

## PF4.2: Quality of childcare and early education services

### *Definitions and methodology*

The ‘quality’ of childcare and early childhood education and care (ECEC) services has many aspects, including safety and hygiene standards, the number of staff and the size of groups, the qualifications of staff, parent involvement and compliance with certain educational policies. Given this diversity, the ‘quality’ of ECEC services is difficult to measure, and there is no single indicator that adequately reflects the quality of the service environment and the quality of interaction between staff and children. However, two main types of information are used here to capture certain aspects of ‘quality’:

- *Child-to-staff ratios in early childhood educational development and in pre-primary education services*, that is, the (full-time equivalent) number of children using early childhood education services per (full-time equivalent) member of staff. Although imperfect and restricted to only one single aspect of quality, the child-to-staff ratio gives at least some quantitative indication of the frequency of contact between staff and children. Data cover both professional teaching staff and all contact staff (i.e. both teachers and teaching aides or assistants), with information for the two presented separately. Unfortunately internationally-comparable data are not available for *all* childcare and ECEC services. However, information is available for pre-primary education services (those classified under ISCED 2011 level 02, targeted primarily at children from age 3 to the start of primary education) and, in certain countries, also for early childhood educational development services (those classified under ISCED 2011 level 01 – services with an intentional education component targeted mainly at children aged zero-to-two). Data for these two levels of ECEC are presented separately.
- *Minimum qualifications required for ECEC staff*, with the required qualifications presented according to the corresponding level of education under the ISCED (1997) classification system in order to promote comparability across countries. Comparable data on the *proportion* of qualified staff is unfortunately not available across countries, but information on the minimum qualifications for staff gives at least some indication on their ‘quality’, even if it remains affected by other factors such as personal aptitude and work-experience. Because required qualifications and levels of education often vary across different types of ECEC service, data are presented separately for those staff working in ‘care-only’ services (typically, those services aimed at children age 0-2) and for teaching staff working in education-focused ECEC services or in services that integrate both education and care functions.

For further data and information on quality in early childhood education and care, see the OECD Starting Strong series and in particular [OECD \(2012\) Starting Strong III: A Quality Toolbox for Early Childhood Education and Care](#), [OECD \(2015\) Starting Strong IV: Monitoring Quality in Early Childhood Education and Care](#).

### *Key findings*

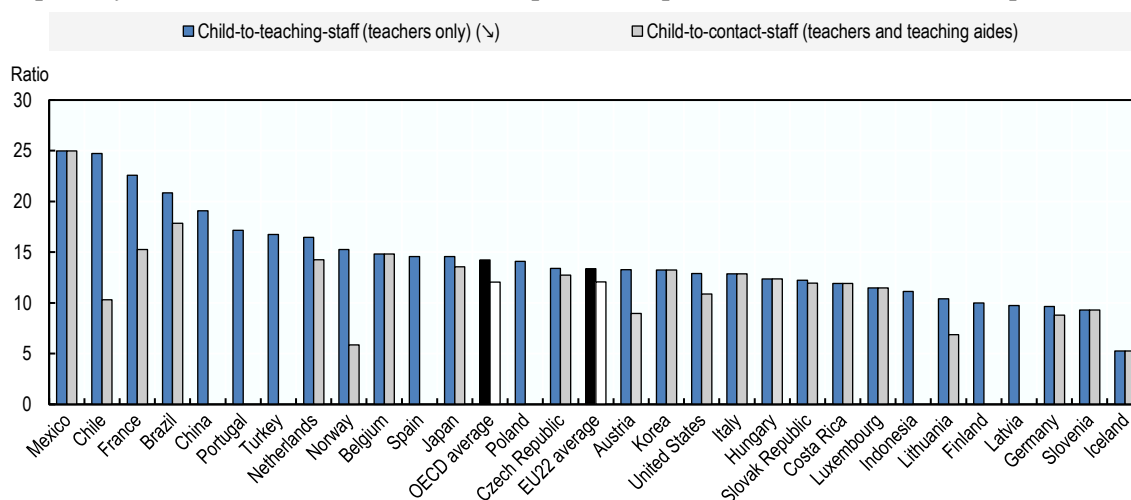
Child-to-staff ratios in pre-primary education services differ considerably across OECD countries (Chart PF4.2.A). In 2016, the average child-to-*teaching*-staff ratio across OECD countries was 14.2 – meaning that there was approximately 14 children for every teacher in pre-primary education – but this

<i>Other relevant indicators:</i> PF3.1 Public spending on childcare and early education; PF3.2 Enrolment in childcare and pre-school; PF3.4 Childcare support; PF4.1 Typology of childcare and early education services
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varied from more than 20 children per teacher in Chile, France and Mexico to fewer than 10 in Germany, Iceland, Latvia, and Slovenia. However, some OECD countries do make extensive use of teacher's assistants at the pre-primary level, and in a number of countries the child-to-contact-staff ratio is lower than the child-to-teaching-staff ratio. In some cases the difference is substantial – in Chile, for example, the child-to-contact-staff ratio is less than half the child-to-teaching-staff ratio.

### Chart PF4.2.A. Child-to-staff ratios in pre-primary education services, 2016

Average ratios of pupils to teaching staff and to all contact staff (teachers and teaching aides) in pre-primary education (ISCED 020) services (public and private), based on full-time equivalents



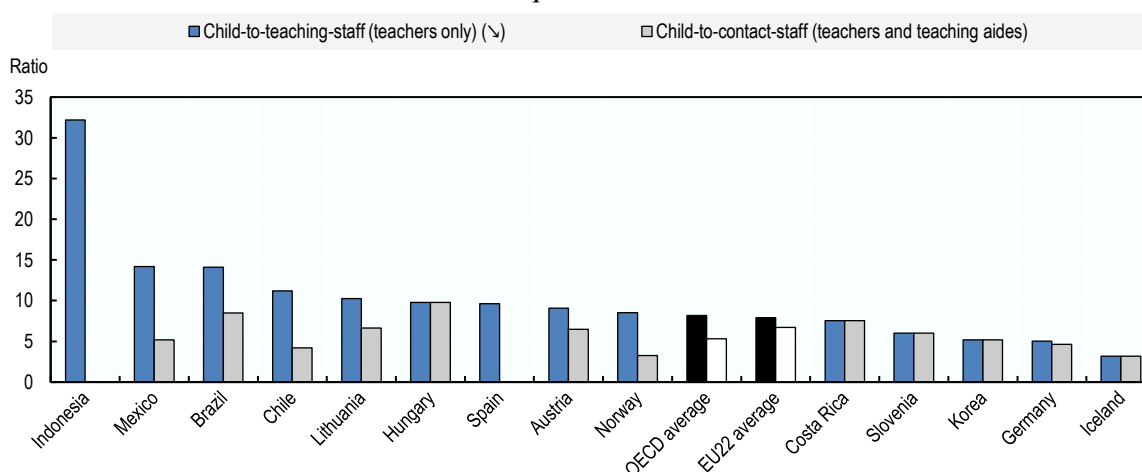
Countries are ranked in descending order according to the child-to-teaching-staff (teachers only) rate.

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. See OECD Education at a Glance 2018 Annex 3 for notes (<http://www.oecd.org/edu/education-at-a-glance-19991487.htm>).

Source: OECD Education at a Glance 2018

### Chart PF4.2.B. Child-to-staff ratios in early childhood educational development services, 2016

Average ratios of pupils to teaching staff and to all contact staff (teachers and teaching aides) in early childhood educational development (ISCED 010) services (public and private), based on full-time equivalents



Countries are ranked in descending order according to the child-to-teaching-staff (teachers only) rate.

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. See OECD Education at a Glance 2018 Annex 3 for notes (<http://www.oecd.org/edu/education-at-a-glance-19991487.htm>).

Source: [OECD Education at a Glance 2018](#)

Information on child-to-staff ratios for early childhood educational development services is available for only a few countries but, where available, data show similar levels of variation across countries (Chart PF4.2.B). In Iceland, for example, the child-to-teaching staff ratio for early childhood educational development services is as low as 3.2, meaning there are approximately 3 children per member of teaching staff. In Mexico, the ratio is 14.2. Again, however, in at least some countries the child-to-contact-staff ratio is considerably lower than the child-to-teaching-staff ratio, indicating extensive use of teacher's aides. In Norway, the child-to-staff ratio falls by almost two-thirds once all contact staff are taken into account.

A variety of job roles exist within the ECEC sector, and any classification of staff is fraught with difficulties, particularly when comparing across countries. Nevertheless, some broad groups of carers and educators in the day-care and pre-school service sectors can be identified:

- **Childcare workers:** The qualifications of child care workers differ greatly from country to country and from service to service. In most countries, lead child care workers have a vocational level diploma, generally at children's nurse level (upper secondary, vocational level), although many countries will also have specialist staff trained to secondary level graduation, plus a one- to two-year tertiary level vocational diploma.
- **The pre-primary/primary teacher** (or kindergarten/pre-school teachers): Pre-primary teachers are generally trained at the same level and in the same training institution as primary school teachers. The profile is found in Australia, Canada, France, Ireland, the Netherlands, the United Kingdom and the United States. In some of these countries, *e.g.* France, Ireland, and the Netherlands, the pre-primary teacher is trained both for the pre-school and primary sector. In federal countries, variation exists across different states or provinces, but the predominant type of training is in primary school-oriented pedagogy (readiness-for-school is a primary aim of early education).
- **Family and domestic care workers:** Family and domestic care workers are caregivers working in a family day care provision or home-based care setting. These are traditionally provided in a home setting. This can be at the childminder's home or at the child's own home where a qualified or registered childminder looks after the child. This type of care is most common for children prior to preschool, *i.e.*, those up to three years old.
- **Pedagogues:** In Nordic and central European countries, many pedagogues have been trained (upper-secondary or tertiary education) with a focus on early childhood services rather than primary teaching. Pedagogues may also have received training in other settings, *e.g.*, youth work or elderly care. In some countries, pedagogues are the main staff members responsible for the care and education of children.
- **Auxiliary staff.** There are many types of auxiliary staff working in centres who are trained to different levels. At one end of the scale are auxiliary staff with no formal qualification in the area, while auxiliaries in the pre-school service sector in Nordic countries have often gone through a couple of years of upper secondary vocational training.

The exact qualifications and level of education required for these roles do, however, differ across countries. Tables PF4.2.A and PF4.2.B summarise the levels of education required as a minimum for ECEC staff in the 'care-only' sector and in integrated education and care ECEC services, respectively. In most countries, staff in the 'care-only' are required to hold qualifications at ISCED (1997) level 3, that is, are required to

have qualifications at the ‘upper secondary education’ level. There are exceptions, however. In Australia, for example, child care workers are expected to hold a post-secondary non-tertiary (ISCED 1997 level 4) qualification. In Israel, Italy, Japan, Spain and Scotland, at least some workers in the ‘care only’ sector are required to hold at least short-cycle tertiary level (ISCED 1997 level 5) qualifications

Initial education requirements for pre-primary or pre-school teachers and those working in the integrated education and care sector are generally higher (Table PF4.2.B). In most countries, these staff are required to hold qualifications at ISCED (1997) level 5, that is, are required to have qualifications at the ‘tertiary education’ level. Again, however, there are some exceptions. In the Netherlands, for example, kindergarten teachers are required to have only a post-secondary non-tertiary (ISCED 1997 level 4) level qualification.

**Table PF4.2.A: Minimum qualifications required for ECEC staff in the ‘care-only’ sector**

	<b>Staff title</b>	<b>Level of minimum required qualification (ISCED 1997 level in brackets)</b>	<b>Age range</b>
Australia	Child care worker	Post-secondary non-tertiary education (level 4)	0-5
	Child care manager	Tertiary education (first stage) (level 5)	0-5
Belgium (Flemish Community)	Child care worker in the care sector	Upper secondary education (level 3)	0-5
Belgium (French Community)	Child care worker	Upper secondary education (level 3)	0-3
Canada (British Columbia)	Early childhood educator	Upper secondary education (level 3)	0-5
Canada (Manitoba)	Early childhood educator	Tertiary education (first stage, short cycle) (level 5B)	0-6
Canada (Prince Edward Island)	Family day carer	Upper secondary education (level 3)	0-5
	Child carer in centre-based care	Post-secondary non-tertiary education (level 4)	0-5
Czech Republic	Child care worker	Upper secondary education (level 3)	0-3
Finland	Child care worker in kindergarten	Upper secondary education (level 3, for at least 2/3rds of staff)	0-6
Germany	Child care worker	Upper secondary education (level 3)	0-5
Hungary	Child care worker	Upper secondary education (level 3)	0-2
Israel	Child care teacher	Tertiary education (first stage) (level 5)	0-4
Italy	Educator (child care centres)	Tertiary education (first stage, short cycle) (level 5B)	0-2
Japan	Nursery teacher	Tertiary education (first stage, short cycle) (level 5B)	0-5
Korea	Child care worker	Upper secondary education (level 3)	0-5

OECD Family Database [www.oecd.org/els/family/database.htm](http://www.oecd.org/els/family/database.htm)  
 OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs

	<b>Staff title</b>	<b>Level of minimum required qualification (ISCED 1997 level in brackets)</b>	<b>Age range</b>
Mexico	Indigenous ECEC teacher	Upper secondary education (level 3)	0-2
Netherlands	Child carer (centered child care)	Upper secondary education (level 3)	0-4
	Official childminder	Upper secondary education (level 3)	0-4
	Playgroup leader	Upper secondary education (level 3)	0-4
New Zealand	Playcentre leader	Upper secondary education (level 3)	0-5
Norway	Child/youth worker	Upper secondary education (level 3)	0-5
Poland	Child care worker	Upper secondary education (level 3)	0-2
Slovak Republic	Nursery school worker	Upper secondary education (level 3)	0-2
Slovenia	Family day carer	Upper secondary education (level 3)	0-5
Spain	Early education teacher	Tertiary education (first stage, short cycle) (level 5B)	0-2
Sweden	Child minder	Upper secondary education (level 3)	1-6
United Kingdom (Scotland)	Child care practitioners	Tertiary education (first stage) (level 5)	0-4

Source: OECD (2012) Starting Strong III: A Quality Toolbox for Early Childhood Education and Care

**Table PF4.2.B: Minimum qualifications required for teaching staff in education-focused ECEC services or in services that integrate both education and care functions**

	<b>Staff title</b>	<b>Level of minimum required qualification (ISCED 1997 level in brackets)</b>	<b>Age range</b>
Australia	Preschool/kindergarten teacher	Tertiary education (first stage) (level 5a)	0-5
Austria	Kindergarten pedagogue	Post-secondary non-tertiary education (level 4)	0-5
Belgium (Flemish community)	Child care worker in the education sector	Upper secondary education (level 3)	2.5-5
	Kindergarten teacher / Pedagogue	Tertiary education (first stage, short cycle) (level 5B)	2.5-5
Belgium (French community)	Pre-primary teacher	Tertiary education (first stage) (level 5)	2.5-5
Canada (British Columbia)	Kindergarten teacher	Tertiary education (first stage) (level 5a)	5
Canada (Manitoba)	Kindergarten teacher	Tertiary education (first stage) (level 5)	5-6
Canada (Prince Edward Island)	Kindergarten teacher	Post-secondary non-tertiary education (level 4)	4-5
Czech Republic	Pedagogue	Upper secondary education (level 3)	4-5
Denmark	Pedagogue	Tertiary education (first stage) (level 5)	0-5
Estonia	Pre-school pedagogue	Tertiary education (first stage) (level 5)	1.5-6
Finland	Kindergarten teacher	Tertiary education (first stage, short cycle) (level 5B)	0-5
	Pre-primary teacher	Tertiary education (first stage, short cycle) (level 5B)	6

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	<b>Staff title</b>	<b>Level of minimum required qualification (ISCED 1997 level in brackets)</b>	<b>Age range</b>
Germany	Pedagogue	Post-secondary non-tertiary education (level 4)	0-5
	Pedagogue for childhood or social pedagogue	Tertiary education (first stage) (level 5)	0-5
Hungary	Pedagogue	Tertiary education (first stage) (level 5)	3-5
Ireland	Pre-primary teacher	Tertiary education (first stage) (level 5)	3-5
Israel	Pre-primary teacher	Tertiary education (first stage) (level 5)	3-5
Italy	Pre-primary teacher	Tertiary education (first stage) (level 5)	3-5
Japan	Kindergarten teacher	Tertiary education (first stage, short cycle) (level 5B)	3-5
Korea	Pre-primary teacher	Tertiary education (first stage) (level 5)	3-5
Luxembourg	Pre-Primary teacher (Instituteur) / educator	Tertiary education (first stage, short cycle) (level 5B)	3-5
Mexico	Indigenous preschool teacher	Upper secondary education (level 3)	3-5
	ECE/preschool teacher	Tertiary education (first stage) (level 5)	3-5
Netherlands	Kindergarten/ primary school teacher	Post-secondary non-tertiary education (level 4)	4-5
New Zealand	Qualified education and care teacher / kindergarten teacher	Tertiary education (first stage, short cycle) (level 5B)	0-5
	Teacher for pacific/indigenous children (Kaiako)	Tertiary education (first stage, short cycle) (level 5B)	0-6
Norway	Pedagogical leader (kindergarten & family kindergarten) / Head teacher	Tertiary education (first stage) (level 5)	0-5
Poland	Kindergarten teacher	Tertiary education (first stage) (level 5)	3-5
Portugal	Preschool teacher	Tertiary education (first stage) (level 5)	0-5



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	<b>Staff title</b>	<b>Level of minimum required qualification (ISCED 1997 level in brackets)</b>	<b>Age range</b>
Slovak Republic	Kindergarten teacher	Upper secondary education (level 3)	3-5
Slovenia	Preschool teacher	Tertiary education (first stage, short cycle) (level 5B)	0-5
Spain	Preschool teacher	Tertiary education (first stage) (level 5)	3-5
Sweden	Preschool teacher	Tertiary education (first stage) (level 5)	1-6
Turkey	Pre-primary teacher	Tertiary education (first stage) (level 5)	3-5
United Kingdom (Scotland)	Preschool teacher	Tertiary education (first stage) (level 5)	3-4
United States (Georgia, Massachusetts, North Carolina, Oklahoma)	Preschool teacher	Tertiary education (first stage) (level 5)	3-5

Source: OECD (2012) Starting Strong III: A Quality Toolbox for Early Childhood Education and Care

*Sources and further reading: OECD (2016), Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/eag-2016-en>; OECD (2012), Starting Strong III: A Quality Toolbox for Early Childhood Education and Care, OECD Publishing, Paris. DOI: <http://dx.doi.org/10.1787/9789264123564-en>*