



# Starting Strong IV

## Monitoring Quality in Early Childhood Education and Care Country Note

### LUXEMBOURG

#### Summary

Luxembourg has an integrated Early Childhood Education and Care (ECEC) system with the Ministry of National Education, Children and Youth (*Ministère de l'Éducation nationale, de l'Enfance et de la Jeunesse*) in charge of ECEC. The education framework for non-formal education in childhood and adolescence (*Bildungsrahmenplan für non-formale Bildung im Kindes und Jugendalter* ()) covers children in non-formal childcare and education up to the age of 12 years and includes family day care and day care centres. The Curriculum of fundamental school (*Plan d'études de l'école fondamentale*) is the framework for children between 3 and 12 years in formal education, including early childhood education (ECE) programmes and compulsory preschool education. The national government is responsible for the registration and licensing of ECEC and education settings.

Regional officers monitor ECEC and early education settings for family day care and day care centres, while national inspectors, under the responsibility of the Ministry, monitor early education programmes and preschool education. Inspections and self-assessments are used in Luxembourg to monitor service and staff quality. Inspections of service quality focus on a broad range of areas, including: structural aspects; health, hygiene and safety standards; materials in use; planning and time management; and curriculum implementation. In formal ECEC settings<sup>1</sup> (early childhood education programmes and preschool for 3-6 year-olds as part of the public system), commonly used tools during inspections include observations, interviews, and analysis of internal documentation. Some settings also use the results of self-evaluations. Since the passing of a new law (2016) on the monitoring of non-formal ECEC provisions, these tools are also used during inspections by regional officers in non-formal settings (ECEC for children birth to start of compulsory school).

Luxembourg monitors children's development most commonly on the following development areas: language and literacy, socio-emotional skills and motor skills, as well as numeracy and creative skills and autonomy.

Although Luxembourg implements a range of monitoring practices in ECEC, several challenges remain. Firstly, children's views are not widely monitored in Luxembourg while this can provide some useful information on how children experience ECEC. And secondly, it can be challenging to ensure monitoring informs policies and practices. Increasing the country's efforts in data and information collection on ECEC can support evidence-based policy-making.

The monitoring quality in Early Childhood Education and Care (ECEC) country note for Luxembourg is based on findings presented in the report of OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care* that covers 24 OECD member and non-member economies. A separate OECD (2016) [Starting Strong IV Early Childhood Education and Care Data Country Note: Luxembourg](#) provides an overview of ECEC policy inputs, outputs and outcomes in Luxembourg.

---

1. An explanation of Luxembourg's formal and informal ECEC system can be found in Box 1.

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

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

© OECD 2017

You can copy, download or print OECD content for your own use, and you can include excerpts from OECD publications, databases and multimedia products in your own documents, presentations, blogs, websites and teaching materials, provided that suitable acknowledgment of OECD as source and copyright owner is given. All requests for commercial use and translation rights should be submitted to [rights@oecd.org](mailto:rights@oecd.org).

For more information on Early Childhood Education and Care, visit [www.oecd.org/edu/earlychildhood](http://www.oecd.org/edu/earlychildhood).

<p><b>Questions can be directed to:</b></p> <p>Miho Taguma, Directorate for Education and Skills <b>Email:</b> <a href="mailto:Miho.Taguma@oecd.org">Miho.Taguma@oecd.org</a></p>	<p><b>Country note authors:</b> Elizabeth Adamson, University of New South Wales and Ineke Litjens, OECD</p> <p><b>Country note collaborators OECD:</b> Miho Taguma, Arno Engel, Mernie Graziotin, Éric Charbonnier, Elizabeth Zachary, Sophie Limoges, Rachel Linden and Camilla Lorentzen</p> <p><b>Country note collaborators Luxembourg:</b> Claude Sevenig and Anne Reinstadler</p>
---	--

## Key messages

- **Service and staff quality in non-formal ECEC settings are monitored for a variety of reasons.** These include: for accountability purposes (without sanctions or rewards), to inform policy making and the general public, to improve the level of service quality, to identify development needs of staff and possible learning needs of children to further stimulate their development. The purposes for monitoring staff quality are similar, except that staff quality is not monitored to identify the learning needs of children or to inform the public. Service and staff quality are monitored at least once per year.
- **Monitoring of ECEC service quality in Luxembourg focuses on several aspects.** These include: compliance with regulations regarding space, health, hygiene and safety, staff-child ratios and staff qualifications. A newly established quality system for the non-formal ECEC sector focuses on the implementation of the curriculum, the materials in use, planning of work, and human resource management in all ECEC settings.
- **A range of tools can be used during visits by regional agents,** including observations, interviews, and the analysis of a setting's documentation.
- **In formal ECEC settings, the focus of monitoring is on the overall quality of the school in which the setting is integrated.** Staff use self-evaluation tools on a regular basis to monitor the progress towards their objectives in view of the school development plan.
- **Inspections in formal ECEC settings (public preschool) focus more on process than on structural aspects,** including curriculum implementation, planning of activities, and use of materials. Inspections also address process quality and the overall quality of teaching and caring, as well as communication between staff and parents and child development and outcomes.
- **In non-formal ECEC settings for children under the age of four, self-assessments of service quality have a broader scope than staff self-evaluations.** They focus on the overall quality of a setting, quality of the rooms, quality of staff in childcare centres, compliance with regulations in childcare centres, collaborations between staff, collaboration between staff and management (in childcare centres only) and with parents, availability and use of materials, curriculum implementation, and working conditions and management and leadership in childcare centres.
- **Children's development and outcomes are monitored for various reasons at ages 3 to 6.** These include: to document children's progress and development, to identify their learning needs and stimulate their development, for accountability purposes without sanctions or rewards, to inform policy makers, to improve the quality of the setting, and to enhance staff performance.
- **Luxembourg primarily uses narrative assessments and observational tools to monitor children's development,** including language and literacy skills, numeracy, creativity, socio-emotional and motor skills, and autonomy. A first national testing of children in pre-primary education was carried out in November 2014 to collect information for policy makers at the system level.

- **Inspectors (external assessors) have initial training on conducting inspections and on the subject of monitoring and evaluation.** Internal assessors (ECEC staff and managers conducting self-assessments) receive on-the-job or in-service training on the subject of monitoring and evaluation.
- **There are several monitoring challenges in Luxembourg.** These include ensuring that monitoring actually informs policies and strategies and is translated into policy reforms or changes to improve the ECEC system. Information collection from different sources can contribute to ensuring monitoring results support policy development. Besides, children's views are not yet widely monitored. Children can be involved in monitoring practices and evaluations to understand how they experience ECEC, which can provide valuable inputs for improving quality.

## Introduction

The data and information in this country note for Luxembourg are based on findings from the OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care* report that covers 24 OECD member and non-member economies, the OECD Network on ECEC's Online Survey on Monitoring Quality in Early Learning and Development that was conducted in 2013 and validated in 2014/15.<sup>2</sup> A separate OECD (2016) [Starting Strong IV Early Childhood Education and Care Data Country Note: Luxembourg](#) provides an overview of ECEC policy inputs, outputs and outcomes in Luxembourg.

This country note primarily aims to provide opportunities for peer-learning by highlighting Luxembourg's policies and practices for monitoring quality in ECEC settings and describing what other countries are doing in this area. It informs policy makers and the general public of the current international standing of Luxembourg regarding key areas of monitoring quality in ECEC, of the types of challenges for Luxembourg in monitoring quality, which have been identified by the OECD ECEC team in close consultation with the Luxembourgish colleagues. It also provides insights from other countries to understand various approaches and practices used for monitoring quality.

This note distinguishes between the monitoring practices of three key aspects of quality: 1) service quality; 2) staff quality and performance; and 3) child development and outcomes. Some jurisdictions monitor all three aspects and some monitor only one. Sometimes aspects are integrated into the monitoring tool of another aspect, for example, curriculum implementation can be monitored when evaluating quality at a more general service level, or when assessing staff performance; and monitoring general staff performance can be part of the service quality evaluation procedure. Therefore, aspects of ECEC quality that are monitored are not mutually exclusive (see also Litjens, 2013).

In line with previous reports from the Starting Strong series, the term Early Childhood Education and Care (ECEC) "includes all arrangements providing care and education for children under compulsory school age, regardless of setting, funding, opening hours, or programme content" (OECD, 2015: 19). For Luxembourg, the information on ECEC refers to home-based family day care and day care centres for children under the age of 6, early childhood education programmes for 3-year-olds, and compulsory preschool education for 4 and 5-year-olds.

In this country note, Luxembourg is compared with Finland, Germany and Norway. These three countries were selected by Luxembourg for specific country comparison. In Finland, there are five types of ECEC setting. One is home-based family day care for all children below the age of 6; and there are four types of centre-based ECEC provision, including: group family day care for all 0-6 year-olds, day care centres for 0-6 year-olds, open ECEC settings for 0-6 year-olds, and pre-primary education for 6-year-olds. In Germany, the information and data in this note refer to child day care centres for all children under the age of 6. For Norway, all information regards kindergartens for children from birth until 6 years. All data and information for countries refer to their most commonly or generally used practices and tools, unless indicated otherwise, as monitoring practices are usually not implemented nationally.

This country note first provides a review of key findings from the research literature, focusing on studies that examine how monitoring practices contribute to quality improvement, specifically in the

---

2. For the purpose of comparability across all participating countries the information collection underlying this report focused on the mainstream provision and therefore – in line with the work on ECEC by the European Commission (Eurydice) – excludes the information on settings providing services to children with special needs only, settings integrated into hospitals (and all other ECEC services targeting children with disabilities attributable to organic pathologies), orphanages or similar institutions. Responding countries and jurisdictions were asked to use, where possible, the school year starting in 2012 as a reference year for reporting statistics and data. Further information about the questionnaire and compiling procedures can be found in the full report (see OECD, 2015).

areas of service quality, staff quality, curriculum implementation and child development and outcomes. The remaining sections focus on Luxembourg's monitoring policies and practices, in comparison with Finland, Germany and Norway. The sections address how quality is defined, the purposes of monitoring quality, areas and scope of monitoring, responsibility for monitoring, and approaches and procedures. The final part of the country note looks at the challenges for Luxembourg and policy approaches that other countries have taken when tackling these issues.

### Monitoring matters: Overview of research findings

- There is a significant body of research that shows the benefits of quality ECEC for child development (OECD, 2006). This body of research emphasises that the benefits of high quality ECEC are important for all children's outcomes, with evidence especially strong for disadvantaged children.
- Definitions of "quality" may differ between countries as it is a value- and cultural-based concept, and any definition of quality is subject to change over time (Kamerman, 2001). Service quality is usually defined by a set of structural (e.g. staff-child ratios) and process indicators (e.g. the quality of staff-child interactions) that contribute to practices that are markers of settings and staff performance.
- Staff quality is often linked to pre-defined criteria or professional standards (Rosenkvist, 2010). Child development encompasses various domains such as socio-emotional skills, health, motor skills, early numeracy, literacy and language skills. Quality indicators for children's development may be linked to pre-defined outcomes for different ages, learning standards, developmental goals or curriculum objectives. These outcomes can also be used over time to define the effectiveness of a setting and its staff (Rosenkvist, 2010).
- Service quality (including curriculum implementation), staff quality and child outcomes can be monitored using various practices and tools. It is often difficult to elicit the causality between monitoring and actual quality improvements; for instance, improvements in service quality are more likely to be the result of numerous policy developments.

### *Effects of monitoring service quality*

Overall, research supports the idea that monitoring and evaluation contributes to improvements in the quality of ECEC services (Litjens, 2013). Without monitoring, it is difficult to ensure that services are meeting their goals and aims (Cubey and Dalli, 1996). Studies show that monitoring quality can be associated with increased programme quality, for example, adopting higher standards can lead to improved ratings for settings (Office of Child Development and Early Learning, 2010; RAND, 2008).

There are a number of tools that can be used to monitor service quality, such as checklists, parental surveys, and rating scales. In the United States, ratings scales are frequently used to monitor quality. Some research has been conducted to assess the effectiveness of rating scales, for example, the validity of the Quality Rating and Improvement System (QRIS) (a rating scale) has been studied for its role as a tool to improve childcare quality. The study found that among providers using QRIS, service quality improved over time (Zellman et al., 2008). However, others studies have suggested that extensive co-ordination across services, agencies and data systems is required to attain this goal (Tout et al., 2009).

The effects of monitoring curriculum implementation are complex and although some studies indicate that such practices can lead to better staff quality and staff-child interactions (Danmarks Evalueringsinstitut, 2012), there is a clear gap in research about how the monitoring of curriculum implementation interacts with other monitoring practices of service and staff quality (OECD, 2012, Østrem et al., 2009).

### ***Effects of monitoring staff quality***

The literature indicates that the quality of staff and their pedagogical activities have a large impact on children's well-being and development. It also suggests that the effective monitoring of staff quality is central to their professional development and improvement of ECEC services (Fukkink, 2011; OECD, 2012). From this research, however, it is difficult to draw wider conclusions about the impacts of monitoring staff quality (Litjens, 2013).

Monitoring staff quality usually involves observations or self-evaluations in combination with the use of rating scales, checklists or portfolios, and can be part of monitoring service quality (Isoré, 2009). The Classroom Assessment Scoring System™ (CLASS) is an observation instrument that assesses the quality of teacher-child interactions in centre-based preschool classrooms. It was found that the CLASS observation tool can help teachers and schools improve the quality of their interactions with students as it identifies what interactions are rated higher and provides an opportunity to identify what practices they can improve (CASTL, 2011).

Studies show that self-evaluation can be an effective tool to support professional development and increase the quality of the service (Picchio et al., 2012). Self-reflection processes enable staff to be aware of their own strengths and weaknesses (Isoré, 2009; Cubey and Dalli, 1996), and lead to a greater awareness of ongoing activities and pedagogical processes (Sheridan, 2001).

In Belgium, a process-orientated self-evaluation instrument for staff in care settings contributed to staff professional development and teamwork. However, findings from research in the United Kingdom were more ambiguous, concluding that there needed to be more emphasis on how providers implement self-assessment procedures and initiate changes in their practice (Munton, Mooney and Rowland, 1997).

### ***Effects of monitoring child development outcomes***

Research indicates that monitoring child development and outcomes can play an important role in improving teacher practices and service provision. Researchers emphasise the need for age-appropriate monitoring tools and for the assessment of development to be ongoing rather than at a particular point in time. This is because the development of young children evolves at a rapid pace and ongoing monitoring can more accurately capture how a child is developing (Meisels and Atkins-Burnett, 2000; NICHD, 2002).

The results from monitoring child development can foster staff interactions with children and facilitate the adaptation of curricula and standards to meet children's needs (Litjens, 2013). There is some evidence of positive relationships between the use of non-formal monitoring practices such as observation, documentation through portfolios or narrative assessments, and improved child outcomes (Bagnato, 2005; Grisham-Brown, 2008; Meisels et al., 2003; Neisworth and Bagnato, 2004).

Capturing children's skills and abilities at a single moment in time is a challenging proposition (Zaslow, Calkins and Halle, 2000). Brain sensitivity is higher and development more rapid in the period from birth to age eight than at later periods. To assess individual children's abilities in different domains, it is recommended that child outcomes are based on multiple sources of information, rather than single tests or monitoring practices, especially if assessment results are used for high-stakes decisions and tracking at an early age (NAEYC, 2010; Waterman et al., 2012).

### ***Representing children's views in monitoring***

The importance of considering the view of the child in monitoring the quality of ECEC provision has been established, but more research and reflection on the validity of instruments and results and their effective implementation is needed (Meisels, 2007; NAEYC, 2010; Neisworth and Bagnato, 2004). Research on children's self-perception suggests that their perceptions can provide information on their

development in areas such as academic competence, achievement motivation; social competence; peer acceptance; and depression and aggression; which are also important areas for staff evaluations and monitoring of their performance (Measelle et al., 1998).

### *Summary*

The literature indicates that it is critical to monitor quality at both system and service level. Recent research studies provide some indication that monitoring the quality of settings, staff and children's outcomes can lead to higher quality service provision. However, the literature also reveals some gaps and complexities in making causal links between monitoring practices and quality improvements. Further research into the effectiveness of monitoring tools across the four monitoring areas will provide a greater evidence base to help countries enhance quality in these areas.

### **Monitoring quality: Where Luxembourg stands in international comparison**

#### *How quality is defined in Luxembourg*

Quality encompasses all the features of children's environments and experiences that are assumed to benefit their well-being and development (Litjens, 2013). These features include the use of a curriculum: staff characteristics; teacher or care giver behaviours and practices; and staff-child interactions, often referred to as process quality. Quality also includes structural features of ECEC settings, such as space, group size and safety standards (OECD, 2006; 2012). The literature points out that the definitions of quality differ between countries as it is a value- and cultural-based concept, meaning that definitions of quality tend to change over time (Kamerman, 2001). Most jurisdictions that participated in the Starting Strong IV study set out their definition of ECEC quality in their curricula or legislation. Alternatively they may set out quality expectations through minimum requirements or educational or developmental objectives for staff to achieve.

In Luxembourg, quality is mainly defined through regulations and the curriculum for pre-primary education settings. A quality framework for children under the age of 4 and for out-of-school settings has been introduced by a law that passed through parliament on 23 February 2016 and that sets out quality expectations for these settings. In addition, the law of February 2009 covering the organisation of fundamental education (which covers ages 3 or 4 to 12 years) states the right to formal education for all children and clarifies the goals of (early) education. It states that all children should be enabled to achieve their full potential, to foster creativity, and to create confidence in his/her capacities. It also states that education should enable children to acquire a large general knowledge and to display initiative and creativity so that they can become responsible citizens in a democratic society. This is further developed in the curriculum for fundamental education, which describes the minimum levels of competencies to be reached at the end of the four cycles of fundamental education. Cycle 1 is the educational cycle commonly referred to as preschool.

In Finland, quality is implicitly defined through the minimum regulatory standards in place that set out what aspects Finland regards as important for quality. Finland sets high expectations for the level of quality in ECEC. There are high minimum staff qualifications, one of the most favourable staff-child ratios in OECD countries (OECD, 2012), and high requirements for safety, health and hygiene. Finland sets out its objectives for ECEC through curriculum frameworks: the national curriculum guidelines for early childhood education and care (for 0-6 year-olds) and the core curriculum for preschool education for 6-year-olds. These frameworks aim to provide standard principles for high-quality activities and have a strong focus on staff and what is expected of them. The guidelines also aim to enhance parental engagement in ECEC and stimulate co-operation with other early childhood services. Based on the frameworks, each municipality develops its own specific guidelines and local curriculum to meet the

needs of their municipality and population<sup>3</sup> (STAKES, 2005). These frameworks complement the regulatory standards in setting out what constitutes ECEC quality in Finland.

In Germany, a definition of quality ECEC has been developed through law, a curriculum framework and state-level curricula, and through a quality initiative that sets out quality criteria. Expectations of ECEC (as part of the general child and youth welfare system) is provided in Social Code Book VIII (*Sozialgesetzbuch*), where the federal law stipulates that all young people have the legal right to be supported in their development and encouraged to become independent and socially competent personalities. It also states that ECEC providers are obliged to equally support the education, care and upbringing of children, and take into account children's social, emotional, physical and cognitive development. Children's individual interests and needs, and their ethnic background, also have to be considered. In addition to the Social Code Book, all 16 *Länder* (regions) have developed their own ECEC curriculum. The overarching document for these curricula is the Common Framework of the Federal States for Early Education in ECEC Centres (*Gemeinsamer Rahmen der Länder für die frühe Bildung in Kindertageseinrichtungen*), which is an agreement on the most important basic principles that guide curriculum development. This framework emphasises the importance of a holistic approach whereby education, care and upbringing are considered inseparable elements of pedagogical practice. The framework indicates that a curriculum has to take into account the interests of children and should be relevant to their lives. The Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (*Bundesministerium für Familie, Senioren, Frauen und Jugend*), together with 10 *Länder*, launched the National Quality Initiative in ECEC (*Nationale Qualitätsinitiative im System der Tageseinrichtungen für Kinder*) in 1999. Its aim was to define quality using a set of quality criteria (21 quality areas) and to develop instruments for internal and external evaluation within five sub-programmes.

In Norway quality is defined through legislation (the Kindergarten Act, *Barnehageloven*) and the country's Framework Plan (*Rammeplan for barnehagens innhold o oppgaver*), which provides guidance on the content and pedagogical practices of kindergartens (OECD, 2015).

Some countries or municipalities define quality at the local rather than at the national level through national legislation or a national curriculum.

### ***Why countries monitor the quality of services, staff and child development***

Countries reported various reasons for monitoring ECEC service and staff quality. Common reasons included: accountability with and without sanction or reward; informing policy making; informing the general public; improving the level of service quality; improving staff performance; identifying learning needs for staff; and enhancing child development and identifying children's learning needs. In all countries, improving service quality is the main purpose for monitoring both service and staff quality, followed by informing policy making. Monitoring service and staff quality is not usually conducted in order to identify learning needs for children or for accountability purposes without any sanctions or rewards. It is common to monitor service quality to inform the general public, including the users of ECEC settings, while this is fairly uncommon in monitoring staff performance (see Figure 1 and 2).

3. Since August 2015, the National Board of Education is in charge of curriculum development in Finland.

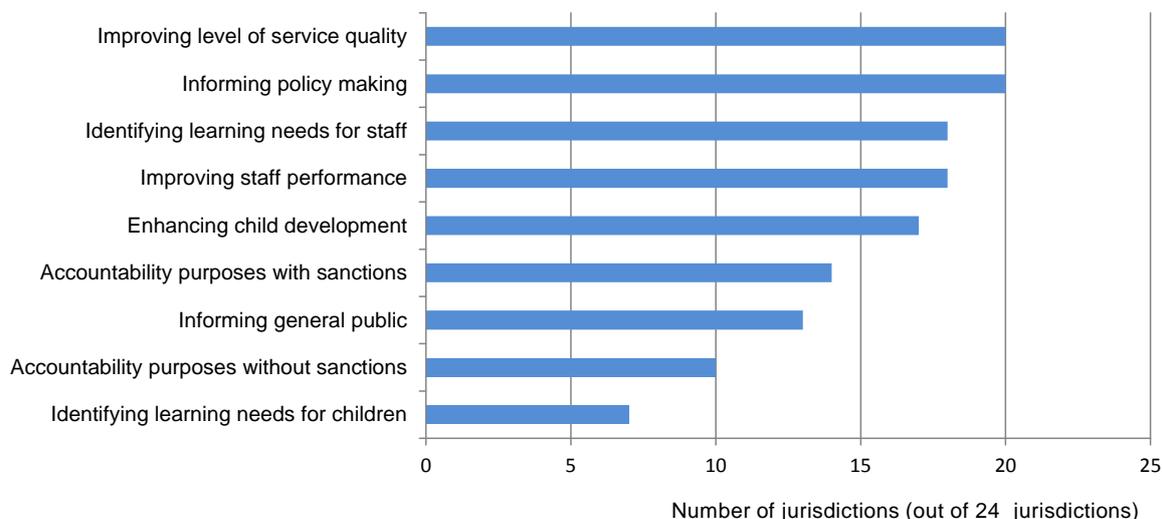
Figure 1. Purposes of monitoring service quality



Note: Purposes of monitoring service quality are ranked in descending order of the number of times they are cited by jurisdictions.

Source: OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Table 3.1, OECD Publishing, <http://dx.doi.org/10.1787/888933243059>.

Luxembourg monitors service quality for almost all of the purposes listed in Figure 1, with the exception of accountability purposes where a sanction or reward is attached to the monitoring results. It monitors staff performance for similar reasons as service quality; however it does not monitor staff quality to inform the general public or to identify the learning needs of children. Finland and Norway monitor service and staff quality for accountability purposes, although sanctions or rewards are not used in Finland. Luxembourg, Finland and Norway monitor service and staff quality to inform policy making, to improve the level of service quality, and to enhance child development. They also monitor service quality to identify learning needs of children. In addition, Finland monitors service quality to enhance staff performance (as do Luxembourg and Norway), to identify the learning needs of staff, and to identify the learning needs of children (as does Norway). Norway also monitors staff quality to analyse what training needs staff may have. Germany monitors service and staff quality to improve the level of quality and staff performance, and, for service quality, to inform the general public (OECD, 2015).

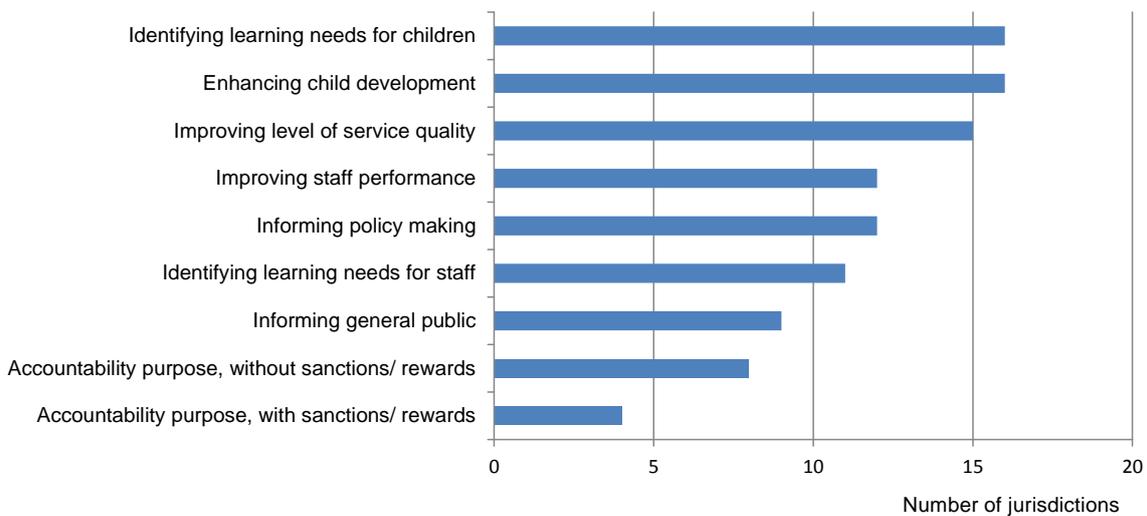
**Figure 2. Purposes of monitoring staff quality**

Note: Purposes of monitoring staff quality are ranked in descending order of the number of jurisdictions that cited these purposes.

Source: OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Table 4.1, OECD Publishing, <http://dx.doi.org/10.1787/888933243203>.

While the research literature suggests that child development outcomes are not usually used as a way of monitoring quality, many countries do monitor child development for various purposes. In line with the potential benefits suggested by research, the most commonly named reason for monitoring child development and outcomes is to enhance child development (16 jurisdictions out of 24), to identify the learning needs for children (16) and to improve the level of service quality (15).

Luxembourg monitors children's development to inform parents of their children's development, to inform staff so that they can adapt pedagogical tools to children's needs, and for accountability purposes (without sanctions or rewards). In addition, Luxembourg monitors children's development to inform policy making, to improve service quality (as do Finland and Norway), to identify staff learning needs (as do Finland and Germany), and to enhance staff performance (as do Finland, Germany and Norway). All four countries monitor children's development so that it can be enhanced. Luxembourg, Finland and Norway also monitor children's development to identify the learning needs of children (see Figure 3 for an overview across OECD countries).

**Figure 3. Purposes of monitoring children’s development**

*Note:* Purposes of monitoring child development are ranked in descending order of the number of jurisdictions that cited these purposes.

*Source:* OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Table 5.1, OECD Publishing, <http://dx.doi.org/10.1787/888933243334>.

### ***Monitoring practices***

Countries use various approaches and practices for monitoring service quality, staff quality and child development (see Table 1). The practices used for monitoring service and staff quality can be either external or internal. The external monitoring of quality is done by an external agency, evaluator or office that is not part of the ECEC setting being monitored.

In Luxembourg, the monitoring of family day care services and centre-based day care is decentralised to regional authorities, and regional agents are responsible for monitoring these settings. The early childhood education programme (*éducation précoce*, part of public school) and compulsory preschool are monitored by national-level inspectors, who fall under the responsibility of the Ministry of National Education, Children and Youth. In Finland, due to the decentralised system where the responsibility for monitoring is at regional and municipal level, regional state administrative agencies are responsible for conducting inspections, together with the municipalities and settings. In Norway, municipalities are responsible for carrying out inspections, which is similar to Germany’s monitoring system.

External inspections and internal self-evaluation are the most common methods used to monitor service and staff quality. All four countries make use of both practices, although internal self-evaluations are only used in family day care in Luxembourg to monitor service quality (see Table 1). In German family day care settings, inspections are used to monitor service quality but not staff quality. In Luxembourg, inspections can be carried out in family day care centres and ECEC settings when issues have been reported. Parental surveys may be used to monitor service quality in Finland, in Norwegian kindergartens and in German child day care services.

Table 1. Monitoring practices for service and staff quality

	Type of setting	External			Internal		
		Inspections	Surveys	Peer reviews	Peer reviews	Tests for staff	Self-assessment/evaluation
Luxembourg	Family day care	X					X (Service)
	ECEC non-formal sector; early childhood education programme (public schools); compulsory preschool education (public school)	X (in the formal sector)					X
Finland	All ECEC settings	X	X (Service)				X (Staff)
Germany	Family day care	X (Service)					
	Child day care centres	X	X (Service)				X
Norway	Kindergartens	X	X (Service)				X

Sources: OECD (2013), Online Survey on Monitoring Quality in Early Learning and Development, Network on ECEC, OECD, Paris; OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, OECD Publishing, Paris, Table 3.2 <http://dx.doi.org/10.1787/888933243065> and Table 4.2 <http://dx.doi.org/10.1787/888933243213>.

Direct assessments, observational tools and narrative assessments are commonly used to monitor child development. Direct assessments test children at a certain point in time, while narrative assessments, and usually observational tools, monitor children's development on an ongoing basis. Luxembourg and Finland commonly use narrative assessments in combination with observational tools to monitor children's development, while, in Germany, direct assessments, observations and narrative assessments may be used. In Norway, the practices used are decided at the setting level and therefore differ between regions and settings (OECD, 2015).

### *Areas and scope of monitoring*

There are a number of different aspects or areas that can be monitored in relation to service<sup>4</sup> and staff quality.<sup>5</sup> When monitoring child development, other aspects more directly related to outcomes, skills, and aptitudes a child can develop are monitored. These include language and literacy skills, numeracy skills, socio-emotional skills, motor skills, autonomy, creative skills, practical skills, health development, well-being, science skills, and information and communications technology (ICT) skills.

4. For service quality, these aspects are: staff-child ratios, indoor/outdoor space, health and/or hygiene and safety regulations, learning and play materials, minimum staff qualifications, planning of work and staff, the working conditions for staff, implementation of the curriculum, human resource management and financial resource management.

5. For staff quality, these aspects are: staff qualifications, process quality, use of materials, time management, knowledge of subjects, overall quality of teaching/caring, teamwork and communication skills, communication between staff and parents, management and leadership, working conditions, professional development opportunities and child outcomes.

## Service quality

All jurisdictions indicated that regulatory aspects of service quality are monitored during inspections. Safety regulations are most frequently monitored (in 23 out of 24 jurisdictions), followed by health and hygiene regulations (22) and staff qualifications (22). Staff-child ratios (21) and space requirements (19) are also commonly monitored. Working conditions are not frequently monitored as part of service quality.

Table 2. Aspects of service quality monitored through inspections

Jurisdiction	Type of setting	Staff-child ratios	Indoor/outdoor space	Health and/or hygiene regulations	Safety regulations	Learning and play material in use	Minimum staff qualifications	Planning of work/staff	Working conditions	Curriculum implementation	Human resource management	Financial resource management
Luxembourg	Family day care	X	X	X	X	X	X	X		X		
	Day care centres	X	X	X	X	X	X	X		X	X	X
	Early childhood education programmes; compulsory preschool education	X	X	X	X	X	X	X		X	X	
Finland	All ECEC settings	X		X	X		X					
Germany	Family day care and child day care centres	X	X	X	X	X	X	X	X	X	X	
Norway	Kindergartens	X	X	X	X		X	X		X		X

Notes: For Germany, the data in this table refer to recurrent quality aspects, for example, the quality aspects commonly monitored through KES-R, a rating scale tool, (although tools can differ between settings). The KES-R consists of 7 subscales (43 items) which refer to process and structural aspects of quality: space and material resources; personal care routines; cognitive and language stimulation; activities; staff-child and child-child interaction; planning and structuring of pedagogical practice; situation of staff and co-operation with parents. Data in this table do not reflect the situation for every inspection in every setting.

Source: OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Table 3.3, OECD Publishing, <http://dx.doi.org/10.1787/888933243071>.

All four countries monitor staff-child ratios, health and hygiene regulations, safety requirements and minimum staff qualifications. Inspections in Luxembourg, Germany and Norway monitor a broader scope of aspects, while Finland's inspections focus on regulatory aspects. Luxembourg, Germany and Norway monitor space, planning of work, and curriculum implementation, and Luxembourg and Germany also monitor the materials in use. Human resource management is only monitored in German settings and Luxembourgish childcare centres, ECE programmes and preschools. Financial resource management is not commonly inspected, although it is in day care centres in Luxembourg and in Norwegian kindergartens. Germany is the only jurisdiction where working conditions are monitored. Self-assessments of quality usually monitor different aspects than external inspections, with, for instance, stronger attention being paid to communication among staff members and with parents, and collaborations (OECD, 2015).

### *Staff quality*

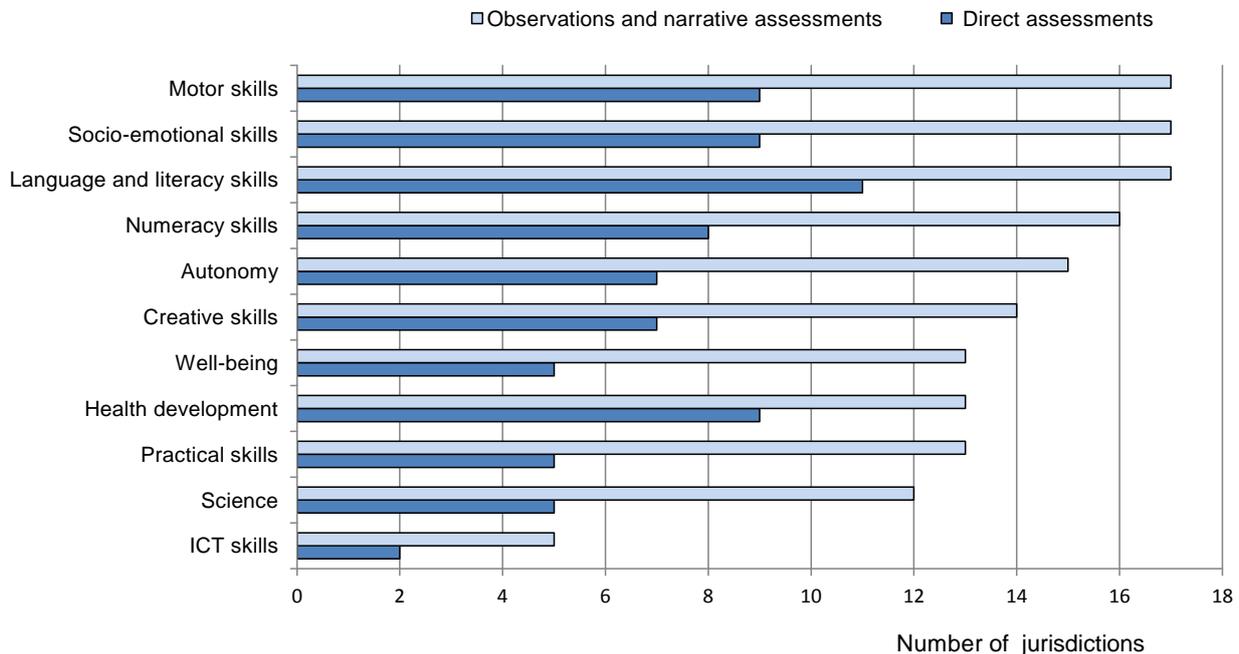
Inspections of staff quality commonly focus on staff qualifications in Luxembourg, Germany, Norway and Finland. However, these are not monitored in all settings across these jurisdictions. In Luxembourg, staff qualifications are monitored in day care centres and family day care, but not in ECE programmes and preschool education. Luxembourg, Germany and Finland also focus on process quality, the materials in use and the planning of work and time management. All four countries address curriculum implementation and monitor the overall quality of teaching and caring. Knowledge of subjects is monitored in Finnish ECEC settings. Teamwork and communication between staff is important in Germany and Finland, as are management and leadership in Germany and Norway. Finland is the only country out of four to focus on working conditions and professional development opportunities (OECD, 2015).

Self-evaluations of staff in preschools and ECE programmes in Luxembourg (within the context of the school development plan) focus on communication between staff and parents, curriculum implementation, teamwork, and the use of materials. In childcare centres, the focus is on teamwork and communication with parents, the overall quality of teaching and caring, management and leadership skills, and working conditions. Self-evaluations in Norway focus on similar aspects as Luxembourgish day care centres and preschools. Germany's self-evaluation procedures also emphasise related aspects as inspections, with the exception of staff qualifications and overall quality provided (OECD, 2015).

### *Child development and outcomes*

Among the participating countries, the most common aspects of child development monitored are language and literacy, socio-emotional skills and motor skills. Language and literacy skills are more commonly monitored through direct assessments than socio-emotional and motor skills. Observations and narrative assessments, rather than direct assessments, are more likely to be used to assess children's development in Luxembourgish early childhood education programmes (*précoce*) and preschools, and in German family day care settings, common aspects monitored are language and literacy skills, numeracy, creative and socio-emotional skills, motor development and autonomy. In Germany, well-being is also monitored. In Norway, all the areas listed in Figure 4 may be monitored, as is the case in Finland, with the exception of ICT skills.

Figure 4. Areas of early child development monitored, by monitoring method



Notes: Developmental areas are ranked in descending order of the number of jurisdictions that cited observations and narrative assessments to monitor developmental areas.

Information on the use of direct assessments and observations and narrative assessments to monitor developmental areas is based on 21 jurisdictions.

Sources: OECD (2013), Online Survey on Monitoring Quality in Early Learning and Development, OECD Network on ECEC, Table A5.1, OECD, Paris; OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Chart 5.3, OECD Publishing, Paris, <http://dx.doi.org/10.1787/888933243423>.

### ***Monitoring system design, responsibilities and evaluator training***

#### *Design*

Various stakeholders are involved in the design and monitoring of ECEC services. These generally involve the ministry in charge of ECEC (national or regional), an independent national agency, and/or local authorities.

In Luxembourg, the monitoring procedure and tools for ECEC settings and non-formal education services are designed at the national level by the Ministry of Education, Children and Youth, in collaboration with researchers and service providers. In Germany, local authorities are responsible for developing a monitoring system for their municipality. The Child and Youth Welfare Statistics (*Kinder- und Jugendhilfestatistiken*) generate data that allow policy makers to evaluate quantitative growth, staff and employment conditions, and other structural features of the ECEC sector, such as opening hours, and the age and ethnic background of children. In addition, as part of Germany's National Quality Initiative, several instruments for the internal and external evaluation of quality in ECEC have been developed by different groups of ECEC researchers on the initiative of, and with funding from, the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth. These instruments have served as a blueprint for provider-specific adaptations. In Finland, there is no one single monitoring system in place as municipalities are responsible for developing their own monitoring system. In Norway, municipalities also hold overall responsibility for developing monitoring systems, however the Ministry of Education and Research (*Kunnskapsdepartementet*) develops guidance material on the inspection process.

### *Responsibility*

Among the 24 participating countries and jurisdictions, half have integrated systems of governance for ECEC, and half have split systems of governance. In integrated systems, the responsibilities for childcare and early learning are within one ministry or authority, and ECEC services generally provide integrated care and education. In split systems, the responsibilities for childcare (usually for children 0 to 3 years) and early education (generally for children aged 3 or 4 and above) are split between different ministries or authorities. There also tend to be different providers for childcare and early education.

Luxembourg has an integrated ECEC system, with the Ministry of National Education, Children and Youth responsible for ECEC at the national level. ECEC in Luxembourg has recently become an integrated system (see Box 1 for further information). Finland, Germany and Norway also have integrated systems for ECEC. In Germany, the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth is responsible for ECEC at the national level, although most responsibilities for ECEC in Germany are decentralised to state-level and local authorities. In Finland, the Ministry of Education and Culture (*Opetus- ja kulttuuriministeriö*) has responsibility, and, in Norway, it is the Ministry of Education and Research.

Luxembourg has a very centralised system with national standards in place and a national monitoring system. Responsibilities for financing are shared between the national government and local authorities. The national curriculum framework is adapted at the local level to meet the specific needs of settings and children. Standard setting is done at the national (central) level in Finland and Norway, while responsibilities for financing are shared between the national and municipal level. Curriculum frameworks in Finland and Norway are designed at the national level, but municipalities are expected to adapt the guidelines and frameworks to the needs of their area. In Germany, financing and monitoring responsibilities are shared between the regional, state and local authorities, while standards are developed at the state level, as is curriculum development.

Funding for the monitoring of ECEC services in OECD countries comes from a mix of public and private sources. Public funding can be from national, regional or local/municipal governments. In some countries, the funding sources for monitoring quality differ depending on the type of setting. In Luxembourg, monitoring is financed from national public funding. In Finland, local public funding can finance monitoring. Monitoring quality is not regulated at the national level and municipalities can decide whether or not they use funding for monitoring. Family day care and child day care centres in Germany mainly receive funding from local authorities, which is complemented by some private funding for child day care centres. In Norway, monitoring is usually funded with local public funding (OECD, 2015).

### Box 1. The integration of ECEC governance in Luxembourg

In December 2013, a new government in Luxembourg was formed by the Liberal Party, the Socialists and the Green Party. All responsibilities for the departments concerning children and youth were concentrated into a single ministry: the Ministry of National Education, Children and Youth. Previously, all services that provided non-formal education<sup>1</sup> for early childhood and school-aged children, including family day care and daycare centres, had been the responsibility of the Ministry of Family and Social Affairs.

The goal was to develop an integrated system to administer resources for children, to co-ordinate decision making, and to enhance quality and efficiency in general. At the local level, schools and non-formal education services are encouraged to co-operate more closely to ensure better co-ordination of actions and services. The government wants both sectors to collaborate in the interests of children.

The formal and non-formal sectors have complementary but different fields of action and different educational, pedagogical and methodological particularities. Since they have been historically separated, and have developed apart from one another, it will be necessary to build bridges between the two sectors, both at a central level between the different ministerial departments, and at the operational level. The educational sector is highly centralised, teachers are state employees, and the resources for formal education are allocated by the ministry to the communes. Non-formal education, such as family day care and day care centres, is often offered by private non-profit and for profit (especially in the age range 0 to 3) actors. Settings are partly run by non-governmental organisations, subsidised by the government, or even by private for-profit organisations (this mainly concerns the ECEC sector for children aged 0 to 3 or 4 years until the start of compulsory education). The prevailing views on children and of child development in the two sectors are very different, and efforts must be made to exchange views and organise common continuous professional training to bring together the two groups of professionals, teachers, educators and social pedagogues.

The government has given incentives to local schools and less formalised settings to work together to establish a common plan, with weekly schedules and activities designed to bring more coherence into the children's daily routines and ensure that their needs are better met. Efforts have also been made to invite professionals to share the facilities at their disposal and use them in different and more effective ways. New buildings are planned and services organised with the children and their daily needs in mind, rather than the interests of the institution (e.g. school or out-of-school setting). Educational settings for children will be planned around a variety of functions and daytime activities that correspond to the children's needs, such as learning, playing, relaxing, moving, building and experimenting.

Note: <sup>1</sup> In Luxembourg, non-formal education takes place within an institutional educational setting (such as day care centres) for children aged 0 to 12, and is organised outside the established formal system (school). It has its own identifiable learning framework, learning areas and learning objectives, but does not lead to any formal qualification. Formal, non-formal and informal education complement each other and mutually reinforce the lifelong learning process.

Sources: Draft case study provided by the Luxembourgish Government and edited by the OECD Secretariat. OECD Network on ECEC, "Online Survey on Monitoring Quality in Early Learning and Development", November 2013.

### *Qualification and training of evaluators*

Research suggests that evaluators need to receive training to apply monitoring practices and tools as to ensure these are properly understood and that practices result in consistent and objective judgments (Waterman et al., 2012).

In the majority of the 24 jurisdictions, pre-service education or training, on-the-job training or other types of training are offered to evaluators. Two-thirds of jurisdictions (16) reported that external assessors/evaluators receive on-the-job or in-service training. Training for assessors/evaluators can focus on various skills or aspects of ECEC. In Luxembourg, candidates have to complete a specific training phase in order to become an inspector while in Norway, inspectors receive on-the-job or in-service training on monitoring and evaluation. In Germany, since there is no uniform system of monitoring, the training of external evaluators differs across ECEC providers, although there are possibilities to receive on-the-job or in-service training. Finland is the only country out of the four that does not systematically provide specific training on monitoring for either external or internal evaluators (see Table 3).

Internal evaluators are not specifically trained in Germany, while in Luxembourg (within the context of the school development plan) they can receive on-the-job or in-service training. In Norway, internal evaluators are trained on monitoring and evaluation during their initial education programme (OECD, 2015).

**Table 3. Training of external and internal evaluators**

		No, not specifically	Yes, through pre-service education/ training	Yes, through on-the-job or in-service training
<b>Luxembourg</b>	External assessors		X	
	Internal assessors			X
<b>Finland</b>	External assessors	X		
	Internal assessors	X		
<b>Germany</b>	External assessors		X	
	Internal assessors	X		
<b>Norway</b>	External assessors			X
	Internal assessors		X	

*Note:* In Finland, some evaluators have some evaluation training, but the training is not systematic at the national or municipal levels.

*Sources:* OECD (2013), OECD Network on ECEC's Online Survey on Monitoring Quality in Early Learning and Development, OECD, Paris; OECD (2015) *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, OECD Publishing, Paris, Table A2.4 <http://dx.doi.org/10.1787/888933243001> and Table A2.6 <http://dx.doi.org/10.1787/888933243026>.

### ***Implementation of monitoring practices***

#### *Monitoring tools (instruments)*

##### Service quality

The main practices used to monitor service quality are external evaluations/inspections and parental surveys, as well as internal self-evaluations. There are various tools that can be used to carry out these practices.

Inspections in early childhood education programmes and compulsory preschools in Luxembourg use observations, interviews, analysis of internal documentation and the results of self-evaluations. All of these tools are also commonly used for inspections in German day care services, as are self-evaluation results, surveys conducted by inspectors, rating scales, and surveys completed by management and staff, and parents. In Norway, surveys by inspectors, checklists and parental surveys are commonly used, in combination with interviews and analysis of internal documentation. In Finland, no data collection instruments are prescribed at the national level and these therefore differ between municipalities or ECEC settings (OECD, 2015).

Internal evaluation is commonly used in combination with external evaluation/inspections to monitor service quality, which is the case in Luxembourgish ECEC settings, with the exception of family day care environments, German child care settings and Norwegian ECEC settings. The most common self-evaluation tools used across countries are self-reported questionnaires/surveys (12), self-reflection reports/journals (12), checklists (11), and portfolios (8). Video feedback is used in three jurisdictions: the Czech Republic, the Slovak Republic and Sweden. Self-reflection journals are often used in Germany, as are self-reported questionnaires, checklists and portfolios. In Norway, individual settings have the discretion to determine what collection processes or tools are used (OECD, 2015).

## Staff quality

In many countries staff quality is monitored in the same way as service quality and includes a mix of external and internal practices. However, there can also be differences in the focus, aspects monitored and instruments used.

External monitoring and evaluation practices of staff quality include inspections, parental surveys, and peer reviews. Similar to the monitoring of service quality, inspections (external evaluations) of staff quality are undertaken in all 24 jurisdictions. Observations, interviews and the analysis of internal documentation are most commonly used during inspections in Luxembourg. In Germany, the same tools are used for service quality as for staff quality, with the addition of the results of self-evaluations, checklists and rating scales. In Finland and Norway, no instruments or tools are prescribed and the instruments used during inspections are decided by municipalities or settings.

For self-evaluations in Norway, instruments are not prescribed and settings can use a wide range of tools. Self-reflection reports are commonly used, as are self-reported questionnaires, checklists and portfolios, and, sometimes, video feedback. In Germany and Finland, each setting can decide on the tools and instruments it uses for staff self-evaluations (OECD, 2015).

## Child development

Across participating countries, monitoring child development and outcomes is mostly done through internal practices, with an important role also taken by external agencies. This is in line with the fact that in many countries, the monitoring of child development and outcomes takes place more frequently than in other areas, often on a continuous basis or several times per year. The three main tools used to monitor child development are: 1) direct assessments (tests of children and screening); 2) narrative assessments (storytelling and portfolios); and 3) observational tools (rating scales and checklists). As Table 4 shows, there is some variation in the combination of tools used.

The majority of jurisdictions use observational tools (primarily checklists), however these often vary by types of ECEC setting. Narrative assessments are also common, while direct assessments through testing and screening are used less often. Finland and Luxembourg report using both narrative assessments and observational tools when monitoring children in pre-primary school, with portfolios and checklists most commonly used in Luxembourg. In Finland, these tools are also used, as well as storytelling tools and rating scales. The decision on what tools are used is at the discretion of each setting in Finland. In Germany, all three monitoring tools and instruments may be used. In Norway, settings can decide what type of instruments they use to monitor children's development (OECD, 2015).

**Table 4. Child development monitoring tools in place, by country**

Country	Direct assessments		Narrative assessments		Observational tools	
	Tests for children	Screening	Storytelling	Portfolios	Rating scales	Checklists
<b>Luxembourg</b>				X		X
<b>Finland*</b>			X	X	X	X
<b>Germany</b>	X	X	X	X	X	X
<b>Norway*</b>	Settings decide what tools to use					

*Notes:* In Finland, all monitoring tools/instruments of child development may be used, but municipalities decide what to use, and there is no standard national test for children. In Norway, narrative assessments and observational tools are most common. Direct assessments are mostly used outside ECEC settings, in health checks or special needs assessment.

*Source:* OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Table 5.2, OECD Publishing, <http://dx.doi.org/10.1787/888933243347>.

### *Frequency*

Service quality is generally monitored a set number of times by the responsible monitoring body. Frequency of monitoring often varies across different types of ECEC. In Luxembourg, pre-primary education programmes and compulsory preschool may be monitored more than once per year. Staff quality is also monitored more than once per year. In Germany there are no particular regulations regarding the frequency of monitoring, except in Berlin, where the Berlin Education Programme (*Berliner Bildungsprogramm*) requires that an external evaluation in ECEC centres is conducted every five years. Internal evaluations are seen as a continuous (yearly) process. The frequency of monitoring in Finland varies by municipality, and in Norway it is not regulated. Child development is generally monitored on a more frequent basis, usually through ongoing observations and/or contributions to portfolios (OECD, 2015).

### *Use of results and consequences*

The results from monitoring have to be made public in most jurisdictions (16 out of 24), however, not always for all types of ECEC. In Luxembourg, the aggregated inspection results of preschools and early education programmes (both part of the public school system) are publically available. In Germany, the provider decides whether or not they are made available to the public. In Finland, service providers also have discretion over whether results are made available, although they are usually published. National evaluation results are commonly shared. In Norway, the results of inspections are available to the public upon request, while internal self-evaluations are not shared. The aggregated results of staff evaluations and the monitoring of staff quality are also usually available to the public, while individual staff evaluations are not due to privacy matters.

Countries take various actions or impose consequences when the results from monitoring service quality do not meet the minimum standards set by the service or body responsible. Actions can include funding cuts, follow up inspections, obligatory staff training, or closure of services. There can also be positive outcomes for services from monitoring results, for example, services can have a competitive advantage compared to other services, or remuneration can be increased in line with monitoring outcomes.

In Luxembourg, settings are required to address their shortcomings by, for instance, participating in training, and a follow-up inspection or evaluation is planned. Settings receive support to address their particular areas for improvement through professional training, a professional training plan for the whole staff, or regular assistance from a specialist for a certain period of time. In extreme cases, a setting may be closed. In Germany, settings that underperform must also take measures to improve their level of quality. In Finland, staff are usually required to participate in training, or follow-up inspections are planned. In Norway, licenses can be revoked and services closed if an ECEC setting drastically underperforms on a continuous basis.

### **Challenges and policy options**

All countries face challenges in monitoring, and some challenges are shared by different countries. The practices that countries have implemented suggest ways of overcoming the challenges of monitoring quality. Luxembourg's challenges include:

1. Monitoring children's views. This is only recently being considered, but it can help provide policy makers and ECEC management and staff with new insights into ECEC quality and how it can be further improved.
2. Ensuring monitoring informs policies and strategies and is translated into policy reforms or changes to improve the ECEC system.

Policy approaches that other countries have taken when tackling these issues are presented to provide some examples for Luxembourg in how the challenges can possibly be addressed.

### *Challenge: Monitoring children's views*

Research suggests that children's voices should be recognised and that they can provide useful information about their own experience in ECEC, as well as wider societal issues (Clark, 2005; McNaughton, 2003; Sorin, 2003). Children's perceptions can provide additional information on their own academic, socio-emotional and mental development. These areas are also important in staff evaluations as such additional information can help improve staff practices to better support children's early development (Measelle et al., 1998).

Luxembourg has recently implemented national testing for 6-year-olds (after ECEC), and the tests include questions concerning self-concept, attitudes towards learning, and well-being. However, views of children in ECEC are not yet surveyed or studied. Box 2 provides a case study of Finland, one of the few countries that currently monitors children's views. The involvement of children in monitoring practices can provide valuable insights into how children experience certain pedagogical practices, which can contribute to improved child development experiences. Other countries have also implemented measures to collect information on children's experiences.

Involvement of children in monitoring practices can provide valuable insights into how children experience certain pedagogical practices, which can contribute to improved child development experiences. Other countries have also implemented measures to collect information on children's experiences.

### *Include children in evaluations and monitoring practices*

- In the **Czech Republic**, children's views in public settings are taken into account as part of the school external evaluation, when children's well-being is assessed. Based on these reports, a comment about the atmosphere in the school is included in the public school inspection report. Internally, schools may also monitor children's well-being and happiness when conducting their self-assessments.
- In the **Flemish Community of Belgium**, children's views are monitored in both family day care settings and day care centres. Though not compulsory, tools have been developed to enable family day care providers and day care centres assess how children experience the settings. The Self-Assessment Instrument for Care Settings (SiCs) starts by scanning well-being and involvement and helps to identify factors in the environment that may affect them. MyProfile, originally developed as ZiKo-Vo for family day care providers, helps practitioners in all kinds of settings for young children monitor children's development. Both instruments help the settings monitor each child and tailor their approach to the child's individual needs. Additionally, for preschool children (3-5 year-olds) a more extensive monitoring system is available: POMS, the Process-Oriented Monitoring System.

### Box 2. Monitoring children's views in Finland

Finland provides an interesting example of how monitoring children's views can be used to inform policy making. In 2013/2014, a large survey of parents was conducted by the Finnish Ministry of Education (*Opetus- ja kulttuuriministeriö*) and Culture to inform the preparation of a new law on the ECEC sector. The process also included interviews with children to ensure that their voices were being heard; the first time this had ever been done in the preparation of a new law. Finland reports that the emphasis put on hearing children's opinions stems from the United Nations Convention on the Rights of the Child.

To inform the revision of the legal framework, 48 children across the country were interviewed in their ECEC setting, either by their own teachers or other staff. The interviews sought to reveal information about how children experience their days and practices in ECEC and what meaning they attribute to its different aspects. To express their opinions, children used photographs they had taken and drawings they had made to discuss with staff what they appreciated in ECEC and what they did not like and wanted to change.

Finland reported that children emphasised the importance of being able to participate in activities with their friends. They particularly liked being allowed to play and move. They also enjoyed games involving physical activities. On the question of the ECEC environment, they considered their bed and the sleeping room unpleasant, i.e. the rooms where activities and free movement are restricted. Long sedentary periods were also seen as unpleasant. Children reported that they expect personalised care from adults and that they mediate when differences in group situations emerge. While overall children enjoy being in ECEC, they asked for more time for play, movement and physical activities, as well as to be able to make use of modern technology. Activities regarded as important by staff and adults, such as long morning meetings in a circle, were not regarded by children as at all meaningful and important.

For the ministry, this represents valuable feedback from the users of the ECEC services under their responsibility that can contribute to their evaluation. The findings also encourage Finland to involve children more often in the development of practices.

*Sources:* Draft case study provided by the Finnish Government and edited by the OECD Secretariat. OECD Network on ECEC, "Online Survey on Monitoring Quality in Early Learning and Development", November 2013.

### *Challenge: Ensuring monitoring informs policies and strategies*

Developing a balanced and consistent monitoring system is challenging in itself, but in addition, it must be ensured that monitoring results have a tangible effect on improving service quality and overall system performance. Monitoring results can be used to influence policy and enhance ECEC quality, which can further strengthen the quality of a country's ECEC system and result in better efficiency. Information collection from different sources, as in Australia and Sweden, can help make policy decisions or draw attention to areas that need additional support. Monitoring results can also contribute to a quality framework, as is currently the case in Germany. Examples of how countries have ensured that monitoring informs strategies are presented below.

#### *Collect census data*

- In **Australia**, it is recognised that to ensure public investments in ECEC are directed to areas of need, strong evidence is required to guide decisions on policy, which can, in turn, result in actions. One source of evidence is the data collected by the Australian Early Development Census (AEDC). These data provide an opportunity to see how young children are progressing, inform policies and programmes to improve early childhood development, and help evaluate long-term strategies. Australian state and territorial governments have recognised that communities need information about early childhood development and have endorsed the AEDC as a progressive national measure. The Australian Early Development Instrument (EDI), used as a tool in early child development assessment, is a population measure of children's development as they enter school. The EDI, collected through teacher-completed checklists, is based on the teacher's knowledge and observations of children in their class and demographic information. The five developmental domains include: 1) physical health and well-being;

2) social competence; 3) emotional maturity; 4) language and cognitive skills (school-based services); and 5) communication skills and general knowledge. Governments at all levels and community organisations have been using this data to inform early childhood development policy and practice since the first national collection in 2009.

*Collect data on structural quality indicators*

- In **Germany**, ECEC data are collected annually in the Child and Youth Welfare Statistics. These statistics contain information on some aspects of structural quality, such as qualification of staff, staff per group/number of children, or group size; they also reflect on other quantitative developments in the ECEC sector, such as capacity. Monitoring the ECEC sector through the Child and Youth Welfare Statistics has raised awareness of the considerable differences regarding quality aspects (e.g. child-staff ratios) between East and West Germany, between *Länder* and within regions. This has led to a debate on the need for quality regulations at the national level, and possibly a national quality framework. As well as stipulating core quality parameters (such as child-staff ratios), a national framework could also include provisions for the systematic collection of data on quality aspects in ECEC services. The increased interest in the quality of ECEC has resulted in a continuous differentiation and refinement of statistical indicators. Most recently, attention has been paid to the management of ECEC in this context.

*Conduct surveys to establish information about quality in the early childhood sector*

- In **France**, the Ministry of Social Affairs (*Ministère des Affaires sociales et de la Santé*) conducts regular surveys on staff in crèches and nursery assistants (family day care), and the spaces available and occupied at these providers. Parental surveys are also distributed every few years (the last were issued in 2002, 2007 and 2014). In-depth studies are conducted based on these surveys. The Ministry of Education (*Ministère de l'Éducation nationale*) regularly shares ECEC data and provides detailed policy briefing notes on, for instance, enrolment rates in ECEC of children below the age of 3 and development at the end of preschool/kindergarten. Such information and data informs parents, ECEC stakeholders and policy makers about the latest developments in ECEC. Use data to establish action plans
- In **Sweden**, the National Agency for Education (*Skolverket*) is responsible for generating statistics on the preschool system. Every year, the Agency collects data on children, staff and costs. It aims to provide an overall view of ECEC services and establish action plans, where necessary, at the national and local level. For example, data collected at both the national and municipal level on ECEC staff and workforce supply have been used to address challenges in the sector, such as the need for more preschool teachers. The capacity for preschool teacher education has since been increased in universities. A national evaluation of Swedish preschools by the National Agency for Education in 2008 led to a revised curriculum in 2010, with new and clarified goals for children's development in language, mathematics, natural science and technology. In addition, a quality audit by the Schools Inspectorate (*Skolinspektionen*) in 2012 showed the need for further in-service training to increase staff knowledge. Within the framework of Boost for Pre-school 2012-2014, staff have received continuing professional development on subjects where the curriculum has been clarified and strengthened, particularly children's development in language and mathematics, natural science and technology, support for mother-tongue languages and intercultural policy, as well as follow-up and evaluation.

## REFERENCES

- Bagnato, S. (2005), “The authentic alternative for assessment in early intervention: An emerging evidence-based practice”, *Journal of Early Intervention*, Vol. 28/1, pp. 17–22.
- CASTL (2011), *Measuring and Improving Teacher-Student Interactions in PK-12 Settings to Enhance Students’ Learning*, Center for Advanced Study of Teaching and Learning, Charlottesville, Virginia.
- Cubey, P. and C. Dalli (1996), *Quality Evaluation of Early Childhood Education Programmes*, Occasional Paper No. 1, Institute for Early Childhood Studies, Wellington.
- Danmarks Evalueringsinstitut (2012), *Læreplaner i praksis. Daginstitutionernes arbejde med pædagogiske læreplaner* [Curriculum and practice. Child-care services working with pedagogical curricula], Danmarks Evalueringsinstitut, Copenhagen.
- Fukkink, R. (2011), “Prettiger in een goed pedagogisch klimaat [More pleasant in a good pedagogical climate]”, *Management Kinderopvang*, Vol. 11/4, pp. 12-14.
- Grisham-Brown, J. (2008), “Best practices in implementing standards in early childhood education”, in: A. Thomas and J. Grimes (eds.), *Best practices in school psychology V*, National Association of School Psychologists, Washington DC.
- Isoré, M. (2009), *Teacher Evaluation: Current Practices in OECD Countries and a Literature Review*, OECD Education Working Paper No. 23, Paris.
- Kamerman, S.B. (ed.). (2001), *Early childhood education and care: International perspectives*, Columbia University, ICFP, New York.
- Litjens, I. (2013), *Literature Review on Monitoring Quality in Early Childhood Education and Care (ECEC)*, OECD, Paris.
- Measelle, J.R., J.C. Ablow, P.A. Cowan and C.P. Cowan (1998), “Assessing young children’s views of their academic, social, and emotional lives: An evaluation of the self-perception scales of the Berkeley puppet interview”, *Child Development*, Vol. 69/6, pp. 1 556-1 576.
- Meisels, S. J. and S. Atkins-Burnett (2000), “The elements of early childhood assessment”, in J.P. Shonkoff and S.J. Meisels (eds.), *Handbook of early childhood intervention*, Cambridge University Press, New York.
- Meisels, S.J., S. Atkins-Burnett, Y. Xue, D.D. Bickel and S. Son, (2003), “Creating a system of accountability: The impact of instructional assessment on elementary children’s achievement test scores”, *Education Policy Analysis Archives*, Vol. 11/9, pp. 1–18.
- Meisels, S.J. (2007), “Accountability in Early Childhood: No Easy Answers”, in: R.C. Pianta, M.J. Cox, K.L. Snow (eds.), *School Readiness and the Transition to Kindergarten in the Era of Accountability*, Paul H. Brookes Publishing Co., Baltimore, Maryland.

- Munton, A.G., A. Mooney and L. Rowland (1997), “Quality in Group and Family Day Care Provision: Evaluating Self-Assessment as an Agent of Change”, *European Early Childhood Education Research Journal*, Vol. 5/1, pp. 59-75.
- NAEYC (2010), *Quality Rating and Improvement Systems (QRIS) Toolkit*, National Association for the Education of Young Children, Washington DC.
- Neisworth, J. and S.J. Bagnato (2004), “The mismeasure of young children: The authentic assessment alternative”, *Infants and Young Children*, Vol. 17/3, pp. 198–212.
- NICHD (2002), “Early childhood education and school readiness: Conceptual models, constructs, and measures”, Workshop Summary, National Institute of Child Health and Human Development Washington, DC.
- OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264233515-en>.
- OECD (2013), *Online Survey on Monitoring Quality in Early Learning and Development*, Network on ECEC, OECD, Paris.
- OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD (2006), *Starting Strong II: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264035461-en>.
- OECD (2001), *Starting Strong: Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264192829-en>.
- OECD Network on Early Childhood Education and Care (2012), *Draft Position Paper of the Thematic Working Group on Monitoring Quality*, Background document for the 12<sup>th</sup> ECEC Network Meeting, OECD, Paris.
- Office of Child Development and Early Learning (2010), “Keystone Stars: Reaching Higher for Quality Early Education”, *Program Report*, Department of Public Welfare, Philadelphia, Pennsylvania.
- Østrem, S., H. Bjar, H., Føsker, L. Rønning, H. Hogsnes Dehnæs, T. Jansen Thorsby, S. Nordtømme, et al. (2009), *Alle teller mer. En evaluering av hvordan Rammepplan for barnehagens innhold og oppgaver blir innført, brukt og erfart [Everyone matters more. An evaluation of how the Framework Plan for the content and tasks of kindergartens are introduced, used and experienced]*, Tønsberg, Høgskolen i Vestfold.
- Picchio, M., D. Giovannini, S. Mayer and T. Musatti (2012), “Documentation and analysis of children’s experience: An ongoing collegial activity for early childhood professionals”, *Early Years: An International Research Journal*, Vol. 32/2, pp. 159-170.
- RAND (2008), “Assessing Child-Care Quality: How Well Does Colorado’s Qualistar Quality Rating and Improvement System Work?”, *Policy Brief*, RAND Corporation, Santa Monica, California.
- Rosenkvist, M.A. (2010), “Using Student Test Results for Accountability and Improvement: A Literature Review”, *OECD Education Working Papers*, No. 54, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5km4htwzby30-en>.
- Sheridan, S. (2001), “Quality Evaluation and Quality Enhancement in Preschool - A Model of Competence Development”, *Early Child Development and Care*, Vol. 166/1, pp. 7-27.

- STAKES (2005), *National Curriculum Guidelines for Early Childhood Education and Care*, STAKES, Helsinki.
- Tout, K., M. Zaslow, T. Halle and N. Ferry (2009), “Issues for the Next Decade of Quality Rating and Improvement Systems”, *Issue Brief No. 3*, Office of Planning, Research and Education, U.S. Department of Health and Human Services, Washington DC.
- Waterman, C., P.A. McDermott, J.W. Fantuzzo and J.L. Gadsden (2012), “The matter of assessor variance in early childhood education - Or whose score is it anyway?”, *Early Childhood Research Quarterly* Vol. 27/1, pp. 46– 54.
- Zaslow, M., J. Calkins and T. Halle (2000), *Background for community-level work on school readiness: A review of definitions, assessments, and investment strategies. Part I: Defining and assessing school readiness – building on the foundation of NEGP Work*, Child Trends Inc., Washington DC.
- Zellman, G.L., M. Perlman, V.N. Le and C.M. Setodji (2008), *Assessing the Validity of the Qualistar Early Learning Quality Rating and Improvement System as a Tool for Improving Child-Care Quality*, RAND Corporation, Santa Monica, California.

## GLOSSARY

**Autonomy:** The ability of a child to undertake activities, tasks etc. without the help of others (mastery of skills), to make his/her own decisions, and to express his/her own opinions or ideas, feel secure and have confidence in his/her own ability.

**Appraisal:** The review of a preschool teacher's or educator's work by the centre management, an external inspector or by his or her colleagues. This appraisal can be conducted in a range of ways, from a more formal, objective approach (e.g. as part of a formal performance management system involving set procedures and criteria) to the more informal, more subjective approach (e.g. through informal discussions with the teacher).

**Assessment:** Judgement on individual progress and achievement of goals. It covers classroom/playroom-based assessments as well as large-scale, external assessments and examinations and refers to the process of documenting knowledge, skills, attitudes and beliefs. Assessment can focus on the individual learner and staff (adapted from OECD, 2013). Assessment can be direct or indirect and its use formative or summative.

- **Direct assessment:** Assessments that look at concrete outputs of learning, i.e. the measurable and demonstrated knowledge and skills of children/staff.
- **Indirect assessment:** Assessments that examine indicators of learning and gather information through feedback, e.g. in surveys or interviews (adapted from Middle States Commission on Higher Education, 2007).
- **Formative assessment:** Assessments that frequently or continuously (not at one point in time only) and interactively assess child development and progress with the purpose of understanding and identifying learning needs and adjust instruction and teaching methods accordingly (adapted from OECD, 2005, and Litjens, 2013).
- **Summative assessment:** Assessments that measure learning results at the end of a certain time period to obtain summary statements. These can be used e.g. for holding staff and settings accountable for providing quality ECEC or as a method to identify whether children have learning disadvantages (adapted from OECD, 2005, and Litjens, 2013).

**Assessor (or evaluator):** A person or organisation/company that conducts assessment or evaluation on the effectiveness or the level of quality of someone or something, e.g. level of service quality, staff performance, effective curriculum implementation, child development/outcomes.

**Checklist:** A list of items, tasks or steps to be taken in a specific order to be checked or consulted. In ECEC, this can be used to assess or evaluate the developmental status of children, staff performance and the quality of ECEC services by observing compliance with regulations. This may also include a series of tasks, skills and abilities to assess children's development or knowledge, such as "Child can count to five" or "Child is able to play independently" (OECD, 2012).

**Creative skills** (e.g. art, music, dance, imagination): Children's capacities and competencies to generate ideas and feelings, use imagination and convey thoughts and experiences in many forms of expressions, including artistic skills (e.g. painting, drawing, handicrafts, etc.), musical skills (e.g. singing,

playing an instrument, recognising songs, etc.). It also refers to the capacity to observe and reflect; explore on their own, and search for their own answers and solutions.

**Curriculum implementation:** The actual use in practice (practical application) of the curriculum by ECEC staff, managers and children. This refers to the way in which the concepts of the curriculum are put into effect, and how they are used in practices and activities by staff and children, how they are interpreted, how they are used in development and learning, and how they influence teaching, caring and interactions between staff, and between staff with children.

**ECEC setting:** A place where ECEC is delivered. Also referred to as ECEC centre or provision. With regard to ECEC settings, two types of provision can be distinguished: **centre-based/school-based** and **home-based** (as defined by Eurydice, 2013).

**Evaluation:** Judgements on the effectiveness of ECEC settings or ECEC systems, policies and programmes (adapted from OECD, 2013).

**Evaluator:** See definition of **assessor**.

**External monitoring practices:** See definition of **monitoring practice**.

**Government:** The entirety of the executive at all levels of governance, at national, state, regional and local level.

**Health development:** The physical health status of a child, encompassing physical well-being only (adapted from WHO definition, 2006). Mental, emotional and social development are in this definition excluded – these are included in the definition of **socio-emotional skills**.

**Information and communications technology (ICT):** The teaching and learning of technological and digital skills. Creating and developing the capacity to use digital and technological environments for development, communication and knowledge creation. Digital environments refer to computers (including laptops, tablets, iPads, netbooks, smart boards etc.) and computer games, the Internet, television and radio, among others.

**Inspection:** The process of assessing (inspecting, investigating) the quality and/or performance of institutions, staff, services and programmes by those (inspectors) who are not directly involved in the ECEC settings being monitored, and who are usually specially appointed to fulfil these responsibilities.

**Instrument (or tool):** A means used for monitoring or material that is used to conduct the monitoring process. Examples of instruments or tools for monitoring include checklists, rating scales and surveys.

**Integrated system:** The responsibilities of ECEC services are under one (leading) authority (at the national and/or regional level), e.g. the education Ministry, Ministry of social welfare or another authority.

**Internal monitoring practices:** See definition of **monitoring practice**.

**Language and literacy skills:** Children's productive and receptive language skills on all levels: syntax (ability to form sentences), morphology (ability to form words), semantics (understanding the meaning of words/sentences), phonology (awareness of speech sounds), pragmatics (how language is used in different contexts), vocabulary. It also refers to children's (precursor) literacy skills, that is to say, all the skills related to reading and writing, such as recognising and writing letters and words, understanding pictures, etc.

**Local level or local authorities:** The local level is a decentralised level of ECEC governance. It is located at city/town level in the vast majority of countries. In some countries, the municipalities take the main responsibility for ECEC.

**Minimum quality standards:** The minimum benchmark for structural aspects of ECEC settings to ensure a minimum level of quality. These are often aspects of ECEC that can be regulated relatively easily (e.g. staff-child ratio, space, group size and qualifications of ECEC staff).

**Motor skills:** The ability to perform complex muscle and nerve acts that produce movements, the ability to co-ordinate the body. It refers to both fine and gross motor skills and awareness of their own body. Fine motor skills include small movements such as drawing and writing, crawling or putting shoes on. Gross motor skills are large movements like walking and kicking, running and cycling.

**Monitoring:** The process of systematically tracking aspects of ECEC services, staff, child development and curriculum implementation, with a view toward data collection, accountability and/or enhancing effectiveness and/or quality.

**Monitoring practice:** The main activity/ies involved in monitoring, such as inspections or self-assessments. There are two different types of monitoring practices:

- **External monitoring practices:** Any monitoring practices conducted by evaluators/assessors/actors who are not part of the ECEC service that is being monitored. These can include inspections, surveys completed by people who are not employed by the ECEC setting that is being monitored, or peer reviews conducted by external staff (peer review of a person working in one ECEC setting by a person not working in that ECEC setting).
- **Internal monitoring practices:** Any monitoring practices conducted by evaluators/assessors/actors who are part of the ECEC service that is being monitored. These can include self-evaluations of staff working in ECEC settings (teachers, managers, care givers, etc.) or peer reviews conducted by internal staff (among colleagues in the same setting).

**Narrative assessments:** Descriptions of the development of a child through narratives/stories. Narrative assessment is a more inclusive approach to assessing child development, as it involves not only professionals but also the children's work, and can also include inputs or feedback from parents. It is a combination or package of what a child has done and learned, such as examples of drawings and exercises, feedback from staff, and staff planning or example practices. Portfolios or storybooks of children's development are well-known examples of narrative assessment practices (see also **portfolio** and **storytelling**).

**National level/national authorities** (also referred to as **central level or central authorities**): The authorities responsible for ECEC within a single country that is at the highest level of governance. Depending on the governance structure of the country, such as a federal structure of education governance, those authorities may or may not exert the key power of decision over ECEC policies and implementation. Examples for such authorities include the United Kingdom and Belgium.

**Numeracy:** The ability to reason and to apply simple numerical concepts and understand numbers. Basic numeracy skills consist of knowing and recognising space, shapes, location and direction, the basic properties of sets, quantity, order and number concepts, time and change, being able to count, to comprehending fundamental mathematics like addition, subtraction, multiplication and division.

**Observation:** Observation is a method to collect information on a subject from an outsider's perspective. It can be used for a specific purpose (e.g. inspection, peer review) or can be open-ended (e.g. to document a child's progress for parents).

**Peer review:** an assessment process of a colleague's work and practices. This can be done internally (by an internal colleague or a manager) or externally (by a colleague or a manager not working in the same setting).

**Portfolio:** A collection of pieces of work that can tell a story of child/staff progress, or achievement in given areas.

**Practical skills:** Skills that involve active involvement of a child and refer to only those skills that children need in daily life such as lacing shoes, brushing teeth, etc.

**Process quality:** What children actually experience in their programme – what happens within a setting, such as interactions between educators and children. It also consists of the relationships with parents, available materials and professional skills of staff.

**Rating scale:** A set of categories designed to elicit information about a quantitative or a qualitative attribute. A common example is the 1-10 rating scale, in which a person (evaluator or assessor) selects the number that is considered to reflect the perceived quality or performance of the subject being monitored.

**Regional level/regional authorities:** A decentralised level of governance. It is located at state or province level in the vast majority of countries, and can be referred to as e.g. communities, *Länder*, cantons, states, etc. Regional authorities in federal countries are often responsible for ECEC in their particular region. Examples for regional level authorities are England, Scotland and the French and Flemish Communities of Belgium.

**Regulations/recommendations:** Different kinds of official documents containing guidelines, obligations and/or recommendations for ECEC institutions. **Regulations** are laws, rules or other orders prescribed by public authority to regulate conduct. **Recommendations** are official documents proposing the use of specific tools, methods and/or strategies for teaching and learning. Their application is not mandatory (as defined in Eurydice, 2013).

**Review:** The process of examining, considering and judging a situation or process carefully in order to see, for example, if changes are necessary, analyse strengths and weaknesses, and look for improvement.

**Science skills:** All scientific subjects such as geography and natural science, as for example interest in and understanding of different cycles in nature, but also in the development of scientific knowledge, question scientific phenomena and the ability to draw conclusions about scientific subjects. Science also refers to the development of awareness of how science and technology shape and affect our material, intellectual and cultural environments and the ability to understand that we all are a part of nature's cycles.

**Screening:** A tool designed to identify problems or delays during normal childhood development. Usually involves a short test to tell if a child is learning basic skills when he or she should, or if there are delays. It can include some questions the professional asks a child or parent (depending on a child's age) or can involve talk and play with the child during an examination to see how he or she plays, learns, speaks, behaves and moves. Screening is often used to identify delays or problems, including learning disabilities, speech or language problems, autism, intellectual disability, emotional/behavioural conditions, hearing or vision impairment or attention deficit hyperactivity disorder (ADHD).

**Self-evaluation (or self-assessment):** The process in which an ECEC setting evaluates its own performance regarding the accomplishment of certain goals or standards, or a process in which staff members assess their own skills and capabilities as a way to monitor progress, attain goals and foster improvement.

**Sensitivity:** The quality of understanding how a child feels and the staff member's responsiveness to children's needs and emotions. The ability of a person (in this case a staff member) to respond and interact in a way appropriate to the age of the child and with care, warmth and attentiveness (adapted from Macmillan, 2014).

**Service quality:** The level of quality at setting/provision level. It is the level of quality provided by an ECEC setting, and refers to all the features that are regarded by a country/region/local authority to be of importance for quality, children's environments and experiences that are presumed to be beneficial to their well-being. This most often includes the use of a curriculum, staff characteristics, teacher or caregiver behaviours and practices, and the staff-child interactions that form the core of children's ECEC experiences, referred to in the literature as process quality. In addition, quality in most countries involves structural features of the setting, such as space, group size and other standards or regulations, e.g. safety standards (NCES, 1997; OECD, 2006; OECD, 2012).

**Socio-emotional skills:** The emotional and social development of a child. It includes children's ability to express and regulate emotions, children's relations with others (including peers), play with others (including peers), self-concept, development of personality identity, self-efficacy and the personality of a child, which shapes his/her thinking, feeling and behaviour. It also refers to co-operation and solving problems together. Examples of socio-emotional development include the forming and sustaining of positive relationships, experiencing, managing and expressing emotions, and exploring and engaging with the environment.

**Split system:** ECEC services are governed by different ministries or authorities at national/regional level. In many countries with a split system, policies for "care" and "early education" have developed separately and fall under the responsibility of different authorities. Child care and early education is provided as two different services and for different age groups. For instance, "child care" for younger children refers most commonly to children of under age 3 and "early education" most commonly to children of 3 years or older.

**Staff-child ratio:** The number of children per full-time member of staff. This can be a maximum (regulated) number, which indicates the maximum number of children that one full-time member of staff is allowed to be responsible for, or an average, that is, the average number of children a full-time staff member can be responsible for. Ratios can be either for main staff only (such as teacher or caregiver), but can also include auxiliary staff, such as assistants.

**Standardised test:** A test designed in such a way that the questions, conditions for administering, scoring procedures and interpretations are consistent and administered and scored in a predetermined, standard manner (OECD, 2012; Zucker, 2004). This means that the same test is given in the same way to all test takers. Standardised assessments are usually administered to large groups of children, and mainly for the purpose of measuring academic achievement and/or comparing members of a cohort (Rosenkvist, 2010) (see also **test**).

**Structural quality:** Quality aspects that consist of "inputs to process-characteristics that create the framework for the processes that children experience". These characteristics are not only part of the ECEC location in which children participate, but part of the environment that surrounds the ECEC setting, e.g. the community. They are often aspects of ECEC that can be regulated, although they may include variables that cannot be regulated.

**Test:** A formal assessment, often administered on paper or on the computer, intended to measure children's knowledge, skills and/or aptitudes. Tests can be either standardised or not (see also **standardised test**).

**Tool:** See definition of **instrument**.

## REFERENCES

- Eurydice (2013), “Reference Document 2, Key Data ECEC 2014 – Questionnaire for Eurydice Figures”, internal working document, Education, Audiovisual and Culture Executive Agency, Brussels.
- Litjens, I. (2013), *Literature Review on Monitoring Quality in Early Childhood Education and Care (ECEC)*, OECD, Paris.
- Macmillan (2014), *Macmillan Dictionary*, Macmillan Publishers Ltd., London, [www.macmillandictionary.com](http://www.macmillandictionary.com).
- Middle States Commission on Higher Education (2007), *Student Learning Assessment: Options and Resources*, Middle States Commission on Higher Education, Philadelphia, PA.
- National Center for Education Statistics (NCES) (1997), *Measuring the Quality of Program Environments in Head Start and Other Early Childhood Programs: A Review and Recommendations for Future Research*, Working Paper No. 97-36, Washington, DC.
- OECD (2013), *Synergies for Better Learning: An International Perspective on Evaluation and Assessment*, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264190658-en>.
- OECD (2012), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264123564-en>.
- OECD (2005), *Formative Assessment: Improving Learning in Secondary Classrooms*, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264007413-en>.
- Rosenkvist, M.A. (2010), “Using student test results for accountability and improvement: A literature review”, *OECD Education Working Papers*, No. 54, OECD Publishing, Paris, <http://dx.doi.org/10.1787/5km4htwzvb30-en>.
- World Health Organisation (2006), *Constitution of the World Health Organisation*, WHO, Geneva.
- Zucker, S. (2004), *Administration Practices for Standardized Assessments*, Pearson Assessment Report, Pearson Education, San Antonio, TX.