa ³	m a	m 0.1	m 0.1	m a	m m	m m	m a	m 806	m 806
G20 average	m	m	m	m	m	m	m	m	m

^{1.} Includes some expenditure on childcare.

Source: OECD. Argentina, China, Colombia, India, Indonesia, Saudi Arabia, South Africa: UNESCO Institute for Statistics. Latvia: Eurostat. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

^{2.} Year of reference 2013.

^{3.} Public institutions only.

Table C2.4. Profile of education-only and integrated pre-primary programmes (2013)

		I										
		Educat	tion-only progr	ammes		grated program cation and child			roportion of en Education at a			
		Exist nationally	Delivered by qualified teacher	Have a formal curriculum	Exist nationally	Delivered by qualified teacher	Have a formal curriculum	Education-only programmes	Integrated programmes	Total		
		(1)	(2)	(3)				(7)		(9)		
8	Australia	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100		
OECD	Austria	Yes	Yes	Yes	Yes	Yes	No	3	97	100		
	Belgium	Yes	Yes	Yes	No	a	a	100	a	100		
	Canada	Yes	Yes	Yes	Yes	Yes	Yes	m	m	m		
	Chile	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100		
	Czech Republic	Yes	Yes	Yes	No	a	a	100	a	100		
	Denmark	No		a	Yes	Yes	Yes	a	100	100		
	Estonia	No	a	a	Yes	Yes	Yes	a	100	100		
	Finland	Yes	Yes	Yes	Yes	Yes	Yes	31	69	100		
	France	Yes	Yes	Yes	No	a	a	100	a	100		
	Germany	Yes	Yes	Yes	No	a	a	100	a	100		
	Greece	Yes	Yes	Yes	Yes	m	m	100	m	100		
	Hungary	No	a	a	Yes	Yes	Yes	a	100	100		
	Iceland	Yes	Yes	Yes	Yes	Yes	Yes	1	99	100		
	Ireland	No	a	a	Yes	a	a	a	100	100		
	Israel	Yes	Yes	Yes	Yes	Yes	Yes	98	2	100		
	Italy	No	a	a	Yes	m	m	a	100	m		
	Japan	Yes	Yes	Yes	Yes	Varies	Varies	x(9)	x(9)	100		
	Korea	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100		
	Luxembourg	Yes	Yes	Yes	No	a	a	100	a	100		
	Mexico	Yes	Yes	Yes	Yes	Yes	Yes	99	1	100		
	Netherlands	Yes	Yes	Yes	Yes	No	Varies	70	30	100		
	New Zealand	No	a	a	Yes	Yes	Yes	a	100	100		
	Norway	No	a	a	Yes	Yes	Yes	a	100	100		
	Poland	Yes	Yes	Yes	No	a	a	100	a	100		
	Portugal	No	a	a	Yes	Yes	Yes	a	100	100		
	Slovak Republic	Yes	Yes	Yes	No	a	a	100	a	100		
	Slovenia	No	a	a	Yes	Yes	Yes	a	100	100		
	Spain	Yes	Yes	Yes	No	a	a	100	a	100		
	Sweden	Yes	Yes	Yes	Yes	Yes	Yes	17	83	100		
	Switzerland	Yes	Yes	Yes	Yes	Yes	m	100	m	100		
	Turkey	Yes	Yes	Yes	No	a	a	100	a	100		
	United Kingdom	Yes	Yes	Yes	Yes	Varies	Yes	x(9)	x(9)	100		
	United States	Yes	Varies	Varies	Yes	Varies	Varies	x(9)	x(9)	100		
Ę.	Argentina	m	m	m	m	m	m	m	m	m		
rtue	Argentina Brazil China	Yes	Yes	No	Yes	Yes	No	x(9)	x(9)	100		
Pa	China	m	m	m	m	m	m	m	m	m		
	Colombia	m	m	m	m	m	m	m	m	m		
	India	m	m	m	m	m	m	m	m	m		
	Indonesia	m	m	m	m	m	m	m	m	m		
	Latvia	m	m	m	m	m	m	m	m	m		
	Russian Federation	m	m m	m m m m		m	m	m				
	Saudi Arabia	m	m	m	m	m	m	m	m	m		
	South Africa	m	m	m	m	m	m	m	m	m		

 $\textbf{Source:} \ \ \text{OECD, INES Working Party special data collection on early childhood education programmes.} \ \ \text{See Annex 3 for notes} \ \ \underline{\textbf{(www.oecd.org/education-education-at-decomposition)}}$ a-glance-19991487.htm).

 $Please\ refer\ to\ the\ Reader's\ Guide\ for\ information\ concerning\ symbols\ for\ missing\ data\ and\ abbreviations.$

Table C2.5. [1/3] Coverage of early childhood education programmes in OECD and partner countries

ISCED 01 and ISCED 02, based on ISCED 2011 classifications

					<u> </u>						
	ISCED 010 – Early	childhood development p	rogran	nmes	020	– Pre-primary education					
	Name of the programme in national language	Name of the programme in English	Theoretical starting age	Theoretical duration of the programme (years)	Name of the programme in national language	Name of the programme in English	Theoretical starting age	Theoretical duration of the programme (vears)			
Australia	Early childhood education	Early childhood education	0	2 - 4	Pre-primary, preschool	Preschool programs delivered in educational institution settings or educational long-day care settings.	4	1			
Austria	Kinderkrippe	Crèche	0	3	Kindergarten	Kindergarten	3	3			
					Vorschulstufe	Pre-primary stage (of primary school)	6	1			
Belgium (Fl.)	Kinderopvang	Childcare	0	2.5 - 3	Gewoon kleuteronderwijs	Regular nursery education	2.5 - 3	3			
					Buitengewoon kleuteronderwijs	Special nursery education	2.5 - 3	3			
Belgium (Fr.)		a			Enseignement maternel ordinaire	Regular pre-primary education	2.5 - 3	3			
					Enseignement maternel spécialisé	Special pre-primary education	2.5 - 3	3			
Canada	Early childhood development or equivalent	Pre-elementary education or equivalent – Early childhood development	3 - 4	1 - 2	Kindergarten	Pre-elementary education or equivalent – Kindergarten	4 - 5	1			
Chile	Educación Parvularia (Sala Cuna y Nivel Medio Menor)	Pre-primary education (Day care and Lower Middle Level)	0 - 2	3	Educación Parvularia (Nivel Medio Mayor, Nivel de Transición 1 y Nivel de Transición 2)	Pre-primary education (Upper middle level, 1st transition level and 2nd transition level)	3 - 5	3			
Czech Republic		a			Mateřská škola	Kindergarten	3	3			
					Přípravné třídy pro děti se sociálním znevýhodněním	Preparatory classes for socially disadvantaged children	6	1			
					Přípravný stupeň základní školy speciální	Preparatory stage of special basic school	6	3			
Denmark	Vuggestue	Nursery school	0 - 2	3	Børnehave	Kindergarten	3 - 5	2			
Estonia	Ir	cluded with ISCED-02			Alusharidus (alushariduse raamõppekava)	Pre-primary education (general study programme of pre-primary education)	0	6			
Finland	0-2-v. lapset päiväkodeissa	Kindergartens (0 to 2-year-old children), including special education programmes	0 - 2	1-3	3-5-v. lapset päiväkodeissa	Kindergartens (3 to 5-year-old children), including special education programmes	3 - 5	1-3			
	0-2-v. lapset perhepäivähoidossa	Family day care (0 to 2-year-old children), including special education programmes	0 - 2	1-3	6-v. lasten esiopetus	Pre-primary education for 6-year-old children in kindergartens and comprehensive schools, including special education programmes	6	1			
					3-5-v. lapset perhepäivähoidossa	Family day care (3 to 5-year-old children), including special education programmes	3 - 5	1-3			
France		a			Enseignement préélémentaire	Pre-elementary education	2 - 3	3			
Germany	Krippen	Crèche, Day nursery	0	2 - 3	01 Kindergärten	Kindergarten	3	3			
					02 Schulkindergärten	School kindergarten	6	1			
					03 Vorklassen	Pre-school classes	5	1			
Greece	Vrefonipiakos stathmos	Kindergarten Early childhood	0	1 - 3	Nipiagogio	Pre-primary	4 - 5	1-2			
Hungary	Bölcsőde (2 évestől)	Créche	2	1	Óvoda	Kindergarten (of which one year pre-school education)	3	3			
	Leikskóli I	Pre-primary schools I	0	1-3	Leikskóli II	Pre-primary schools II	3	0 to			
Iceland	Demondr 1	The primary serious r						3 years, variable			

Source: ISCED 2011 mappings. For more details, see Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table C2.5. [2/3] Coverage of early childhood education programmes in OECD and partner countries

ISCED 01 and ISCED 02, based on ISCED 2011 classifications

		ISCED 010 – Early	childhood development p	rogran	nmes	020	- Pre-primary education		
		Name of the programme in national language	Name of the programme in English	Theoretical starting age	Theoretical duration of the programme (years)	Name of the programme in national language	Name of the programme in English	Theoretical starting age	Theoretical duration of the programme (years)
OECD	Ireland		a			Early start	Early start	3 - 4	1
ö						Traveller Pre-School Programmes	Traveller Pre-School Programmes	3 - 4	1
						Privately provided Pre-Primary education – Early Childhood Care and Education (ECCE) Scheme and the Community Childcare Subvention (CCS) Programme	Privately provided Pre-Primary education – Early Childhood Care and Education (ECCE) Scheme and the Community Childcare Subvention (CCS) Programme	3 years 2 months to 4 years 6 months	1
	Israel	Hinuh be ganey misrad ha kalkala or harevacha	Early childhood education supervised by Ministry of Economy or by Ministry of Welfare	0	3	Hinuh kdam yesody-ganey yeladim-ziburi (misrad ha kalkala, misrad ha revacha ve misrad ha hinuh)	Pre-primary education-public (supervised by Ministry of Economy, Ministry of Welfare or by MoE)	3	3
						Hinuh kdam yesody-ganey yeladim-prati	Pre-primary education-independent private	3	3
	Italy		a			Scuola dell'infanzia	Pre-primary school	3	3
	Japan		a			Yochien	Kindergarte	3 - 5	1-3
						Tokubetsu-shien-gakko Yochi-bu	School for special needs education, kindergarten department	3 - 5	1-3
						Hoikusho	Day nursery	3 - 5	1-3
	Korea	어린이집 (0 - 2세) (Eorinyijip, age 0 - 2)	Infant course, Childcare centre	0 - 2	1-3	어린이집 (3 - 5세) (Eorinyijip, age 3 - 5)	Kindergarten course, Childcare centre	3 - 5	1-3
		특수학교	Infant course,	0 - 2	1-3	유치원 (Yuchiwon)	Kindergarten	3 - 5	1 - 3
		(Teuksu-hakgyo), 영아과정 (Younga kwajeong)	Special school			특수학교 (Teuksu-hakgyo), 유치원과정 (Yuchiwon-kwajeong)	Kindergarten course, Special school	3 - 5	1-3
	Luxembourg		a			Enseignement fondamental/ cycle 1-éducation précoce	Early maturity education	3	1
						Éducation précoce	Early maturity education (independent private institutions)	<4	1
						Enseignement fondamental/cycle 1 – éducation préscolaire (Spillschoul)	Pre-primary education	4	2
						Éducation préscolaire	Pre-primary education (independent private institutions)	4	2
	Mexico	Educación Inicial	Early Childhood Education	0	3	Educación Preescolar	Pre-primary Education	3	2 - 3
	Netherlands	Early childhood education	Early childhood education	0	<=3	Voorschools onderwijs	Pre-school education in day care centres and play groups	3	1
		Barnehage, 0 - 2 åringer	Kindergarten	0	2	Basisonderwijs en speciaal basisonderwijs, groep 1 en 2	Pre-primary education in school settings, including pre-primary special needs education group (class) 1 and 2	4	2
	New Zealand	Early childhood education	Early childhood education	0	<= 3	Early childhood education	Early childhood education	3	2
	Norway	Barnehage, 0 - 2 åringer	Kindergarten	0	2	Barnehage, 3 - 5 åringer	Kindergarten	3	3
	Poland		a			Wychowanie przedszkolne Wychowanie przedszkolne specjalne	Pre-school education Special pre-school education	3	4
	Portugal		a			Educação pré-escolar	Pre-primary education	3 - 5	3
-	- or engur					Saucajao pre escolar	- re primary education		

Source: ISCED-2011 mappings. For more details, see Annex 3 for notes (www.oecd.org/education-education-at-a-glance-19991487.htm).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table C2.5. [3/3] Coverage of early childhood education programmes in OECD and partner countries

ISCED 01 and ISCED 02, based on ISCED 2011 classifications

_						, , , , , , , , , , , , , , , , , , ,						
		ISCED 010 – Early	childhood development p	rogran	nmes	020	- Pre-primary education					
		Name of the programme in national language	Name of the programme in English	Theoretical starting age	Theoretical duration of the programme (years)	Name of the programme in national language	Name of the programme in English	Theoretical starting age	Theoretical duration of the programme (years)			
OECD	Slovak Republic		a			Materská škola	Kindergarten	3	3			
ö						Špeciálna materská škola	Special Kindergarten	3	3			
						Prípravné triedy na základnej škole	Preparatory classes in basic school	6	1			
						Prípravné triedy v špeciálnej škole	Preparatory classes in special school	6	1			
_	Slovenia	Pedšolska vzgoja (1.starostno obdobje)	Pre-school education (1st age period)	1	2	Predšolska vzgoja (2. starostno obdobje)	Pre-school education (2nd age period)	3	3			
	Spain	Educación Infantil Primer ciclo (0-2 años)	Early childhood education	0	3	Educación infantil segundo ciclo (3+ años)	Pre-primary education	3	3			
	Sweden	Förskola för barn/elever under 3 år	Pre-school, for children/pupils younger than 3 years	0	0 - 2	Förskola för barn/ elever 3 år eller äldre	Pre-school, for children/ pupils 3 years of age or older	3	3			
		under 5 ar	younger than o years			Förskoleklass	Pre-school classes	6	1			
	Switzerland		a			Vorschule, préscolarité, prescolarità	Kindergarten	4 - 6	2			
						Besonderer Lehrplan, programme d'enseignement spécial, programma scolastico speciale	Special needs education programmes	4 - 6	2			
	Turkey	Erken çocukluk dönemi eğitimi (0-2 yaş)	Early childhood care and education (ages 0-2)	0 - 2	1-2	Okul öncesi eğitimi (3-5 yaş)	Pre-primary education (ages 3-5)	3 - 5	1-3			
	United Kingdom	Children's Centres (including Sure Start centres)	Children's Centres (including Sure Start centres)	1	2	Reception and nursery classes in schools	Reception and nursery classes in schools	3	1 - 2			
		Registered childminders	Registered childminders	1	2	Preschool or pre-kindergarten	Preschool or pre-kindergarten	2 - 4	1 - 2			
		Day nurseries	Day nurseries	1	2	Kindergarten	Kindergarten	4 - 6	1			
	United States		m			Preschool or pre-kindergarten	Preschool or pre-kindergarten	2 - 4	1 - 2			
						Kindergarten	Kindergarten	4 - 6	1			
Partners	Brazil	Educação Infantil – creche	Nursery schools/ daycare centres	0	3	Educação Infantil – pré-escola	Pre-school	4	2			
2 -	Colombia	Atención integral a la primera infnacia	Early childhood educational development	0	3	Pre-jardin (3 year-olds) , Jardin (4 year-olds), and Transicicón (5-year-olds)	Pre-primary education	3 - 5	1-3			
	Latvia	Pirmskolas izglitibas programmas (līdz 2 gadu vecumam)	Pre-primary education programmes (part of the programme up until the age of 2 years) (early childhood education)	0	1-2	Pirmskolas izglitibas programmas (no 3 gadu vecuma)	Pre-primary education programmes (part of the programme from the age of 3 years on)	3	1-4			
	Russian Federation	Программы развития детей младшего возраста	Early childhood educational development	0	2	Дошкольное образование	Pre-primary education	3	3			

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.



From:

Education at a Glance 2015OECD Indicators

Access the complete publication at:

https://doi.org/10.1787/eag-2015-en

Please cite this chapter as:

OECD (2015), "Indicator C2 How do Early Childhood Education Systems Differ Around the World?", in *Education at a Glance 2015: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/eag-2015-25-en

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for public or commercial use and translation rights should be submitted to rights@oecd.org. Requests for permission to photocopy portions of this material for public or commercial use shall be addressed directly to the Copyright Clearance Center (CCC) at info@copyright.com or the Centre français d'exploitation du droit de copie (CFC) at contact@cfcopies.com.

