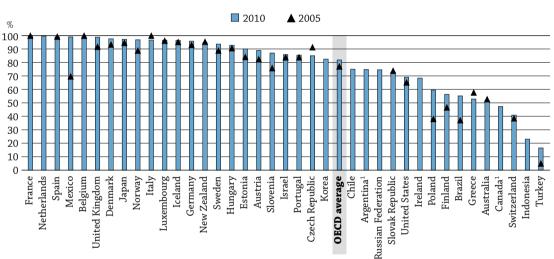
HOW DO EARLY CHILDHOOD EDUCATION SYSTEMS DIFFER AROUND THE WORLD?

- Early childhood education is associated with better performance later on in school. Fifteenyear-old pupils who attended pre-primary education perform better on PISA than those who did not, even after accounting for their socio-economic backgrounds.
- In a majority of OECD countries, education now begins for most children well before they are 5 years old. Belgium, France, Iceland, Italy, Norway, Spain and Sweden have the highest enrolment rates of 3-year-olds in early childhood education, where more than 90% are enrolled.
- More than three-quarters of 4-year-olds (79%) are enrolled in early childhood education across OECD countries as a whole. This rises to 83%, on average, among OECD countries that are part of the European Union.

Chart C2.1. Enrolment rates in early childhood and primary education at age 4 (2005 and 2010)



Full-time and part-time pupils in public and private institutions

1. Year of reference 2009.

Countries are ranked in descending order of the enrolment rates of 4-year-olds in 2010.

Source: OECD. Argentina and Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Table C2.1. See Annex 3 for notes (*www.oecd.org/edu/eag2012*).

StatLink and http://dx.doi.org/10.1787/888932663055

Context

A growing body of research recognises that early childhood (pre-primary) education improves children's cognitive abilities, helps to create a foundation for lifelong learning, makes learning outcomes more equitable, reduces poverty, and improves social mobility from generation to generation.

Enrolling pupils in early childhood education can also mitigate social inequalities and promote better student outcomes overall. Many of the inequalities that exist within school systems are already present when pupils enter formal schooling and persist as pupils progress through the school system (Entwisle, et al., 1997; Downey, et al., 2004). Because inequalities tend to grow when school is not compulsory, earlier entrance into the school system may reduce educational inequalities. In addition, schooling experiences in pre-primary education helps pupils become better prepared to enter and succeed in formal schooling (Hart and Risely, 1995; Heckman, 2000).

INDICATOR C2

As countries continue to expand their early childhood education programmes, it will be important to consider parents' needs and expectations regarding accessibility, cost, programme quality and accountability. When parents' needs with respect to program quality and accountability are not met, some may be more inclined to send their children to private pre-primary institutions, child care, or extra-curricular activities. This can result in heavy financial burdens for parents, even when government subsidies are provided (Shin, et al., 2009).

Other findings

- Publicly-funded pre-primary education tends to be more strongly developed in the European than in the non-European countries of the OECD. Private funding varies widely between countries, ranging from 5% or less in Belgium, Estonia, Luxembourg, the Netherlands and Sweden, to 25% or more in Argentina, Austria and Germany, and to over 48% in Australia, Japan and Korea.
- As a percentage of GDP, expenditure on pre-primary education accounts for 9% of OECD expenditure on educational institutions, or on average 0.5% of GDP. Differences between countries are significant. For example, while 0.1% or less of GDP is spent on pre-primary education in Australia, India, Indonesia, Ireland and South Africa, 0.8% or more is spent in Denmark, Iceland, Israel, the Russian Federation and Spain.
- The ratio of pupils to teaching staff is also an important indicator of the resources devoted to pre-primary education. The pupil-teacher ratio excluding non-professional staff (e.g. teachers' aides) ranges from more than 20 pupils per teacher in China, France, Israel, Mexico and Turkey, to fewer than 10 in Chile, Iceland, New Zealand, Slovenia and Sweden.
- Some countries make extensive use of teachers' aides at the pre-primary level. Fifteen countries reported smaller ratios of pupils to contact staff than of pupils to teaching staff. As a result, the ratios of pupils to contact staff are substantially lower than the ratios of pupils to teaching staff (at least two fewer pupils) in Austria, Brazil, China, France, Germany, Ireland, Israel and the United States.

Trends

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

On average for OECD countries with 2005 and 2010 data, enrolments in early childhood education programmes have risen from 64% of 3-year-olds in 2005 to 69% in 2010, and similarly from 77% of 4-year-olds in 2005 to 81% in 2010. The enrolment rates of 4-year-olds in early childhood education programmes increased more than 20 percentage points in Mexico and Poland between 2005 and 2010.

INDICATOR C2

Analysis

Early childhood education 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 the OECD, 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, and programme length.

This indicator shows enrolment rates in ISCED 0 (pre-primary) programmes by individual year of age, as well as the transition into primary education. Expenditure by public and private sources, pupil/staff ratios and information on starting ages and program length are also presented to enable further comparisons of early childhood education systems throughout OECD countries.

Enrolment in early childhood education

In a majority of OECD countries, education now begins for most children well before they are 5 years old. More than three-quarters (79%) of 4-year-olds are enrolled in in early childhood education programmes across OECD countries as a whole, and this rises to 83%, on average, in the OECD countries that are part of the European Union. Enrolment rates for early childhood education at this age vary from over 95% in Belgium, France, Germany, Iceland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Spain and the United Kingdom, at one end of the spectrum, to less than 60% in Australia, Brazil, Canada, Finland, Greece, Indonesia, Poland, Switzerland and Turkey (Table C2.1 and Chart C2.1).

Results from the OECD's PISA assessment support these figures. On average across OECD countries, 72% of the 15-year-old pupils assessed by PISA reported that they had attended more than one year of pre-primary education. According to pupils' 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. More than 90% of pupils in 27 OECD countries had attended pre-primary education for at least some time, and more than 98% of pupils in France, Hungary, Japan and the United States reported having done so. Pre-primary education is rare in Turkey, where less than 30% of 15-year-olds attended pre-primary education for any period of time. More than one year of pre-primary education is uncommon in Canada, Chile, Ireland and Poland, where less than 50% of pupils had attended pre-primary education for that length of time (see OECD, 2010, Table II.5.5, and Table C2.2 at the end of this indicator).

Notably, PISA analyses also find that in most countries, pupils who have attended pre-primary education programmes tend to perform better than those who have not, even after accounting for pupils' socio-economic background. PISA research also shows that the relationship between pre-primary attendance and performance tends to be greater in school systems with a longer duration of pre-primary education, smaller pupil-to-teacher ratios in pre-primary education and higher public expenditure per child at the pre-primary level (OECD [2010], Table II.5.6).

At the same time, the availability of early childhood education programmes for even younger children is still a work in progress. In some countries, demand for early childhood education for children aged 3 and under far outstrips supply. The highest enrolment rates of 3-year-olds in early childhood education are found in Belgium, France, Iceland, Italy, Norway and Spain. OECD research has found that the demand for services for young children is significantly higher than the places available in many countries, even in those with provisions for long parental leave. In countries where public funding for parental leave is limited, many working parents must either seek solutions in 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 (OECD, 2011).

Early childhood education helps to build a strong foundation for lifelong learning and ensure equity in education later on. Some countries have recognised this by making access to pre-primary education almost universal for children by the time they are three. Early childhood education is growing quickly in the majority of countries.

On average for OECD countries with 2005 and 2010 data, enrolments rose from 64% of 3-year-olds in 2005 to 69% in 2010, and from 77% of 4-year-olds in 2005 to 81% in 2010. In Mexico and Poland, the enrolment rates of 4-year-olds increased more than 20 percentage points during this period (Table C2.1).

Financing early childhood education

Sustained public funding is critical to supporting the growth and quality of early childhood education programmes. Appropriate funding helps to ensure the recruitment of 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 the absence of direct public funding or parental subsidies, there is greater risk that early childhood education programmes will vary in quality, or that access will be restricted to more affluent families (OECD, 2006).

Public expenditure on education is mainly used to support public pre-primary institutions, but also funds private institutions in some countries to varying degrees. On average among OECD countries, the level of public expenditure on public pre-primary institutions, per pupil, is more than twice the level of public expenditure on private pre-primary institutions (USD 6 426 and USD 2 701, respectively) (see Table B3.4). At the pre-primary level, annual expenditure per pupil for both public and private institutions averages USD 6 670 in OECD countries. However, expenditure varies from USD 2 500 or less in Argentina, Brazil, Indonesia, Mexico and South Africa to more than USD 10 000 in Luxembourg and New Zealand (Table C2.2, and see Table B3.4 in Indicator B3).

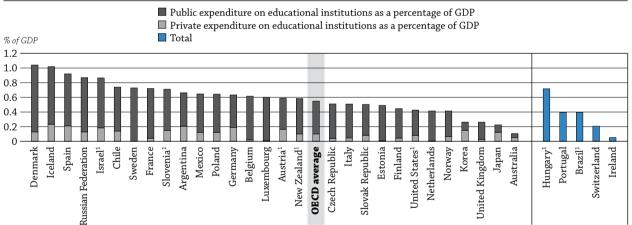


Chart C2.2. Expenditure on early childhood educational institutions as a percentage of GDP (2009)

By funding source

1. Includes some expenditure on child care.

Countries are ranked in descending order of public and private expenditure on educational institutions.

Source: OECD. Argentina: UNESCO Institute for Statistics (World Education Indicators programme). Table C2.2. See Annex 3 for notes (*www.oecd.org/edu/eag2012*).

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Expenditure on pre-primary education accounts for 9% of OECD expenditure on educational institutions, or 0.5% 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 Australia, India, Indonesia, Ireland and South Africa, 0.8% or more is spent in Denmark, Iceland, Israel, the Russian Federation and Spain (Table C2.2, and see Table B2.1 in Indicator B2).

These differences can largely be explained by enrolment rates and the differing starting age for primary education in some countries, but are also influenced by the extent to which this indicator covers private early childhood education. In Ireland, for example, most early childhood education is delivered by private institutions

that were not captured by the Irish data for the year 2009. In Australia, the Netherlands and Switzerland, the absence of data on integrated programmes is also likely to understate the true level of expenditure and enrolments in early childhood education programmes, and may affect the comparability of the data to other countries. Inferences on access to and quality of early childhood education and care should therefore be made with caution. Countries with integrated early childhood programmes may vary in the extent of expenditure that is devoted to the "care" component of the programme (ideally only education expenditures should be included) (Table C2.2, Chart C2.2 and Indicator B2).

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- to 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 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 that and for at least two years. Early education programmes in Europe are often free and located in schools. Compared to primary, secondary and post-secondary non-tertiary education, pre-primary institutions obtain the largest proportion of funds from private sources, at 18%. However, this proportion varies widely between countries, ranging from 5% or less in Belgium, Estonia, Luxembourg, the Netherlands and Sweden, and 25% or more in Argentina, Austria and Germany, to over 48% in Australia, Japan and Korea (Table C2.2 and OECD, 2011).

Ratio of pupils to teaching staff

The ratio of pupils to teaching staff is obtained by dividing the number of full-time equivalent pupils 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 compared to the length of a teacher's working day, nor how much time teachers spend teaching. Therefore, it cannot be interpreted in terms of class size. The number of pupils per class summarises different factors, but distinguishing between them would allow an understanding of the differences between countries in terms of the quality of the educational system (see Indicator D2).

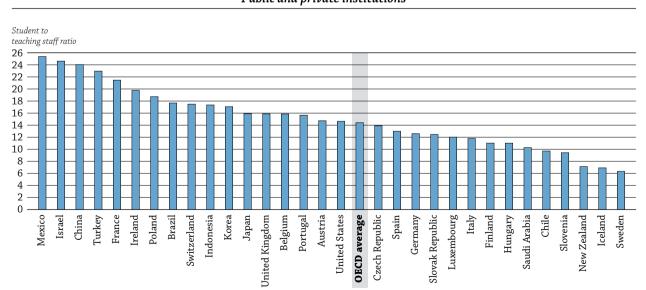


Chart C2.3. Ratio of pupils to teaching staff in early childhood education (2010) Public and private institutions

Countries are ranked in descending order of students to teaching staff ratios in early childhood education.

Source: OECD. China and Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Saudi Arabia: UNESCO Institute for Statistics. Table C2.2. See Annex 3 for notes (*www.oecd.org/edu/eag2012*).

StatLink and http://dx.doi.org/10.1787/888932663093

The ratio of pupils to teaching staff is also an important indicator of the resources devoted to education. Table C2.2 shows, for the pre-primary level, the ratio of student to teaching staff and also the ratio of pupils to contact staff (e.g. teachers and non-professional staff [teacher aides]) in early childhood education. Some countries make extensive use of teachers' aides at the pre-primary level. Fifteen countries reported smaller ratios of pupils to contact staff (Column 4 of Table C2.2) than of pupils to teaching staff. As a result, the ratios of pupils to contact staff are substantially lower in Austria, Brazil, China, France, Germany, Ireland, Israel and the United States. The difference is particularly large in Ireland and Israel, where there are at least ten fewer pupils per contact staff than per teaching staff. Globally, at the pre-primary level, there are 14 pupils for every teacher, on average in OECD countries. The student-teacher ratio (excluding teacher aides) ranges from more than 20 pupils per teacher in China, France, Israel, Mexico and Turkey, to fewer than 10 in Chile, Iceland, New Zealand, Slovenia and Sweden (Table C2.2 and Chart C2.3).

Definitions and methodologies

How is early childhood education defined?

Early childhood education or pre-primary education (ISCED 0) is defined as the initial stage of *organised instruction*, designed primarily to introduce very young children to a school-type environment.

The distinction between programmes that are classified as ISCED 0 and programmes that are outside of the scope of ISCED 0 is based primarily on the *educational properties* of the programme. As the educational properties of these programmes are difficult to assess directly, several proxy measures are used. ISCED 0 programmes:

- <u>Include</u> early childhood programmes that:
 - are in a centre or are school-based;
 - are designed to meet the educational and developmental needs of children;
 - are typically designed for children at least 3 years old and not older than 6; and
 - have staff that are adequately trained (i.e. qualified) to provide an educational programme for the children.
- <u>Exclude</u> early childhood programmes that fail to meet these criteria.

How are early childhood education programmes classified as full-time or part-time, and what effect does this have?

There are two methods used to classify pupils as full-time/part-time in *Education at a Glance*:

- 1. Based on national definitions for early childhood education programmes.
- 2. A proxy method, derived from the duration of the first grade in primary education (ISCED 1).

Though the classification method used by countries differs, the issue does <u>not</u> affect enrolment rates (Table C2.1), as these are based on the total number of enrolments as a proportion of the population, regardless of whether pupils are full-time or part-time. The differences in classification methods may have some effect on expenditure per student and the teacher/student ratio, as these data are based on full-time equivalent student figures.

What are the differences between education only and integrated programmes?

In some countries, institutions providing early childhood education also provide extended day or evening child care. For the purposes of reporting in *Education at a Glance*, these programmes are referred to as *integrated programmes* (i.e. they integrate education and care in the same programme). *Education only* programmes are those that do not include extended day or evening child care services (i.e. they only provide educational programmes).

Is child care expenditure on integrated programmes reported in Education at a Glance?

The focus of ISCED 0 is on the educational properties of the programme. Therefore, the child care component of integrated programmes is excluded from expenditure reporting in *Education at a Glance*. Countries that are not able to remove child care expenditure from data reported in *Education at a Glance* have been footnoted in Table C2.2. The amount of child care expenditure included is likely to vary between countries and care should be taken when interpreting these results.

How are variations at the national level represented?

Some variations at the national level are not able to 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.

The statistical data for Israel are supplied by and 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

Downey, D.B., P.T. von Hippel and B.A. Broh, "Are Schools the Great Equalizer? Cognitive Inequality during the Summer Months and the School Year", *American Sociological Review*, Vol. 69, No. 5, pp. 613-635.

Entwisle, D.R., K. Alexander and L.S. Olson (1997), Children, Schools and Inequality, Westview, Boulder.

Hart, B. and I. Risley (1995), *Meaningful Differences in the Everyday Experience of Young American Children*, Paul H. Brookes Publishing, Baltimore.

Heckman, J.J. (2000), *The Case for Investing in Disadvantaged Young Children*, CESifo DICE Report, Ifo Institute for Economic Research at the University of Munich, Vol. 6, No. 2, pages 3-8, 07.

OECD (2006), Starting Strong II: Early Childhood Education and Care, OECD Publishing.

OECD (2010), PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II), PISA, OECD Publishing.

OECD (2011), Starting Strong III: A Quality Toolbox for Early Childhood Education and Care, OECD Publishing.

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

		Enrolment rates (2010)									Enrolment rates (2005)										
		Age 3		Age 4			Age 5			Age 6		Age 3 Age 4			Age 5				Age 6		
		ISCED 0	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 0	ISCED 1	Total	ISCED 0	ISCED 1	TOTAL	ISCED 0	ISCED 1	Total
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
B	Australia	10	51	1	52	17	82	99	n	100	100	17	51	2	53	18	72	91	n	100	100
Ö	Austria	61	89	n	89	95	n	95	41	59	100	47	82	n	82	93	n	93	39	57	96
	Belgium	99	99	n	99	98	1	99	5	94	99	100	100	n	100	99	1	100	6	94	100
	Canada ¹	1	47	n	47	94	n	94	n	m	99	m	m	m	m	m	m	m	m	m	m
	Chile	38	m	m	75	m	m	87	m	m	92	m	m	m	m	m	m	m	m	m	m
	Czech Republic	60	85	n	85	92	1	93	46	51	97	65	91	n	91	97	n	97	49	51	100
	Denmark	87	98	n	98	98	n	98	97	2	99	91	93	n	93	84	n	84	95	3	98
	Estonia	88	90	n	90	91	n	91	77	14	91	81	84	n	84	88	n	88	100	12	100
	Finland	47	56	n	56	64	n	64	99	n	99	38	47	n	47	56	n	56	98	1	99
	France	100	100	n	100	100	1	100	2	99	100	100	100	n	100	99	1	100	2	94	96
	Germany ²	89	96	n	96	96	n	97	35	64	99	82	93	n	93	93	n	93	38	58	96
	Greece	a	53	a	53	94	a	94	2	98	100	a	58	a	58	83	2	84	n	100	100
	Hungary	72	93	n	93	96	n	96	73	22	95	73	91	n	91	97	n	97	74	25	99
	Iceland	95	96	n	96	95	n	95	n	98	98	94	95	n	95	96	n	96	n	98	98
	Ireland	65	27	41	68	n	100	100	n	100	100	m	m	m	m	m	m	m	m	m	m
	Israel	79	86	n	86	96	n	96	14	83	97	67	84	n	84	93	n	94	13	81	95
	Italy	93	97	a	97	89	8	98	1	98	99	97	100	a	100	94	7	100	1	100	100
	Japan	75	97	a	97	99	a	99	a	100	100	69	95	a	95	99	a	99	a	100	100
	Korea	78	82	n	82	88	1	89	4	98	100	m	m	m	m	m	m	m	m	m	m
	Luxembourg	73	97	n	97	88	5	93	3	95	98	62	96	n	96	92	3	95	3	97	100
	Mexico	40	99	n	99	99	29	100	1	100	100	23	70	а	70	88	10	98	1	100	100
	Netherlands	m	100	a	100	99	a	99	а	99	99	m	m	m	m	m	m	m	m	m	m
	New Zealand	86	95	n	95	2	98	100	n	100	100	85	96	n	96	3	100	100	n	100	100
	Norway	95	97	n	97	97	n	97	1	100	100	83	89	n	89	91	n	91	1	99	100
	Poland	46	59 85	a	59 85	75 93	x(9)	75 93	91 3	4 97	95 100	28	38 84	a	38	48 87	 3	48 90	98 3	1	99
	Portugal Slovak Republic	73 60	85 73	n	85 73	82	1	93 82	3 41	97 51	100 92	61	84 74	n	84 74	87 85		85	40	100 54	100 94
	-	81	73 87	n	87	90	n x(9)	82 90	41 5	94	92 99	61 67	74	n	74 76	84	n	84	40	96	100
	Slovenia	99	87 99	n	99	90		100	1	94 97	99 98	95	70 99	n	99	04 100	n	100	4	90	100
	Spain Sweden	99	99 94	n	99 94	99	n	95	96	97	98 97	95 84	99 89	n	99 89	90	n	90	96	39	99
	Switzerland	30	40	n	94 41	94	n 1	95 95	56	43	100	8	38	n	39	90	n 1	91	60	40	100
	Turkey	4	40 17	n	41 17	61		95 61		43 96	96	0 2	5	n	5	90 23	8	32		40 83	83
	United Kingdom	83	65	m 31	97	1	n 99	100	m	90	90	2 78	60	n 32	92		100	100	n	100	100
	United States	51	65 69		697	74	99 6	80	n 16	99 80	99 96	78 35	60 65	32 n	92 65	n 72	6	78	n 15	80	95
	onited States	51	09	n	09	/4	0	80	10	80	90	33	05	п		12	0		15	80	93
	OECD average	66	79	3	81	78	15	93	26	72	99	64	77	1	79	77	12	88	30	69	100
	OECD average for countries with 2005 and 2010 data	69	81	1	83	80	13	93	29	70	99	64	77	1	79	76	12	88	31	69	100
	EU21 average	73	83	3	86	82	11	93	34	64	98	69	82	2	84	82	7	89	40	61	100
•		26	75		75	100	1	100	1	100	100										-
G20	Argentina ¹	36 32	75 55	n	75 55	100 77	1	100 78	1 47	100 45	100 92	m 21	m 37	m	m 37	m 62		m 63	m 63	m 21	m
Other	Brazil			n										n							83
ö	China India	m	m	n 5	m	m	n	m	n	m	m	m	m	m	m	m	m	m	m	m	m
	India Indonesia	m	m 22	5	m	m	44	m	m	99	m	m	m	m	m	m	m	m	m	m	m
	Indonesia Russian Endonetion	4	23	n	23	43	5	48	23	75	98	m 100	m	m	m	m	m	m	m	m	m
	Russian Federation	68	75	a	75	76	1	77	70	14	84	100	m	a	m	m	1	1	m	23	23
	C 1: A 1. '		1 . I																		
	Saudi Arabia South Africa	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m	m m

Table C2.1. Enrolment rates in early childhood and primary education, by age (2005, 2010)

Full-time and part-time students in public and private institutions

Note: Enrolment rates at young ages should be interpreted with care; mismatches between the date of reference of ages and the date of data collection may lead to overestimations. Underestimation in enrolment rates may be due to uncounted late entrants. Rates above 100% are shown in italics. 1. Year of reference 2009 instead of 2010.

2. Year of reference 2006 instead of 2005.

Source: OECD. Argentina, India and Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). See Annex 3 for notes (www.oecd.org/edu/eag2012).

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

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		in ISCE	ution of 2D 0, by tution (2	type of	Ratio o to tea staff (ching	Expenditure on educational institutions (2009)				Characteristics of early childhood education programmes						
		Public	Government-dependant private	Independent private	Pupils to contact staff (teachers and teachers' aides)	Pupils to teaching staff	Total expenditure (from public and private sources) as a % of GDP	Proportion of total expenditure from public sources	Proportion of total expenditure from private sources	Annual expenditure per pupil (in USD)	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)
		ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 0	ISCED 1	ISCED 0	ISCED 0	ISCED 0
		(1)	(2)	(3)	(4)		(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
9	Australia	25.0	75.0	n	m	m	0.1	51.4	48.6	8 493	3	4	1	5	а	а	PT
OECD	Austria ¹	71.9	28.1	x(2)	10.3	14.7	0.6	72.0	28.0	8 202	3	3	3	6	5	1	FT
	Belgium Canada ²	47.2 93.0	52.8 7.0	m x(2)	15.9 m	15.9 m	0.6 m	96.5 m	3.5 m	5 696 m	3 2.5 to 5	2.5 4.5 to 5	3 to 4 1	6 6	a a	a a	FT FT/PT
	Chile	34.1	59.3	x(2) 6.7	9.4	9.7	0.7	81.1	18.9	3 885	2.5 10 5	4.5 10 5	2	m	a	a	FT/PT
	Czech Republic	98.4	1.6	a	13.6	13.9	0.5	92.0	8.0	4 452	3	3	3	6	a	a	FT
	Denmark	79.1	20.9	n	m	m	1.0	87.6	12.4	8 785	0	1	6	7	m	m	FT
	Estonia	97.4	a	2.6	m	6.0	0.5	98.6	1.4	2 551	0	3	4	7	m	m	FT
	Finland France	91.2 87.1	8.8 12.5	а 0.4	m 14.2	11.0 21.5	0.4 0.7	90.3 94.1	9.7 5.9	5 553 6 185	0 2	a 2 to 3	а З	7 6	а	a	FT FT
	Germany	35.2	64.8	x(2)	9.9	12.6	0.7	70.2	29.8	7 862	2	2 10 3	3	6	a a	a a	FT
	Greece	92.6	a	7.4	m	m	m	m	m	. 002 m	4	4	1 to 2	6	m	m	FT
	Hungary ¹	93.9	6.1	а	m	11.0	0.7	m	m	4 745	3	3	3	7	5	1	FT
	Iceland	88.0	12.0	n	6.9	6.9	1.0	77.1	22.9	9 636	0	2	4	6	а	а	FT/PT
	Ireland Israel ^{1, 3}	2.5 95.6	a	97.5 4.4	9.0 12.5	19.8 24.6	0.1 0.9	m 78.7	m 21.3	m 3 998	3 3	3 3	1 3	4 to 5 6	а З	а З	FT/PT FT
	Italy	68.6	a a	31.4	12.3	11.8	0.5	91.2	8.8	7 948	m	m	m	m	a	a	FT
	Japan	30.4	а	69.6	15.1	15.9	0.2	45.0	55.0	5 103	3	3	3	6	а	a	FT
	Korea	17.2	3.7	79.1	17.1	17.1	0.3	42.6	57.4	6 047	m	m	m	m	m	m	FT
	Luxembourg	91.6	n	8.4	m	12.0	0.6	98.6	1.4	16 247	3	3	3	6	4	2	FT
	Mexico	85.9	а	14.1	25.4	25.4	0.6	81.4	18.6	2 158	3	3 to 4	3	6	4	2	FT
	Netherlands New Zealand ¹	100.0 1.7	a 98.3	m n	m 7.1	m 7.1	0.4 0.6	98.7 82.9	1.3 17.1	7 437 11 202	4 m	4 3	2 2	6 5	5 a	1 a	FT FT/PT
	Norway	55.1	44.9	a	,.1 m	, .1 m	0.0	84.4	15.6	6 696	0	1	5	6	a	a	FT/PT
	Poland	86.7	1.2	12.1	m	18.7	0.6	81.1	18.9	5 610	3	3	4	7	6	1	FT
	Portugal	51.4	31.3	17.3	m	15.7	0.4	m	m	5 661	m	m	m	m	m	m	FT
	Slovak Republic	96.4 96.4	3.6 3.1	n 0.5	12.4 9.4	12.5 9.4	0.5 0.7	83.6 79.3	16.4 20.7	4 433 7 979	2 3	3 3	3 3	6 6	а	a	FT FT
	Slovenia ¹ Spain	64.2	24.7	11.0	9.4 m	9.4 13.0	0.7	79.5	20.7	6 946	0	2 to 3	3 to 4	6	a a	a a	FT
	Sweden	83.8	16.2	11.0 n	6.3	6.3	0.7	100.0	22.0 n	6 5 4 9	3	- 2 10 5	4	7	a	a	FT
	Switzerland ⁴	96.1	0.3	3.5	m	17.5	0.2	m	m	5 147	4	5	2	6	5	1	FT
	Turkey	91.0	a	9.0	m	23.0	m	m	m	m	3	5	1 to 3	6	а	a	m
	United Kingdom United States ^{1, 5}	79.0 55.5	0.2	20.8 44.5	15.0 11.4	15.9 14.6	0.3 0.4	89.9 80.9	10.1 19.1	6 493 8 396	3 3	3 4	1.5 1	5 6	а	a	FT/PT FT/PT
			а								3	4	T	0	а	а	FI/FI
	OECD average	62.7	21.5	15.8	12.3	14.4	0.5 0.5	81.7	18.3	6 670 6 208							
	OECD total EU21 average	75.1	12.8	12.0	11.6	13.4	0.5	- 88.3	- 11.7	6 208 6 807							
																	DO
G20	Argentina Brazil ¹	m 72.7	m a	m 27.3	m 13.0	m 17.7	0.7 0.4	69.0 m	31.0 m	2 398 1 696	m 0	m m	m 5	m 6	m 4	m 2	FT FT
Other	China	m	m	m	21.6	24.0	m	m	m	m	m	m	m	m	m	m	FT
õ	India	m	m	m	m	m	n	m	m	m	m	m	m	m	m	m	m
	Indonesia	2.5	а	97.5	16.1	17.4	n	m	m	57	m	m	m	m	m	m	FT
	Russian Federation Saudi Arabia	98.9 m	a	1.1 m	m m	m 10.3	0.9 m	85.2	14.8 m	m	m m	m m	m	m	m	m	m
	Saudi Arabia South Africa	m m	m m	m m	m m	10.3 m	m n	m m	m m	m 420	m m	m m	m m	m m	m m	m m	m m
	G20 average	60.1	m	m	15.5	17.5	0.4	m	m	m	m	m	m	m	m	m	m

Table C2.2. Characteristics of early childhood education programmes (2010)

1. Includes some expenditure on child care.

2. ISCED 0 programmes are compulsory for all pupils in two of the 13 jurisdictions. Earliest stating age, typical starting age and duration of ISCED 0 programmes vary by jurisdiction.

3. By recently enacted law, ISCED 0 programmes have been made compulsory and free nationwide. Implementation will commence gradually from 2013.

4. In jurisdictions where ISCED 0 programmes are compulsory, it is compulsory for two years in some jurisdictions and only one year in others.

S. ISCED 0 programmes are compulsory in about one-third of U.S. states. **Source:** OECD. Argentina, China and Indonesia: UNESCO Institute for Statistics (World Education Indicators programme). Saudi Arabia and South Africa: UNESCO Institute for Statistics. See Annex 3 for notes (*www.oecd.org/edu/eag2012*). *Please refer to the Reader's Guide for information concerning the symbols replacing missing data*.

StatLink and http://dx.doi.org/10.1787/888932667045

C2

		Educat	ion-only progr	ammes	(in	grated program cludes educati child care serv	on	Relative proportion of enrolments reported in <i>Education at a Glance</i> (%)				
		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)	(4)	(5)	(6)	(7)	(8)	(9)		
OECD	Australia	Yes	Yes	Yes	Yes	Yes	Yes	100	m	100		
ō	Austria	Yes	Yes	Yes	Yes	а	No	3	97	100		
	Belgium	Yes	Yes	Yes	No	а	а	100	а	100		
	Canada	Yes	Yes1	Yes	Yes	Yes	Yes	100	m	100		
	Chile	Yes	Yes	Yes	Yes	Yes	Yes	x(9)	x(9)	100		
	Czech Republic	Yes	Yes	Yes	No	а	а	100	а	100		
	Denmark	m	m	m	m	m	m	m	m	m		
	Estonia	No	а	а	Yes	Yes	Yes	а	100	100		
	Finland	Yes	Yes	Yes	Yes	Yes	Yes	37	63	100		
	France	Yes	Yes	Yes	No	а	а	100	а	100		
	Germany	Yes	Yes	Yes	No	а	а	100	а	100		
	Greece	Yes	Yes	Yes	No	а	а	100	а	100		
	Hungary	No	а	а	Yes	Yes	Yes	а	100	100		
	Iceland	Yes	Yes	Yes	Yes	Yes	Yes	1	99	100		
	Ireland	Yes	Yes	Yes	No	а	а	100	а	100		
	Israel	Yes	Yes	Yes	Yes	Yes	Yes	98	2	100		
	Italy	m	m	m	m	m	m	m	m	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	а	а	100	а	100		
	Mexico	Yes	Yes	Yes	Yes	Yes	Yes	99	1	100		
	Netherlands ²	Yes	Yes	Yes	Yes	No	Varies	100	m	100		
	New Zealand	No	а	а	Yes	Yes	Yes	а	100	100		
	Norway	No	а	а	Yes	Yes	Yes	а	100	100		
	Poland	Yes	Yes	Yes	No	а	а	100	а	100		
	Portugal	m	m	m	m	m	m	m	m	m		
	Slovak Republic	Yes	Yes	Yes	No	а	а	100	а	100		
	Slovenia	No	а	а	Yes	Yes	Yes	а	100	100		
	Spain	Yes	Yes	Yes	No	а	а	100	а	100		
	Sweden	Yes	Yes	Yes	Yes	Yes	Yes	30	70	100		
	Switzerland	Yes	Yes	Yes	Yes	Yes	m	100	m	100		
	Turkey	Yes	Yes	Yes	No	а	а	100	а	100		
	United Kingdom	Yes	Yes	Yes	Yes	Varies	Yes	x(9)	x(9)	100		
	United States	Yes	Varies	Varies	Yes	Varies	Yes	x(9)	x(9)	100		
0	Argentina	m	m	m	m	m	m	m	m	m		
Other G20	Brazil	Yes	Yes	No	Yes	Yes	No	x(9)	x(9)	100		
the	China	m	m	m	m	m	m	m	m	m		
õ	India	m	m	m	m	m	m	m	m	m		
	Indonesia	m	m	m	m	m	m	m	m	m		
	Russian Federation	m	m	m	m	m	m	m	m	m		
	Saudi Arabia	m	m	m	m	m	m	m	m	m		
	Jauni Alabia	m	m	m	m	m	m	m	m	m		

Table C2.3. Characteristics of education-only and integrated early childhood education programmes (2010)

1. For most jurisdictions.

2. The teachers in integrated programmes are qualified nursery personnel with additional training for early childhood education. These integrated programmes are only offered to the 3-year-old children in ISCED 0 (who are missing in table C2.1). **Source:** OECD, INES Working Party special data collection on early childhood education programmes.

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

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Education at a Glance © OECD 2012 347



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