



Starting Strong IV

Monitoring Quality in Early Childhood Education and Care Country Note

AUSTRALIA

Summary

In Australia, the six states and two territory governments are responsible for funding preschools. Since 2012, a nationally consistent system of quality rating and minimum standards, the National Quality Framework (NQF) for Early Childhood Education and Care (ECEC) or the NQF, is used in each state and territory, which aligns regulatory requirements for ECEC services across the country. The National Quality Standard (NQS) is a key aspect of the National Quality Framework and sets a high, national benchmark for early childhood education and care, and outside school hours care services in Australia.

Regulatory authorities in each state and territory inspect for minimum standards in ECEC services and provide service ratings against the NQS. The NQS outline components of quality across seven key areas, including: educational programming, relationships with children, and service leadership. The NQS is both an inspection tool for regulatory authorities and a framework used by the sector to guide service delivery, promote quality improvement, and support developmental and educational outcomes for children. The Australian Children's Education and Care Quality Authority (ACECQA), an independent national body established under the Education and Care Services National Law Act 2010 (National Law), is responsible for supporting national consistency in the operation of the NQF, for example by negotiating the national agreement on operational procedures. ACECQA also analyses the consistency of inspectors and service quality ratings across states and territories to inform. The ACECQA is co-funded by the Australian Government and state and territory governments.

ECEC pedagogy and practice in Australia is focused on providing learning experiences based on an approved learning framework, such as "Belonging, Being and Becoming - The Early Years Learning Framework", or "My Time, Our Place – The Framework for School Age Care".

The monitoring quality in Early Childhood Education and Care (ECEC) country note for Australia 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 (forthcoming) *Starting Strong IV Early Childhood Education and Care Data Country Note: Australia* will provide an overview of ECEC policy inputs, outputs and outcomes in Australia.

This paper 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.

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.

Questions can be directed to: Miho Taguma, Directorate for Education and Skills Email: Miho.Taguma@oecd.org	Country note authors: Elizabeth Adamson, University of New South Wales and Ineke Litjens, OECD Country note collaborators OECD: Miho Taguma, Arno Engel, Eric Charbonnier, Mernie Graziotin, Elizabeth Zachary, Sophie Limoges, and Camilla Lorentzen
---	---

Key messages

- **In 2012, new quality standards were introduced under the National Quality Framework (NQF).** The NQF is the result of an agreement between the Australian Government and state and territory governments to work together to provide better educational and developmental outcomes for children using ECEC settings. The NQF includes: the [National Law and National Regulations](#), the [National Quality Standard \(NQS\)](#), an [assessment and quality rating process](#), and [national learning frameworks](#).
- **The National Quality Standard (NQS) is a key aspect of the NQF and sets a national benchmark for Early Childhood Education and Care,** and outside school hours care settings in Australia. The NQS brings together the seven key quality areas that are important to outcomes for children: educational program and practice; children's health and safety; physical environment; staffing arrangements; relationships with children; collaborative partnerships with families and communities; leadership and service management.
- **Assessments and rating inspections by regulatory authorities** aim to measure how well education and care settings are performing against the NQS. Each setting receives an overall rating and a rating for the seven quality areas.
- **The Australian Children's Education and Care Quality Authority (ACECQA) was established to guide the implementation and administration of the NQF.** It provides governments, the sector and families with access to reports and research to promote NQF policy and service delivery in line with best practice across the country. The minimum standards, such as the staff-child ratios and space requirements, are set in nationally consistent legislation adopted at the state and territory level.
- **Inspections of service quality against the minimum standards and the NQS national quality benchmark are conducted by the regulatory authority in each jurisdiction.** Staff quality can be part of service quality inspections.
- **Internal monitoring practices for staff quality are not mandatory,** but self-evaluations may be conducted in ECEC settings.
- **In Australia, inspectors receive pre-service education and training.** This is provided by the national body, ACECQA, which also provides ongoing professional learning and development for inspectors in addition to what is provided at the state and territory level.
- **Child learning and development is monitored in Australia by ECEC service providers and their systems of monitoring, review and record keeping are regulated against the NQS.** For providers, this helps identify the learning needs of staff. Direct and narrative assessments and observational tools are used to monitor children's development.

Introduction

The data and information in this country note for Australia 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 2014/15.¹ A separate OECD (forthcoming) *Starting Strong IV Early Childhood Education and Care Data Country Note: Australia* will provide an overview of ECEC policy inputs, outputs and outcomes in Australia.

This country note primarily aims to provide opportunities for peer-learning by highlighting Australia'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 Australia regarding key areas of monitoring quality in ECEC, of the types of challenges for Australia in monitoring quality, which have been identified by the OECD ECEC team in close consultation with the Australian 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). In Australia, there are four types of centre-based provision: preschools for 4-year-olds, occasional and long day care for 0-5 year-olds, and outside schools hours care for 5-12 year-olds. Home-based care services include family day care and in-home care for children up to the age of compulsory schooling, which starts at the age of five in most states. Australia's Early Years Learning Framework - *Belonging, Being, Becoming* - covers all ECEC settings for children aged 0 to 5. The Framework for School Age Care - *My Time, Our Place* - covers settings for school-age children, generally 5 to 12 years old.

In this country note, Australia is compared with Germany, New Zealand and the Netherlands. For Germany, the information and data regard child day-care centres for all children under the age of six. In New Zealand, there are five main types of ECEC setting, which are broadly split between centre-based provisions (including education and care services for 0-5 year-olds and kindergartens for 2-5 year-olds), playcentres for 0-5 years, and home-based education and care for 0-5 year-olds. In addition, there are *Kōhanga Reo*, which are Maori language nests. For the Netherlands, the information in this note refers to childcare centres for children from birth until 12 years, childminding for children up until age of 5, playgroups for all children from birth until 4 (when free pre-primary

¹For 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, <http://www.oecd.org/publications/starting-strong-iv-9789264233515-en.htm>.

education starts in the Netherlands), and targeted ECEC programmes for children aged 0 to 4 with a disadvantaged background. 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 areas of service quality, staff quality, curriculum implementation and child development and outcomes. The remaining sections focus on Australia's monitoring policies and practices in comparison with Germany, New Zealand and the Netherlands. 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 Australia 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 (Kamerma, 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 Australia stands in international comparison

How quality is defined in Australia

Quality encompasses all the features of children's environments and experiences that are assumed to benefit their well-being and development (Litjens, 2013). Such features include the use of a curriculum, staff characteristics, teacher or caregiver 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 and it is a value- and cultural-based concept, meaning that definitions of quality tend to change over time (Kammerman, 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 Australia, quality is defined through its National Quality Framework (NQF). The NQF is the result of an agreement between the Australian Government and all state and territory governments to work together to provide better educational and developmental outcomes for children using education and care services. The National Quality Standard (NQS) is a key aspect of the NQF and sets a national benchmark for ECEC and outside school hours care services in Australia. After assessment against the NQS, each service receives an overall rating and a rating against each of the seven quality areas: 1) educational programme and practice; 2) children's health and safety; 3) physical environment; 4) staffing arrangements; 5) relationships with children; 6) collaborative partnerships with families and communities; and 7) leadership and service management. These are the areas for quality regarded as most important in Australia. Most other countries do not have a clear definition or framework for quality in ECEC.

In the Netherlands, quality is mainly defined through national standards that are monitored through inspections. There is no national curriculum in place, unlike in other countries. Different quality standards exist for health inspections and education inspections, which each monitor different aspects. The health inspection (concerning all childcare facilities) focuses on the structural quality of the facility and the staff, while the education inspection places greater emphasis on pedagogical and educational aspects.

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, 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, 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, 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 5 sub-programmes.

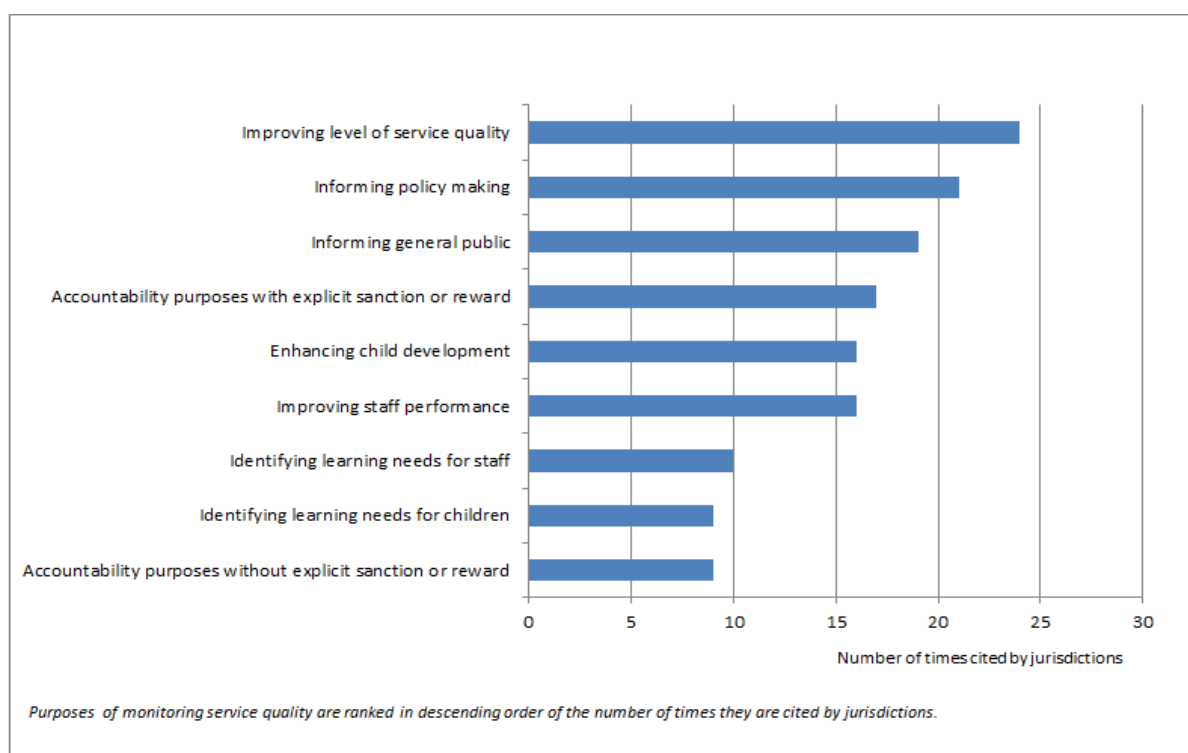
New Zealand regulations indicate that all licensed ECEC settings in the country have to implement the Te Whāriki early childhood curriculum framework. The regulations, in combination with the curriculum framework, provide an indication of what constitutes quality in New Zealand. The early childhood curriculum framework describes outcomes for Early Childhood Education (ECE) settings in terms of knowledge, skills and attitudes, and gives staff pedagogical guidance on how these can be achieved (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).

Figure 1. Purposes of monitoring service quality

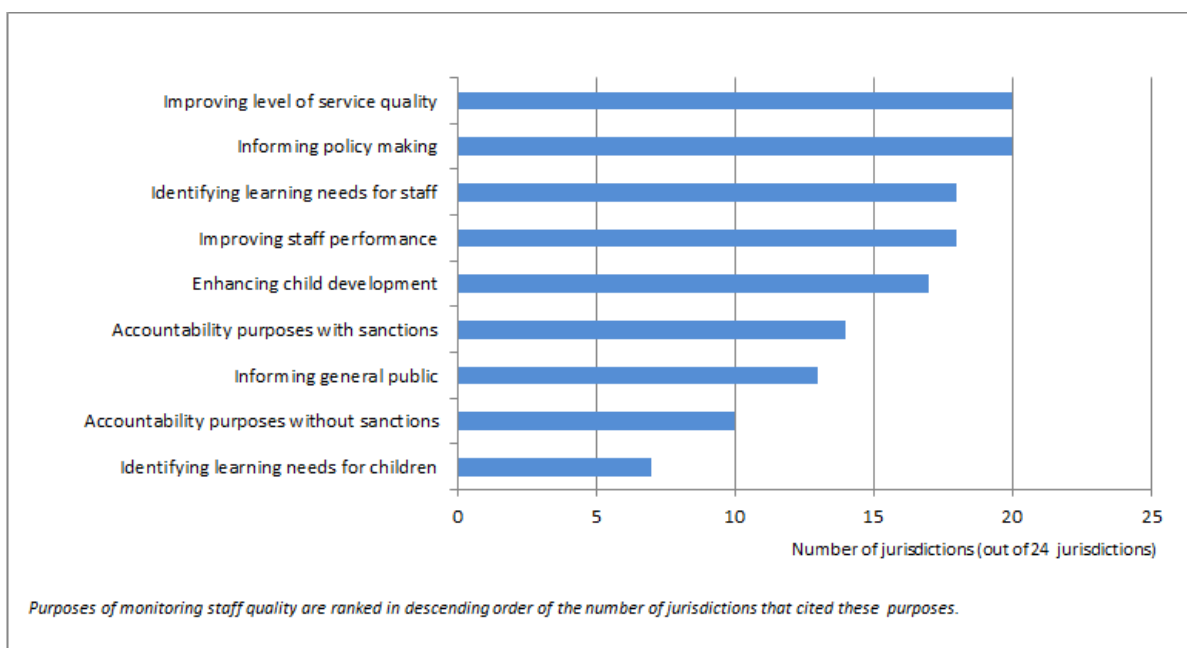


Source: OECD (2015), *Starting Strong IV: Monitoring Quality in Early Childhood Education and Care (ECEC)*, Table 3.1, OECD Publishing, <http://dx.doi.org/10.1787/888933243059>.

The main reasons for monitoring quality in Australia are to encourage providers to improve the quality of their service to meet (or exceed) the national benchmark, and to inform families about the level of quality of ECEC services. There are also six purposes that Australia and New Zealand share for monitoring service quality: 1) for accountability reasons (with sanctions); 2) to inform policy making; 3) to inform the general public; 4) to improve the level of service quality; 5) to improve staff performance; 6) and to enhance child development. In Germany, quality is monitored primarily to improve service and staff quality and to inform the general public about the level of quality provided. These two reasons are also identified by the Netherlands, in addition to informing policy making and for accountability purposes, with or without sanctions.

The purposes for monitoring service quality are similar to the purposes for monitoring staff quality in Australia, as staff qualifications and systems for staff practice quality are monitored as part of the quality inspection. New Zealand and Germany each identify two main purposes for monitoring staff quality: in New Zealand it is to improve staff performance and to identify learning needs for staff; and in Germany it is to enhance service and staff quality. The Netherlands has similar purposes for monitoring staff quality and service quality.

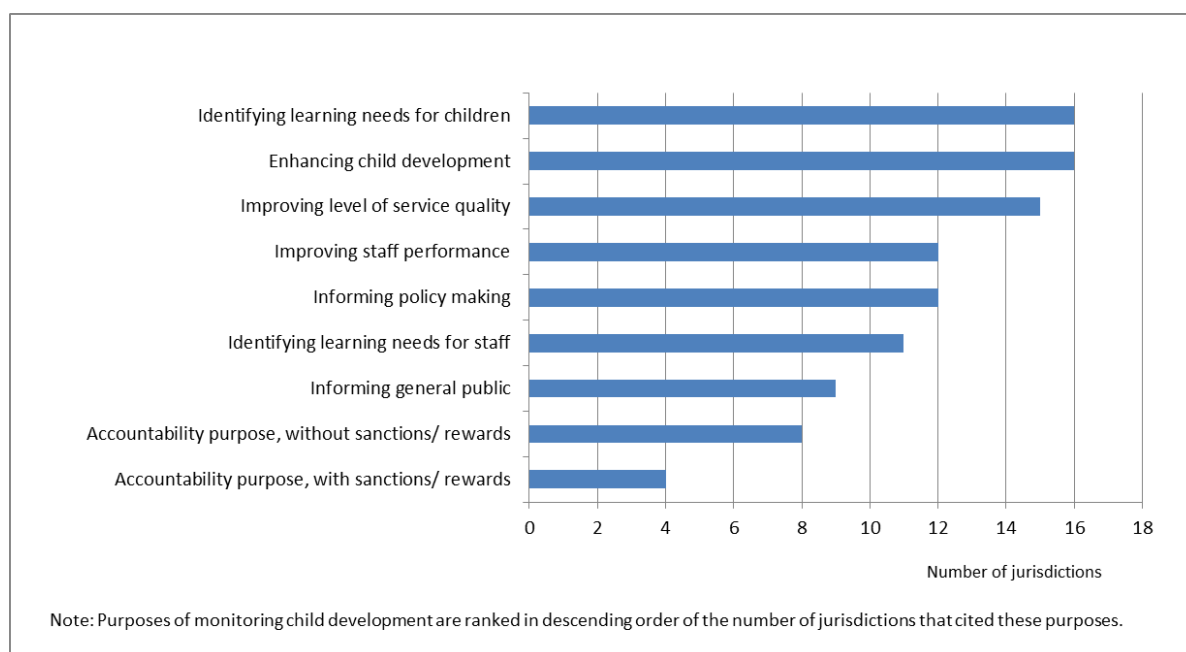
Figure 2. Purposes of monitoring staff quality



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).

In Australia, children’s development and outcomes are monitored for the same purposes as service and staff quality, with the additional purpose of identifying the learning and training needs of staff. In New Zealand, children’s learning and development is monitored to improve the level of service quality, to identify learning needs for staff and to identify learning needs for children. Germany monitors children’s learning and development mostly for the same reasons, however, instead of identifying learning needs for children it aims to enhance children’s development (see Figure 3 for a complete overview of purposes).

Figure 3. Purposes of monitoring children's development

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

Monitoring practices

Countries use various approaches and practices for monitoring service quality, staff quality and child development. 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 Australia, the government regulatory authority in each state or territory conducts inspections, guided by the National Quality Framework. This is similar to Germany's monitoring system. In New Zealand, the Education Review Office (ERO) conducts external evaluations, while in the Netherlands, the municipal health offices inspect ECEC settings and the Inspectorate for Health and Education monitors all ECEC services for disadvantaged children. Internal monitoring practices are conducted by evaluators who also work in the setting, such as managers and practitioners. Internal evaluations are common in Germany, New Zealand and the Netherlands.

External monitoring practices include inspections, surveys and peer reviews (when conducted by, for example, a teacher from another ECEC setting). Internal practices include self-evaluations, peer reviews, and tests for staff (staff quality only). External inspections and internal self-evaluations are the most common methods or practices used to monitor service and staff quality. Australia, New Zealand, Germany and the Netherlands all conduct external inspections (see Table 1). The NQS in Australia is used to assess how practice is organised and delivered, monitored, documented and evaluated across the service, although it does not evaluate individual staff quality. Staff qualification levels, which are monitored, are mandated as part of the national legislation.

Self-assessments are common in many countries to monitor service and staff quality. In Australia, since the introduction of the National Quality Framework in 2012, ECEC settings must submit a Quality Improvement Plan (QIP) to their state or territory regulatory authority to help the assessment and rating of the setting. The aim of the QIP is to help providers of ECEC to self-assess their performance in delivering quality education and care, including assessment of the quality of practices against the national regulations and the seven quality areas of the NQS. The QIP helps ECEC settings plan future improvements and assists the regulatory authority in assessing the setting. New Zealand

indicated that it is common for leaders and managers to undertake staff appraisal reviews, which are indicated as peer reviews in the table below. Surveys are used in both Germany and the Netherlands to monitor service quality (in both) or staff quality (in the Netherlands).

Table 1. Monitoring practices for service and staff quality

	External practices			Internal practices		
	Inspections	Surveys	Peer reviews	Peer reviews	Tests for staff	Self-assessment/evaluation
Australia*	X					X
Germany**	X	X (Service)				X
New Zealand***	X (Service)			X (Staff)		X
Netherlands	X	X				X

Notes: *In Australia, ECEC settings are required to develop a Quality Improvement Plan (QIP) and submit it to a regulatory authority. The QIP helps regulatory authorities assess and rate settings against the National Quality Standard. As part of QIP, providers self-assess their performance and quality against the National Regulations and the quality areas of the NQS. **In Germany, surveys to monitor quality are only used in monitoring service quality. ***In New Zealand, external inspections of service quality, but not staff quality, are conducted. Peer reviews refer to staff appraisal reviews of ECEC staff conducted by leaders and/or managers.

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. In Australia and Germany, direct and narrative assessments and observational tools may be used to monitor children’s development. New Zealand tends to use narrative assessments through learning story frameworks and portfolios (OECD, 2015).

Areas and scope of monitoring

There are a number of different *aspects* or areas that can be monitored in relation to service² and staff quality.³ 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.

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: this is the case in Australia, New Zealand and the Netherlands, while these are monitored in Germany (see Table 2).

² 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.

³ 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.

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
Australia*	Family day care, Long day care, In home care, outside school hours care	X	X	X	X	X	X	X		X	X	
	Occasional care	X	X	X	X	X	X	X				
	Preschool	X	X	X	X	X	X	X		X	X	
Germany	Family day care and child day care centres	X	X	X	X	X	X	X	X	X	X	
New Zealand**	All ECEC settings	X		X	X	X	X	X		X	X	X
Netherlands	All ECEC settings	X	X	X	X		X	X				

Note: *For Australia, occasional care and in-home care are not part of the NQF, however, some state and territory laws do apply these attributes in some cases. For New Zealand, data on inspections refer to the inspections conducted by ERO and do not refer to the inspections conducted by the Ministry of Education for licensing purposes. The aspects monitored through inspections for licensing purposes cover different aspects. **In New Zealand, ERO has evaluation indicators in place for its reviews of education and care centres, kindergartens and Playcentres. ERO also has separate evaluation indicators for its reviews of Kōhanga Reo. ERO has recently revised its evaluation indicators for reviews of home-based services and is in the process of revising its indicators for hospital-based early childhood services.

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

In Australia, a wide range of aspects are monitored, which differ across some types of settings. Staff-child ratios, space requirements, health, hygiene and safety are monitored in all Australian ECEC settings. However, curriculum implementation and human resource management are not monitored in occasional care provisions (see Table 2). In New Zealand, 9 (out of 11) aspects of service quality are monitored across all settings through inspections conducted by ERO. The only aspects not monitored by ERO are indoor/outdoor space (although space is monitored by the Ministry of Education for licensing purposes) and staff working conditions. In German family day care and child day-care centres, almost all aspects are monitored except for financial resource management. In the Netherlands, the scope of inspections is narrower, focusing on staff-child ratios, indoor and outdoor space, health and safety regulations, minimum staff qualifications and the planning of work (OECD, 2015).

Staff quality

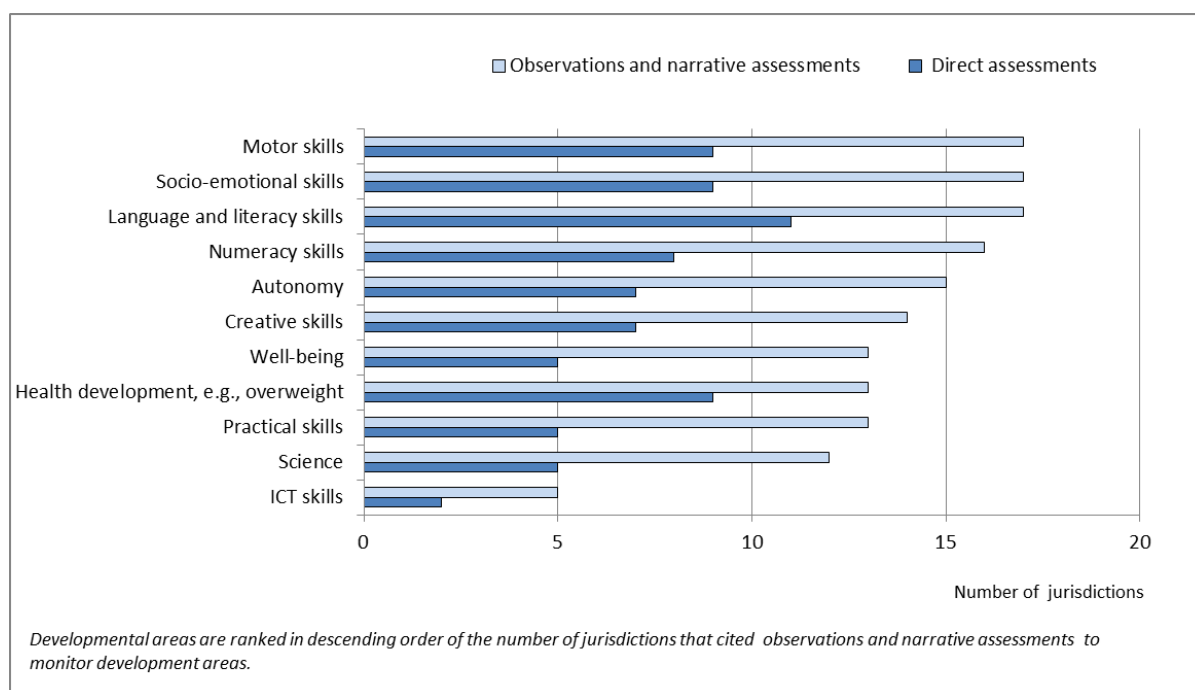
The NQS in Australia includes assessments of how practices are organised and delivered, monitored, documented and evaluated across the service. Individual staff quality is not evaluated, but staff qualification levels are mandated as part of the national legislation and are monitored. In New Zealand, ERO monitors early childhood services' systems and processes for the performance management of staff, including staff appraisal. However, ERO does not conduct individual staff assessments, which are conducted internally in ECEC settings. When ERO conducts an inspection of

the performance system in an ECEC setting, the procedure focuses on the implementation of the curriculum, the overall quality of teaching and instruction, teamwork and communication, communication between staff and parents, management and leadership, and overall process quality. Germany inspects similar aspects as Australia, with a focus on communication with parents and management and leadership. It also monitors staff quality through surveys that address similar aspects as inspections, except that they do not cover the overall quality of teaching and staff qualifications. The Netherlands also uses inspections and surveys to monitor staff quality. Inspections have a more narrow focus than surveys and monitor the following aspects: staff qualifications, process quality, the use of materials, time management and planning, teamwork among staff, and staff knowledge of the subjects they teach. In addition, surveys address the implementation of the curriculum and overall staff quality.

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 Australia, all aspects listed in Figure 4 are monitored. In New Zealand, the areas assessed vary by setting and within settings, while in German day-care centres, language and literacy skills are most commonly monitored.

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



Note: Information on use of direct assessments and observations and narrative assessments to monitor developmental areas 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.

The Australian Government, in collaboration with the state and territory governments, sought advice from early childhood experts on designing and developing the NQF and the NQS for all ECEC settings. Australia's national child development monitoring system was developed over a number of years, in combination with various stakeholders and experts. The Centre for Community Child Health (CCCH) received federal funding to pilot the instrument in more than 60 communities, and the Australian Early Development Index (AEDI) was created (see Box 1).

In Germany, local authorities are responsible for developing a monitoring system for their municipality and there is no national monitoring system in place. However, the Child and Youth Welfare Statistics generate data that allow policy makers to evaluate the quantitative growth, staff and employment conditions, and other structural features of the ECEC sector, such as opening hours, 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 New Zealand, ERO designed the monitoring system in consultation with the Ministry of Education. ERO is responsible for evaluating and publicly reporting on the quality of education and care of children in all New Zealand schools and early childhood services. ERO has an ongoing programme to review its evaluation methodologies. In 2012-13 it revised its methodology for centre-based services, and it has recently reviewed its methodology for reviews of home-based education and care services. It is currently revising the way it reviews hospital-based education and care services, which are a small but unique part of its ECE sector. In the Netherlands, the monitoring system is a result of collaboration between the government, sector-based partners, scientists, inspection services and enforcement services.

Box 1. The use and adaptation of the Early Development Instrument (EDI) in Australia

Originally developed in Ontario, Canada, the Early Development Instrument is a population-level measure of children's development or well-being as they enter school. Some other countries have subsequently developed their own EDI according to their particular cultural and societal needs. Australia adapted the EDI to create the Australian Early Development Index (AEDI). The EDI has also been adapted, validated and applied by the Ministry of Health in Mexico for early detection of neurodevelopmental problems in children under the age of five.

The EDI is completed by teachers. The results are aggregated to the group level (school, neighbourhood, city, etc.) to provide a population-based measure of children's development. The data are not reported at the child or class level, which means they are not used as a diagnostic tool for individual children or for assessing their school readiness. The results of the EDI allow local authorities, communities or providers to assess how local children are doing relative to other children in their community, and across the country (if implemented at country level).

The instrument measures five key domains of early childhood development: 1) physical health and well-being; 2) social competence; 3) emotional maturity; 4) language and cognitive skills; and 5) communication skills and general knowledge.

Box 1. The use and adaptation of the Early Development Instrument (EDI) in Australia (continued)

In 2003, federal and state governments, academics and practitioners reached a strong consensus that the EDI should be adapted for Australia. The Centre for Community Child Health (CCCH) received federal funding to pilot the instrument in more than 60 communities, and the AEDI was created. Since 2009, the Australian Government has supported a national data collection through this instrument, every three years, on the developmental health of all children starting school. In 2014, the AEDI program was renamed the Australian Early Development Census (AEDC), to distinguish the programme from the data collection instrument, while noting that it is the Australian version.

An example from the Australian island state, Tasmania, shows how AEDC results can be used to motivate and inform practices to foster child development. Results from 2009 and 2012 showed that Tasmania had a lower share than the national average of children who were developmentally vulnerable in one or more assessed domains. However, in some communities, results showed high levels of vulnerability among children. The Tasmania-wide *Launching into Learning* initiative started in 2007 in 30 primary schools, which are often located on the same site as kindergartens. Teachers in participating schools deliver activities for babies, children in preschool and parents. They have used the results of the EDI to inform their choice of suitable activities for the programme and to address the areas where children risk being vulnerable. With the support of the Tasmanian Department of Education, teachers undertake professional development to better understand the EDI data and the related developmental domains so that they can design their activities with parents and children on the ground. For instance, unfamiliar places can be visited to foster the development of reliance and risk-taking. According to the Education Department, children who have regularly participated in *Launching into Learning* activities perform better than their peers in mathematics at the beginning of primary school (preparatory).

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

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.

Australia and New Zealand have an integrated ECEC system, with the Ministry of Education responsible for ECEC. However, many ECEC responsibilities in Australia are decentralised to states and territories. Germany also has an integrated system at the federal level, with the Federal Ministry of Family Affairs, Senior Citizens, Women and Youth carrying responsibility for ECEC. However, as in Australia, most responsibilities for ECEC in Germany are decentralised to state-level and local authorities. The Netherlands has a split ECEC system, with the Ministry of Social Affairs and Employment responsible for children in childcare and playgroups up to the age of four; and the Ministry of Education, Culture and Science responsible for children in kindergartens (pre-primary education) aged four and older, as well as for all targeted ECEC programmes for disadvantaged children.

Most states and territories in Australia have an integrated ECEC system, whereby one department is responsible for ECEC. At the federal level, the Australian Government has responsibility for supporting the delivery of ECEC through improving affordability for families and providing programme support for ECEC services. State and territory governments fund preschools and regulate for quality and minimum standards against national legislation and frameworks. The Australian Government, in partnership with state and territory governments, implements the NQF and the NQS, with national oversight and guidance provided by ACECQA. This partnership of governments resulted in a national curriculum – the Early Years Learning Framework – that is a key component of the NQF.

In New Zealand, responsibility for aspects of ECEC quality (financing, minimum standard setting, curriculum development and monitoring of quality) are held at the central government level. ERO is responsible for monitoring all types of ECEC services and largely recruits review officers (evaluators) from the education sector who have a background in management/leadership and/or teaching in schools or early childhood services. In Germany, standard setting and curriculum development is done at the state or regional level, while financing and monitoring ECEC is a shared responsibility between regional (state) authorities and local municipalities. The Netherlands does not have a national curriculum in place for ECEC, and therefore the government or regional authorities are not involved in curriculum design. Responsibilities for funding are shared between the national and regional governments, while monitoring and minimum standards are set at the central government level.

Funding for monitoring 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 Australia, the monitoring of ECEC is financed by public funding largely at state and territory government levels. In New Zealand, the monitoring of ECEC is financed by public funding at the central level. In the Netherlands, monitoring is funded by national government and local authorities. In Germany, the monitoring of family day care and child day-care centres is funded through local authorities, and is complemented by private funding for child day-care centres (OECD, 2015).

Qualification and training of evaluators

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

In the vast majority of jurisdictions, at least 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 can focus on various skills or aspects of ECEC. Australian and German inspectors are trained for their role during pre-service education programmes. ECEC staff who conduct internal evaluations are not specifically trained for this role in Australia and Germany, although training on this subject may be available. In New Zealand, ERO places a strong emphasis on the importance of continuous learning and ERO evaluators receive on-the-job or in-service professional learning and development. Evaluators also have the opportunity to undertake further tertiary-level study in evaluation. ECEC professionals and managers with evaluator roles also receive evaluation training, although this training differs from the training for ERO evaluators.

The Netherlands prepares external evaluators for evaluations mainly through on-the-job training, while staff are prepared during their pre-service education programme and have the opportunity to receive further training. In both New Zealand and Australia, training is provided to external evaluators in the following areas: theoretical and technical knowledge of evaluation, implementation skills and interpretation of monitoring results. This training is limited to implementation and interpretation skills for German inspectors (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
Australia	External assessors		X	
	Internal assessors	X		
Germany	External assessors		X	
	Internal assessors	X		
New Zealand	External assessors			X
	Internal assessors			X
Netherlands	External assessors			X
	Internal assessors		X	X

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, Tables 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.

In Australia and New Zealand, similar data gathering instruments or tools are used during external inspections or evaluations: observations, interviews, results of internal evaluations, and the analysis of settings' internal documentation. In Australia, rating scales may also be used during inspections. In New Zealand there are some differences in tools used across settings. The NQS in Australia includes evaluation indicators across seven quality areas. Inspectors gather information against the NQS evaluation indicators for all service types regulated under the National Quality Framework. New Zealand does not have a National Quality Framework. However, ERO has developed evaluation indicators in four key domains. Evaluators use evaluation indicators to evaluate the quality of all regulated service types. ERO has evaluation indicators in place for its reviews of education and care centres, kindergartens and playcentres, and has separate evaluation indicators for its reviews of Maori language nests (Kōhanga Reo). ERO has recently developed evaluation indicators for reviews of home-based education and care services, and is in the process of developing evaluation indicators for reviews of hospital-based services. In Germany, a wide range of instruments may be used when inspecting day-care centres. These include similar tools as Australia, but also staff and parental surveys and checklists. In the Netherlands, surveys taken by inspectors, rating scales, checklists, observations, and interviews are common tools used during inspections of childcare centres and playgroups.

Internal evaluation is often used in combination with external evaluation/inspections to monitor service quality in Germany, the Netherlands and New Zealand. In New Zealand, ERO adopted a revised approach in 2012-13 to reviews of centre-based early childhood services. A feature of the revised approach to external evaluation is the use of a "self-report" (self-evaluation) that each early childhood service and its staff complete at the beginning of the external evaluation process. This provides an opportunity for leaders and teachers in each setting to share with the review team what they know about their processes and practices in relation to the key aspects of the review framework.

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.

The data collection processes or instruments used to carry out internal evaluations in New Zealand vary across settings. The Netherlands usually uses checklists, while Germany uses self-reported surveys, self-reflective reports, portfolios and checklists.

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.

In Australia, the monitoring and inspection of service and staff quality are integrated. When settings and the staff are inspected, observations, interviews, surveys, internal documentation and self-analysis results may be used. These can also be used in the Netherlands during inspections, with the difference that rating scales and checklists may be used instead of analysis of internal documentation and self-evaluation results. Internal monitoring practices for staff quality are not mandatory in Australia, but self-evaluations may be conducted in ECEC settings. As they are the responsibility of each service provider under the NQS (Leadership and service management Quality Area), the tools used differ by setting.

In New Zealand, staff quality is monitored primarily through self-assessments and peer reviews (carried out by managers). ERO externally reviews the systems for staff appraisal in ECEC settings, but does not evaluate the performance of individual staff. Monitoring of individual staff quality in New Zealand is conducted at the setting-level, with teacher criteria establishing the requirements staff need to meet. When peer reviews are conducted in New Zealand, the evaluation tools used are: observations, results of the staff member's self-evaluation, analysis of staff documentation, and the portfolios prepared by staff. Portfolios are also used in New Zealand during staff's self-evaluations, together with self-reflection reports or journals. Checklists are commonly used during self-evaluations in the Netherlands, while in Germany, each setting decides on the instruments used (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).

The majority of jurisdictions use observational tools (primarily checklists), however these often vary by type of ECEC setting. Narrative assessments are also common, while direct assessments through testing and screening are used less often. In Australia, all monitoring tools/instruments listed in Table 4 may be used to assess and monitor children's outcomes. The Early Development Instrument (EDI) is a population-level measure of children's development or well-being as they enter school, which has been implemented and adapted for use in Australia (see Box 1). In New Zealand, portfolios and storytelling methods are most commonly used to assess and monitor child development. As Table 4 shows, there is some variation in the combination of tools used: Australia and Germany report using all three methods (with six tools), while New Zealand focuses on using narrative assessments. The Netherlands primarily uses checklists for monitoring children's development. However, other measures may be used in addition.

In Australia, children's views are captured, when possible, during development of the Quality Improvement Plan (QIP). Regulations establish the requirements for the preparation and review of the QIP in each ECEC setting. Children's views are also a fundamental principle of the Early Years

Learning Framework and My Time Our Place (the framework for school-age children in care outside school hours). These frameworks have been central components of Australia’s system since 2012.

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
Australia	X	X	X	X	X	X
Germany	X	X	X	X	X	X
Netherlands						X
New Zealand			X	X		

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

Frequency

Service quality is generally monitored a set number of times by the responsible monitoring body. The frequency of monitoring often varies across different types of ECEC. In Australia, New Zealand, and the Netherlands, the frequency of inspections depends on the last monitoring result. In Germany, no particular regulations for frequency of monitoring exist, except in Berlin where the *Berliner Bildungsprogramm* requires that an external evaluation in ECEC centres is conducted every five years. In New Zealand’s centre and home-based services, ERO judges “how well placed the service is to promote positive learning outcomes for children”. If the service is very well placed, the next ERO review is in four years; if well placed in three years; if the service requires further development a review will take place within two years; and if not well placed the Ministry of Education will be asked to reassess the service’s license. The process for determining frequency of reviews differs for home-based care, where reviews occur every 3 years or 12 months, depending on the last review result.

Staff in New Zealand ECEC settings are usually internally evaluated once per year. In the Netherlands and Berlin (Germany), internal evaluations are also seen as a continuous (yearly) process. Child development is, in general, monitored on a more frequent basis, usually continuously through observations and/or contributing to portfolios.

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 Australia, the Netherlands and New Zealand, inspection results have to be made available to the public, whereas in Germany, settings can decide on the release of inspection results. In New Zealand, ERO’s national evaluation reports have to be made available to the public. These reports provide system level information in relation to specific topics, inform policy decisions and provide ECEC services with examples of good practice. Feedback indicates that the findings of these reports are used to inform practice and as a basis for self-review in early childhood services (OECD, 2015).

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 Australia, underperforming settings may be required to take measures to address shortcomings. Management/staff may be obliged to participate in training, and in severe cases, a setting can be closed and a license revoked. In the Netherlands, similar consequences exist. In Germany, underperforming

settings have to take measures to improve their level of quality. In New Zealand, the potential consequence from a poor ERO evaluation result is initially a follow-up inspection. ECEC services that underperform are required to address their issues and work with the Ministry of Education to develop an action plan. Only when no improvement is shown, or when settings frequently do not meet the ERO standards, can the Ministry reassess the setting's license and decide whether or not it should be closed.

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. Australia's main challenge is the consistent implementation of monitoring procedures and practice.

Challenge: Consistent implementation of monitoring procedures and practices

In Australia, service quality is often monitored through external evaluations, often using inspections. As inspections are in part subjective in nature, it is important that inspectors have a consistent understanding of what a quality service is to ensure that ratings are consistent.

Prior to the establishment of the NQF in 2012, the ECEC sector in Australia was governed by 9 separate regulatory frameworks, which were characterised by inconsistent standards and duplication. The NQF harmonised the separate regulatory frameworks into a single framework underpinned by nationally consistent legislation, and an NQS (a set of benchmarks) against which services are inspected (or assessed) and rated. Regulatory authorities in each state and territory inspect and rate services in their own jurisdictions.

There are high levels of support for the NQF, and a decline in the perception of the burden associated with administrative requirements. The Australian Children's Education and Care Quality Authority (ACECQA) is undertaking further work to support ECEC services in specific areas and is continuing, along with regulatory authorities, to identify improvements that will enhance monitoring procedures and practices. In addition to a national regulatory and quality framework, training can contribute to a more consistent implementation of monitoring practices and strengthen the link between internal and external evaluations. This has taken place in New Zealand.

Providing on-the-job/in-service training

In Australia, the NQS supports consistency in assessment and rating. ACECQA and state and territory regulatory authorities work together to develop resources and guidance notes, to identify areas of inconsistency, and to determine national solutions to operational issues. Ratings of services are analysed for inconsistency to inform future training and practice of inspectors. State and territory regulatory authorities and ACECQA provide training to ECEC providers and services about the NQS and requirements of the NQF.

Other country examples include:

In **New Zealand**, ERO largely recruits review officers (evaluators) from the education sector who have a background in management/leadership and/or teaching in schools or early childhood services. Evaluators subsequently receive ongoing on-the-job/in-service training.

External evaluators in **Sweden** have a variety of backgrounds, including preschool teacher qualifications, preschool managerial experience or a university degree. Evaluators are given internal training by more experienced colleagues and are educated/trained through internal seminars and guidelines.

In **Luxembourg**, all teachers receive on-the-job training for drafting school development plans and regularly evaluating whether objectives have been attained.

Mexico has several different ECEC institutions, but they all provide a form of in-service training for evaluators, particularly in IMSS (*Instituto Mexicano del Seguro Social* or Mexican Social Security Institute) settings, where internal evaluators are called “zone co-ordinators”. Evaluators receive constant training through training courses, a national event held once a year, video conferences and at IMSS training centres.

Linking external and internal evaluations

New Zealand places a great emphasis on linking external and internal evaluation procedures on service quality, which it considers to be closely related and complementary to one another. ERO’s external evaluation process is both proportional and responsive to an individual service’s self-review. ERO’s approach is based on evidence that external evaluation can stimulate, expand upon and validate the results of internal evaluation, while internal evaluation can deepen the scope of external evaluation and provide important insights. ERO uses its external evaluation process to increase the capacity of early childhood services to undertake internal evaluation (self-review) as a routine activity for both accountability and improvement purposes. The intent is for evaluation to subsequently become embedded in the day-to-day practice of managers and educators.

REFERENCES

- Bagnato, S. (2005), “The authentic alternative for assessment in early intervention: An emerging evidence-based practice”, *Journal of Early Intervention*, Vol. 28, No. 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. No. 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, No. 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, No. 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, No. 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*, No. 17, No. 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 12th 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 Rammeplan for barnehagens innhold og oppgaver blir innført, brukt og erfart*, 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, No. 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/10.1787/5km4htwzvbv30-en>.
- Sheridan, S. (2001), “Quality Evaluation and Quality Enhancement in Preschool - A Model of Competence Development”, *Early Child Development and Care*, Vol. 166, No. 1, pp. 7-27.

- 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, No. 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.
- 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.