

CHAPTER 7:

Supporting Quality in ECE

Studies have shown that to have effective outcomes, ECE must also be of high quality (Barnett, 2012; Corak et al., 2012; Heckman et al., 2009, 2012). This chapter describes how quality in ECE is assured and maintained, including the regulatory environment; staff qualifications and training; group size and ratios; health, safety and child protection; ECE curriculum guidance; and quality assurance, inspection, reporting and accountability. These data provide readers with information on aspects often associated with quality ECE services for children and families, and how this quality is achieved, monitored and maintained. Within and between country similarities and variations in quality and monitoring will be highlighted.

International studies (Corak et al., 2012; EIU, 2012; OECD, 2010, 2012b, 2013; Pascal, Bertram, Delaney, & Nelson, 2012; Sylva et al., 2004, 2008) indicate a clear relationship between ECE participation, especially participation in ECE settings with certain “quality” features, and later learning outcomes. The indicative quality indicators include child:staff ratios, staff qualifications and training, regulation and data use, the duration of programs, and public spending per child. A recent study (Pascal, & Bertram, 2012) analyzed patterns and associations between these quality indicators and later PISA school outcome results, revealing that high-performing European countries in terms of school outcomes appear to have:

- Higher staff:child ratios (higher number of staff to number of children)
- Higher levels of staff qualification and training
- Relatively higher levels of regulation
- A government-led ECE policy strategy and higher levels of investment.

This study and others (for example, EIU, 2012) provide convincing evidence of the validity of five structural indicators as key policy levers within an early education system for reducing inequality, educational underachievement and social exclusion. These indicators are:

Indicator 1: staff:child ratios

Indicator 2: staff training and qualifications

Indicator 3: regulation and data collection

Indicator 4: government strategy and investment

Indicator 5: national preschool curriculum requirements.

These quality indicators are covered in the data presented in this report.

Regulatory Environment

There is evidence (Corak et al., 2012; Pascal et al., 2012) that reforms to bring in better regulation and accountability in the early years sector can foster improvements in service delivery and improved outcomes for children. The development of enhanced statutory standards, a comprehensive regulatory framework, and more efficient systems to manage data, measure quality, and evidence the impact of practice are generally associated with better quality, more effective targeting, the efficient deployment of resources at all levels, and improved outcomes, particularly for the less advantaged. Research (Pascal et al., 2012) has also shown that the presence and efficiency of regulation varies widely across

countries, from highly regulated ECE services to minimally regulated services with a strong association between the presence and efficiency of ECE regulatory systems and later school performance.

Given the wider evidence on the role of regulation in ECE quality assurance, the ECES collected information from the eight study countries on whether or not regulatory bodies exist for ECED and PPE services, and, if so, whether these bodies operate at national or subnational level in the country and what aspects of ECE provision the regulatory bodies cover at these different levels. The aspects of ECE regulation identified by the study countries included:

- Authorization to open a setting
- Accreditation for public funding or subsidy
- Financing
- Staff qualifications and training
- Staff professional development
- Staff licensing and accreditation
- Staff remuneration
- Equal opportunities for staffing
- Group size
- Child:staff ratios
- Opening hours
- Health and safety
- Environmental requirements (for example, space or access to outdoor play)
- ECE curriculum or program
- Parental participation
- Child protection
- Quality assurance and inspection
- Reporting and accountability.

All eight of the study countries reported that they have ECE regulatory bodies at both national ([Table 18a](#)) and subnational ([Table 18b](#)) levels, and that responsibility for different aspects of quality regulation are distributed between bodies that operate at both levels. In this context, subnational is taken to mean where responsibility is delegated to a level below that of the whole country or national level. This will include both federal systems, where a state or province has constitutional authority for the area, and non-federal systems where a regional administrative body has delegated responsibility (but which is not the highest point of responsibility).

In the majority of the study countries, there is both national and subnational regulation for ECED and PPE services (the exception being the Czech Republic where no regulation is reported at subnational level for ECED) ([Tables 18a](#) and [18b](#)). However, the balance between national and subnational regulation differs among countries, with Chile, the Czech Republic and Estonia having more national regulation, the Russian Federation having more subnational regulation, and Denmark, Italy, Poland, and the United States reporting regulatory responsibilities at both the national and subnational level. Some countries also appear to be more highly regulated than others, with the Czech Republic

Table 18a: Regulatory responsibilities at national level for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Aspects of ECE where responsibility is located at national level																	
		Authorization to open a setting	Accreditation for public funding or subsidy	Financing	Staff qualifications and training	Staff professional development	Staff licensing and accreditation	Staff remuneration	Equal opportunities for staffing	Group size	Child:staff ratios	Opening hours	Health and safety	Environmental requirements	ECE curriculum or program	Parental participation	Child protection	Quality assurance and inspection	Reporting and accountability
Chile	ECED	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	○	●	○	●	●	●	●	●	●	●	●	●	●
Czech Republic	ECED	–	–	–	●	–	–	–	–	–	–	●	–	–	–	–	–	–	
	PPE	●	●	●	●	●	○	●	●	●	○	●	●	●	●	●	●	●	●
Denmark	ECED	● ^a	– ^b	●	●	●	●	●	○	○	○	○	●	●	●	○	●	●	●
	PPE	● ^a	– ^b	●	●	●	●	●	○	○	○	○	●	●	●	○	●	●	●
Estonia	ECED	●	●	–	●	●	●	–	●	●	●	–	●	●	●	●	●	●	–
	PPE	●	●	–	●	●	●	–	●	●	●	–	●	●	●	●	●	●	–
Italy	ECED	●	●	●	●	●	●	●	●	●	●	●	●	●	○	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
Poland	ECED	○	●	●	○	○	○	○	●	○	●	○	●	○	○	○	●	●	●
	PPE	○	●	●	●	●	●	●	●	●	●	○	●	●	●	○	●	●	●
Russian Federation	ECED	○	○	○	●	○	○	●	○	●	○	○	●	●	○	●	●	●	●
	PPE	○	○	●	●	○	○	●	○	●	○	○	●	●	○	●	●	●	●
United States ^c	ECED	●	○	●	●	●	●	○	●	●	●	○	●	●	○	●	●	●	●
	PPE	●	○	●	●	●	●	○	●	●	●	○	●	●	○	●	●	●	●

Key:

- Yes, regulation responsibility exists.
- No, regulation responsibility does not exist.
- No data provided.

Country specific notes:

- ^a In Denmark, local communities can authorize a setting without asking the state, but all settings are regulated under [the national law on dagtilud](#) (Chapter 3 § 20); thus establishment is local but regulation is national. The same is true for reporting and accountability.
- ^b No data is supplied for Denmark, as public funding and subsidies are available to all. At local level, municipalities can decide to give increased funding to certain centers.
- ^c For PPE within the United States, these aspects may vary among state funded and non-state funded settings for three-year-olds to 5-year-olds-not-yet-in-kindergarten compared to kindergarten.

Table 18b: Regulatory responsibilities at subnational level for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Aspects of ECE where responsibility is located at subnational level																	
		Authorization to open a setting	Accreditation for public funding or subsidy	Financing	Staff qualifications and training	Staff professional development	Staff licensing and accreditation	Staff remuneration	Equal opportunities for staffing	Group size	Child: staff ratios	Opening hours	Health and safety	Environmental requirements	ECE curriculum or program	Parental participation	Child protection	Quality assurance and inspection	Reporting and accountability
Chile	ECED	●	○	○	○	○	○	○	○	○	○	○	○	●	○	○	○	○	○
	PPE	●	○	○	○	○	○	○	○	○	○	○	○	●	●	○	○	○	○
Czech Republic	ECED	–	–	–	○	–	–	–	–	–	–	○	–	–	–	–	–	–	
	PPE	●	○	○	○	○	○	○	○	●	○	○	○	○	○	○	○	○	
Denmark	ECED	●	●	●	●	●	● ^a	●	○ ^b	○ ^b	○ ^b	○ ^b	●	●	●	●	●	●	
	PPE	●	●	●	●	●	● ^a	●	○ ^b	○ ^b	○ ^b	○ ^b	●	●	●	●	●	●	
Estonia	ECED	–	–	●	–	–	–	●	–	–	–	●	–	–	–	–	–	●	
	PPE	–	–	●	–	–	–	●	–	–	–	●	–	–	–	–	–	–	
Italy	ECED	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
	PPE	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
Poland	ECED	●	●	●	●	●	●	●	○	○	○	●	●	○	○	○	●	●	
	PPE	●	●	●	○	●	●	●	○	○	○	○	●	○	●	○	●	●	
Russian Federation	ECED	●	●	●	●	●	●	●	○	●	●	●	●	●	○	●	●	●	
	PPE	●	●	●	●	●	●	●	○	●	●	●	●	●	○	●	●	●	
United States	ECED	●	○	●	●	●	●	○	●	●	●	○	●	●	○	●	●	●	
	PPE	●	○	●	●	●	●	○	●	●	●	○	●	●	○	●	●	●	

Key:

- Yes, regulation responsibility exists.
- No, regulation responsibility does not exist.
- No data provided.

Country specific notes:

^a In Denmark, pedagogues are licensed according to the standard of the bachelor degree. There are different levels of education. Some staff are assistants. Those are licensed at a national level. There are national standards, but municipalities decide how many staff of each profession they hire.

^b In Denmark, for equal opportunities for staffing, group size, child:staff ratios and opening hours, no regulatory responsibility exists. Decisions are made at the subnational level, and decisions are not regulated.

and Estonia reporting less regulation, and Italy and Denmark reporting higher levels of regulation.

There are a wide range of aspects of service delivery that are regulated in the study countries (see list on p. 82), with the most frequently reported regulated aspects of ECE settings across countries overall being health and safety, and child protection, and the least frequently reported regulated aspects across countries being setting opening hours and ECE curriculum programs. At the ECED level, the most frequently reported regulated aspects are health and safety, staff qualifications and training, child protection, and quality assurance. The most frequently reported regulated aspects at the PPE level in the study countries are financing, health and safety, environmental requirements, child protection, quality assurance, and reporting and accountability. In short, the evidence shows that a wide range of aspects of ECE service delivery are regulated in the study countries, which suggests a desire to ensure all ECE settings meet a set of minimal standards.

The complexity in the regulation system in some of the study countries is evident when information about the compliance bodies for each aspect of the regulations at national and subnational level are described. For example, in Chile, compliance bodies for ECED and PPE at a national level include the *Superintendencia of Educación*, JUNJI (National Board), the Quality Agency and the Ministry of Education, the Ministry of Social Development, the *Controloría General de la República*, and at the subnational level they include the Municipality of each council, the *Superintendencia of Educación*, the *Controloría General de la República*, the Ministry of Education, JUNJI and the *Fundación Integra*. Chile also pointed out that not all the regulatory requirements are compulsory for all kinds of providers, and not all providers are monitored by the same body, as the provider and the type of accreditation determine the compliance monitoring body.

In the Czech Republic, it is a simpler system, with responsibility for regulation compliance for PPE residing mainly with the Ministry of Education, and with some aspects being monitored by the Ministry of Labor and Social Affairs and the Ministry of Health.

In Italy, there are again a range of bodies at national, regional and municipality levels with regulatory compliance responsibility for ECED and PPE. Generally, regulations exist nationally and have regional and local articulation, with monitoring of the aspects mostly delegated to compliance bodies at the local level. The difference between ECED and PPE is that PPE is recognized as the first level of the education system and so is more centrally regulated and monitored. Another main difference is that ECED does not have a national curriculum and inspection body, while at PPE level these are well established within the education system. Differential situations also apply for monitoring state, municipal and private schools or schools with equal state status, with school inspectors generally monitoring state and private schools, while the municipal schools tend to have a local monitoring body.

In Poland, at ECED and PPE level regulation compliance is less complex, usually the responsibility of the mayor or president of the town, city or village, with some aspects being subject to monitoring by the Ministry of Labor and Social Policy, and the Ministry of Health.

In the Russian Federation, there is a mix of national (federal), regional and local bodies who are responsible for regulation compliance for ECED and PPE, including the Federal Service for the Supervision of Education and Science, the Federal Ministry of Labor and Social Protection, the *Rospotrebнадзор* (federal level), the Ombudsman for Children, the *Regional Obrnadzor* and the Regional Ministry of Education.

Summary Finding 22

All study countries regulate their ECE services, with regulatory responsibilities being distributed between national and subnational bodies, indicating a desire to ensure all ECE services meet minimal standards. Some countries appear to regulate more than others, and some aspects of service delivery are more regulated than others, with the most frequently reported regulated aspects across countries overall being health and safety, and child protection. The system for monitoring regulatory compliance may also be very complex, with a wide range of national and subnational bodies with compliance responsibility for different aspects of regulation in many of the study countries.

Staff Qualifications, Training and Remuneration

There is research evidence that stimulating early learning environments are fostered by better qualified practitioners who can provide pedagogies that facilitate better learning outcomes for children (OECD, 2012b, 2013; Pascal & Bertram, 2012; Sylva et al., 2008). This evidence indicates that a well-trained early childhood workforce, with high levels of qualification and access to ongoing professional development, is vital to ensuring high quality ECE for all children, and, in particular, for settings that serve children from poorer homes and their peers, if the achievement gap is to be closed. It appears that qualified staff provide children with more curricula-related activities (especially in language and mathematics) and encourage children to engage in challenging play. Montie, Xiang, and Schweinhart (2006) also suggested that teachers with more education use more words and more complex language when communicating with children. The presence of well-educated professional staff who use extended vocabulary and replicate what well-educated mothers can do has also been shown to be crucially important in improving school readiness. In addition, less-qualified staff have been shown to be better at supporting learning when they work with qualified teachers (Montie et al. 2006). Research has also consistently identified strong leadership as a key element of effective early childhood provision and so form part of a developing workforce strategy (Barnett, 2012; Muijs, Aubrey, Harris, & Briggs, 2004; Rodd, 2005).

International studies have shown that there is considerable variation across countries in the extent of training and qualifications required for ECE staff. Professional development and training ranges from compulsory and fully funded, to voluntary, with no funding provided (EIU, 2012; OECD, 2013; Pascal, & Bertram, 2012). In Europe, two models have been identified. In the most common model, there are two distinct paths of training: one for staff dealing with the youngest children (under three years) and one for the pre-primary sector (children aged three to six years). Other countries have a single training route and a professional profile for all educational staff across the whole ECE phase, where both management and staff tend to be more highly trained (Eurydice, 2009, European Commission/EACEA/Eurydice/Eurostat, 2014; Oberhuemer, 2005;

OECD, 2012b). In a split system there may be a variety of staffing and training models across different types of provider (such as public or private) (Oberhuemer, 2005).

There are several different professional profiles or “core competencies” operating within ECE, which can be either a “teaching profile,” a “socio-pedagogical profile” or a “caring or health profile” (Van Laere, Peeters, & Vandenbroeck, 2012). There is still a tendency to allocate “educational” work to qualified staff, and “care” to less qualified staff, which can lead to a lack of continuity in the individual child's care and education (European Commission, 2011). This is exemplified in European countries by the hierarchy between core practitioners, who are often treated and conceptualized as respected professionals and paid accordingly, and assistants, who are viewed as low status workers, and often paid considerably less (Van Laere et al., 2012). This is not the case in Finland, for example, where “The ECEC (Early Childhood Education and Care) team constitutes a multi-professional community where tasks are not distributed on the basis of qualifications” (Eurydice, 2009, p. 116). Van Laere et al. (2012) argued that the “care” aspects of ECE should be valued more than they currently are, in order for a conception of ECE incorporating a broad range of aspects of child development to take hold.

Given the extensive evidential base for the importance of a qualified, well trained and appropriately remunerated early childhood workforce, the ECES investigated the most commonly found staff and leadership categories (those who work directly with children to support learning and development) at different stages in the ECE system, the minimal level of final qualification required, the opportunities for ongoing continuing professional development (CPD) and the average level of annual remuneration (annually in US\$) for these staff and leaders in the eight study countries. This information reveals a complex pattern of qualifications, training opportunities, and salary remuneration levels both within and between the study countries (Tables 19a–19k).

CHILE

In Chile (Table 19a), there are two main categories of staff who work to support children’s learning and development, and two main categories of leader in services for children under the age of three (ECED). In settings for three- to six-year-olds (PPE), there are also two main categories of staff who work to support children’s learning and development and three main categories of leader.

Early childhood teacher or *educadora de párvulo*: work with children at both ECED level and PPE level in Chile, have the same level of qualification (ISCED Level 5), have optional CPD opportunities, and receive the same annual salary of US\$ 10,000–US\$ 20,000, whether they work with older or younger ECE children. These teachers may also work in a leadership capacity in ECED and PPE settings.

Early childhood teacher assistant or *técnico asistente del educador de párvulo*: work with children at both ECED level and PPE level in Chile, have the same level of qualification (ISCED Level 3), have optional CPD opportunities, and receive the same annual salary of US\$ 5,000–US\$10,000, whether they work with older or younger ECE children.

Pedagogical advisor or *jefe de la unidad técnico pedagógica*: work in PPE settings to lead the pedagogic practice in ECE settings. They have an ISCED Level 5 qualification, optional CPD opportunities, and receive an annual salary of US\$ 20,000–US\$ 30,000.

Table 19a: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities, and average annual remuneration level in US\$ of staff who work in services for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE) in Chile

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$)
ECED	Staff	Early childhood teacher	Educadora de párvulo	ISCED 5	Optional	10,000 to < 20,000
		Early childhood teacher assistant	Técnico asistente del educador de párvulo	ISCED 3	Optional	5000 to < 10,000
	Leader	Early childhood teacher	Educadora de párvulo	ISCED 5	Optional	10,000 to < 20,000
		Director	Directora	ISCED 5	Optional	20,000 to < 30,000
PPE	Staff	Early childhood teacher	Educadora de párvulo	ISCED 5	Optional	10,000 to < 20,000
		Early childhood teacher assistant	Técnico asistente del educador de párvulo	ISCED 3	Optional	5000 to < 10,000
	Leader	Early childhood teacher	Educadora de párvulos	ISCED 5	Optional	10,000 to < 20,000
		Pedagogical advisor	Jefe de la unidad técnico pedagógica	ISCED 5	Optional	20,000 to < 30,000
		Principal	Director	ISCED 5	Optional	20,000 to < 30,000

Director or principal: lead and manage ECE settings at ECED and PPE level. They have an ISCED Level 5 qualification, optional CPD opportunities, and receive an annual salary of US\$ 20,000–US\$ 30,000.

In Chile, staff and leaders working in ECE settings have the same minimum qualifications, training opportunities and salary, whether they work in ECED settings or PPE settings. Senior staff members working directly with children are educated to first stage tertiary level (Level 5), assistant staff to upper secondary school level (Level 3) and leaders to first stage tertiary level (Level 5). However, it is noted that these requirements are only compulsory for settings with public funding and private settings that have a certificate from JUNJI or the Ministry of Education.

Managers or directors of settings serving three- to four-year-old children should have a four-year Bachelor degree and every setting must have this role designated, but they can also fulfil the teacher function in the classroom alongside their leadership role.

CZECH REPUBLIC

The Czech Republic was not able to submit data for ECED because of the implementation of current reforms. There are two main categories of staff who work to support children’s learning and development in settings that serve children from three to six years, and one category of leader (Table 19b).

Table 19b: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities and average annual remuneration level in US\$ of staff who work in services for children aged 3 to the start of primary school (PPE) in Czech Republic

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$)
PPE	Staff	Teacher	Učitel	ISCED 3	Optional	10,000 to < 20,000
		Teacher assistant	Asistent pedagoga	ISCED 2	Optional	5000 to < 10,000
	Leader	Head teacher	Ředitel	ISCED 3	Required	10,000 to < 20,000

Teacher or *učitel*: work with three- to six-year-old children. They are required to have an ISCED Level 3 qualification, have optional CPD opportunities, and earn an annual salary of US\$ 10,000–US\$20,000.

Teacher assistant or *asistent pedagoga*: work with three- to six-year-old children. They are required to have an ISCED Level 2 qualification, have optional CPD opportunities, and earn an annual salary of US\$ 5000–US\$10,000.

Head teacher or *ředitel*: has responsibility to lead and manage PPE settings. They are required to have an ISCED Level 3 qualification, are required to undertake CPD, and receive an annual salary of US\$ 10,000–US\$ 20,000.

The Czech Republic reported that a new law has given all schools the status of independent legal entities, with a high degree of autonomy and also greater responsibilities. Head teachers have full responsibility for quality and efficiency of the educational process, adjustment of educational programs, financial management of the school, appointment and dismissal of teachers, and relationships with the community and public. Currently, teachers are trained to Bachelor’s level (ISCED Level 5) and head teachers are trained to Master’s level (ISCED Level 6). In ECED settings, before the current reforms, pre-primary teachers in a nursery school were trained to ISCED Level 3A in a shortened study program. They were also expected to hold a school leaving examination certificate.

DENMARK

In Denmark, there are four main categories of staff who work to support children's learning and development in both ECED and PPE settings (Table 19c). There is one category of leader for both ECED and PPE settings.

Table 19c: Main staff and leader categories, minimum qualification level, continuing professional Development (CPD) opportunities and average annual remuneration level in US\$ of staff who work in services for children aged 0-3 years (ECED) and children aged 3 to the start of primary school (PPE) in Denmark

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$)
ECED	Staff	Pedagogues	Pædagoger	ISCED 5	Optional	30,000 to < 50,000
		Semi-trained assistant pedagogues	Medhjælpere med pædagogisk grunduddannelse (PGU)	ISCED 2	Optional	20,000 to < 30,000
		Assistant pedagogues (untrained)	Medhjælpere	No formal qualification required	Optional	20,000 to < 30,000
	Leader	Manager	Leder	ISCED 5	Optional	30,000 to < 50,000
PPE	Staff	Pedagogues	Pædagoger	ISCED 5	Optional	30,000 to < 50,000
		Semi-trained assistant pedagogues	Medhjælpere med pædagogisk grunduddannelse (PGU)	ISCED 2	Optional	20,000 to < 30,000
		Assistant pedagogues (untrained)	Medhjælpere	No formal qualification required	Optional	20,000 to < 30,000
	Leader	Manager	Leder	ISCED 5	Optional	30,000 to < 50,000

Pedagogue or *Pædagoger*: work with children at both ECED level and PPE level in Denmark, have the same level of qualification (ISCED Level 5), have optional CPD opportunities, and receive the same annual salary of US\$ 30,000–US\$50,000, whether they work with older or younger ECE children. These teachers may also work in a leadership capacity in ECED and PPE settings.

There is also a category of **Pedagogue** who work in PPE settings, but for whom no formal qualification is required. These staff have access to optional CPD opportunities, and earn less than formally qualified staff (US\$ 20,000–US\$ 30,000 per year).

Semi-trained assistant pedagogue: or *Medhjælpere med pædagogisk grunduddannelse* (PGU) also work with children at both ECED level and PPE level in Denmark, have the same level of qualification (ISCED Level 2), have optional CPD opportunities, and receive the same annual salary of US\$ 20,000–US\$ 30,000, whether they work with older or younger ECE children.

Manager or *Leder*: has responsibility to lead and manage ECE settings at ECED and PPE level. They have an ISCED Level 5 qualification, optional CPD opportunities, and receive an annual salary of US\$ 30,000–US\$ 50,000.

In Denmark, staff and leaders working in ECE settings have the same minimum qualifications, training opportunities and salary whether they work in ECED settings or PPE settings. Senior staff working directly with children are educated to post-secondary non-tertiary education (Level 4), assistant staff to lower secondary school level (Level 2), and leaders to post-secondary non-tertiary education (Level 4). Pedagogues have a three-and-a-half year Bachelor degree and assistant pedagogues have a one-and-a-half year training. Usually 60–100% of staff in a setting are pedagogues. Assistant pedagogues are not allowed to be managers.

ESTONIA

In Estonia there are three main categories of staff who work to support children's learning and development and two main categories of leader in services for under-threes (ECED). In services for three- to seven-year-olds (PPE), there are two main categories of staff who work to support children's learning and development and two categories of leader (Table 19d).

Table 19d: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities, and average annual remuneration level in US\$ of staff who work in services for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE) in Estonia

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$)
ECED	Staff	Teacher	Õpetaja	ISCED 5	Required	5000 to < 10,000
		Assistant	Õpetaja abi	ISCED 3	Optional	1000 to < 5000
		Nurse	Lapsehoidja	ISCED 4	Optional	1000 to < 5000
	Leader	Director	Direktor	ISCED 5	Required	10,000 to < 20,000
		Head teacher	Õppealajuhataja	ISCED 5	Required	10,000 to < 20,000
PPE	Staff	Teacher	Õpetaja	ISCED 5	Required	5000 to < 10,000
		Assistant	Õpetaja abi	ISCED 3	Optional	1000 to < 5000
	Leader	Director	Direktor	ISCED 5	Required	10,000 to < 20,000
		Head teacher	Õppealajuhataja	ISCED 5	Required	10,000 to < 20,000

Teacher or *Õpetaja*: work with children under the age of three (ECED level) and with three- to seven-year-olds (PPE) and are qualified to ISCED Level 5. They are required to undertake CPD, and have an annual salary of US\$ 5000–US\$10,000.

Assistant or *Õpetaja abi*: work with children at ECED and PPE level. They have an ISCED Level 3 qualification, optional CPD opportunities, and have an annual salary of up to US\$ 5000.

Nurse or *Lapsehoidja*: work with children at ECED level. They have an ISCED Level 4 qualification, have optional CPD opportunities, and an annual salary of up to US\$ 5000.

Director or *Direktor*: has responsibility to lead and manage ECE settings at ECED and PPE level. They are required to have an ISCED Level 5 qualification in pedagogy, are required to undertake CPD, and receive an annual salary of US\$ 10,000–US\$ 20,000.

Head Teacher or *Õppealajuhataja*: has responsibility to lead and manage PPE settings. They are required to have an ISCED Level 5 qualification in pedagogy, are required to undertake CPD, and receive an annual salary of US\$ 10,000–US\$ 20,000.

In Estonia, teaching staff, assistants and leaders working in ECE settings have the same minimum qualifications, training opportunities and salary whether they work with younger children or with older children. Senior staff working directly with children are educated to first stage tertiary level (Level 5), assistant staff to upper secondary school level (Level 3), and leaders to post-secondary non-tertiary education (Level 5).

ITALY

It should be noted that the situation represented in this evidence for Italy is changing, due to the education system reform introduced by Italian Law 107 of July 2015. One key element included in Law 107 is the provision of further legislation for the reunification of the split system, in order to establish an integrated or unitary ISCED Level 0 system serving children from birth to six years. Within the foreseen legislation, most aspects reported are under consideration for further changes, including staff categorization in ECED and their qualifications. National contracts for staff and leadership are also under revision, and they might affect aspects in many ways. Another example of planned change is the provision for leaders of professional development and training, which it is foreseen to be mandatory at least on the topic of social inclusion. Nevertheless, effort has been made to specify the most up-to-date information and incorporate planned changes whenever possible ([Table 19e](#)).

In Italy there are currently three main categories of staff who work to support children's learning and development in services for under-threes (ECED) and two categories in services for three to six-year-olds (PPE). There are four main categories of leader, three of whom work in ECED and PPE services, and one that works only in PPE settings ([Table 19e](#)).

Nursery school educator or *Educatore asilo nido /micro nido* work with children under the age of three years (ECED). They are required to have an ISCED Level 3 qualification and have optional CPD opportunities. Salaries currently vary according to local and national contracts.

Nursery school educators/teacher aide or *Ausiliari asili nido*: work with children at ECED level. They are not required to have a formal qualification and have optional CPD opportunities. Salaries currently vary according to local and national contracts.

Paediatric nurse or *Puericultrici*: generally work with children under the age of three (ECED), with a more health-oriented profile, and they can also work in private preschools. They are required to have an ISCED Level 2 qualification and have optional CPD opportunities. Salaries currently vary according to local and national contracts.

Preschool school teacher or *Docente di scuola dell'infanzia* (also called *Maestra*): work with three- to six-year-old children (PPE). They are required to have an ISCED Level 5 qualification (with some exceptions) and have optional CPD. Teachers in state schools are an exception: they now will have mandatory CPD, while, up until now, mandatory training was required only in their first year of service. CPD is provided face-to-face and online via a national platform. In state preschools they have an annual average salary of US\$ 34,162.

Preschool teacher aide or *Assistenti scuola dell'infanzia*: work with three- to six-year-old children (PPE) in private schools only. They are not required to have a formal qualification and have optional CPD opportunities. Salaries currently vary according to local and national contracts.

Provincial or regional coordinator of early childhood education services or *Coordinatore provinciale o regionale dei servizi per l'infanzia*: has responsibility to lead the development of private ECE services (ECED and PPE) at regional or provincial level. They are required to have an ISCED Level 5 qualification. Salaries currently vary according to local and national contracts.

Coordinator of early childhood education services or *Coordinatore educativo nei servizi per l'infanzia*: has responsibility to lead and coordinate private ECE services (ECED and PPE) at a local level. They are required to have an ISCED Level 5 qualification. In 13 out of 21 regions and autonomous provinces salaries currently vary according to local and national contracts.

Lead teacher in early childhood education services or *Coordinatore-docente*: leads pedagogic practice in private settings either for birth to three-year-olds (ECED) or for three- to six-year-olds (PPE). When in PPE, they can also work in state comprehensive institutes, under the school leader. They are generally required to have an ISCED Level 3 qualification. Salaries currently vary according to local and national contracts, yet in state preschools they have an average annual salary of US\$ 34,162 and could earn more depending on their years of experience.

School leader of state comprehensive institutes (that include PPE) or *Dirigenti scolastici di istituti comprensivi*: leads and manages state comprehensive institutions where PPE is included. They are required to have an ISCED Level 5 qualification. They have an annual salary of over US\$ 50,000.

In Italy, staff working in ECE differ in settings that serve under-threes (ECED) and settings that serve three to six-year-olds (PPE). At ECED Level the senior staff is likely to be less qualified than the senior staff working in PPE settings (Level 3 or upper secondary school level compared with Level 5 or first stage tertiary level). Teacher aides or assistants in ECED and PPE non-state settings are not required to have a formal qualification. Those in leadership positions are usually expected to have a Level 5 or first stage tertiary level qualification. Teachers and head teachers in state schools receive mandatory CPD during their first year of service, after which it becomes optional, yet this situation is expected to change. For teachers, CPD is already mandatory according to the new reform of 2015, and it should become mandatory for leaders as well, according to future regulations on the reunification of Italy's ECE system. There is little information about CPD in Italy because it is optional, although the National Training Agency provides courses. Remuneration arrangements were being revised in 2014, with new national contracts under negotiation.

It should be noted that, in Italy, although the law prescribes teachers of state schools should have an ISCED Level 5 or a five-year tertiary degree, local regulations still allow municipalities and private providers to hire teacher aides with a minimum qualification of ISCED Level 2 plus an additional qualification, and preschool teachers at ISCED Level 3. It is reported that such derogations to the national regulations have considerably slowed down the upgrading of PPE teachers' qualifications. However, the new system reform makes provision to change this situation.

Table 19e: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities, and average annual remuneration level in US\$ of staff who work in services for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE) in Italy

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$) ^{c, d}
ECED	Staff	Educator in nursery schools	Educatore asilo nido /micro nido	ISCED 3	Optional	–
		Pediatric nurse	Puericultrici	ISCED 2	Optional	–
		Educator/teacher aide in nursery schools	Ausiliari asili nido	No formal qualification required	Optional	–
	Leader	Provincial or regional coordinator of early childhood education services	Coordinatore provinciale o regionale dei servizi per l'infanzia	ISCED 5	Optional	–
		Coordinator of early childhood education services	Coordinatore educativo nei servizi per l'infanzia	ISCED 5 ^a	Optional	–
		Lead teacher in early childhood education services	Coordinatore-docente	ISCED 3	Optional	–
PPE	Staff	Preschool teacher	Docente di scuola dell'infanzia (also called Maestra)	ISCED 5 ^b	Optional ^e	–
		Preschool teacher aide ^a	Assistenti scuola dell'infanzia	No formal qualification required	Optional	–
	Leader	Provincial or regional coordinator of early childhood education services	Coordinatore provinciale o regionale di servizi per l'infanzia	ISCED 5	Mandatory	–
		Coordinator of early childhood education services	Coordinatore educativo nei servizi per l'infanzia	ISCED 5	Optional	–
		Lead teacher in early childhood education services	Coordinatore-docente	ISCED 3	Optional	–
		School Leader of State comprehensive institutes (that include PPE) ^f	Dirigenti scolastici di istituti comprensivi	ISCED 5	Optional ^g	50,000 or more

Key:

– No data provided.

Country specific notes:

^a In Italy, there is no national regulation concerning minimum qualifications for ECED personnel. Only 13 out of the 21 regions and autonomous provinces require ECED leaders to have Level 5 qualifications. This aspect is expected to change with the future legislation announced by the reform of Law 107/2015, and minimum qualification should be set at university degree level.

^b Since 1990, the law prescribes that teachers of state schools have an ISCED 5 degree, however, local regulations still allow municipalities and private providers to hire teacher aides with a minimum qualification at ISCED level 2 plus specific training and ISCED 3 for preschool teachers. In private schools and in schools with equal status, the minimum qualification level is ISCED 3, because teachers do not need to pass the ability examination. Such derogations to national regulations have considerably slowed down the upgrading of skills of PPE teachers, given their slow turnover, especially in private schools, municipal schools and in schools with equal state status. This aspect is also expected to change for PPE, with the future legislation announced by the reform of Law 107/2015, and minimum qualification should be set at university degree level.

(Continued on next page)

Country specific notes (contd.)

^c In Italy, for PPE, data are provided for state school contracts only. For private, non-state schools with equal status (*paritarie*) and non-state municipal schools, other contracts apply that cannot be easily compared; thus they are excluded from this analysis. In addition, national contracts for non-state preschools are currently under revision.

^d No comparable data are available for the 0–2 segment. There are several contracts applied at the local level, and thus it is very difficult to determine an average. In addition, national contracts are currently under revision.

^e In the first year of service, teachers and leaders of state schools currently receive mandatory training.

^f In private schools only.

^g This leadership category only applies to state schools, while the other categories apply to private schools or schools with equal status. A leader of a state comprehensive institute might appoint a lead teacher coordinating all preschool teachers in that school. Continued professional development for leaders in state comprehensive institutes is changing from optional to mandatory, at least for certain topics such as social inclusion: Law 107/2015 is making provision for this type of training for leaders in the future.

It was also stated by the NRC that in Italian ECED settings, the role of leader is not well defined and designation can vary from region to region. This means there is little national documentation of leadership categories. Although the presence of a Coordinator of Early Childhood Services is often cited in accreditation procedures as a quality element, it is reported by the NRC that little information has been documented about staff with this profile in Italy. This aspect should also be changing with the new system reform.

POLAND

In Poland, there are six main categories of staff who work to support children's learning and development, and two main categories of leader in settings for under-threes (ECED). In settings for three- to six-year-olds (PPE) there are two main categories of staff who work to support children's learning and development and one main category of leader. Minimum professional qualifications, training and the remuneration levels of these staff and leaders vary among settings (Table 19f).

Child carer or *Opiekunka dziecięca*: work with children under the age of three (ECED), are required to have an ISCED Level 3 qualification, have optional CPD opportunities, and receive an annual salary of between US\$ 1000 and US\$ 5000.

Teacher or *Nauczyciele*: work with children under the age of three (ECED) or from three to six years (PPE). They have the same level of qualification (ISCED Level 5) regardless of the age phase they work with, and have optional CPD opportunities, but the salary they receive differs significantly with setting. Teachers who work in ECED settings receive an annual salary of US\$ 1000 to US\$ 5000, whereas teachers who work in PPE settings receive an annual salary of US\$ 5000 to US\$ 10,000.

Nurse or *Pielęgniarki*: work with children under the age of three years (ECED). They are required to have an ISCED Level 4 qualification, are required to undertake CPD, and receive an annual salary of US\$ 1000 to US\$ 5000.

Childbirth assistant or *Położne*: work with under-threes (ECED) and are required to have an ISCED Level 4 qualification, are required to undertake CPD, and have an annual salary of US\$ 1000 to US\$ 5000.

Doctor or *Lekarze*: work in an ECED setting, are required to undertake CPD, and have an annual salary of US\$ 1000 to US\$ 5000.

Volunteers or *Wolontariusz*: work in ECED settings. There are no training requirements and there is no remuneration.

Table 19f: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities and average annual remuneration level in US\$ of staff who work in services for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE) in Poland

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$)
ECED	Staff	Child carers	Opiekunka Dziecięca	ISCED 3	Optional	1000 to < 5000
		Other child carers	Inni Opiekunowie	ISCED 3	Optional	1000 to < 5000
		Teachers	Nauczyciele	ISCED 5	Optional	1000 to < 5000
		Nurses	Pielęgniarki	ISCED 4	Required	1000 to < 5000
		Childbirth assistants	Położne	ISCED 4	Required	1000 to < 5000
		Doctors	Lekarze	ISCED 5	Required	1000 to < 5000
		Volunteers	Wolontariusz	–	–	–
	Leader	Principal	Dyrektor	ISCED 3	Optional	5000 to <10,000
PPE	Staff	Teacher	Nauczyciel	ISCED 5	Optional	5000 to < 10,000
		Auxiliary staff	Personel pomocniczy	ISCED 3	Unavailable	5000 to < 10,000
	Leader	Principal	Dyrektor	ISCED 5	Optional	5000 to < 10,000

Key:

– No data provided.

Country specific notes:

In Poland it should be noted that the occupational allowance (the variable part of the salary given for the type of responsibility undertaken, career progression, cost of living, or other variable factors) is not easy to establish from the contractual arrangements; it has thus been excluded here, and figures are based only on the basic salary for newly-hired staff. ECED contracts often differentiate between different levels of leaders or even include leader categories; thus leaders' salaries appear to be quite similar to those of ECED staff and do not vary greatly from one contract to another.

Auxiliary staff or *Personel pomocniczy*: work in PPE settings with children from three to six years of age. They are required to have an ISCED Level 3 qualification, but there is no CPD program currently available. They receive an annual salary of US\$ 5000 to US\$ 10,000.

Principal or *Dyrektor*: leads and manages either an ECED or a PPE setting. In ECED settings they are required to have an ISCED Level 3 qualification, have optional CPD opportunities and receive an annual salary of US\$ 1000 to US\$ 5000. In PPE settings they are required to have an ISCED Level 5 qualification, have optional CPD opportunities and receive an annual salary of US\$ 5000 to US\$ 10,000.

Staff working in ECE in Poland differ in settings that serve under-threes (ECED) and settings that serve three to six-year-olds (PPE). For ECED and PPE settings, senior staff have a minimum Level 5 or first stage tertiary level qualification and assistant staff have a minimum Level 3 or upper secondary school level qualification. Health-oriented staff can be qualified at Level 4 or 5, and are required to undertake CPD. The setting leaders (principals) have to have higher qualifications if they work in PPE settings and may earn significantly more.

In Poland, it is noted that there is no national regulation concerning minimal qualifications for ECED personnel. Regional regulations apply and it was reported by the NRC that sometimes these are dated. It is also possible that teachers and pediatric nurses hold no higher than an ISCED Level 2 vocational qualification and no formal qualification is required for teacher aides. For leaders at PPE level, there is an expectation

that they have an ISCED Level 5 qualification and also five years of experience as a teacher, with good performance, no criminal record and appropriate management training (business management or management in education).

THE RUSSIAN FEDERATION

The Russian Federation has eight main categories of staff who work to support children's learning and development and three main categories of leader in both ECED and PPE settings (Table 19g). The Russian Federation NRC was able to provide only limited information on CPD opportunities and annual salary levels for staff and leaders.

Educator or *Воспитатель, старший воспитатель*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 4 qualification and also to undertake CPD for ECED settings, but CPD is optional for PPE settings. They receive an annual salary of US\$ 1000 to US\$ 5000.

Educator assistant or *Помощник воспитателя*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 3 qualification and also to undertake CPD for ECED settings, but this is optional for PPE settings.

Junior educator or *Помощник воспитателя*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 4 qualification. CPD is optional for ECED settings, and is unavailable for PPE settings.

Methodist or *Методист*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 6 qualification and CPD is optional.

Speech therapist teacher or *Учитель-дефектолог, учитель-логопед*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 6 qualification and also to undertake CPD for ECED settings, but this is optional for PPE settings.

Psychologist or *Педагог-психолог*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 4 qualification and also to undertake CPD for ECED settings, but this is optional for PPE settings.

Music teacher or *Музыкальный руководитель*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 4 qualification and also to undertake CPD for ECED settings, but this is optional for PPE settings.

Physical development teacher or *Инструктор по физической культуре*: work in settings with children under the age of three (ECED) and in settings with children from three to seven years (PPE). They are required to have an ISCED Level 4 qualification and also to undertake CPD for ECED settings, but this is optional for PPE settings.

Head or *Руководитель ДОО*: leads and manages either an ECED or a PPE setting. They are required to have an ISCED Level 6 qualification.

Deputy head or *Заместитель руководителя ДОО*: leads and manages either an ECED or a PPE setting. They are required to have an ISCED Level 6 qualification.

Table 19g: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities and average annual remuneration level in US\$ of staff who work in services for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE) in the Russian Federation

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$)
ECED	Staff	Educator	Воспитатель старший воспитатель	ISCED 4	Required	see explanatory notes
		Educator assistant	Помощник воспитателя	ISCED 3	Required	–
		Junior educator	Младший воспитатель	ISCED 4	Optional	–
		Methodist	Методист	ISCED 6	Required	–
		Speech therapist teacher	Учитель - дефектологу, читель - логопед	ISCED 6	Required	–
		Psychologist	Педагог-психолог	ISCED 4	Required	–
		Music teacher	Музыкальный руководитель	ISCED 4	Required	–
	Physical development teacher	Инструктор по физической культуре	ISCED 4	Required	–	
	Leader	Head	Руководитель ДОУ	ISCED 6	–	–
		Deputy head	Заместитель руководителя доу	ISCED 6	–	–
Head of department		Руководитель структурно подразделения ДОУ	ISCED 6	–	–	

(Continued on next page)

Head of department or *Руководитель структурного подразделения ДОУ*: leads and manages a department in either an ECED or a PPE setting. They are required to have an ISCED Level 6 qualification.

In the Russian Federation, there is a single qualification handbook for managers, professional and employees working in ECE published under a decree of the Ministry of Health and Social Development. There is also federal state law on education setting out qualification requirements. These documents specify that all staff and leaders at ECED or PPE level should have minimum qualifications; qualification requirements do not differ for staff who work with younger or older children, but staff have differential access to CPD opportunities between these two phases. Senior staff working directly with children and leaders are usually educated to graduate level (Level 6), and assistant staff and health-based staff are generally educated to a post-secondary non-tertiary education level (Level 4). Leaders are also required to have at least five years of work experience in teaching positions.

Level	Staff/leader	Staff/leader category	Staff/leader category in national language	Minimum level of final qualification	Requirements for CPD	Annual salary range (US\$) ^{c, d}
PPE	Staff	Educator	Воспитатель старший воспитатель	ISCED 4	Required	see explanatory notes
		Educator assistant	Помощник воспитателя	ISCED 3	Required	–
		Junior educator	Младший воспитатель	ISCED 4	Optional	–
		Methodist	Методист	ISCED 6	Required	–
		Speech therapist teacher	Учитель - дефектологу, учитель - логопед	ISCED 6	Required	–
		Psychologist	Педагог-психолог	ISCED 4	Required	–
		Music teacher	Музыкальный руководитель	ISCED 4	Required	–
	Physical development teacher	Инструктор по физической культуре	ISCED 4	Required	–	
	Leader	Head	Руководитель ДОУ	ISCED 6	–	–
		Deputy head	Заместитель руководителя доу	ISCED 6	–	–
Head of department		Руководитель структурно-группы	ISCED 6	–	–	

Key:

– No data provided.

Explanatory notes:

In the Russian Federation, the remuneration rates are given as an average of salaries of all types of pedagogic staff.

Minimum regional average salary rate: ~ US\$ 2700.

Maximum regional average salary rate: ~ US\$14,100.

Modal regional average salary rate: ~ US\$3600–4800 (40% of regions).

Median regional average salary rate: ~ US\$ 5000.

The combination of staff working in a setting depends on the curriculum program that is developed by the setting. The NRC reported that the most common staffing for one group of children (as defined by floor space available) is to have two educators, one full-time junior educator or educator assistant, a part-time (0.25) music teacher, a part-time (0.125) physical development teacher, a part-time (0.075) psychologist, and one full-time speech therapist.

THE UNITED STATES

The United States NRC reported there were six main categories of staff who work to support children's learning and development, and two main categories of leader in both ECED and PPE settings ([Table 19h](#)).

Lead teacher: work in center-based (not school-based) settings with children under the age of three (ECED) and children aged from three to six (PPE). There may or may not be a formal qualification requirement based on setting or funding source (additional information on education is provided below in [Tables 19i](#) and [19j](#)); lead teachers have optional CPD opportunities and receive an annual salary of US\$ 20,000 to US\$ 30,000.

Teacher: work in center-based (not school-based) settings with children under the age of three (ECED) and in settings with children aged three to six (PPE). There may or may not be a formal qualification requirement based on setting or funding source (additional information on education is provided below in [Tables 19i](#) and [19j](#)); teachers have optional CPD opportunities and receive an annual salary of US\$ 20,000 to US\$ 30,000.

Assistant teachers: work in center-based settings (not school-based) with children under the age of three (ECED) and in settings with children aged from three to six (PPE). There may or may not be a formal qualification requirement based on setting or funding source (additional information on education is provided below in [Tables 19i](#) and [19j](#)); assistant teachers have optional CPD opportunities and receive an annual salary of US\$ 20,000 to US\$ 30,000.

Aides: work in center-based (not school-based) settings with children under the age of three (ECED) and children aged from three to six (PPE). There may or may not be a formal qualification requirement based on setting or funding source (additional information on education is provided below in [Table 19i](#) and [19j](#)); aides have optional CPD opportunities and receive an annual salary of US\$ 10,000 to US\$ 30,000.

Listed providers: work in home-based settings with children under the age of three (ECED) and in settings with children aged from three to six (PPE). There is no formal qualification requirement (additional information on education is provided below in [Tables 19i](#) and [19j](#)); listed providers have optional CPD opportunities, and receive an annual salary of US\$ 30,000 to US\$ 50,000.

Unlisted providers: work in home-based settings with children under the age of three (ECED) and in settings with children aged from three to six (PPE). There is no formal qualification requirement (additional information on education is provided below in [Tables 19i](#) and [19j](#)); unlisted providers have optional CPD opportunities and receive an annual salary of US\$ 5000 to US\$ 20,000.

Kindergarten teacher: work with five- to six-year-old children in either public or private kindergarten classes. They are required to have an ISCED Level 5 qualification (additional information on education is provided below in [Tables 19i](#) and [19j](#)), and to undertake CPD. They receive an annual salary of US\$ 50,000 plus in public kindergartens, and US\$ 30,000 to US\$ 50,000 in private kindergartens.

Directors and other leaders without the title director: have responsibility to lead and manage settings at ECED and PPE level. They are required to have an ISCED Level 6 qualification and have optional CPD opportunities. They receive an annual salary of US\$ 30,000 to US\$ 50,000.

Table 19h: Main staff and leader categories, minimum qualification level, continuing professional development (CPD) opportunities and average annual remuneration level in US\$ of staff who work in services for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE) in the United States

Level	Staff/leader	Staff/leader category	Minimum level of final qualification ^c	Requirements for CPD	Annual salary range (US\$) ^d
ECED ^a	Staff	Center-based, lead teachers	No formal qualification required	Optional	20,000 to < 30,000
		Center-based, teachers	No formal qualification required	Optional	20,000 to < 30,000
		Center-based, assistant teachers	No formal qualification required	Optional	20,000 to < 30,000
		Center-based, aides	No formal qualification required	Optional	20,000 to < 30,000
		Home-based, listed providers ^b	No formal qualification required	Optional	30,000 to < 50,000
		Home-based, unlisted providers, paid	No formal qualification required	Optional	5000 to < 10,000
	Leader	Directors	No formal qualification required	Optional	30,000 to < 50,000
		Other leaders (not entitled “director”)	No formal qualification required	Optional	30,000 to < 50,000
PPE	Staff	Center-based, lead teachers	No formal qualification required	Optional	20,000 to < 30,000
		Center-based, teachers	No formal qualification required	Optional	20,000 to < 30,000
		Center-based, assistant teachers	No formal qualification required	Optional	20,000 to < 30,000
		Center-based, aides	No formal qualification required	Optional	10,000 to < 20,000
		Home-based, listed providers ^b	No formal qualification required	Optional	30,000 to < 50,000
		Home-based, unlisted providers, paid ^b	No formal qualification required	Optional	10,000 to < 20,000
		Kindergarten teacher, public	ISCED 5	Required	50,000 or more
		Kindergarten teacher, private	ISCED 5	Required	30,000 to < 50,000
	Leader	Directors	No formal qualification required	Optional	30,000 to < 50,000
		Other leaders without the title “director”	No formal qualification required	Optional	30,000 to < 50,000
		School principal, public	ISCED 5	Optional	50,000 or more
		School principal, private	ISCED 5	Optional	50,000 or more

Explanatory notes:

^a For staff who work in ECED settings, qualification requirements vary. There are specific setting types within the broader category “center-based” that require certain levels of education. For example, Early Head Start/Head Start, state preschool and primary school based programs have differing education requirements for different levels of staff. However, there is no uniform requirement across all of the different kinds of center-based settings within the US center-based day care centers, preschools or prekindergarten programs that are not in a private home. Therefore, the United States provided data that shows the distribution of the highest educational level attained by staff type.

^b Data sources for staff categories for children aged 0 to not-yet-in-kindergarten are from the US Department of Health and Human Services, National Survey of Early Care and Education (NSECE) Project Team (NSECE, 2012). For the NSECE, the provider sampling frame built from administrative lists was used to sample listed providers, including center-based programs and home-based ECE providers. Listed providers were primarily licensed or regulated family day care providers, but included other formally listed home-based providers such as license-exempt providers or providers participating in Early Head Start. Alternatively, as part of a screener interview sent to households, the respondent to the screener could provide information on whether an adult in the household provided care to children not their own for at least five hours per week in a home-based setting. These households were identified as “unlisted home-based” and were subsequently surveyed with an unlisted home-based provider survey (detail provided by the NRC).

^c For the USA, ISCED Level 5 appears to encompass an associate’s degree through to a master’s degree, and within the USA, there is significant distinction between an associate’s, to a bachelor’s, to a master’s degree, captured by the program number within the ISCED level. (See [Tables 19i](#) and [19j](#) for further information on the distribution of education.)

^d Home-based salaries were calculated as average weekly revenue multiplied by 52 weeks to convert to average annual salary. The US Department of Health and Human Services (NSECE, 2012) provided salary data for center-based and home-based staff. The US Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS) 2011–2012 (SASS 2012) provided the salary data for kindergarten teachers and school principals.

School principals have responsibility to lead and manage public or private settings at PPE level. They have an ISCED Level 5 qualification (additional information on education is provided below in [Tables 19i](#) and [19j](#)), have optional CPD opportunities and receive an annual salary of US\$ 50,000 plus.

Staff and leaders working in ECE settings in the United States appear to have the same training opportunities and salary whether they work in ECED settings or PPE settings ([Table 19h](#)), but these data mask considerable variation across setting types and age phases. There are no formal qualifications required in the United States for most settings offering services to children from birth to kindergarten age (other than those that are part of state preschool programs or federal programs such as Head Start, Title I or Preschool Development Grants) and this masks considerable variations between setting types and age phases. However, staff and leaders who work in kindergartens and schools are required to have an ISCED Level 6 qualification, and must undertake CPD.

For staff who work with under-threes (ECED), qualifications vary significantly between center-based and home-based services ([Table 19i](#)).

Table 19i: Distribution of educational attainment for staff who work in settings that serve children birth to three years in the United States

Staff categories that serve children birth to three years	Distribution of educational attainment (%)			
	High school or less	Some college, no degree	Associate's degree	Bachelor's degree or higher
Center-based, lead teachers	23.4	30.5	18.8	27.3
Center-based, teachers	27.4	36.1	15.2	21.3
Center-based, assistant teachers	29.4	35.4	17.7	17.5
Center-based, aides	34.8	40.7	7.5	17.0
Home-based provider, listed	33.8	34.7	16.0	15.4
Home-based provider, unlisted, paid	50.7	26.6	8.3	14.3

Source:

US Department of Health and Human Services, Administration for Children and Families (NSECE, 2012).

These data reveal that center-based services for under-threes tend to have more highly educated staff than home-based services, and that less than half of lead teachers and teachers in center-based services have an ISCED Level 5 qualification.

For staff who work with three to not-yet-in-kindergarten (PPE), qualifications also vary between center-based and home-based services ([Table 19j](#)).

These data show that staff educational attainment levels appear to be higher in center-based settings serving older children and lower in home-based settings. The educational attainment levels of teachers in primary school appear on average to be higher than those of providers in center-based or home-based settings ([Table 19k](#)).

Opportunities for CPD for ECE staff differ state by state, and depend on the program and age phase. For example, at ECED level, early Head Start teachers are required to attend no less than 15 hours of professional development per year. Some states have no requirements for prekindergarten programs, while others are more stringent; for example, Missouri requires 12 hours of professional development per year and an

Table 19j: Distribution of educational attainment for staff who work in settings that serve children three years to not-yet-in-kindergarten in the United States

Staff categories that serve children three years to not-yet-in-kindergarten	Distribution of educational attainment (%)			
	High school or less	Some college, no degree	Associate's degree	Bachelor's degree or higher
Center-based, lead teachers	11.0	19.1	16.8	53.2
Center-based, teachers	9.7	16.9	18.2	55.2
Center-based, assistant teachers	19.0	33.0	22.0	26.0
Center-based, aides	24.3	36.0	11.3	28.4
Home-based provider, listed	33.7	34.7	16.0	15.6
Home-based provider, unlisted, paid	55.4	22.0	8.6	14.0

Source:

US Department of Health and Human Services, Administration for Children and Families (NSECE, 2012).

Table 19k: Qualifications of staff who work as teachers in private and public primary schools in the United States

Level of qualification	% Teachers in public primary schools	% Teachers in private primary schools
No bachelor's degree	3.2	8.4
Bachelor's degree	41.2	52.8
Master's degree	47.3	32.7
Higher than master's degree	8.4	6.1

Source:

US Department of Education, National Center for Education Statistics, 2011–2012 (SASS 2012).

additional 30 hours for first-year teachers and assistants (source: <http://www.nieer.org/resources/factsheets/2.pdf>). At PPE level, the requirements continue to vary by state, but professional development credits are required for renewal of a teacher's license. In addition, Head Start teachers are required to attend no less than 15 hours of professional development per year.

Qualification requirements for leaders at both ECED level and PPE level are again variable in the United States and differ between setting types, age phases and states. However, in the United States leaders have higher levels of education than other staff, particularly in school-based settings, and settings serving older children. In more detail, in settings serving under-threes, 59.0% of directors have a bachelor's degree or higher, and at PPE level, that rises to 80.5%. In K-12 private schools, 69% have a master's degree or above, and in K-12 public schools, 91.4% hold this advanced qualification. For leaders professional development is usually optional.

Summary Finding 23

The study countries illustrate the diversity of staffing of ECE services, which varies by age phase, type of setting, setting provider (public or private), location, and professional role of staff. Services for under-threes (ECED) indicate that while there is a wide range of staffing options within the study countries, there are more “education” focused staff than “care” or “health” focused staff. In the United States, staff working in settings outside primary schools tend to have greater preparation in child development, while teachers in primary schools often have more training in academic teaching. The qualification levels of these staff also range from lower secondary school level to graduate level, and include, but not always, specialized training in ECE. The minimum qualification required of staff tends to increase with the age of the children they work with, with more staff having ISCED Level 5 and above in the pre-primary (kindergarten) year. Leaders in all settings are usually required to have an ISCED Level 5 or above in educational attainment to work with the pre-primary year. Specific training in leadership and management is rare.

Summary Finding 24

Opportunities for continuing professional development are variable in the study countries. This is optional for most staff working at the ECED level, becoming a requirement for more senior staff or for those who work with the pre-primary year.

Summary Finding 25

Remuneration rates are very different between the study countries, although within country salary levels are usually higher for staff in PPE level settings than those in ECED settings. In the study countries, staff with higher qualifications and more senior roles are more highly paid, and those who work in public settings are paid more than those who work in private settings, as are those working in center-based services as compared to those working in home-based services. There is also a differentiation between those who work with children aged from three to six or seven years (PPE) and those who work with children under three years (ECED); this holds even for teachers within these age groups, depending on funding sources. Leaders’ basic salaries do not always differ from those of the staff who work directly with children, but in some cases they may receive additional allowances, enabling them to earn considerably more than other staff.

Group Size and Ratios

Studies have shown that group size affects staff working conditions and can influence the satisfaction of professionals with their workplace, which, in turn, is likely to affect the ability and willingness of professionals to provide stable relationships and attentive interactions with children (OECD, 2012b). High staff turnover disrupts the continuity of care, negates professional development efforts, harms overall quality, and negatively affects child outcomes. Barnett et al. (2015) stated in their NIEER report that “*in sum, preschool research strongly indicates that smaller class sizes are associated with greater educational effectiveness and other benefits*” and that “*even within studies that focus only on preschool children, the effects of class size have been found to be larger for younger children.*”

There is also some evidence (OECD, 2010; Pascal et al., 2012; Sylva et al., 2008) that a favorable staff:child ratio (i.e. one where there are fewer children for every adult) in early education programs, particularly those working with less advantaged children, is helpful in ensuring the quality of interactions between educators and children (Howes, Phillips, & Whitebrook, 1992). However, there is little definitive evidence on the relationship of different ratios on outcomes for children. A study by Pascal et al. (2012) showed that, for European countries, the range of staff:child ratios for preschool classes ranged from 1:22 in France to 1:6 in Sweden. The countries examined in the Pascal et al. (2012) study indicated a consistent association between these ratios and student performance in PISA rankings, with those countries with fewer children per adult performing better. Favorable ratios may help to create a climate of emotional security, allowing practitioners to be more responsive to children, being more readily able to support them when they have needs or are in distress. In the absence of direct measures of the quality of provision, the ratio of pupils to teaching staff is often used as a proxy to measure quality in ECE (OECD, 2010). A large body of research has found that the fewer children to staff, the better the children perform in cognitive (mathematics and science) and linguistic (language, reading and word recognition) assessments (Corak et al., 2012; OECD, 2010). There is no definitive research that indicates optimal staff:child ratios at different ages, as work so far has been unable to disentangle the effects of staff qualification, group size and ratios. While the available literature on the effects of staff:child ratios cannot offer an exact “best” ratio, there was a general consensus in a UNICEF (United Nations Children's Fund) report (Bennett, 2008) that an acceptable model for ECE classes for four- and five-year-olds would be a group of 22–24 children with two adults, assuming that both have qualifications related to working with young children in an ECE setting. For example, in the US, the Departments of Education and Health and Human Services' Preschool Development Grants program require programs to have a minimum staff:child ratio of 1:10 with a class size of no larger than 20 children (note that class size is not the same as a staff:child ratio). For Head Start, a maximum staff:child ratio of 1:10 with class sizes of fewer than 20 children is required; Early Head Start staff ratios are 1:4, with group sizes are limited to eight children. It should be noted that to support a pedagogy with more sustained shared dialogues between adults and children, beneficial to underachieving children, requires smaller group sizes as well as more favorable staff:child ratios.

The ECES collected information on the existence of national regulations on group size and staff:child ratios for differing age groups of children in the study countries.

Group size

Seven of the study countries indicated that they had national or subnational regulations on group size, but these were differently specified (Table 20). Poland did not have national or subnational regulation on group sizes. In five countries, (Chile, the Czech Republic, Denmark, Estonia, and the United States) maximum group sizes were specified according to the age of the child. In Italy's ECED, group size recommendations were set at regional level according to the type of service offered and the type of teacher contract. According to the new regulations announced within the 2015 education system reform, this aspect should be subject to change. In the Russian Federation, group size was determined by the available floor space in a center.

Table 20: Regulated group size for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Maximum group size for children aged...						
	Under 1 year old	1 year old	2 years old	3 years old	4 years old	5 years old	6 years old
Chile	42	42	32	32	35	45	◇
Czech Republic	n/a	n/a	n/a	24–28	24–28	24–28	24–28
Denmark	– ^a	10–14 ^b	10–14 ^b	20–25 ^b	20–25	20–25	◇
Estonia	– ^a	14–16	14–16	20–24	20–24	20–24	20–24
Italy	– ^c	– ^c	– ^c	18–26 ^d	18–26 ^d	18–26 ^d	◇
Poland	n/a	n/a	n/a	n/a	n/a	n/a	◇
Russian Federation	– ^e	– ^e	– ^e	– ^e	– ^e	– ^e	– ^e
United States ^f	8	12	12	17–18	20	20	◇

Key:

n/a Not applicable as there are no national or typical subnational regulated group sizes.

◇ Age phase is not applicable, as children are enrolled in school.

– Data in this format are not available.

Country specific notes:

^a In Denmark and Estonia, most children under the age of one are at home with their parents and this means there are no recommended group sizes for center-based provision.

^b In Denmark, these maximum sizes are recommended but not regulated.

^c In Italy, ECED services (Asili nido and other integrated services) in the 0–3 age range are fragmented, since regional regulations generally apply, in addition to national contracts for teachers. The differentiation is not in terms of maximum group/class size, but rather on the maximum number of children per setting/center (ranging from as low as 10 in services organized within a family context to 75 maximum for Asili Nido and 60 for other integrated services). Also, the differentiation in terms of a staff:child ratio is not dependent on the age of children, but rather on the typology of center considered and the type of teacher contract. The new regulations announced within the 2015 education system reform should also affect this aspect.

^d In Italy, in PPE in state schools, maximum group size is reduced to 20 if, in the classroom, there is a child with certified disabilities.

^e In the Russian Federation, the number of children in a preschool group is determined by calculating the floor area of a group playroom, and is not based on a maximum group size per age of child.

^f In the United States, the majority of states with prekindergarten initiatives set class size and ratio requirements that are consistent with standards developed jointly by the American Public Health Association and the American Academy of Pediatrics and the National Association for the Education of Young Children.

In countries with national or subnational regulations, the largest group sizes are found in Chile, ranging from 32 for two-year-olds to 45 for five-year-olds. The smallest group sizes were in the United States, from a maximum of eight children in a group for birth to one-year-olds to 20 for four and five-year-olds. The data suggest that group sizes generally increase with the age of the child, with the exception of Chile, which reports children under two years old in a maximum group of 42, reducing to 32 for two- and three-year-olds and then increasing again to 45 for five-year-olds.

Staff:child ratios

All of the study countries except Denmark (where local communities decide) indicated that they had national regulations or recommendations on staff:child ratios (Table 21). In Chile, the Czech Republic, Estonia, Poland and the United States, these are calculated according to the maximum number of children per staff member. In Italy, staff:child ratio recommendations are set at the regional level according to the type of service offered and the type of teacher contract. The 2015 education system reform will alter this situation. In the Russian Federation, the staff:child ratio is determined by the floor space available in a center. The data suggest that, in the majority of the study countries, the number of children per staff member increases as children get older from birth to three years, and then stabilizes from age three to primary school transfer age.

Table 21: Regulated staff:child ratios for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Recommended staff:child ratio for children aged...						
	Under 1 year old	1 year old	2 years old	3 years old	4 years old	5 years old	6 years old
Chile	1:6	1:6	1:13	1:16	1:18	1:23	◇
Czech Republic	n/a	n/a	n/a	1:13	1:13	1:13	1:13
Denmark	– ^a	n/a	n/a	n/a	n/a	n/a	◇
Estonia	– ^a	1:7–8	1:7–8	1:12	1:12	1:12	1:12
Italy	– ^b	– ^b	– ^b	– ^b	– ^b	– ^b	◇
Russian Federation	– ^c	– ^c	– ^c	– ^c	– ^c	– ^c	– ^c
Poland	1:5	1:8	1:8	1:8	1:8	–	◇
United States	1:4	1:4	1:10	1:10	1:10	1:10	◇

Key:

n/a Not applicable as there are no national or typical subnational regulated staff:child ratios.

◇ Age phase is not applicable, as children are enrolled in school.

– Data in this format are not available.

Country specific notes:

^a In Denmark and Estonia, most children under the age of one are at home with their parents, and so there are no set staff:child ratios for center-based provision.

^b In Italy, differentiation in terms of staff:child ratio is not only dependent on the age of the children, but also on the typology of the center and the type of teacher contract. The 2015 education system reform will alter this situation.

^c In the Russian Federation, the staff:child ratio in preschool groups is determined by the floor area of a group playroom.

Summary Finding 26

All of the study countries regulate group sizes and staff:child ratios in their ECE services. Maximum group sizes change as the child gets older, with group size steadily increasing year on year, and the numbers of children per staff member also increases from birth to age three, and then stabilizes from age three years to entry to primary schooling. Regulated maximum levels for group size and adult:child ratios in the study countries do not vary significantly, with one exception (Chile), where group sizes are much larger, and there are more children per adult.

Health and Safety Measures

International studies (OECD, 2012b; Pascal et al., 2012) suggest that a regulatory framework, with minimum health, safety and child protection standards can promote the health and safety of children and ensure minimum levels of quality. It is argued that national regulatory frameworks can “level the playing field” by ensuring all children benefit from a minimum standard of provision and regulated experiences to support a child’s wider socio-emotional and physical well-being, which in turn provides the optimal conditions for children to learn and develop. However, there is little research evidence on this aspect of provision and outcomes for children.

The ECES collected information on the existence and scope of national health and safety regulations for different ages of children in the study countries (Table 22)

Table 22: Existence and scope of health and safety regulations for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Existence of specific regulations										
		Catering facilities	Illness protocols	Indoor equipment	Medicine protocols	Minimum amount of indoor space per child	Nutrition standards	Outdoor equipment	Outdoor space	Risk assessments for child activities	Suitability of employed staff, e.g. absence of criminal record	Toilet facilities
Chile	ECED	●	○	●	○	●	●	●	●	○	○	●
	PPE	●	○	●	○	●	●	●	●	○	○	●
Czech Republic	ECED	○	●	○	○	●	○	○	○	○	○	●
	PPE	●	●	●	●	●	●	○	●	●	●	●
Denmark	ECED	●	○	●	●	●	●	●	●	●	●	●
	PPE	●	○	●	●	●	●	●	●	●	●	●
Estonia	ECED	●	●	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●	●	●
Italy	ECED	●	●	○	●	●	●	○	●	○	●	●
	PPE	●	●	●	●	●	●	○	●	○	●	●
Poland	ECED	●	○	●	●	●	○	○	○	○	●	●
	PPE	○	○	●	○	○	○	●	●	○	○	●
Russian Federation	ECED	●	●	●	●	●	●	●	●	○	●	●
	PPE	●	●	●	●	●	●	●	●	○	●	●
United States	ECED	●	●	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●	●	●

Key:

● Yes, national regulation exists.

○ No, national regulation does not exist.

All the study countries indicated that they have national health and safety regulations for settings working with under-threes (ECED) and three-year-olds to primary school age (PPE). The most frequently reported regulated aspects of health and safety at both ECED and PPE level are the toilet facilities and the indoor space required for children. The least frequently reported aspects are the outdoor space and risk assessments for children's activities. In the majority of countries the same regulatory focus is evident at both levels, but in the Czech Republic there appears to be more aspects regulated at PPE level than at ECED level, and in Poland the focus varies. In many countries there are subnational regulations in addition to the national regulations.

Summary Finding 27

The importance of regulating for health and safety is acknowledged in all the study countries throughout the ISCED Level 0 age phases, with a wide range of aspects being addressed in the regulations, suggesting key concern for the health and well-being of the children.

ECE Curriculum Guidance and Pedagogic Approaches

The OECD (2013) refers to “curriculum” as the knowledge contents and methods that support children's learning and development. Questions such as “What to teach?” and “How to teach it?” (Barnett, Hustedt, Allison, Friedman, Stevenson Boyd, & Ainsworth, 2007) raise complex issues in ECE containing multiple components, such as ECE goals, content and pedagogical practices (Litjens, & Taguma, 2010). In the United States, for example, the term “early learning and development standards” is used and curricula are the materials, teachers' guides, and strategies linked to the standards. “Pedagogic approaches” refers to how teaching and learning is supported and facilitated by practitioners in a setting, and reflects the philosophies, values, theories, or concepts adopted in the setting to inform the teaching and learning.

Most developed countries now have an ECE curriculum, especially for children in the year before primary schooling, acknowledging that some structuring and orientation of children's experiences towards educational aims is beneficial (EIU, 2012; OECD, 2013; Pascal, & Bertram, 2012). Curricula are influenced by many factors, including society's values, standards, research findings, community expectations, culture, and language. Although these factors differ by country, state, region, and even program, it is widely accepted that high quality ECE curricula provide appropriate developmental support and cognitive challenges that lead to positive child outcomes (OECD, 2006). A cross-national study (Pascal et al., 2012) reveals that many countries have or are developing national preschool curriculum guidelines, acknowledging their role in ensuring improved outcomes for children as they enter compulsory schooling.

There is continuing debate about the best curriculum approach for young children prior to compulsory schooling (Corak et al., 2012; OECD, 2012a). In many countries there is an emphasis on literacy and numeracy in official curricula. Where there is a social pedagogy tradition, emergent literacy and numeracy are not excluded, but a more open and holistic curriculum is promoted until children enter school and sometimes well into the early classes of primary school. In countries where early education has been strongly associated with primary school, there can also be a focus on school readiness and a more academic approach to curriculum and pedagogy.

While literacy and numeracy appear to be academic subjects, it is possible to use child-centered pedagogic approaches, such as play, to develop these abilities in young children. Literacy is important for language development and providing the foundations for reading. It has been linked with improved school performance and achievement, and to productivity in later life (Mullis et al., 2012). Research from the United States, reported by Barnett et al. (2007) suggests that the key skills to be developed before primary school are: vocabulary use, listening skills, knowledge of the alphabet, and writing skills (Strickland, & Riley-Ayers, 2006). Research into numeracy has suggested that the early childhood curriculum should focus on concepts that form the basis of mathematical competence, such as number, shape, and pattern (Ginsburg, & Amit, 2008). Large-scale nationally representative longitudinal studies within the United States, such as the [Early Childhood Longitudinal Study, Birth Cohort](#) and the [Early Childhood Longitudinal Study, Kindergarten Class of 2010–2011](#), recognize the importance of collecting information on children’s reading, mathematics, executive functioning, approaches to learning, and social-emotional well-being.

Research has indicated that there are some areas of learning that are particularly vital to focus on in the foundation years of life (Corak et al., 2012; Nagaoka, Farrington, Ehrlich, & Heath, 2015; Pascal, & Bertram, 2008). Heckman (2012) emphasized that “life skills”, such as conscientiousness, perseverance, motivation, sociability, attention, self-regulation and anger management, self-esteem, and the ability to defer gratification, should be the focus of an early years’ curriculum. Recent research from neuroscience (Diamond, 2010) affirmed this approach to the early years’ curriculum and identified a range of “executive functions” that are needed for a child to make educational progress. Three of these core functions appear to be particularly associated with long-term attainment and are vital for children to develop if the gap in achievement is to be narrowed: (1) cognitive flexibility, described as the ability to switch perspectives; (2) inhibitory control, namely the ability to stay focused despite distraction, have selective focused attention, and stay on task; and (3) working memory, described as the ability to hold information in mind and mentally work with it, make sense of what unfolds over time, relate events, ideas, and learning from before to now, reason, understand cause and effect, and remember multiple instructions in sequence and follow them step-by-step in correct order. There is evidence indicating that these aspects of development may be more important for academic success than intelligence quotient (IQ), entry-level reading, or mathematics (Blair, & Diamond 2008; Blair, & Razza, 2007). Therefore, to support a child to be “school ready” and able to operate as an effective learner, the early years’ curriculum needs to focus on both cognitive and non-cognitive aspects of early learning and, importantly, give children a sense of their own capacity to be successful learners.

ECE providers have a varied degree of choice over the curriculum they use. In some countries, the curriculum is devised by an external authority, such as central or local government. The OECD (2012b) reported that an early years’ curriculum or standards for learning exists in almost all OECD countries covering the ages of three to the start of primary school. While some curricula specify what is expected of staff (notably in Nordic countries), others are based on the outcomes that children are expected to achieve (commonly found in Anglo-Saxon countries). The existence of a common curriculum allows an authority to set priorities, direct staff behavior and create continuity across the education system. However, a curriculum determined by an outside body may restrict a

settings freedom to teach and care in the ways that it sees as most appropriate (OECD, 2006). There is much debate over the best curriculum and pedagogical approach for children in ECE and, while the aims may be similar, research has shown that early childhood curricula vary considerably in their scope, objectives, evaluation, methods, and perspectives on learning and quality (Pepper, & May, 2009).

This wider policy debate about the need for an early childhood curriculum and its focus and nature, stimulated the ECES to investigate whether the study countries had national curriculum guidance for ECE, and if so, the scope of the guidance, the areas of learning it covered, and the pedagogical approaches it promoted (Table 23).

Table 23: Existence and content of curriculum guidance for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Aspects of national or typical subnational curriculum guidance					
		Areas of learning and/or activities	Learning objectives	Learning outcomes	Assessment of learning and development	Pedagogic approaches	Learning contexts and/or environments
Chile	ECED	●	●	●	●	○	●
	PPE	●	●	●	●	○	●
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●
Denmark	ECED	●	●	●	○	○	○
	PPE	●	●	●	○	○	○
Estonia	ECED	●	●	●	●	●	●
	PPE	●	●	●	●	●	●
Italy	ECED	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	○	●	●
Poland	ECED	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	○
Russian Federation	ECED	●	●	○	●	●	●
	PPE	●	●	○	●	●	●
United States	ECED	●	●	●	●	●	●
	PPE	●	●	●	●	●	●

Key:

- Yes, national guidance includes this aspect.
- No, national guidance does not include this aspect.
- n/a Not applicable, as no national curriculum guidance exists.

All eight of the study countries have national curriculum guidance (sometimes statutory) for children from three years to the start of primary school (PPE) and five countries have curriculum guidance (sometimes statutory) for children from birth to three years (the Czech Republic, Italy and Poland do not have curriculum guidance for this age phase) (Table 23). This suggests that the majority of countries see the key role played by ECE in supporting children's learning and development. In Italy, the education system reform of July 2015 introduced future regulations on structural, organizational and quality aspects of services for children from birth to six years to be integrated under the responsibility of the Ministry of Education. Given Italy is in the transition period toward new legislation, it is difficult to report if and how a curriculum for children from birth to three years will also be introduced. For ECED in the Czech Republic, there is only a general statement that education should take place for crèche provision and, for other forms of ECED provision there is only a requirement that education should be appropriate to the developmental level of the child. It should be noted that the United States NRC stated that there are no national curricula, but rather national guidance on elements that should be covered in curricula in ECE settings. Individual states have defined their own early learning standards covering birth to five years.

All countries indicated that the national guidance includes a specification of the areas of learning or the kinds of learning activities to be offered, and the learning objectives for children at different ages and in different areas of learning. Such advice also (excluding Italy) includes guidance on the assessment of learning and development, and all bar the Russian Federation also specify the desired learning outcomes for children at each stage. Six countries provide guidance on learning environments and recommended pedagogic approaches (excluding Denmark and Chile). The data suggest that the curriculum guidance for both age phases is broad in scope and usually provides specific guidance on learning content, pedagogic approaches, learning goals and assessment (Table 24).

Curriculum guidance in all the study countries promotes a broad and balanced range of learning areas throughout the age phases, with no narrowing of curriculum focus as the child heads towards entry to primary schooling (Table 24). Countries reported that both cognitive and non-cognitive areas were included in curriculum guidance. It is notable that the majority of countries do not include a foreign/second language or religious and spiritual education in their guidance. The United States stated that learning a foreign language tends to be included in curriculum guidance at the kindergarten level. In Italy, Catholic religious guidance is only included for those parents who request it at individual school level; this area is regulated outside the national curriculum by a specific agreement (Italian Presidential Decree of the 11 February 2010) and guidelines set by the Roman Catholic Church and the state. Technology is another area that is less well covered for the under-threes, although some countries (the Russian Federation and the United States) indicated that this area is increasingly being addressed.

A report on ECE in Europe (Eurydice, 2009) identified a child-centered approach as the model found most commonly in early childhood settings in the European Union. Child-centered approaches have developed from the theories of influential pedagogues (such as Fröbel, Pestalozzi, Dewey, and Montessori). They are intended to develop an individual through self-determined activity, interacting with peers, and learning through cooperative behavior and play. This contrasts with a teacher-directed approach, in which the adult's role is to transmit knowledge and skills to the children. In their report arising from an OECD conference on early childhood policy, Pramling Samuelsson et al. (2006) discussed the characteristics of five selected pedagogical approaches adopted

Table 24: Areas of learning included in curriculum guidance for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Areas of learning in prescribed curriculum guidance												
		Personal and emotional development	Social development, including citizenship, values	Attitudes and dispositions to learning	Physical development and health education	Language development and communication skills	Reading and literacy skills	Mathematical skills	Understanding the natural world	Science	Technology and digital world	Expressive arts, music and creativity	Second/foreign language	Religious and spiritual
Chile	ECED	●	●	●	●	●	●	●	●	○	○	●	○	○
	PPE	●	●	●	●	●	●	●	●	●	○	●	○	○
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●	●	●	●	●	●	○	○
Denmark	ECED	●	●	●	●	●	●	●	●	●	●	●	○	○
	PPE	●	●	●	●	●	●	●	●	●	●	●	○	○
Estonia	ECED	●	●	●	●	●	●	●	●	●	●	●	○	–
	PPE	●	●	●	●	●	●	●	●	●	●	●	●	–
Italy	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●	●	●	●	●	●	○	●
Poland	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●	●	●	●	●	○	●	○
Russian Federation	ECED	●	●	●	●	●	○	○	●	○	○	●	○	○
	PPE	●	●	●	●	●	●	●	●	●	●	●	○	●
United States	ECED	●	●	●	●	●	●	●	●	●	○	●	○	○
	PPE	●	●	●	●	●	●	●	●	●	●	●	○	○

Key:

- Yes, national guidance includes this area of learning.
- No, national guidance does not include this area of learning.
- n/a Not applicable, as no national curriculum guidance exists.
- No data provided.

by preschool settings from across the world: namely Reggio Emilia (Italy), Te Whāriki (New Zealand), Experiential Education (Belgium), HighScope (USA), and the Swedish National Curriculum for Pre-school. These were similar in a number of respects, including: recognition of each child's rights, the central role of interactive play, the importance of parental involvement, and the encouragement of staff development. The main differences were the importance given to the child's view, the influence of the learning environment, and the emphasis on assessment and evaluation. This diversity in pedagogic approach has been shown to be evident both between and within countries in a number of recent policy studies (Corak et al., 2012; EIU, 2012; OECD, 2012a).

The ECES examined the existence and range of nationally promoted pedagogic approaches in the study countries (Table 25).

Table 25: Pedagogic approaches promoted in national guidance for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Pedagogic approaches promoted in national guidance				
		Academic, formal instruction approach	Creative, progressive learning approach	Experiential learning approach	Play curriculum approach	Specific philosophy, e.g. Montessori/Steiner
Chile	ECED	n/a	n/a	n/a	n/a	n/a
	PPE	n/a	n/a	n/a	n/a	n/a
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a
	PPE	n/a	n/a	n/a	n/a	n/a
Denmark ^a	ECED	○	○	○	○	○
	PPE	○	○	○	○	○
Estonia	ECED	○	●	●	●	●
	PPE	○	●	●	●	●
Italy ^b	ECED	n/a	n/a	n/a	n/a	n/a
	PPE	○	○	○	○	○
Poland	ECED	n/a	n/a	n/a	n/a	n/a
	PPE	●	○	●	○	○
Russian Federation	ECED	○	●	●	●	○
	PPE	○	●	●	●	○
United States	ECED	●	●	●	●	○
	PPE	●	●	●	●	○

Key:

- Yes, national guidance includes this approach.
- No, national guidance does not include this approach.
- n/a Not applicable, as no national guidance provided.

Country specific notes:

^a In Denmark, although there is national guidance on pedagogic approaches, centers are free to choose their preferred approach.

^b In Italy, a person-centered humanistic approach, inclusive and intercultural, was explicitly included in the initial part of the 2012 curriculum guidelines. This is based on the values included in the Italian Constitution and refers to the entire curricular 3–14 age range, from preschool to lower secondary. No specific approach is emphasized nor recommended, as schools are autonomous and teachers' autonomy is guaranteed by the Italian Constitution.

Four of the study countries have national or subnational guidance on pedagogic approaches for children under the age of three (Denmark, Estonia, the Russian Federation and the United States) and four do not (Chile, the Czech Republic, Italy currently, and Poland) (Table 25). The evidence indicates that, in the majority of countries, a broad range of pedagogic approaches are promoted. For example, in Estonia, the Russian Federation and the United States, four or more approaches are promoted, including a creative, progressive learning approach; an experiential learning approach; a play curriculum approach; a specific philosophy; and, in the United States, an academic, formal instruction approach. Six countries have national or subnational guidance on pedagogic approaches for children from age three to primary school age (Denmark, Estonia, Italy, Poland, the Russian Federation and the United States). Again, a similar range of pedagogies are promoted, but with two countries including an academic, formal instruction approach (Poland and the United States).

Note that no single pedagogic approach is more frequently reported over others for either younger or older children, but rather a range of pedagogies are encouraged, including more progressive, play-based, and child-centered approaches and more academic, formal, instructional approaches. This seems to suggest some choice and freedom for settings to develop their preferred approach. Denmark emphasized that centers are encouraged to choose their own pedagogic approach, and there seems to be some measure of flexibility in all the study countries.

Summary Finding 28

The study shows that national curriculum guidance, which usually includes guidance on learning content and learning standards, has been developed for early childhood services in the majority of the study countries; this is broad in scope and provides specific guidance on learning content, pedagogic approaches, learning goals, and assessment. The guidance promotes a broad and balanced range of learning areas to be covered throughout the age phases, with no narrowing of curriculum focus as the child heads towards entry to primary schooling. Countries report that both cognitive and non-cognitive areas are included in curriculum guidance at both age phases. All countries reported that a range of pedagogies is encouraged, including more play-based approaches and more academic, formal, instructional approaches. This suggests settings have some choice and freedom to develop their preferred approach.

Parental Participation In Learning

There is well-established evidence indicating that those early childhood programs that combine high-quality cognitively-oriented learning experiences for children with parenting support and strategies to encourage parental participation are more effective in enhancing long-term outcomes for children, particularly those from less advantaged home backgrounds (Corak et al., 2012; Sylva et al., 2008; Waldfogel, 2012; Waldfogel, & Washbrook, 2008).

The encouragement of parental participation in early childhood programs is a key area where further action is required. Most evidence reveals that early education programs that encourage high levels of parent engagement with their children's learning are more successful in closing the attainment gap for socially disadvantaged children. The most effective settings shared child-related information between children and staff, and more particularly, children did better where the center shared its educational aims with parents. This enabled parents to support children at home with activities or materials that complemented those experiences in the setting. The "winning formula" consists of combining education of the young child in a formal setting with support for parents (Corak et al., 2012; Pascal, & Bertram, 2012; Sylva et al., 2008).

The ECES investigated whether there was guidance in the study countries to support parental participation in early childhood settings and what level of participation they had achieved (Table 26). The level and nature of participation was assessed using a three-level assessment of participation. At the first level, participation is characterized as being about information transmission, mainly from setting to parent. This may be realized through leaflets, newsletters, parent meetings, parent visits to setting, and

reports. At the second level, there is a more reciprocal partnership, characterized by consultation and dialogue. This may be achieved through child assessment meetings, surveys, feedback activities, parent group meetings. At the third level, participation is characterized by much more parent involvement in the learning processes within the setting. This is realized through parent participation on advisory boards, parents helping out in the classroom, parent meetings to plan a child's learning program, and parent participation in evaluative processes.

Table 26: Existence of guidance on parental partnership and level of parent participation in settings for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Nature of guidance to support parental participation		
		Level 1: Information transmission	Level 2: Consultation and dialogue	Level 3: Active involvement and participation
Chile	ECED	●	●	○
	PPE	●	●	○
Czech Republic	ECED	n/a	n/a	n/a
	PPE	●	●	●
Denmark	ECED	●	●	●
	PPE	●	●	●
Estonia	ECED	●	●	●
	PPE	●	●	●
Italy	ECED	n/a	n/a	n/a
	PPE	○	●	●
Poland	ECED	n/a	n/a	n/a
	PPE	●	○	●
Russian Federation	ECED	●	●	●
	PPE	●	●	●
United States	ECED	●	●	●
	PPE	●	●	●

Key:

- Yes, national guidance includes this level.
- No, national guidance does not include this level.
- n/a Not applicable, as no national guidance exists.

All of the study countries have national guidance on parental participation at PPE level and the majority of countries also include ECED level settings in the guidance (Table 26). Three countries did not have this guidance for parents of under-threes (the Czech Republic, Italy and Poland). All countries, except Chile, encouraged parental participation at all three levels, suggesting that priority is given to supporting parental participation at policy level.

In Chile, it is reported that parents are seen as crucial in the educational process. It was reported that the Danish pedagogue has a long tradition of a close and respectful dialogue and involvement with parents, and that all settings have policies for parental participation through meetings, formal and informal gatherings, home visits, and using printed and electronic communication. Danish law also emphasizes that staff and

parents should work together in giving the children care, supporting their development, and developing their self-esteem. In the Russian Federation, **Federal State Law 273** "On Education" states that a parents' council must be created in all settings, parents must be aware of the license for educational activity, and parents must receive copies of the setting's certificates of accreditation and program details. A setting must also support parents in raising their children, child protection and promotion of child health, and directly involve parents in the educational activity.

Summary Finding 29

It is evident in all the study countries that engaging families and parents in partnership with ECE programs, and encouraging their active participation in the life of the setting and in the development and education of their child, is a central element in policy strategies.

Accreditation, Inspection, Reporting and Accountability

The development of enhanced statutory standards, a comprehensive regulatory framework, and more efficient systems to manage data, measure quality and evidence the impact of practice has been shown to be associated with better quality, more effective targeting, the efficient deployment of resources at all levels, and improved outcomes for the less advantaged (Corak et al., 2012; OECD, 2006; Pascal, & Bertram, 2012). The OECD (2012b) has described the existence of data and monitoring systems as essential in order for ECE settings to be accountable to parents and other stakeholders. They can contribute to helping parents make decisions about their choice of setting, can help inform planning and resource allocation, strengthen policy making, improve pedagogical practices, and potentially improve child outcomes if developed and aligned with quality goals. A variety of features can be monitored, including child development, staff performance, service quality, regulation compliance, and working conditions. Many countries ensure that early childhood settings adopt policies and procedures intended to assure quality and are subject to inspection by external assessors. These accountability measures are designed to ensure minimum standards are achieved and demonstrate the quality of the setting (Pascal, & Bertram, 2012). These reports on quality are often used to support service accountability and performance management, and to inform parental choice in ECE.

Quality assurance is the regular and continuous process by which those who work in, or administer, ECE ensure that children receive a quality experience. Two key mechanisms for quality assurance are accreditation and inspection, which may be undertaken internally or externally by independent assessors or inspectors.

Accreditation of settings is the process of gaining official approval from an independent external body, usually involving a site visit and inspection to assess whether the setting owners have met minimum requirements for operation. Accreditation can be given before a setting opens or shortly after opening, and sometimes has to be regularly renewed.

Inspection is the act of looking at something closely in order to learn more about it, to find problems, to scrutinize or assess it. Sometimes inspection processes are standardized nationally or subnationally to enable comparisons between one setting and another.

Most countries have an inspection service that includes an official visit to a setting. As assuring and monitoring the quality of ECE provision becomes more important, the evidence shows that countries are developing more robust and universally applied accreditation and inspection processes (EIU, 2012; OECD, 2006, 2012b).

The importance of this aspect of quality assurance is recognized in the ECES and evidence was gathered in the study countries on accreditation and inspection processes, and also on reporting and accountability procedures. The evidence collected from the study countries identifies where responsibility for accreditation and inspection lies and what aspects of ECE provision are covered by accreditation and inspection processes (Table 27). Finally, it sets out how accreditation and inspection evidence is reported to parents and others, and how such evidence is used. For Italy the situation in 2014 has been reported, but the July 2015 education system reform and announced regulations on the reunification of ISCED 0 system could lead to alterations.

Table 27: Existence of a responsible body at national or subnational level for the accreditation of settings for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Existence of a body (or bodies) responsible for accreditation	
		A national body	A typical subnational body
Chile	ECED	●	○
	PPE	●	○
Czech Republic	ECED	●	○
	PPE	●	○
Denmark ^a	ECED	○	○
	PPE	○	○
Estonia	ECED	●	○
	PPE	●	○
Italy	ECED	○	●
	PPE	●	●
Poland	ECED	○	●
	PPE	○	●
Russian Federation	ECED	○	○
	PPE	○	○
United States ^b	ECED	●	●
	PPE	●	●

Key:

- Yes, accreditation body exists
- No, accreditation body does not exist.

Country Specific Note:

^a In Denmark it is reported that there is no accreditation because the pedagogic standard is assumed to be high as the pedagogues are trained and all facilities are run and controlled by local authorities.

^b In the USA this applies only to federal programs.

All the study countries, except for Denmark and the Russian Federation, have bodies with responsibility for setting accreditation (Table 27). For three countries this is located at a national level (Chile, the Czech Republic and Estonia); for one country it is located at a subnational level (Poland); and for two countries responsibility is distributed across national and subnational levels (Italy PPE is controlled at the national level, and ECED only at subnational level, while the United States has responsible bodies at both levels).

In Chile, there are different bodies involved in the certification and inspection of ECED and PPE settings, and they may need authorization from a number of these. For example, a setting needs municipality authorization, official recognition from the Ministry of Education, and certification from the National Board of Kindergartens (JUNJI). For children from age four to six years, the Ministry of Education is the accrediting body. Denmark stated that there is no accreditation system, but that the local communities are responsible for ensuring all centers meet national requirements. In Italy, the Ministry of Education has responsibility for accrediting non-state schools. At the municipal level, a combination of municipal and state accreditation for private and for public non-state schools might be required. Accreditation is often linked to some kind of public subsidy. In the Russian Federation, there is only licensing for ECE settings, as accreditation was cancelled some years ago. Quality is controlled by the Federal Standard of Preschool Education, which guarantees the quality of the setting if it meets the standard; powers of regulating quality have been transferred to regional authorities. The United States reported that they have a voluntary system of accreditation, and accreditation guidelines often exceed those of licensing guidelines. Examples of the range of accrediting bodies include the National Association for the Education of Young Children, Head Start Renewal system, Montessori, Reggio Emilia Alliance, and the IB Primary Years Program.

The evidence suggests that although accreditation of settings is seen as important to sustaining the quality of ECE, countries approach it very differently, with some having no system in place, some having one clear body with responsibility, while others spread responsibility between different bodies at different levels in the system. For some countries the accreditation process is mandatory and for others it is voluntary.

All study countries have bodies with responsibility for setting inspection (Table 28). For children under the age of three, seven countries have bodies with responsibility for inspection, with only the Czech Republic not having a responsible body during this age phase. In Chile, the body is at national level, and, in Denmark, Italy, Poland and the Russian Federation, these bodies are at subnational level. In Estonia and the United States, there are bodies at both national and subnational level.

For children from age three to primary school age, all of the study countries have bodies with responsibility for setting inspection. For Chile and the Czech Republic this is at a national level; for Denmark, Poland and the Russian Federation this is located at a subnational level; and, in Estonia, Italy and the United States, this is distributed across national and subnational levels, with Italian ECED only at subnational level.

In Denmark, the local communities have responsibility for inspecting all centers on a regular basis. In the Czech Republic, the Czech School Inspectorate has responsibility for inspecting ECE settings. In Italy, inspection for ECED settings is seen as part of the accreditation and authorization process, and is carried out mainly at local municipal or district level. At PPE level, national inspectors and inspectors of the regional scholastic

Table 28: Existence of a responsible body at national or subnational level for the inspection of settings for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Existence of a body (or bodies) responsible for inspection	
		A national body	A typical subnational body
Chile	ECED	●	○
	PPE	●	○
Czech Republic	ECED	○	○
	PPE	●	○
Denmark	ECED	○	●
	PPE	○	●
Estonia	ECED	●	●
	PPE	●	●
Italy	ECED	○	●
	PPE	●	●
Poland	ECED	○	●
	PPE	○	●
Russian Federation	ECED	○	●
	PPE	○	●
United States	ECED	●	●
	PPE	●	●

Key:

- Yes, inspection body exists
- No, inspection body does not exist.

offices generally inspect state and non-state schools. It was reported that in 2014 this technical position was not well defined in Italy and was the subject of debate within the newly launched National System for the Evaluation of Education. In Poland, settings for under-threes are supervised by the commune mayors and for older children, facilities are supervised by the heads of the regional education authorities. In the Russian Federation, inspection is carried out by other bodies that operate at federal and regional level, including federal and regional services for supervision in education and the Russian Federal Service for Surveillance on Consumer Rights Protection and Human Well-being. In the United States, each state has its own licensing inspections; the federal government monitors and inspects Head Start programs.

The ECES also explored what aspects of provision were covered by accreditation and inspection procedures, which give an indication of what are seen as key elements of quality provision (Tables 29 and 30).

Table 29: Aspects of quality assurance processes covered by accreditation for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Aspects of quality assurance covered by accreditation								
		Regulation compliance	Staff performance	Leadership and management	Children's learning outcomes	Curriculum program	Children's well-being	Parental satisfaction	Financial sustainability	Value for money
Chile	ECED	●	○	●	○	●	○	○	●	○
	PPE	●	●	●	○	●	○	○	●	○
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	○	○	○	○	○	○	○	○	○
Denmark ^a	ECED	○	○	○	○	○	○	○	○	○
	PPE	○	○	○	○	○	○	○	○	○
Estonia	ECED	●	○	●	○	●	○	○	●	○
	PPE	●	○	●	○	●	○	○	●	○
Italy	ECED	●	○	○	○	○	○	○	○	○
	PPE	●	○	○	○	●	○	○	○	○
Poland	ECED	●	○	○	○	○	○	○	○	○
	PPE	●	○	○	○	●	○	○	○	○
Russian Federation	ECED	○	○	○	○	○	○	○	○	○
	PPE	○	○	○	○	○	○	○	○	○
United States	ECED	●	●	●	○	●	●	●	●	○
	PPE	●	●	●	○	●	●	●	●	○

Key:

- Yes, aspect covered.
- No, aspect not covered.
- n/a Not applicable, as no accreditation exists.

Country Specific Note:

^a In Denmark it is reported that there is no accreditation because the pedagogic standard is assumed to be high as the pedagogues are trained and all facilities are run and controlled by local authorities. There are no standards for accreditation, but the local communities have to meet the standards of the national laws.

The evidence shows that the most frequently reported aspect covered by the accreditation process is regulation compliance (Chile, Estonia, Italy, Poland and the United States), followed by the curriculum program (Chile, Estonia, Italy [PPE], Poland [PPE] and the United States), and financial sustainability (Chile, Estonia, the United States). Children's learning outcomes and value for money were the least covered aspects of quality in the study countries.

Table 30: Aspects of quality assurance processes covered by inspection for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Aspects of quality assurance covered by inspection								
		Regulation compliance	Staff performance	Leadership and management	Children's learning outcomes	Curriculum program	Children's well-being	Parental satisfaction	Financial sustainability	Value for money
Chile	ECED	●	○	●	○	○	○	○	●	○
	PPE	●	●	●	●	●	○	○	●	○
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●	○	●	●
Denmark	ECED	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●
Estonia	ECED	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●
Italy	ECED	●	○	○	○	○	○	○	○	○
	PPE	●	○	○	○	●	○	○	○	○
Poland	ECED	●	○	○	○	○	○	○	○	○
	PPE	●	●	●	●	●	●	●	●	○
Russian Federation	ECED	●	○	○	○	○	○	○	●	●
	PPE	●	○	○	○	○	○	○	●	●
United States	ECED	●	●	●	●	●	●	●	●	○
	PPE	●	●	●	●	●	●	●	●	○

Key:

- Yes, aspect covered.
- No, aspect not covered.
- n/a Not applicable, as no accreditation exists.

The evidence shows a wider spread of coverage for inspection than accreditation but again the most frequently reported aspect is regulation compliance (Chile, the Czech Republic, Denmark, Estonia, Italy, Poland, the Russian Federation and the United States), followed by financial sustainability (Chile, the Czech Republic, Estonia, the Russian Federation and the United States).

Summary Finding 30

The data suggest that, in the study countries, inspection is more frequently reported than accreditation as a means to assure quality services at both ECED and PPE levels, although in the majority of countries the two processes complement one another, with inspection more commonly used to monitor setting quality and provide accreditation for authorization of setting quality.

As governments and parents increase the amount of investment in ECE provision, there is a consequent demand that services be accountable and transparent about their performance. There is a shift towards more open, understandable and usable reporting, which has the capacity to support parental choice, commissioning of services and quality improvement processes. The ECES collected information on how the results of the accreditation and inspection processes are made available to parents and others, and what use is made of the results to inform the development of policy and practice in the study countries (Tables 31 and Table 32).

Table 31: Reporting of results of accreditation of settings for children aged 0 to 3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Reporting process of accreditation							
		Report to setting	Report to parents	Report to providers	Report to local body with responsibility for ECE	Report to regional body with responsibility for ECE	Report to national body with responsibility for ECE	Report published in local media	Report published on internet
Chile	ECED	●	○	●	○	●	●	○	●
	PPE	●	○	●	○	○	●	○	●
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	○	○	○	○	○	○	○	○
Denmark ^a	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Estonia	ECED	●	○	●	●	○	●	●	●
	PPE	●	○	●	●	○	●	●	●
Italy	ECED	●	○	●	●	○	○	○	○
	PPE	●	○	●	○	●	○	○	○
Poland	ECED	●	○	○	●	○	○	○	○
	PPE	●	○	○	○	○	○	○	●
Russian Federation	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
United States	ECED	●	●	●	●	●	●	○	●
	PPE	●	●	●	●	●	●	○	●

Key:

- Yes, reporting occurs.
- No, reporting does not occur.
- n/a Not applicable, as no accreditation exists.

Country Specific Note:

^a In Denmark any reports on a setting must be approved by the local community.

The most frequently reported recipient of accreditation results in the study countries are the settings themselves and those who run the settings, namely the providers (Table 31). Reporting to the local body with responsibility for ECE and reporting to parents are also frequently indicated. Four countries also publish the results more widely through the internet. This evidence suggests that accreditation is seen as an important marker of the quality of the setting and that interested stakeholders are able to access the accreditation reports.

Table 32: Reporting of results of inspection of settings for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Reporting process of inspection							
		Report to setting	Report to parents	Report to providers	Report to local body with responsibility for ECE	Report to regional body with responsibility for ECE	Report to national body with responsibility for ECE	Report published in local media	Report published on internet
Chile	ECED	●	○	●	○	●	●	○	●
	PPE	●	○	●	○	●	●	○	●
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●	○	●
Denmark	ECED	●	○	●	●	●	○	○	○
	PPE	●	○	●	●	●	○	○	○
Estonia	ECED	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●
Italy	ECED	●	○	●	●	○	○	○	○
	PPE	●	○	●	○	●	○	○	○
Poland	ECED	●	○	○	●	○	○	○	○
	PPE	●	○	●	●	●	○	○	●
Russian Federation	ECED	●	○	○	○	●	○	○	●
	PPE	●	○	○	○	●	○	○	●
United States	ECED	●	●	●	●	●	●	○	●
	PPE	●	●	●	●	●	●	○	●

Key:

- Yes, reporting does occur.
- No, reporting does not occur.
- n/a Not applicable, as no inspection exists.

The reporting of inspection results is similar to accreditation, but with a wider range of reporting recipients (Table 32). Again, the most frequently reported recipient of inspection results in the study countries are the settings themselves, but the regional bodies with responsibility for ECE may also receive reports, as do those who run the settings, i.e. the providers. Reporting to parents is reported less frequently, though four countries use the internet to disseminate inspection results. This evidence suggests that accreditation is seen as an important marker of the quality of the setting, and that interested stakeholders are able to access the accreditation reports. It seems that all

the study countries are attempting to be transparent about their quality assessment and assurance results, and are seeking to promote their quality to wider audiences through the internet. An alternative view is espoused in Poland, where it is noted that surveillance is generally conceived of as bureaucratic, and so results of inspections are not made public and given only to those directly concerned and to judiciary authorities where needed.

Accreditation and inspection reports usually include some indication of areas for further development, and are often viewed as part of a system of continuous review and improvement of policy and practice. The ECES explored how accreditation and inspection reports are used in the study countries to inform the development of policy and practice.

Table 33: Use of accreditation results of settings to inform the development of policy and practice in settings for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Use of accreditation reports								
		Reports used for accountability and performance management of ECE providers and settings	Reports used for commissioning providers	Reports used by central body to inform strategic planning of ECE	Reports used by regional body to inform strategic planning of ECE	Reports used by local body to inform strategic planning of ECE	Reports used by provider bodies to inform strategic planning of ECE	Reports used by settings to inform planning of ECE services	Reports used by ECE practitioner groups to inform planning of ECE services	Reports used by parent bodies to inform parental choice of ECE
Chile	ECED	○	●	○	○	○	○	○	○	○
	PPE	●	●	○	○	○	●	●	○	○
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	○	○	○	○	○	○	○	○	○
Denmark ^a	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Estonia	ECED	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●
Italy	ECED	●	○	○	○	○	○	●	○	○
	PPE	○	○	○	○	○	○	○	○	○
Poland	ECED	○	○	○	○	●	○	○	○	○
	PPE	○	○	●	●	○	○	○	○	○
Russian Federation	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
United States	ECED	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●

Key:

● Yes, results are used.

○ No, results are not used.

n/a Not applicable, as there is no accreditation to report.

Country Specific Note:

^a In Denmark, any reports on a setting must be approved by the local community.

All countries that received accreditation results used them in a variety of ways to inform policy and practice (Table 33). This was particularly evident in Estonia and the United States. The most frequently reported uses of the results were to inform accountability and performance management processes (Chile, Estonia, Italy and the United States); to use them in commissioning processes (Chile, Estonia and the United States); and to inform planning of services (Chile, Estonia, Italy [ECED] and the United States).

Table 34: Use of inspection results of settings to inform the development of policy and practice in settings for children aged 0–3 years (ECED) and children aged 3 to the start of primary school (PPE)

Country	Level	Use of inspection reports								
		Reports used for accountability and performance management of ECE providers and settings	Reports used for commissioning providers	Reports used by central body to inform strategic planning of ECE	Reports used by regional body to inform strategic planning of ECE	Reports used by local body to inform strategic planning of ECE	Reports used by provider bodies to inform strategic planning of ECE	Reports used by settings to inform planning of ECE services	Reports used by ECE practitioner groups to inform planning of ECE services	Reports used by parent bodies to inform parental choice of ECE
Chile	ECED	○	●	○	○	○	○	○	○	○
	PPE	●	●	○	○	○	●	●	○	○
Czech Republic	ECED	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	PPE	●	●	●	●	●	●	●	●	●
Denmark	ECED	●	○	○	○	○	○	○	●	○
	PPE	●	○	○	○	○	○	○	●	○
Estonia	ECED	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●
Italy	ECED	●	○	○	○	○	○	●	○	○
	PPE	●	○	○	○	○	○	●	○	○
Poland	ECED	○	○	○	○	○	○	○	○	○
	PPE	●	○	●	●	●	●	●	●	●
Russian Federation	ECED	●	○	○	●	●	○	●	○	●
	PPE	●	○	○	●	●	○	●	○	●
United States	ECED	●	●	●	●	●	●	●	●	●
	PPE	●	●	●	●	●	●	●	●	●

Key:

● Yes, results are used.

○ No, results are not used.

n/a Not applicable, as no inspection occurs.

All countries that have inspection results used them in a variety of ways to inform policy and practice (Table 34). This was particularly evident in Estonia and the United States. The most frequently reported uses of the results were to inform accountability and performance management processes (Chile, the Czech Republic, Estonia, Italy, Poland, the Russian Federation and the United States), planning of services (Chile, the Czech Republic, Estonia, Italy, Poland and the United States), and parental choices (the Czech Republic, Estonia, Poland, the Russian Federation and the United States).

Summary Finding 31

All the countries that have accreditation and inspection processes promote the results to inform the further development of quality in settings and to establish quality credentials with key bodies, as reflected in the reports. Among the study countries, there is clear evidence of genuine effort to be transparent and accountable to interested bodies and individuals, through by reporting development planning, quality improvement, performance management, knowledge creation and transfer, and also documented achievements.

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