April 2017

National Early Childhood Care and Education Quality Monitoring Systems

Kate Anderson
Abbie Raikes
Sunita Kosaraju
Alex Solano

B | Center for Universal Education at BROOKINGS

unicef

THE WORLD BANK

Authors

Kate Anderson is a project director and associate fellow in the Center for Universal Education at the Brookings Institution.

Abbie Raikes was the Measuring Early Learning Quality and Outcomes lead at UNICEF. She is currently director of the Global Early Childhood Development Research at the University of Nebraska Medical Center.

Sunita Kosaraju was an economist with the Global Education team at the World Bank. She is now a data science consultant at the University of the People.

Alex Solana was an early childhood development consultant at the World Bank. She is now an education specialist at the Global Partnership for Education.

Acknowledgements

This paper was written to inform the Measuring Early Learning Quality and Outcomes (MELQO) project, a collaborative effort between individuals from UNESCO, the World Bank, the Center for Universal Education at the Brookings Institution, and UNICEF. The authors would especially like to thank Amanda Devercelli of the World Bank, Tamar Manuelyan Atinc and Tyler Ditmore of the Center for Universal Education at the Brookings Institution, and Nurper Ulkuer for their contributions to this work.

MELQO Core Team

Technical Lead: Abbie Raikes, University of Nebraska	
UNESCO	Maki Hayashikawa Sobhi Tawil
World Bank	Amanda Devercelli Lucy Bassett
Center for Universal Education, Brookings Institution	Kate Anderson Tamar Manuelyan Atinc Fabiola Lara
UNICEF	Pia Britto Ana Nieto

Acronyms

ACEI	Association for Childhood Education International
CCC	Chile Crece Contigo
CPEIP	Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas
DSD	Department of Social Development
ECC	Early Childhood Commission
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECERS	Early Childhood Environment Rating Scale
ELDS	Early Learning and Development Standards
GPE	Global Partnership for Education
IDB	Inter-American Development Bank
ISSA	International Step by Step Association
ITERS	Infant/Toddler Environment Rating Scale
JUNJI	Junta Nacional de Jardines Infantiles
M&E	Monitoring and Evaluation
MCDGC	Ministry of Community Development, Gender, and Children
MELE	Measure of Early Learning Environments
MELQO	Measuring Early Learning Quality and Outcomes
MINEDUC	Chilean Ministry of Education
MoNE	Turkey Ministry of National Education
NAEYC	National Association for the Education of Young Children
NAFCC	National Association for Family Child Care
NGO	Non-governmental organization
OECD	Organization for Economic Cooperation and Development
SABER	Systems Approach for Better Education Results
SDGs	Sustainable Development Goals

Contents

I. Introduction

Regular, reliable, and comprehensive data on young children's development and the quality of their learning environments are essential to address the problem of poor learning outcomes in primary school and beyond. These data can be used to monitor progress toward national and global goals by identifying children's competencies and areas of need. Such data can also help ensure that schools and community organizations offer appropriate settings to support children's holistic development. With early childhood development and learning as a target for the Sustainable Development Goals (SDGs) and Education 2030 Framework for Action, the need for these data is gaining greater urgency.

In order to know how to meet this demand for data, we must first understand where we are now. This brief describes current country practices related to setting standards and monitoring the quality of early childhood care and education (ECCE) learning environments. It was written to inform the Measuring Early Learning Quality and Outcomes (MELQO) project convened by UNICEF, UNESCO, the World Bank, and the Brookings Institution.

Key findings:

- Information on the approaches low- and middle-income countries use to monitor quality of their services is limited. Most of the information on systems to monitor children's learning environments comes from higher-income countries with more developed early childhood development and education systems (e.g., OECD 2015).
- There is agreement on many key constructs of quality, and these can be summarized to help countries develop feasible approaches to monitoring quality at scale.
- While many countries have established standards for ECCE quality, it is unclear if these standards are appropriate and adequate for supporting children's development outcomes, and implementation of these standards is uneven.
- Many countries engage in routine monitoring of preschool settings, often with emphasis on health and safety standards. Few tools to holistically monitor critical elements of quality are available, especially in developing countries, to facilitate monitoring of quality at scale.

The brief is organized in six sections. The first section provides a background on ECCE and definitions of quality. The second section describes the methodology. The third section contains information on which countries have national ECCE quality standards and how they are developed. The fourth section describes evidence about what elements of quality countries monitor, based on three cross-national surveys. The fifth section describes compliance and how countries enforce the standards. The sixth section describes how four countries (Chile, Turkey, Jamaica, and South Africa) have designed and implemented systems to monitor quality. The paper ends with conclusions and recommendations for further research.

Background and definitions of quality

Early childhood development (ECD) services refer to a broad range of supports for young children and their families, including health, early care and education, home visiting programs, social protection, and child welfare (Britto et al. 2011). Within ECD services, ECCE typically refers to programs serving non-familial groups of young children. In this paper, we review monitoring, regulatory, and evaluation systems for ECCE programs provided in a school setting, a community setting, or a child care setting in a home. There is no international agreement on the definition of quality ECCE. While quality is ultimately defined by how well an ECCE program helps children develop, there is agreement that definitions of quality should integrate locally relevant expectations for children's development with scientifically based expectations across children's language, socialemotional, cognitive, and physical development (MELQO 2017). Research and practice have converged upon a set of quality characteristics that promote children's development across domains and respect their rights. These characteristics include adequate safety, attention to health, a safe and stimulating physical environment, supportive teacher-child interactions, qualified staff with pedagogical and content knowledge, and a comprehensive curriculum approach across multiple domains of development (Britto et al. 2011). Other important elements of program quality include the strength of connection between the program and the community, including family engagement and connections to health and nutrition services (UNICEF 2012).

The World Bank's Systems Approach for Better Education Development (SABER) ECD framework cites four categories used to describe elements of quality that predict child development outcomes, including their physical, cognitive, linguistic, and socioemotional development (Myers 2004; 2006). Of these, process variables have been shown to be most closely and consistently related to child outcomes, although it should be noted that almost all research connecting elements of quality to child development is from high-income countries (see MELQO 2017, for more detail). These categories are:

- **Structural variables:** Adult-child ratios, group size, physical environment, and availability of equipment and pedagogical material.
- **Caregiver variables:** Initial education, training, mentoring/supervision, and wages.
- **Program variables:** Program intensity, parent involvement, language of instruction, curriculum, daily routine, and health/nutrition inputs.
- **Process variables:** Caregiver-child and child-child interactions (Naudeau et al. 2011).

There are limited data on the approaches countries use to monitor quality of their services, and few studies analyze ECCE monitoring and evaluation policies and practices across countries. Most of the information systems to monitor children's learning environments are from higher-income countries with more developed ECD systems.

Methodology

In this paper, two types of evidence are presented: survey data and case studies. Survey data from 57 countries are reviewed to examine the various ways that monitoring and evaluation systems for ECCE learning environment are developed and how they are monitored in various country contexts. The authors reviewed/scanned the literature and conducted interviews with a small number of experts. The review is based on 21 countries participating in the SABER-ECD, 21 additional countries participating in ongoing Organization for Economic Cooperation and Development (OECD) surveys of countries' policies and practices on ECCE, and 19 countries participating in an Inter-American Development Bank (IDB) study on ECD services in Latin

America and the Caribbean.[1] None of the surveys are representative; participation is each country's choice.[2] Annex B contains a description of the SABER methodology.

In addition to the survey data, four case studies are presented on development and monitoring of ECCE quality standards in four diverse settings: Chile, Turkey, South Africa, and Jamaica. These case studies describe how the standards were developed and monitored to illustrate four different types of monitoring systems.

Note that this brief does not focus on efforts to set standards for early development and learning and assess child outcomes against these standards, although many of the countries mentioned in this paper also have developed these types of standards.

Developing national standards and guidelines for ECCE quality

Ideally, standards should reflect both local goals and priorities for young children's development and the latest science on child development. One notable effort to generate locally relevant and scientifically sound standards comes from the domain of children's development and learning standards but is relevant also for establishing standards for the quality of children's early learning environment. The methodology for Early Learning and Development Standards (ELDS), which several countries in multiple regions have used, provides countries with a framework to develop standards for what young children should know and be able to do. Through this process, countries develop their own domain frameworks based on a national consultative process with guidance from international experts and support from UNICEF (Kagan and Britto 2005).

Looking across countries, many also have set standards for quality. Of the survey data from 57 countries examined in this paper, only three (Liberia, Sierra Leone, and Tajikistan) do not have any type of quality standards for ECCE. However, there is wide variation in what countries include in the standards. For example, some countries have national standards, while others have locally defined standards and corresponding monitoring systems. Some countries have minimum standards, such as floor levels for teacher-child ratios and basic health and safety standards, while others have higher-level standards that address teacher-child interaction, classroom environment and materials, curriculum, family engagement, and teaching approaches. Whether and how the standards are monitored is also different across countries; this is covered in subsequent sections of the paper.

While information on how standards were developed is not available for all countries, in the following countries standards were generated through dialogue with private and public ECD stakeholders. In Jamaica, the Early Childhood Commission, established in 2003, brought together all ECD agencies and multiple stakeholders to develop early childhood regulations for all ECCE programs, public and private (ECC 2007). In the United States, standards for publicly funded ECCE programs are established by federal and state governments, typically by working with experts from academia. Multilateral agencies also support the development of quality standards. For example, the Ministry of Education in Moldova received a grant from the World Bank and UNICEF to promote quality

[1] Because ECCE services are decentralized in many Latin American countries, select municipal programs are profiled for some countries in this study where there are no national systems.

[2] Breakdown of the 57 countries by region is as follows: East Asia & Pacific, 7; Europe & Central Asia, 19; Latin America and Caribbean, 19; Middle East and North Africa, 1; South Asia, 1; Sub-Saharan Africa, 10. Breakdown by income classification: low income, 9; lower middle income, 12; upper middle income, 16; high income OECD, 19; high income non-OECD, 1. Four countries in the IDB survey were also included in the SABER-ECD or OECD surveys.

through the development of a new national curriculum, early learning and development standards for young children, and teacher standards.

In addition to standards developed by governments, several non-governmental organizations have developed guidelines for quality. These guidelines can be used by countries to define standards, but it is unclear from existing surveys the extent to which the guidelines have influenced creation of national standards. There are international guidelines such as *Principles of Quality Pedagogy* from the International Step by Step Association (ISSA) and *Global Guidelines Assessment* from the Association for Childhood Education International (ACEI), each of which were developed by experts in multiple countries. Several voluntary accreditation systems operated by NGOs, including the National Association for the Education of Young Children (NAEYC) and the National Association for Family Child Care (NAFCC) in the United States, have also developed standards and criteria for quality, and these are often integrated into state policies.

II. What quality standards do countries monitor?

Based on the available data from the OECD and SABER-ECD surveys and the IDB study, five areas in which standards are monitored are examined for each country: teacher training and qualifications; program structure, curriculum, and interactions; infrastructure and classroom environment; health, safety, and nutrition; and family and community engagement. These five standard areas are selected for classification purposes in this paper based on the review of the various frameworks of what constitutes a quality ECCE learning environment. This classification is not intended to be definitive or exhaustive. While the three studies ask different questions, the authors examined various SABER-ECD and OECD survey indicators to establish whether a country implements or monitors some aspect of ECCE quality in each of the five standard areas.[3] Annex A contains a table with information from each country in the surveys.

OECD survey

All of the 21 countries in the OECD survey (OECD 2014) have quality standards, and all countries monitor quality standards in some way.[4] In Finland and Germany, there is no mandatory federal monitoring of quality standards, but sub-national and voluntary monitoring occurs.

- **Teacher training and qualifications** are monitored in all countries in the OECD survey except Portugal, but the extent to which they are monitored varies. In some countries monitoring is limited to tracking teacher certification, while in others teacher training and observations occur. While the SABER-ECD survey asked whether countries have established teacher-child ratios that are monitored, the OECD survey did not. However, several countries mentioned that low teacher-child ratios were part of their national definition of quality ECCE.
- **Program structure, curriculum, and/or interactions** are monitored in all countries in the OECD survey, but in many countries the monitoring is limited to specific types of settings. In most countries, these characteristics are monitored through inspections in school-based kindergarten and preschool programs, but child care programs are less likely to be monitored. Family child care homes are left out of the quality monitoring systems in nearly all of the OECD survey countries.
- **Infrastructure, classroom environment, health/safety/nutrition, and family engagement** are monitored in most but not all OECD survey countries. Similar to standards related to pro-

[3] For instance, the OECD survey did not directly ask whether a country had any quality standards for ECCE, but the authors ascertained the answers by whether the country stated that standards were monitored (thereby implying that standards were set) and comment box 10, which describes the monitoring systems for Finland and Germany; neither is legally obligated to monitor standards but each still has some type of voluntary standards.

[4] For the OECD survey, monitoring of standards was assessed by whether the country representative answered "yes" to question 9, "Is monitoring quality legally obliged?"

gram structure, the standards in these areas are more likely to be monitored in preschool or kindergarten programs than in center-based or family child care programs.

SABER-ECD survey

The questions in SABER-ECD are designed for less-developed ECCE systems than the OECD survey questions and address more basic or minimum standards of quality. The country reports contain more questions about what standards are set than about monitoring and compliance.

- **Program structure, curriculum, and interactions** are monitored in slightly more than half of the countries, with operating hours and teacher-child ratios used as indicators.
- **Infrastructure and classroom environment** are measured by whether the country responded that it had some infrastructure standards[5] and some type of system to monitor them. Slightly more than half of the countries have a process for monitoring infrastructure standards.
- **Teacher qualifications and training, health/safety/nutrition, and family and community engagement** are measured only in terms of whether standards exist; there are no questions related to their monitoring or compliance.

IDB study

All 19 countries in the IDB study have some type of quality standards and all countries (or, in some cases, municipal or provincial programs) reported monitoring the standards.

- **Teacher training and qualifications** are monitored in all countries, but the information collected is limited to required education levels and prior experience. In some cases, standards exist but are low. For example, in Nicaragua educators in national child care programs were required to have an elementary education and some community service experience, while several countries require university degrees.
- **Infrastructure and classroom environment** are monitored in almost every country, typically in terms of teacher-child ratios, indoor space per child, and in some cases materials and furnishings.
- **Health, safety, and nutrition and family engagement** are monitored in 12 of the 19 countries.
- The survey did not contain questions on whether **family and community engagement** was monitored, but it did find that family engagement was part of many child care systems.
- **Program structure, curriculum, and interactions** are not explicitly addressed, although several countries reported general monitoring of "quality standards" that could include elements in this area.

How do countries enforce the standards? What systems and tools do they use?

There is very little available data on how countries enforce standards and to what extent programs are compliant with the standards. While many countries have set national standards for ECCE quality, fewer have developed corresponding quality assurance mechanisms. In the SABER-ECD countries, quality monitoring is carried out by both government and non-state actors such as donors and other non-governmental institutions. According to the SABER-ECD reports, very few countries reported adequate levels of compliance with any of the standards, either because compliance was low

[5] Elements of infrastructure standards for ECCE centers as defined by SABER-ECD include roof, floor, structural soundness, windows, building materials, connection to electricity, access to potable water, and functional hygienic facilities.

or because there was no information available on compliance.

In the IDB study, the depth and frequency of monitoring varied across countries, ranging from bimonthly monitoring across multiple standards to inspections of health and safety standards only at the program's launch. The study does provide data on compliance levels for the different standard areas when available, and these data could be further analyzed to determine how feasible the existing standards are for most programs.

The OECD survey contains no information about compliance levels. Respondents reported that the results of the quality monitoring are used for accountability in all but four of the countries, and slightly more than half of the countries link the results to specific sanctions or rewards. Survey respondents reported using a wide array of methods and tools for measuring quality, including formal inspections, self-assessments, parent satisfaction surveys, checklists, rating scales, and interviews. The most commonly cited standardized observation tools were the Environment Rating Scales (ECERS, ITERS) adapted to national languages and contexts.

III. Profiles of four countries

In this section, Chile, Turkey, Jamaica, and South Africa are profiled to illustrate the various ways that monitoring and evaluation systems for the ECCE learning environment are developed and how they are set in various country contexts. These countries were selected to show different types of systems in diverse regional and economic contexts.

Country case 1: Chile

Country context

Chile has an integrated system of early childhood education and care at the national level. The net enrollment rate for children in pre-primary education in Chile in 2014 was 94 percent, with over 608,000 children enrolled (UIS 2016). The authority responsible for ECCE in the country is the Chilean Ministry of Education (MINEDUC), while the National Board of Education (Junta Nacional de Jardines Infantiles, or JUNJI) has a role in managing and registering certain types of preschools. Preschool education is provided by a wide range of public and private institutions, including center-based programs for children 0-5 and school-based ECCE programs for children 3-5 (This is Chile 2011).

A constitutional reform in 2007 guaranteed free access to preschool but did not make it mandatory. Chile has a strong, guiding intersectoral policy called Chile Crece Contigo ("Chile Grows With You," or CCC), introduced in 2005. The multidisciplinary approach begins before the child's birth and is designed to achieve high-quality ECD by protecting children with relevant and timely services that provide opportunities for early stimulation and development. A core element of the system is that it provides differentiated support and guarantees children from the poorest 40 percent of households key services, including free access to preschool. Furthermore, the CCC mandates provision of services for orphans and vulnerable children and children with special needs. The creation and implementation of the CCC has been accomplished through a multisectoral, highly synergistic approach at all levels of government (Neuman and Devercelli 2013).

Quality standards development

Minimum standards for ECCE environments are set at the national and the local level, though standards set at the national level are not compulsory. A law passed by Congress in May 2015 set forth compulsory national minimum standards (Biblioteca del Congreso Nacional 2015). The Chilean government has set standards at the national level for staff quality, service quality, and child development outcomes. The curriculum for preschools is developed at the national level.

Monitoring of quality standards

- **Staff quality:** The monitoring system for staff quality is designed by the MINEDUC. The Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas (CPEIP), part

of the ministry, is in charge of developing the instruments to assess the teachers at public schools, implement the instruments, and inform the staff about their own results and the society about the aggregate results (Ministerio de Educación 2016).

- **Service quality:** A variety of institutions monitor service quality. As noted above, the MINEDUC sets the minimum standards for the educational settings, such as colegios and escuelas, recognized by the ministry, and the Superintendencia de Educación and the Agencia de la Calidad de la Educación monitor that the settings are following those standards. The JUNJI also monitors the quality of service in the jardines infantiles comunitarios as well as the private jardines infantiles that have a quality certification from the JUNJI, which is voluntary. JUNJI can monitor quality in all jardines infantiles, but it does not have the authority to sanction them. Municipalities also monitor the quality of service in all ECCE settings (OECD 2014).
- Infrastructure and health standards are set by the Ministry of Housing and Urban Development and the Ministry of Health (OECD 2014). There is no monitoring of curriculum implementation.

Financing

Financing for the monitoring of ECCE is provided by the national government and flowed to the municipal level. For example, all jardines infantiles, which are monitored by the JUNJI (whether they are public or private), receive funding from the national level (Araujo et al. 2013), as do the colegios, which are monitored by the Superintendencia de Educación and the Agencia de la Calidad, and the escuelas, which are monitored by the Superintendencia de Educación, the Agencia de la Calidad, and the MINEDUC.[6]

Country case 2: Turkey

Country context

ECCE became a national priority for the government of Turkey with the introduction in 2012 of the reforms under the "4+4+4" education law, which sought to lower the minimum starting age for grade 1 from 72 months to 66 months (i.e., from 6 years of age to 5.5). Turkey has made significant progress in extending the coverage of ECCE in the past 20 years, increasing the number of children enrolled in pre-primary education by approximately 800 percent (MoNE 2011).

Despite this increase in coverage of ECCE, participation remains low and inequitably distributed. At 28 percent (UIS 2016), pre-primary education net enrollment remains far lower than in most countries with similar levels of per capita GDP, such as Mexico and Bulgaria. There are two key reasons behind this relatively low coverage: first, pre-primary education is not compulsory in Turkey, and, second, pre-primary students are not currently eligible for the student transportation subsidies that are available for other levels of education (World Bank 2013).

The Ministry of National Education (MoNE) coordinates educational programs for the 3-5 age group through home-based family training programs run by the Directorate-General of Non-Formal Education and through center-based preschool programs run by the Directorate-General of Basic Education.

Standards development

- The Directorate-General of Basic Education is responsible for setting policies and standards related to ECCE for children aged 3-5, for monitoring the quality of ECCE services of public and private providers, and for coor-

[6] Annual costs for monitoring of staff, service, and child outcomes are provided in the OECD survey.

dinating the various agencies responsible for ECCE provision. The MoFSP sets standards focused on public and private ECCE services for children aged 0-3. The MoNE and MoFSP standards both include standards on the physical environment, safety and security, human resources, and curriculum (Aran et al. 2016).

- In addition to an updated curriculum for training preschool teachers, MoNE's current program for preschool education provides detailed standards for infrastructure requirements and parameters for facilities for public and private ECCE institutions, and also general guidance on encouraging flexibility in program delivery and family participation (World Bank 2013).
- The government revised its pre-primary teacher education curriculum in 2006.

Monitoring and compliance

- Childcare and preschool are provided by both the public and private sectors, with the Ministry of National Education (MoNE) accrediting providers for children aged 3-5 years and the Ministry of Family and Social Policies (MoFSP) accrediting providers focused on children aged 0-3 years (Aran et al. 2016).
- A central authority has not been established to oversee pre-service or in-service training of ECCE educators. Preschool teachers must have a four-year university degree. In-service training is provided by government institutions.
- Private institutions receive little public support—either in the form of quality assurance or subsidies to defray fees for the poor—though a few community-driven initiatives do exist (World Bank 2013).

External assessments of quality of service provision

- One study (Göl-Güven 2009) used a randomly selected sample of public and private pre-primary schools in Istanbul to evaluate the quality of ECCE classrooms. It concluded that both types of institutions have significant shortcomings, from physical infrastructure to teacher-pupil interactions, although the study found that the private sector handles daily routines and teacher-parent interactions more effectively.
- Another study (Özgan 2009) of the preschool development process in Kilis Province found that physical conditions and facilities were inadequate; also, lack of school-family cooperation negatively impacted the quality of ECCE.

Country case 3: Jamaica

Country context

Jamaica's Early Childhood Commission (ECC) was established in 2003 to bring together all ECD agencies and multiple stakeholders under one umbrella to develop early childhood regulations for all ECCE programs, public and private. The ECC has a range of legislated functions, including supervision and regulation of ECCE institutions, including preschools, basic schools, day care centers, and infant schools. The ECC is based within the Ministry of Education, but comprises representatives from across all key line ministries, as well as members from the political opposition. In 2014, Jamaica's net enrollment rate for pre-primary education was 96 percent (UIS 2016).

Standards development

The ECC established the Child Care Act and the Early Childhood Act, which included regulations and standards for ECCE quality. The 12 standards developed by the ECC are:

- **Standard 1: Staff.** The staff at early childhood institutions has the training, knowledge, skills, and attitude to help children achieve their full potential.

- **Standard 2: Programs**. Early childhood institutions have comprehensive programs designed to meet the language, physical, cognitive, creative, socioemotional, and school-readiness needs of children.
- **Standard 3: Behavior management**. Early childhood staff has the training, knowledge, skills, and attitude to promote positive behaviors in children.
- **Standard 4: Physical environment**. Early childhood institutions have physical environments that meet building, health, and safety requirements and allow adequate space for children.
- **Standard 5: Equipment & furnishing**. Early childhood institutions have indoor and outdoor equipment and furnishings that are safe and child-friendly and that promote optimal development of children.
- **Standard 6: Health**. Early childhood institutions have physical facilities, policies, programs, and procedures that promote healthy lifestyles and protect children and staff from illness.
- **Standard 7: Nutrition.** Early childhood institutions provide children in their care with nutritious meals and model good nutritional practices for children and families.
- **Standard 8: Safety**. Early childhood institutions provide safe indoor and outdoor environments for children, staff, stakeholders, and visitors to the institution.
- **Standard 9: Child rights, child protection, and equality**. Early childhood institutions uphold the rights of children, protect them from harm, and ensure that all children have equal access to services.
- **Standard 10: Parent and stakeholder participation.** The management and staff of early childhood institutions have good relationships with parents, caregivers, family members, and the community.
- **Standard 11: Administration.** Early childhood institutions have a management structure that ensures good administration. There are policies, procedures, and programs that ensure child, family, and staff well-being.
- **Standard 12: Finance**. Early childhood institutions have sound financial practices and adhere to standard accounting principles (Early Childhood Commission 2007).

Monitoring of standards and enforcement

Any operator of an ECCE program, public or private, must submit an application showing that the program meets all 12 of the standards. After the application is reviewed by the ECC, the program is subject to inspection. If the program passes inspection it is issued a certificate of registration. If it does not pass inspection, the operator may be asked to make changes or the program may be shut down if there are significant dangers to children (Early Childhood Commission 2007). As of November 2013, there were approximately 2,660 ECCE institutions in Jamaica, with 2,522 registered with the ECC (Reynolds-Baker 2013). The ECC developed a registration information system to track program compliance with the standards.

Additionally, Jamaica has a system for regulating teacher training. In collaboration with the National Council on Technical and Vocational Education and Training, the ECC has developed and implemented a competency-based system of training and certification for early childhood caregivers and teachers (National Council 2006).

Financing

Operators of ECCE programs must pay a fee of US $3,000, which helps support the costs of regulation (Early Childhood Commission 2007).

For more information, refer to Early Childhood Commission 2007 and Reynolds-Baker 2013.

Country case 4: South Africa

Country context

ECCE provision in South Africa is provided both in in schools and community-based programs run by for-or non-profit organizations. Grade R (reception year) is the year prior to compulsory education, and can be located in either schools or ECD centers. Enrollment in early learning programs has increased in recent years, with 64 percent of children ages 3 to 5 years enrolled in an organized early learning program in 2014 (including playgroups, community-based programs, nursery school, and Grade R). However, this ranges from 57 percent of children in the lowest income quintile to 84 percent in the highest (Hall et al. 2016).

The White Paper on Early Childhood Education in 2001 laid the foundation for South African ECD policy. This document defines ECD as the period from birth to 9 years of age (Ministry of Basic Education 2001), and was used in the writing of the Department of Social Development's 2005-2010 National Integrated Plan for ECD and of the Children's Act of 2005 (Ilifa Labantwana 2013).

In 2015, The National Integrated Early Childhood Development Policy was approved by the Cabinet, which entitles all young children under 6 years of age to a comprehensive package of ECD services, including access to quality early learning programs (Republic of South Africa 2016). Planning for ECD services is led by the Department of Social Development in collaboration with other national, provincial and local government agencies, and each province is responsible for developing its own strategy.

Standards development

The Children's Act 38 of 2005 set out the following norms and standards for all ECD centers to meet:

- A safe environment for children;
- Proper care for sick children or children that become ill;
- Adequate space and ventilation;
- Safe drinking water;
- Hygienic and adequate toilet facilities;
- Safe storage of anything that may be harmful to children;
- Access to refuse disposal services or other adequate means of disposal of refuse generated at the facility;
- A hygienic area for the preparation of food for children;
- Measures for the separation of children of different age groups;
- Drawing up of action plans for emergencies; and
- Drawing up of policies and procedures regarding health care at the facility.

Further standards for ECD centers are defined at the local government level. In order to receive a government subsidy, an early learning center (or crèche) is required to meet local government standards and be registered as a non-profit organization and as a partial care facility with the national Department of Social Development (DSD) (Richter et al. 2014).

The application to DSD requires "the submission of a weekly menu and daily program, a building plan or hand drawn sketch, a copy of the constitution, a service or business plan, the financial report from the prior year, a copy of the contract or lease with the owner and a clearance certificate regarding sex offenders" (Richter et al. 2014). Lastly, the center must successfully meet the structural and health requirements of the local authority upon inspection.

Monitoring of standards and enforcement

Registration of ECD centers is not required in all provinces. A 2013/14 audit of nearly 18,000 ECD centers in all provinces found that 45 percent of

centers were fully licensed, meaning they met the norms and standards set out by the Children's Act (Department of Social Development 2014). Another 11 percent of centers were conditionally licensed, meaning they needed to make some improvements to meet the norms and standards. This was most commonly due to inadequate infrastructure, equipment, and staff skills or training. The remaining 44 percent of centers were unlicensed.

The audit found that 93 percent of fully licensed and 92 percent of conditionally licensed ECD centers reported being inspected by DSD officials, and most had been inspected in the last two years. Furthermore, 59 percent of unlicensed centers reported being inspected by the DSD. The study recommended mandatory registration of ECD centers in all provinces and consistent inspections by DSD.

For more information, refer to Hall et al. 2016 and Department of Social Development 2014.

IV. Conclusion

There is little information on how most countries are monitoring ECCE quality. Though the available evidence indicates that many high-income OECD countries have fairly sophisticated systems of monitoring and regulating ECCE programs, many low- and middle-income countries rely on proxy variables such as teacher-child ratios, compliance with operating hours, and infrastructure standards to monitor quality, if quality is monitored at all. But areas of convergence exist on what is important for quality, and these could be used as a basis for global monitoring tools or frameworks.

As evidenced by the country case studies, implementing quality monitoring systems takes significant resources, often from multiple actors and agencies. Sufficient national (and, as needed, international) expertise and resources are required to design and implement a national ECCE quality-monitoring system, and ECCE providers need to have some type of incentive to comply with the standards. Evidence from high-income countries demonstrates that building and maintaining quality in ECCE settings requires an ongoing emphasis on improvement. The OECD (2015) offers the following points that should be considered when developing or reforming a monitoring system for ECCE:

- Clarify the purposes for monitoring;
- Highlight good practices to promote shared understanding of quality;
- Develop a coherent monitoring framework for different settings (schools, community- and home-based centers, etc.);
- Consider both advantages and disadvantages of giving local authorities responsibility for monitoring quality;
- Design a monitoring system that can inform policy as well as the general public;
- Link monitoring of staff quality to professional development;
- Do not underestimate the demands of monitoring on staff;
- Value the voices of staff, parents, and children; and
- Use continuous monitoring for the teaching and learning strategies that support child development.

Ideally, monitoring systems will be designed to promote improvement by setting standards that are designed to promote children's development, ensuring that support and resources are available to address areas of concern, and offering a supportive environment for sharing and acting upon results from quality monitoring.

A way forward

Responding to the need for improving the quality of young children's learning environments and outcomes, UNESCO, UNICEF, the World Bank, and the Center for Universal Education at the Brookings Institution launched a project in 2014 with experts around the world to examine how to fill the global data gap on early development and learning. The overall goal of the Measuring Early Learning Qual-

ity and Outcomes project is to develop a set of population-based measures of (1) child development and learning, and (2) the quality of early learning environments, and then assist governments in taking these measures to scale and effectively using the data. This project draws from a larger dialogue on improving data for early childhood, including a global meeting in 2014 on measuring and improving early childhood environments hosted by the International Step by Step Association in Leiden, the Netherlands. At that meeting, it was proposed that indicators be developed for the systems level (or the policies and regulations that must be in place to support settings) and for the settings level (or the classrooms), which could be adopted to reflect country context and local environments.

Beginning with an emphasis on formal pre-primary and early primary grades, the following set of key constructs for the quality of learning environments was identified: environment and the physical setting; family and community engagement; personnel; interactions with teachers and school staff; inclusiveness of ECCE services; program structure and curriculum; and health, safety, and hygiene. These seven constructs were identified based on evidence suggesting that they support children's learning and/or are important for protecting children's rights.

Prior to the development of the quality measure, each construct was applied to the settings and systems levels to generate items. The intention was to align the quality and child development/learning tools so that there was continuity between the proposed items for child development/learning and quality of learning environments. Identification of items and alignment of the measure resulted in the development of the quality tools, which included observational and survey items.

In early 2016, input from stakeholders and data analyses resulted in the revision of the quality measure. The constructs have since been revised to include the following: physical environment, parent and community engagement, teacher characteristics, interactions, inclusiveness, pedagogy and instruction, and play. These constructs have been identified as having relevance across settings. As revisions continue to be made, the MELQO effort aims to outline key elements of quality and support countries in creating measures to index them. In keeping with this goal, MELQO aims to provide countries with options for measuring key constructs along with examples of how they have been measured in the past, with emphasis on how the tools will fit into an ongoing system of measurement.

References

Aboud, F.E. 2006. "Evaluation of an Early Childhood Preschool Program in Rural Bangladesh." *Early Childhood Research Quarterly,* 21(1): 46.

Aran, Meltem A., Ana Maria Munoz Boudet, and Nazli Aktakke. 2016. "Can Regulations Make it More Difficult to Serve the Poor? The Case of Childcare Services in Istanbul, Turkey." *Journal of Human Development and Capabilities,* 17(4): 558-582.

Araujo, María Caridad, Florencia López-Boo, and Juan Manuel Puyana. 2013. *Overview of ECD Services in LAC.* Inter-American Development Bank.

Biblioteca del Congreso Nacional. 2015. "Crea la Autorización de Funcionamiento de Establecimientos de Deducacion Paravularia." https://www.leychile.cl/Navegar?idNorma=1077040

Britto, P.R., H. Yoshikawa, and K. Boller. 2011. "Quality of Early Childhood Development Programs in Global Contexts: Rationale for Investment, Conceptual Framework, and Implications for Equity." *Social Policy Report* (Society for Research in Child Development), 25(2).

Early Childhood Commission. 2007. *Start Them Right: A User Guide to the Early Childhood Act, Regulations, and Standards for the Operation of Early Childhood Institutions in Jamaica*. Jamaica: Early Childhood Commission. http://www.ecc.gov.jm/Downloads/Standards/Start%20Them%20Right%20Book.pdf.

Department of Basic Education. 2001. "Education White Paper 5 on Early Childhood Education: Meeting the challenge of Early Childhood Development in South Africa." http://www.education.gov.za/Portals/0/Documents/Legislation/White%20paper/EDUCATION%20WHITE%20PAPER%205.pdf?ver=2008-03-05-104653-000

Department of Social Development (DSD). 2014. "Audit of Early Childhood Development (ECD) Centres National Report." Cape Town: Economic Policy Research Institute.

Göl-Güven, Mine. 2009. "Evaluation of the Quality of Early Childhood Classrooms in Turkey." *Early Child Development and Care,* 179(4): 437-51.

Ilifa Labantwana. 2013. *The Essential Package.* Cape Town: Douglas Murray House.http://ilifalabantwana.co.za/wp-content/uploads/2015/06/The_Essential_Package.pdf

Kagan, S.L., and P.R. Britto. 2005. "Going Global With Early Learning and Development Standards Final Report to UNICEF." New York: National Center for Children and Families, Teachers College, Columbia University.

Limlingan, Maria Cristina. 2011. "On the Right Track: Measuring Early Childhood Development Program Quality Internationally." *Current Issues in Comparative Education* (Teachers College, Columbia University), 14: 38-47.

Measuring Early Learning Quality and Outcomes (MELQO). 2017. "Overview of the Measuring Early Learning Quality and Outcomes (MELQO) Initiative." Paris/Washington/New York: UNESCO, World Bank, Brookings Institution, and UNICEF.

MoNE (Ministry of National Education). 2011."National Education Statistics 2010-2011." Ankara.

Ministerio de Educación. 2016. "Evaluación Docente" http://www.cpeip.cl/evaluacion-docente/

Myers, Robert G. 2004. "In Search of Quality Programmes in Early Childhood Care and Education." Quoted in Neuman and Devercelli 2013.

National Council on Technical and Vocational Education and Training. 2006. "Packaging of Competency Standards for National Qualification." http://www.nqrjamaica.org/nationalregister/generalinfo/frm_QualFramework.aspx

Naudeau, Sophie, N. Kataoka, A. Valerio, M. Neuman, and L. Elder. 2011. "Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation." *Directions in Development, Human Development*. Washington: World Bank.

Neuman, Michelle J., and Amanda Devercelli. 2013. "What Matters Most for Early Childhood Development: A Framework Paper." SABER Working Paper Series, No. 5. Washington: World Bank.

OECD. 2015. "Starting Strong IV: Monitoring Quality in Early Childhood Education and Care." Paris: OECD.

OECD. 2014. "Combined Country Responses to the Online Survey on Monitoring Quality Early Learning and Development." Paper presented at the Network on Early Childhood Education and Care, Paris, June 2-3.

Özgan, H. 2009. "An Evaluation Related With Preschool Education in Turkey." *World Applied Sciences Journal,* 7(3):312-19.

Republic of South Africa. 2015. "National Integrated Early Childhood Development Policy." Pretoria: Government Printers.

Reynolds-Baker, Athaliah. 2013. "Non-Compliant Early Childhood Institutions Urged to Register." *Jamaica Information Services.,* November 20. http://jis.gov.jm/non-compliant-early-childhood-institutions-urged-register/

Richter, Linda, L. Berry, L. Biersteker, D. Harrison, C. Desmond, P. Martin, S. Naicker, H. Saloojee and W. Slemming. 2014. "Early Childhood Development: National ECD Programme" (Draft #1). *Human Sciences Research Council.*

Seleti, Juliana. 2009. "Early Childhood Development in South Africa: Policy and Practice." Presented for the World Bank Technical Workshop of the Africa ECCD Initiative, Zanzibar, October 26-28. http://slideplayer.com/slide/2291846/

This is Chile. 2011. "Preschool or Early Education." *Education.* https://www.thisischile.cl/pre-school-or-early-education/?lang=en

UNESCO Institute for Statistics. 2016. "Net Enrolment Rate Pre-Primary Education." http://data.uis.unesco.org/Index.aspx?DataSetCode=EDULIT_DS

UNICEF. 2012. "A Framework and Tool Box for Monitoring and Improving Quality" (Draft). ECD Framework Part II. http://www.unicef.org/ceecis/ECD_Framework_PART_II_june3.pdf.

World Bank. 2013. "Expanding and Improving Early Childhood Education in Turkey." http://documents.worldbank.org/curated/en/2013/03/17981921/expanding-improving-early-childhood-education-turkey

Annexes

Annex A. Survey Data for Select Quality Monitoring Characteristics

The following tables present basic information about quality standards and monitoring in each of the countries participating in the SABER, OECD, and IDB studies. The survey data were coded as follows:

Standards related to teacher training and qualifications (initial education, certification, pre- and in-service training, attracting staff, mentoring/supervision, wages, etc.)

- The SABER-ECD question used as a proxy to determine whether a country has teacher standards was: "Is there a public authority in charge of regulating pre-service training for ECCE professionals?" Replies were either "yes" or "no." A "yes" meant there were teacher standards.
- There was no SABER-ECD question used to determine whether the standard was monitored.
- In the OECD survey, this was coded as "yes" if the country checked "staff quality" as one of the answers to question 13, "What areas do you monitor within the ECCE sector?" and/or "minimum staff qualifications" in question 73.
- In the IDB study, this was captured under "staff profile" in each country description.

Standards related to program structure, curriculum, and interactions

- In the OECD survey, this was coded as "yes" if the country checked "curriculum implementation" in question 31, "What areas do you monitor within the ECCE sector?" and/or "The overall quality of teaching/ instruction/ caring" in question 79, which asks about the scope of monitoring service quality through monitoring process quality.
- In SABER-ECD, questions related to operating hours and child-teacher ratio are used as proxies for program structure, curriculum, and interactions.
    - What is the required minimum number of hours of pre-primary education per week? Answers could be: no standard; less than 15 hours; and 15 hours or more. The SABER-ECD question used to determine whether the standard was monitored was "Do pre-primary schools comply with the established minimum number of opening hours of pre-primary education per week?" Answers anything other than "no compliance" were determined as the standard being monitored. (Options were: no compliance or unknown; compliance with established standard of less than 15 hours; compliance with established standard of 15 hours or more.)
    - What is the required child-to-teacher ratio? Replies were: no standard; more than 15:1; 15:1; less than 15:1. To determine the monitoring of this standard, the question used was "Do average child-to-teacher ratios comply with established standard?" A response other than "no compliance or unknown" was considered as the country having this standard. (Options were: no compliance or unknown; compliance with established standard of more than 15:1 ratio; compliance with established standard of 15:1; compliance with established standard of less than 15:1.)
    - For this exercise, if at least one of the questions was positive, then the country would be considered as having an infrastructure standard and a classroom environment standard.

- In the IDB study, this was captured in the "standards" section of the country descriptions.

Standards related to infrastructure and classroom environment

- This area was captured from SABER-ECD through the following questions:
  - "Do infrastructure standards exist?" The possible replies for each country were: no; yes; yes and includes all elements of infrastructure standards; yes and includes all elements of infrastructure standards and access to potable water and functional hygienic facilities." (All elements of infrastructure standards for ECCE centers include: roof, floor, structural soundness, windows, building materials, connection to electricity.) The SABER-ECD question used to determine whether the standard was monitored was "What percentage of pre-primary facilities comply with infrastructure standards?" Replies that were anything except N/A (these being: less than 60%; between 61% to 75%; between 76% to 90%; 91% and above) were considered as the standard being monitored.
- In the OECD survey, this was coded as "yes" if the country checked "indoor/outdoor space" and/or "learning and play material in use" in question 73.
- In the IDB study, this was captured in the "standards" section of the country descriptions.

Health, safety, and nutritional supports

- There was no SABER-ECD question used to determine whether there are standards for health, safety, and nutrition.
- In the OECD survey this was coded as "yes" if the country checked "health and/or hygiene regulations" and "safety regulations" on question 73 for any type of program.
- In the IDB study this was captured in the "standards" section of the country descriptions.

Family and community engagement

- No IDB or SABER-ECD question was used as a proxy to determine whether a country has standards for family or community engagement.
- In the OECD survey this was coded as "yes" if the country checked "collaboration between staff and parents" on question 79.

Table 1. OECD Survey Data for Select Quality Monitoring Characteristics

Country	Does country have quality standards of any kind?	Are any standards monitored?	Are standards monitored for:					Are results used for accountability?	Region	Income classification	Gross enrollment ratio pre-primary (2014 unless noted)
			Teacher training/ qualifications	Program structure, curriculum, interactions	Infrastructure and classroom environment	Health, safety, nutrition	Family and community engagement				
Australia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	East Asia & Pacific	High income: OECD	109% (2013)
Belgium (Flemish Care, Flemish Education, and French)	Yes	Yes	Yes	Yes	Yes	Yes	Yes, in Flemish Care and French	Yes	Europe & Central Asia	High income: OECD	118%
Chile	Yes	Yes	Yes	Yes, service quality in all types of programs and overall quality of teaching in school-based programs	Yes, in school-based programs	Yes	No	Yes	Latin America & Caribbean	High income: OECD	128%
Czech Republic	Yes	Yes	Yes	Yes, in some types of programs	Yes	Yes	Yes	Yes	Europe & Central Asia	High income: OECD	105%
Finland	Yes	Yes, but monitoring is done locally and not legally required	Yes, at the municipal level	Yes, service quality is measured at the municipal level but not curriculum implementation	No	No	No	Yes	Europe & Central Asia	High income: OECD	80%
France	Yes	Yes	Yes	Yes, service quality and curriculum implementation	Yes	Yes	No	Yes	Europe & Central Asia	High income: OECD	109%
Germany	Yes	Yes, but monitoring is voluntary	Yes	Yes (center-based programs only)	Yes (center-based programs only)	Yes (center-based programs only)	Yes (center-based programs only)	No	Europe & Central Asia	High income: OECD	111%
Ireland	Yes	Yes	Yes	Yes, service quality and overall quality of teaching/instruction/ care	Yes	Yes	No	Yes	Europe & Central Asia	High income: OECD	108% (2013)
Italy	Yes	Yes	Yes	Yes, service quality and curriculum implementation	Yes (preprimary only)	Yes (preprimary only)	No	No	Europe & Central Asia	High income: OECD	100% (2013)
Japan	Yes	Yes	Yes	Yes, service quality and curriculum implementation	No/unknown	No/unknown	No	No	East Asia & Pacific	High income: OECD	90% (2013)
Kazakhstan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Europe & Central Asia	Upper middle income	92% (2013)

Country	Does country have quality standards of any kind?	Are any standards monitored?	Are standards monitored for:					Are results used for accountability?	Region	Income classification	Gross enrollment ratio pre-primary (2014 unless noted)
			Teacher training/ qualifications	Program structure, curriculum, interactions	Infrastructure and classroom environment	Health, safety, nutrition	Family and community engagement				
Korea, Rep.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	East Asia & Pacific	High income: OECD	118% (2011)
Mexico	Yes	Yes	Yes	Yes, service quality and curriculum implementation	No	No/unknown	Yes	Yes	Latin America & Caribbean	Upper middle income: OECD	69%
Netherlands	Yes	Yes	Yes	Yes, service quality only	Yes	Yes	No	Yes	Europe & Central Asia	High income: OECD	95%
New Zealand	Yes	Yes	Yes	Yes	Yes, learning and play material only	Yes	Yes	Yes	East Asia & Pacific	High income: OECD	92%
Norway	Yes	Yes	Yes	Yes, service quality and curriculum implementation	Yes, indoor/ outdoor space only	Yes	No	Yes	Europe & Central Asia	High income: OECD	98%
Portugal	Yes	Yes	No	Yes, kindergarten only	Yes, kindergarten only	No	Yes, kindergarten only	No	Europe & Central Asia	High income: OECD	92%
Slovakia	Yes	Yes	Yes	Yes, kindergarten only	Yes, kindergarten only	Yes, kindergarten only	Yes, kindergarten only	Yes	Europe & Central Asia	High income: OECD	92%
Slovenia	Yes	Yes	Yes	Yes, kindergarten only	Yes (learning and play materials not monitored in home-based care)	Yes	Yes, kindergarten only	Yes	Europe & Central Asia	High income: OECD	93%
Sweden	Yes	Yes	Yes	Yes, preschool only	Yes, preschool only	No	Yes, preschool only	Yes	Europe & Central Asia	High income: OECD	96%
United Kingdom-England	Yes	Yes	Yes	Yes, service quality and curriculum implementation	No	No/unknown	No	Yes	Europe & Central Asia	High income: OECD	88%
United Kingdom-Scotland	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Europe & Central Asia	High income: OECD	88%

Note: Data on region classification and income classification are from the World Bank Database, accessed July 2016, http://databank.worldbank.org/data/home.aspx. Data on gross enrollment ratio are from the UIS Education Database, accessed July 2016, http://data.uis.unesco.org/.

Table 2. SABER-ECD Survey Data for Select Quality Monitoring Characteristics

Country	Does country have quality standards of any kind?	Are the standards monitored?	Are standards monitored for:			Region	Income classification	Gross enrollment ratio pre-primary (2014 unless noted)
			Teacher training and qualifications	Program structure, curriculum, interactions	Infrastructure and classroom environment			
Armenia	Yes (teacher, infrastructure)	No/unknown	No/unknown	No/unknown	No/unknown	Europe & Central Asia	Lower middle income	52% (2012)
Bulgaria	Yes (teacher, infrastructure, and service delivery)	Yes, state (teacher ratio), and non-state (infrastructure)	No/unknown	Yes, state (teacher ratio)	Yes, non-state (infrastructure)	Europe & Central Asia	Upper middle income	83%
Burkina Faso	Yes (teacher, infrastructure, and service delivery)	Yes, state (hours of operation)	No/unknown	Yes, state (hours of operation)	No/unknown	Sub-Saharan Africa	Low income	4%
Colombia	Yes (infrastructure, and service delivery)	Yes, non-state (teacher ratio, hours of operation, and infrastructure)	No/unknown	Yes, non-state (teacher ratio, hours of operation)	Yes, non-state (infrastructure)	Latin America & Caribbean	Upper middle income	55% (2011)
Congo, Dem. Rep.	Yes (teacher, infrastructure, and service delivery)	Yes, state and non-state (hours of operation) and state (infrastructure)	No/unknown	Yes, state and non-state (hours of operation)	Yes, state (infrastructure)	Sub-Saharan Africa	Low income	4%
Guinea	Yes (teacher, infrastructure)	No/unknown	No/unknown	No/unknown	No/unknown	Sub-Saharan Africa	Low income	15% (2011)
Jamaica	Yes (teacher, infrastructure, and service delivery)	Yes, state and non-state (teacher ratio and infrastructure)	No/unknown	Yes, state and non-state (teacher ratio)	Yes, state and non-state (infrastructure)	Latin America & Caribbean	Upper middle income	105%
Kyrgyz Republic	Yes (infrastructure, and service delivery)	Yes, state and non-state (infrastructure)	No/unknown	No/unknown	Yes, state and non-state (infrastructure)	Europe & Central Asia	Lower middle income	25%
Liberia	No/unknown	No/unknown	No/unknown	No/unknown	No/unknown	Sub-Saharan Africa	Low income	No data
Mauritius	Yes (teacher, infrastructure, and service delivery)	Yes, state and non-state (teacher ratio, hours of operation, infrastructure)	No/unknown	Yes, state and non-state (teacher ratio and hours of operation)	Yes, state and non-state (infrastructure)	Sub-Saharan Africa	Upper middle income	102%
Nepal	Yes (infrastructure, and service delivery)	Yes, state (teacher ratio and infrastructure)	No/unknown	Yes, state (teacher ratio)	Yes, state (infrastructure)	South Asia	Low income	86%
Nigeria	Yes (teachers, infrastructure)	Yes, state and non-state (infrastructure)	No/unknown	No/unknown	Yes, state and non-state (infrastructure)	Sub-Saharan Africa	Lower middle income	13% (2010)
Samoa	Yes (teacher, infrastructure, and service delivery)	Yes, state (teacher ratio)	No/unknown	Yes, state (teacher ratio)	No/unknown	East Asia & Pacific	Lower middle income	37%
Seychelles	Yes (teacher, infrastructure)	Yes, state and non-state (hours of operation and infrastructure)	No/unknown	Yes, state and non-state (hours of operation)	Yes, state and non-state (infrastructure)	Sub-Saharan Africa	High income	93%
Sierra Leone	No/unknown	No/unknown	No/unknown	No/unknown	No/unknown	Sub-Saharan Africa	Low income	10% (2013)
Tajikistan	No/unknown	No/unknown	No/unknown	No/unknown	No/unknown	Europe & Central Asia	Lower middle income	11% (2015)

Country	Does country have quality standards of any kind?	Are the standards monitored?	Are standards monitored for:			Region	Income classification	Gross enrollment ratio pre-primary (2014 unless noted)
			Teacher training and qualifications	Program structure, curriculum, interactions	Infrastructure and classroom environment			
Tanzania	Yes (teacher, infrastructure)	Yes, state and non-state (hours of operation)	No/unknown	Yes, state and non-state (hours of operation)	No/unknown	Sub-Saharan Africa	Low income	32% (2013)
Tonga	Yes (infrastructure, and service delivery)	Yes, non-state (hours of operation) and state and non-state (infrastructure)	No/unknown	Yes, non-state (hours of operation)	Yes, state and non-state (infrastructure)	East Asia & Pacific	Lower middle income	39%
Uganda	Yes (infrastructure, and service delivery)	No/unknown	No/unknown	No/unknown	No/unknown	Sub-Saharan Africa	Low income	11% (2013)
Vanuatu	Yes (infrastructure, and service delivery)	Yes, non-state (teacher ratio and infrastructure)	No/unknown	Yes, non-state (teacher ratio)	Yes, non-state (infrastructure)	East Asia & Pacific	Lower middle income	97% (2013)
Yemen, Rep.	Yes (service delivery)	Yes, state and non-state (teacher ratio) and state (infrastructure)	No/unknown	Yes, state and non-state (teacher ratio)	Yes, state (infrastructure)	Middle East & North Africa	Lower middle income	1% (2013)

Note: Data on region classification and income classification are from the World Bank Database, accessed July 2016, http://databank.worldbank.org/data/home.aspx. Data on gross enrollment ratio are from the UIS Education Database, accessed July 2016, http://data.uis.unesco.org/.

Table 3. IDB Study Data for Select Quality Monitoring Characteristics

Country	Programs included in study	Does country have quality standards of any kind?	Are any standards monitored?	Are standards monitored for:					Region	Income classification	National gross enrollment rate for pre-primary (2014 unless noted)
				Teacher training/ qualifications	Program structure, curriculum, interactions	Infrastructure and classroom environment	Health, safety, nutrition	Family and community engagement			
Argentina	City of Buenos Aires and Province of Entre Rios, Municipality of Villa Paranacito	Yes, at the municipal level	Yes	Yes	Not specified	Yes	Not specified	Not specified	Latin America & Caribbean	High income: non-OECD	72% (2013)
Bolivia	Government of La Paz, Municipality of El Alto	Yes	Yes	Yes	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	Lower middle	63% (2013)
Brazil	Municipal Secretariat of Education: Rio de Janeiro, Fortaleza, and Sobral	Yes, defined at the municipal level	Yes, frequent monitoring was reported in Fortaleza and Sobral	Yes	Not specified	Yes	Yes, in Sobral	Not specified	Latin America & Caribbean	Upper middle income	86% (2013, estimated)
Chile (See also OECD data)	National Funcacion Integra and Jardines de la JUNJI child care centers	Yes	Yes, all standards monitored at least every three months	Yes	Yes	Yes	Yes	Not specified	Latin America & Caribbean	High income: OECD	128%
Colombia (See also SABER-ECD data)	Municipality of Medellin; Municipality of Bogota; Colombian Family Welfare Institute's national program for family child care	Yes, defined by each program	Yes	Yes, except for family child care	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	Upper middle income	55% (2011)
Costa Rica	National CEN-CINAI child care centers	Yes	Yes	Yes	Not specified	Not all programs	Not specified	Not specified	Latin America & Caribbean	Upper middle income	53%
Dominican Republic	Three national child care center programs	Yes	Yes, frequent monitoring occurs in all programs	Yes	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	Upper middle income	44%
Ecuador	National CIBV child care centers	Yes	Yes	Yes	Not specified	Yes	Not specified	Not specified	Latin America & Caribbean	Upper middle income	62%
El Salvador	National CBI and CDI child care centers	Yes	Yes, but the reports indicate centers are rarely inspected	Yes	Not specified	Not specified; the report found no information on compliance with space regulations	Yes	Not specified	Latin America & Caribbean	Lower middle income	72%

Country	Programs included in study	Does country have quality standards of any kind?	Are any standards monitored?	Are standards monitored for:					Region	Income classification	National gross enrollment rate for pre-primary (2014 unless noted)
				Teacher training/ qualifications	Program structure, curriculum, interactions	Infrastructure and classroom environment	Health, safety, nutrition	Family and community engagement			
Guatemala	National Hogares Comunitarios and PAIN child care centers	Yes	Yes, bimonthly monitoring of HC and monitoring of health and safety upon opening of PAIN centers	Yes	Not specified	Yes, in HCs only	Yes	Not specified	Latin America & Caribbean	Lower middle income	66%
Honduras	National Bienestar Familiar y Desarrollo Comunitario child care program	Yes	Yes, but not systematically	Yes	Not specified	Not specified	Not specified	Not specified	Latin America & Caribbean	Lower middle income	47%
Jamaica (See also SABER-ECD data)	Programs regulated by the Early Childhood Commission	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Latin America & Caribbean	Upper middle income	105%
Mexico (See also OECD data)	National SEDESOL (private providers) and IMSS Guarderias (public providers) child care centers	Yes	Yes, frequent monitoring was reported in both programs	Yes	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	Upper middle income: OECD	69%
Nicaragua	National PAININ child care centers	Yes	Yes	Yes	Not specified	Yes	Not specified	Not specified	Latin America & Caribbean	Lower middle income	58% (2010)
Panama	National COIF child care centers and IPHE programs for children with special needs	Yes	Yes	For special needs program only	Not specified	Yes	Not specified	Not specified	Latin America & Caribbean	Upper middle income	71% (2013)
Paraguay	National SNNA child care program for homeless children	Yes	Yes	Yes	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	Upper middle income	38% (2012)
Peru	National Wasi-Wasi and INABIF child care centers	Yes	Yes	Yes, in INABIF programs only	Not specified	Yes, Wasi-Wasi only	Not specified	Not specified	Latin America & Caribbean	Upper middle income	88%
Trinidad and Tobago	National Ministry of Education child care centers	Yes	Yes, annually	Yes	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	High income: non-OECD	No data
Uruguay	One national child care program and two municipal programs in Montevideo	Yes	Yes	Yes	Not specified	Yes	Yes	Not specified	Latin America & Caribbean	High income: non-OECD	70% (2013)

Note: Data on region classification and income classification are from the World Bank Database, accessed July 2016, http://databank.worldbank.org/data/home.aspx. Data on gross enrollment ratio are from the UIS Education Database, accessed July 2016, http://data.uis.unesco.org/.

Annex B. SABER-ECD

Part of the methodology used to assess which countries had quality learning standards and whether these standards are monitored was to review 21 SABER-ECD reports (19 developed and two forthcoming). The policy goal of interest within SABER-ECD was the *Monitoring and Assuring Quality* dimension (the other two policy goals are *Establishing an Enabling Environment,* and *Implementing Widely)*. The 21 country reports include 10 from Sub-Saharan Africa, four from Europe and Central Asia, three from East Asia and Pacific, two from Latin America and the Caribbean, one from Middle East and North Africa, and one from South Asia.

Systems Approach for Better Education Results–Early Childhood Development (SABER-ECD) is a World Bank tool that collects, analyzes, and disseminates comprehensive information on ECD policies around the world. Information is collected on ECD policies and programs through a desk review of available government documents, data and literature, and interviews with a range of ECD stakeholders. The SABER-ECD framework presents a holistic and integrated assessment of how the overall policy environment in a country affects young children's development.

An overview of the Monitoring and Quality Policy Goal can be seen in the table below. Questions for each of the three policy levers (data availability, quality standards, and compliance with standards) were classified per the dimensions that the authors of this background document considered to be relevant in measuring learning environments of ECCE programs. Because SABER-ECD indicators did not have the intention of measuring learning environments specifically, some indicators will be used as proxies per the learning environment frameworks researched.

Some key messages that were distilled from the table below are the following:

- Most of the countries have standards established to become pre-primary teachers, but there is no data on whether these standards are enforced outside of the public preschool sector.
- Infrastructure standards are in place in most countries, but they are either not enforced or there is no information available on their enforcement.
- Child-to-teacher ratios are emerging in most countries, but their compliance is low in both public and private schools.
- Most countries have standards for minimum hours of pre-primary education per week, but for both private and public schools their compliance is low.

When looking at the country context, it was not possible to make direct inferences on the relationship between ECD system indicators and the level of sophistication of the monitoring and evaluation (M&E) system for ECCE learning environments. There are several reasons why such correlations are difficult to come by. First, SABER-ECD reports have thus far focused on middle- and low-income countries. As such, the range in the level of economic development is limited. Second, the process of setting up M&E processes for ECCE is not necessarily done in a concerted or systematic way. For example, few countries other than Chile have a system that sets at a high level a strategy, a budget, and focal points for ECCE and builds the M&E process accordingly. Instead, M&E processes are developed organically with some to no follow-through from the standards development stage to the compliance/enforcement stage. A final reason why solid links between country context and M&E system development are not possible to make is that countries are very diverse, making their ECD systems diverse.

It should be noted that SABER-ECD is not an analytic tool that looks exhaustively into every policy dimension within an ECD system. As mentioned in its framework, SABER-ECD is a tool that provides an overview of an ECD system within countries, and allows policymakers and ECD stakeholders to have a clearer picture within a certain policy goal—in this case, within monitoring and quality.

Table 4: SABER-ECD Compilation of Selected Indicators From 21 Country Reports

		L= Latent; Em= Emerging; Es= Established; A= Advanced														
		Data availability					Quality standards					Compliance w/standards				
Dimensions	Indicators	N/A	L	Em	Es	Ad	N/A	L	Em	Es	Ad	N/A	L	Em	Es	Ad
Teachers	What are the entry requirements to become a pre-primary teacher?						3	0	6	9	3					
	Is there regular in-service training for ECCE professionals to develop pedagogical and teaching skills?						3	3	1	9	5					
	Is there a public authority in charge of regulating preservice training for ECCE professionals?						6	5	0	10	0					
	Is some form of preservice practicum or fieldwork required?						5	5	0	11	0					
Infrastructure	Are there established infrastructure and service delivery standards for ECCE facilities?						4	1		16						
	Do infrastructure standards exist?						3	1	5	3	9					
	Do construction standards exist for all health facilities?						13	1	3	0	4					
	What percentage of pre-primary facilities comply with infrastructure standards in state schools?											12	4	1	1	3
	What percentage of pre-primary facilities comply with infrastructure standards in non-state schools?											10	7	1	1	2
Classroom environment	Are data collected to measure child development (cognitive, linguistic, physical, and socioemotional)?	5	7	4	2	3										
	Are individual children's development outcomes tracked?	6	13	0	0	2										
	What is the required child-to-teacher ratio?						6	5	6	1	3					
	Do average child-to-teacher ratios comply with established standards in state schools?											7	8	4	1	1
	Do average child-to-teacher ratios comply with established standards in non-state schools?											7	8	4	0	2
Program structure	Do standards for what students should know and learn exist?						3	2	0	16	0					
	Is there one or more pre-primary curricula that have been approved or are available for teachers to use?						4	3	0	10	4					
	Is the pre-primary curriculum coherent and continuous with the curriculum for primary education?						9	4	0	8	0					
	What is the required minimum number of hours of pre-primary education per week?						6	2	2	11	0					
	Do pre-primary schools comply with the established minimum number of opening hours of pre-primary education per week in state schools?											8	8	0	5	0
	Do pre-primary schools comply with the established minimum number of opening hours of pre-primary education per week in non-state schools?											6	10	0	5	0

		L= Latent; Em= Emerging; Es= Established; A= Advanced														
		Data availability					Quality standards					Compliance w/standards				
Dimensions	**Indicators**	**N/A**	**L**	**Em**	**Es**	**Ad**	**N/A**	**L**	**Em**	**Es**	**Ad**	**N/A**	**L**	**Em**	**Es**	**Ad**
Health and nutrition	Are health workers required to receive training in delivering ECD messages (developmental milestones, child care, parenting, early stimulation, etc.)?						13	2	2	4	0					
Information systems	To what extent are administrative data collected on access to ECD (i.e., number of young children in child welfare system; number of children with special needs who have access to ECD services; number of children who benefit from well-child visits)	3	2	9	3	4										
	Are data available to differentiate ECCE access and outcomes for special groups (gender, mother tongue, rural/urban, socioeconomic status, special needs)?	3	2	7	8	1										
	To what extent are survey data collected on access to ECD and outcomes (i.e., percentage of children who consume iodized salt; level of Vitamin A supplementation among ECD-aged children; prevalence of anemia among ECD-aged children and pregnant women)	3	1	3	11	3										

Establishing enabling environment		**Country context**				
		N/A	**L**	**Em**	**Es**	**Ad**
Legal framework	Does the education law mandate the provision of free pre-primary education before primary school entry?	3	11	1	6	0
Intersectoral coordination	Has an institutional anchor been established to coordinate ECD across sectors?	3	4	7	7	0
	Are there any regular coordination meetings between the different implementing actors at the sub-national level?	7	3	4	7	0
	Is there any integrated service delivery manual/guideline (i.e., any sort of common plan of action)?	8	8	0	5	0
	Is there a mechanism for collaboration between state and non-state stakeholders?	7	1	8	5	0
Finance	To what extent does the budget use explicit criteria at the national or sub-national level to decide ECD spending (i.e., number of students or teaching positions, student characteristics, such as gender, socioeconomic status or special needs, geographical location)?	3	9	3	5	1
	To what extent is determining the budget a coordinated effort across ministries?	6	9	2	3	1
	Can the government accurately report public ECD expenditures?	4	7	4	2	4
	What percentage of the annual education budget is allocated toward pre-primary education?	9	5	3	2	2
ECCE indicators	What is the gross enrollment rate in pre-primary education?	9	5	3	2	2

Source: Saber-ECD, 21 countries

BROOKINGS

The Brookings Institution
1775 Massachusetts Ave., NW
Washington, D.C. 20036
brookings.edu