

Survey of Teachers in

Pre-primary Education (STEPP)

Lessons from the implementation of the pilot study and field trial of international survey instruments





UNESCO Education Sector

Education is UNESCO's top priority because it is a basic human right and the foundation on which to build peace and drive sustainable development. UNESCO is the United Nations' specialized agency for education and the Education Sector provides global and regional leadership in education, strengthens national education systems and responds to contemporary global challenges through education with a special focus on gender equality and Africa.

Education Sector

United Nations Educational, Scientific and Cultural Organization

I Nations ntific and anization

The Global Education 2030 Agenda

UNESCO, as the United Nations' specialized agency for education, is entrusted to lead and coordinate the Education 2030 Agenda, which is part of a global movement to eradicate poverty through 17 Sustainable Development Goals by 2030. Education, essential to achieve all of these goals, has its own dedicated Goal 4, which aims to *"ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."* The Education 2030 Framework for Action provides guidance for the implementation of this ambitious goal and commitments.



Published in 2020 by the United Nations Educational, Scientific and Cultural Organization, 7, place de Fontenoy, 75352 Paris 07 SP, France

© UNESCO 2020

ISBN 978-92-3-100395-0



This publication is available in Open Access under the Attribution-ShareAlike 3.0 IGO (CC-BY-SA 3.0 IGO) license (http://creativecommons.org/licenses/by-sa/3.0/igo/). By using the content of this publication, the users accept to be bound by the terms of use of the UNESCO Open Access Repository (http://www.unesco.org/open-access/terms-use-ccbysa-en).

The designations employed and the presentation of material throughout this publication do not imply the expression of any opinion whatsoever on the part of UNESCO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

The ideas and opinions expressed in this publication are those of the authors; they are not necessarily those of UNESCO and do not commit the Organization.

Cover photo: Jimmy Tran/Shutterstock.com

Designed and printed by UNESCO

Printed in France

Survey of Teachers in

Pre-primary Education (STEPP)

Lessons from the implementation of the pilot study and field trial of international survey instruments

Syeda Kashfee Ahmed, Australian Council for Educational Research Maurice Walker, Australian Council for Educational Research Yoshie Kaga, UNESCO

Acknowledgements

The present publication was authored by Syeda Kashfee Ahmed and Maurice Walker of the Australian Council for Educational Research (ACER) and Yoshie Kaga, of UNESCO, with research and editorial support provided by Divya Arora, Kendal Gee, and Samuel Grimonprez. It greatly benefited from the review and inputs from the members of the STEPP National Teams of the participating countries, namely the Dominican Republic, Ghana, Indonesia, Namibia, the Philippines, Togo and Viet Nam; members of the STEPP International Advisory Group (IAG); and colleagues of ACER and UNESCO.

The publication represents a collective effort of all involved in the implementation of the first phase of the project, covering the development of the STEPP instruments through the pilot study and field trial. The project was managed by Dr Yoshie Kaga, UNESCO. Sincere appreciation goes to the members of the STEPP National Teams, whose hard work and dedication were key to the success of the first phase of the project, and to the leaders of the participating countries, who provided valuable support and guidance for the project implementation. They are:

Sherlyne Acosta, Irwin Adrian, Luis Alba, Mutiara Amanah, Irfan Anshori, Outama Adzi, Ramon C. Bacani, Francia Baez, Santa Yokasta Cabrera Perdomo, Massiel Cohen, Rita Licelot Cruz, Robert Adrian N. Daulat, Fritz David, Edward Dogbey, Zenida T. Domingo, Merjielyn C. Emia, Forcefina E. Frias, Tran Thi Huong Giang, Lukmanul Hakim, Teresita G. Inciong, Dr. Harris Iskandar, Koffi Oubonènalè Lantomey, Danise Macaraya-Tiongson, Marika Matengu, Elaissa Marina E. Mendoza, Lovie Moneva, Cavin Muchila, Ama Serwah Nerquaye-Tetteh, Develias Ngatjiisiue, Dwi Priyono, Francis Owusu-Mensah, Palham Oyiye, Philip J. Purnell, Dr. Nguyen Thi Lan Phuong, Yolanda Quijano, Edi Rukmana, Tinka Batolimba Samah, Cecep Somantri, Alexandra Santelises, Esperanza Santos, Pagbamèyo Tchala, Tawuim Titora, Nguyen Thi My Trinh, Jocelyn S. Tuguinayo, Solomon Twum, Yolanda Quijano, Riche-Mike Wellington, Khara Uy.

Heartfelt gratitude goes to Maurice Walker, Petra Lietz and Syeda Kashfee Ahmed of ACER, who were central to the excellent technical advice and collaboration on the instrument development by the ACER consortium, consisting of ACER, cApStAn, GESIS and University of Namibia.

Sincere thanks go to the OECD for enabling the establishment of this project as a joint initiative linking with the TALIS Starting Strong Survey and for its tireless collaboration throughout the different stages of the project; to the members of the International Advisory Group (IAG) of the STEPP project, which consisted of individual experts and representatives of institutional partners (i.e. Education International, ILO, International Taskforce on Teachers for Education 2030, OECD,

OMEP, UNESCO, UNESCO IICBA, UNESCO Institute for Statistics, UNICEF); and to UNESCO Field Offices and Headquarter colleagues who provided valuable support for the project:

Edem Adubra, Maria Karisma Bea Agarao, Patience Awopegba, Linda Biersteker, Yuri Belfari, Ivelina Borisova, Ursula Itzlinger-Bruneforth, Eric Charbonnier, Mee Young Choi, Soo-Hyang Choi, Rokhaya Diawara, Huyen Hoang Diem, Jean Dumais, Arno Engel, Maki Hayashikawa, Oliver Liang, Miguel Llivina Lavigne, Stig Lund, Sonia Guerriero, Stéphanie Jamet, Shahbaz Khan, Maggie Koong, Diane Lalancette, Toshiyuki Matsumoto, Ehrens Mbamanovandu, Binyam Sisay Mendisu, Albert Motivans, Jordan Naidoo, Yves Watanakata Nantille, Prosper Kwasi Nyavor, Prof Eunhye Park, Jan Peeters, Prof Nirmala Rao, Justine Sass, Miho Taguma, Mamadou Thiam, Yumiko Yokozeki, Gunawan Zakki, Nanqing Zhang.

Special thanks go to the Hamdan bin Rashid Al-Maktoum Foundation – an international champion in supporting teacher development and quality education worldwide – for its very generous financial contribution to the project. The project gratefully benefited from financial and/or in-kind contributions from the participating countries and UNESCO field offices.

Table of contents

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY		2
AC	RONYMS	4
1.	INTRODUCTION	5
	Importance of early childhood	5
	Importance of ECCE personnel	5
	Addressing the evidence gap	6
	Link with OECD TALIS Starting Strong Survey	7
	Contexts of the STEPP participating countries	8
2.	PROJECT DESCRIPTION What is STEPP?	14 14
	What aspects of teachers were addressed in the study?	14
	How was STEPP Phase 1 conducted?	17
3.	PILOT STUDY OUTCOMES	21
4.	FIELD TRIAL OUTCOMES: INSTRUMENTS	22
	Recommendations from the field trial analysis report	23
5.	FIELD TRIAL OUTCOMES: COUNTRY IMPLEMENTATION EXPERIENCES	25
	Recommendations from the field trial experience	29
6	CONCLUSION AND NEXT STEPS	31
RE	REFERENCES	
AM	INEX A: Members of National Teams	38
AN	INEX B: Members of ACER consortium	42
ANNEX C: GLOSSARY		

Executive summary

The present publication documents the achievements and lessons learned from the first phase of the Survey of Teachers in Pre-primary Education (STEPP) project, implemented by UNESCO from 2016 to 2019, with the participation of seven countries, namely, the Dominican Republic, Ghana, Indonesia, Namibia, the Philippines, Togo, and Viet Nam. This phase consisted of instrument development, carried out in several steps, including the pilot study and field trial operations. The project received technical support from the Australian Council for Educational Research (ACER) on instrument development and operationalization. It also involved the cooperation with international partners such as OECD, Education International, ILO, OMEP and UNICEF. It benefited from the generous funding support from the Hamdan bin Rashid Al-Maktoum Foundation.

STEPP is the first international survey for low-and-middle-income countries designed to collect information that is known to affect the quality of pre-primary education from pre-primary teachers and centre heads. The collected information concerns training and professional development, pedagogical and professional practices, working conditions and job satisfaction, and characteristics of pre-primary personnel and the settings in which they work.

The survey offers a valuable opportunity for teachers and centre heads to share views about their practice and needs. It seeks to identify strengths and opportunities for improvement as well as commonalities and differences across participating countries, which will inform policy discussions and development of measures on how to strengthen the quality of pre-primary teachers' work. Launched in 2016, STEPP is an OECD-UNESCO Joint Initiative in support of the implementation of Sustainable Development Goal (SDG) target 4.2 on early childhood care and education (ECCE), and aims to align its content and methodology to that of the OECD Teaching and Learning International Survey (TALIS) Starting Strong Survey to the extent feasible.

STEPP instrumentation consists of three types of paper-based questionnaires: (1) a pre-primary staff questionnaire, (2) a questionnaire for the heads of pre-primary education centres, and (3) a combined questionnaire, used in small pre-primary education centres, and responded to by pre-primary personnel having a combined head-staff role comprising administrative, managerial and pedagogical responsibilities.

The basis of the instrument development drew from the background research and materials produced through the OECD TALIS Starting Strong Survey, the literature review on ECCE personnel in low-and-middle-income countries, and the priority-rating exercise undergone by the participating countries. The instruments were tested through three instances, namely cognitive

pre-testing, pilot study (focus groups discussion on the questionnaires) and field trial (small-scale trial of the instruments), and were improved throughout these testing processes.

The experience and outcomes of the field trial were very positive, and have provided helpful insights and recommendations for the design of the content and methodology of the main survey, which is to be conducted in the second phase of the project. All participating countries found the survey to be a valuable tool to understand the situations of the work as perceived by ECCE personnel, and to generate evidence on the strengths and gaps regarding the training, working conditions and practices for guiding the development of improvement measures. For many of the country stakeholders involved in the initial phase of the project, it was the first time to participate in the process of developing and testing an international teacher survey tool. They appreciated the opportunity to be able to learn about administrative, technical and logistical requirements and methods for organizing the national operations within the framework of an international comparative survey.

In terms of field trial outcomes regarding the instruments, the centre head questionnaire was well understood across the participating countries, and there were only in a few instances whereby the respondents experienced confusion when trying to answer the question about their highest educational attainment and asked for clarification while completing the questionnaires. As for the staff questionnaire, the respondents were satisfied with the topics covered. However, some of them felt confused about certain concepts that appeared in the questionnaire, such as "status" and "community", due mainly to translation/adaptation limitations, and requested that they be explained better in the question. Others suggested improvements in terms of font size and formatting to make it more reader-friendly.

With regard to field trial outcomes concerning the processes, recommendations for the main survey included the following: (1) allowing a longer timeframe for sampling, making it possible for respondents to take the questionnaire home so as to avoid distractions in the classrooms; (2) introducing the possibility of online questionnaire administration; (3) instituting and maintaining regular communication between the STEPP National Teams, the pre-primary education centres in the survey and quality monitors to effectively monitor progress in the field and flag and manage potential issues; (4) choosing the timing for survey administration strategically to ensure success; (5) and providing face-to-face training opportunities to ensure a thorough understanding of survey procedures on the part of the participating countries, in addition to the provision of online training opportunities and support.

Building on the valuable experiences of the first phase of the project, UNESCO is currently planning for the second phase, consisting of the preparation and implementation of the main study using nationally representative samples. It is in the course of developing a resource mobilization strategy that will involve a close cooperation with the STEPP participating countries and international partners in order to raise the necessary funds for the realization of the second phase, which will generate evidence and insights on which to formulate concrete measures and to bring about meaningful improvements in the quality of teaching workforce.

Acronyms

ACER	Australian Council for Educational Research
ECCE	Early Childhood Care and Education
GESIS	Leibniz Institute for the Social Sciences
IAG	International Advisory Group
ISCED	International Standard Classification of Education
OECD	Organisation for Economic Cooperation and Development
STEPP	Survey of Teachers in Pre-primary Education
TALIS	Teaching and Learning International Survey
UNESCO	United Nations Educational, Scientific and Cultural Organisation

1. Introduction

Importance of early childhood

There is compelling evidence on the critical importance of quality early childhood care and education (ECCE) for children's learning and wellbeing and for achieving societal goals, such as gender equality, inclusion and economic development (Marope and Kaga, 2015; Naudeau, et al., 2011). Quality ECCE improves children's wellbeing, school readiness, learning achievement, and employment prospects. Through its compensatory effects, ECCE helps disadvantaged children start primary school at an equal footing with their advantaged peers. Neuroscience research demonstrates that the early years are the most active years for establishing neural connections, and that intervening early in life requires fewer resources and effort, while fixing problems later is costlier and less efficient for the individual and the society (Centre on the Developing Child at Harvard University, n.d.).

The designation of quality ECCE for all as a global education target – Sustainable Development Goal (SDG) Target 4.2 – within the framework of the 2030 United Nations Agenda for Sustainable Development shows the international community's consensus of its importance. The target reads "By 2030, ensure that all girls and boys have access to quality early childhood development, care and preprimary education so that they are ready for primary education" (UNESCO, 2016). To achieve the target, many countries are working to address the needs of the ECCE sector to ensure that every child is provided with the best support to start the process of lifelong learning (Richter, et al., 2017). While progress in pre-primary enrolment has been made, it is off-track to achieve universal coverage by 2030. In 2017, only half of all pre-primary age children were enrolled in pre-primary education (UIS and Global Education Monitoring Report, 2019). Expanding access and ensuring the quality of ECCE must go hand-in-hand to maximize the benefits of ECCE for children and the society.

Importance of ECCE personnel

Research shows that teachers and educators are the hallmark of quality ECCE (Global Education Monitoring Report Team, 2015; World Education Forum, 2000). Good teacher training and support, recognition and working conditions are proven to have positive impact on their capacity, motivation and practice with young children, and therefore constitute a critical policy issue (UNESCO, 2006; OECD, 2006). As a fundamental condition for guaranteeing quality education (UNESCO, 2016), increasing the supply of qualified teachers at all levels has been designated as one of ten global education targets (SDG target 4.c). Qualified and trained ECCE staff have a positive impact on children's developmental outcomes. They engage in caring, stimulating and responsive interactions with young children, and give adequate and timely attention to their health and well-being needs. When children are cared by ECCE staff with higher education and specialised training, they are more sociable, have higher cognitive abilities, make developed use of language and motor skills, and are more likely to be ready for school at an appropriate age (Bowman et al., 2001; Myers, 2006). Teachers with better education and training perform more curriculum related activities on early literacy and numeracy, and engage children in play-based activities (Sylva et al., 2004). Moreover, they are more likely to possess child-centred beliefs and engage in effective pedagogical practices which is directly linked with better learning outcomes (Pianta et Al., 2005; Banu, 2014; Thao and Boyd, 2014).

In addition to adequate education and training, ECCE personnel requires reasonable working conditions – including salary, child/staff ratios, group sizes, and the adequacy of teaching-learning materials and environment – to be effective (Huntsman, 2008). Such factors are shown to affect teachers' competences and practices, which in turn impact child outcomes (Fukkinnk and Lont, 2007). Furthermore, the presence of skilled leaders and managers of ECCE centres is important, as they can support teachers in better organising the pedagogical curriculum to sustain a shared understanding of children's learning experience and care among the personnel (Sylva et al., 2004), and to provide feedback on their work. Together with pedagogical staff, they can also encourage parent and community engagement in ECCE, and facilitate reaching out to professionals who can provide specialised support in assisting children with special needs.

Despite the important role of ECCE personnel, many are inadequately prepared, are relatively poorly paid, and lack recognition (Neuman, et al., 2015; Litjens and Taguma, 2017). Almost onequarter of 80 low-and-middle-income countries reported that less than half of their pre-primary teachers met national training requirements in 2009 (ILO, 2012). There is a lack of teachers, particularly qualified ones, in remote, rural, and marginalised regions (Neuman, et al., 2015). This is highly problematic, as children living in such regions are the ones in most need of quality ECCE, which can compensate for the disadvantages they are facing.

Addressing the evidence gap

To effectively support teachers' capacity enhancement, professionalization, and motivation, evidence-informed policy interventions are needed. However, there is limited information available on the training and working conditions as well as practices and needs of ECCE teachers, particularly in low-and-middle-income countries (UNESCO, 2012; Neuman et al., 2015). When available, the data is more often system-level/structural information (e.g. number of teachers, teacher-child ratio, teacher qualification) than personnel-level, qualitative information (e.g. what teachers do, how they work, how they interact with children, what challenges they experience in ensuring good quality care and education).

To tackle this evidence gap, UNESCO launched in 2016 the development of an international ECCE personnel survey called the Survey of Teachers in Pre-primary Education (STEPP)¹, in cooperation with the OECD and other partners. It is the first international ECCE personnel survey designed for low-and-middle-income countries, aiming to generate comparative, policy-relevant data and information on four interrelated themes that affect the quality of teaching and learning in ECCE:

- Training and professional development
- Pedagogical and professional practices
- Working conditions and job satisfaction
- Characteristics of personnel and the settings in which they work

STEPP will provide a clear picture of what happens within ECCE classrooms, highlight strengths and opportunities for improvement as well as commonalities and differences within and across countries with regard to training, working conditions, and practices of ECCE personnel, and enhance analyses of the impact of ECCE policies on the ground. It will also give an opportunity for ECCE personnel to share perceptions and insights about their work, needs, and challenges.

Link with OECD TALIS Starting Strong Survey

The Survey of Teachers in Pre-Primary Education (STEPP) is an adaptation of the TALIS Starting Strong Survey – international ECCE survey of staff and leaders targeting OECD countries – and therefore is in harmony with the latter in terms of content and methodology to the extent feasible. This has been made possible through the establishment of a Memorandum of Understanding between the two organisations to cooperate on STEPP. Nine countries collected data from staff and leaders working in "pre-primary education" (i.e. ISCED level 02) in 2018: Chile, Denmark, Germany, Iceland, Israel, Japan, Korea, Norway, and Turkey. Four of those countries (Denmark, Germany, Israel, and Norway) also collected data from staff and leaders working with children under the age of three in registered ECCE settings. The results were published on 25 October 2019.

International surveys such as TALIS have been identified as more affordable and accessible research methods in understanding process quality rather than systematic observation. While systematic observation has been found to produce measures that have reliability and validity, for many countries, this method is technically and financially challenging². In addition, information on a range of behaviours can be difficult to capture through observation over one or two days. TALIS surveys use teachers' self-reports for international comparison and have 'contributed to the international knowledge base on teachers, teacher beliefs, teaching practices, and working conditions on the ground — important areas that have been demonstrated as contributing to a good learning and well-being environment" (M.P.Y, Sim, Belanger, Stancel-Piatak, Karoly, 2019: 9).

¹ STEPP instruments were piloted in 2017 and field-tested through a field trial in 2018-2019 in the Dominican Republic, Ghana, Indonesia, Namibia, the Philippines, Togo, and Viet Nam.

² OECD, 2014. Proposal for an international survey of staff in ECEC. EDU/EDPC/ECEC(2014)8/REV3 (unpublished document).

Contexts of the STEPP participating countries

To provide some contextual information for the countries participating in STEPP, this section presents regional and country profiles related to ECCE.

The Caribbean

ECCE programs in this region usually target children at two stages of development: birth to twoyear's old, and three year's old to primary school entry (Charles & Williams, 2006). ECCE provision is primarily driven by the private sector. In recent years there has been an initiative in several countries in the region to include one or two years of initial early childhood education within compulsory education, to align with the OECD countries (Charles & Williams, 2006).

ECCE centres in countries within this region are sometimes part of formal programmes that function either in independent establishments or within primary schools. This form of service is provided by educators and other qualified staff, and activities are managed according to nationally established frameworks, regulations, and curriculum. Services operating within primary schools (generally known as preschool or transitional education) are usually directed at children of three to five years of age, and the structure, hours of operation, and functionality are influenced by school culture, with a focus on more formal education (Charles & Williams, 2006). Informal programmes that take place in settings not associated with schools show a higher level of flexibility in their organization and function, and they often include community and family development. These programs are not always based on curriculum guidelines and may be managed by volunteers, community agents, or mothers and fathers, who generally have either a primary or secondary level education (Charles & Williams, 2006).

Low levels of training, in particular the absence of vocation-trained early childhood practitioners in settings outside the public sector kindergartens, are common characteristics in the region (Charles & Williams, 2006; Williams & Charles, 2008). The great majority of practitioners in early childhood services have very little access to formal training for recognised certification, either because they do not possess the education entry-level requirements, or because their country does not provide vocational training as an early childhood practitioner (William & Charles, 2008). The region has had occupational standards, curricula and assessment procedures for the Caribbean Vocational Qualification (CVQ) in Early Childhood since 1999 (WCECCE, 2010).

Dominican Republic

Early education is defined as education from birth to age six (Ministerio de Educación de la República Dominicana, 2016). The Instituto Nacional de Atencion Integral a la Primera Infancia (INAIPI) – or the National Institute for Comprehensive Early Childhood Care in English – provides programs consisting of early stimulation for children ages 0-2 and early education for children ages 3-4, notably covering disadvantaged areas. These programmes include the components

of health and nutrition monitoring, parenting support, detection and early attention of special educational needs, protection from abuse and violence and birth and identity registration. The National System for the Protection of the Rights of Children and Adolescents (CONANI) oversees the provision of early education services for ages 0-4. The requirement to be teachers for early education is university degrees in early childhood education. Early education teachers receive benefits similar to their counterparts in the basic education system, subject to qualifications (ILO, 2012). Similarly, there are other public provisions of early education in the country, such as Estancias Infantiles Salud Segura (AEI-SS) and Espacios de Esperanza (EPE). The net enrolment rate for ages 3-5 stood at 49.5% and 78% for the pre-primary grade (age 6) in 2017. Currently, only 18% of children in the ages 0-4 participate in early childhood services nationwide.

Africa

In Africa, early childhood development programmes are considered essential to improving the quality and capacity of populations, increasing adult productivity, and mitigating the effects of poverty, disease, and civil conflicts (UNESCO-BREDA, 2010). Moreover, many children in this region are subject to health risks either directly or indirectly, including HIV/AIDS. A study from Tanzania of the long-term effect of orphanhood during early childhood on adult health and educational attainment found that children not yet enrolled in school at the time their mother's death were 54% less likely to complete schooling by adulthood, while the death of the father would result in about 33% less schooling by adulthood (Beegle, De Weerdt and Dercon, 2006). Moreover, when children orphaned by HIV/AIDS manage to attend school, they were less likely to be in the correct grade for their age (UNICEF, 2004).

While formal preschools serve children of ages 4-6 years in the majority of African countries, the enrolment rate in the region is typically less than 10% (Garcia, Pence & Evans, 2008). Most preschools are found in the urban areas; however, access rates are lowest in urban slums as well as remote areas. Although enrolment rates are low, staff-child ratios are still relatively high. Most African governments, however, do not employ preschool educators and a large proportion of staff in preschools are not trained. Preschool curricula are often based on models from developed countries or extrapolation of primary education curricula (Gakuru, 1992; Hyde & Kabiru, 2003; Garcia, Pence & Evans, 2008; Haraseb, 2011).

Ghana

To meet the goals of the National Early Childhood Care and Development Policy released in 2004, Ghana became the first country in sub-Saharan Africa to universalize pre-primary education in 2007 for ages 4 and 5. Due to the policy, the gross enrolment rate moved from over 60% in 2005 to 117% in 2016 with over 14,400 public preschools and 8,000 private preschools, thereby achieving one of the highest net enrolment rates in the region (Early Childhood Workforce Initiative, 2019). ECCE provisions in Ghana include kindergartens for ages 4-5, care centres for ages 6 months to 5 years and family day care centres for ages 0-3 across the private and public sector. The two-year kindergarten education is part of the eleven-year basic education programme of the Government since 2002. The kindergarten years are free and compulsory. In 2018, the adjusted net enrolment rate, one year before the official primary entry age, was 90.1% (UIS data). In the same year, the gross enrolment rate in pre-primary education was recorded at 114.6% (UIS data) and the percentage of private enrolment in pre-primary education was 29.7% (UIS data). In 2012, Ghana released the Scale-up Quality Kindergarten Education, a five-year operational plan that solidified teacher training as a top-national priority. In 2018, Ghana had 61,000 kindergarten teachers (Early Childhood Workforce Initiative, 2019) and 54.6% of teachers in pre-primary education were gualified (UIS data). 68% of the public pre-primary teachers were female compared to 93% in private sector in 2012 (ILO, 2012). Many teachers in Ghana are supposed to pay for their own in-service training despite it being government run (EI, 2010). Salaries are reported to be lower in private preschools (ibid). Minimum qualification required for pre-primary teaching is basic level teacher training course that lasts 3 years. Despite the progress made in ECCE, Ghana faces challenges such as: inadequacy of qualified early childhood teachers, especially in rural areas and privately-owned institutions; overcrowded classrooms and large class sizes that make the organisation of class activities difficult; inappropriate use of teaching methods; and inadequate supply of teaching and learning materials.

Namibia

In 2007, Namibia adopted the National Integrated Early Childhood Development Policy; encompassing health, nutrition, early learning, psychological development, water and sanitation, and protection following its first comprehensive ECD policy in 1996. However, its implementation remains limited: the 2011 census found that only about 31% of children between the ages of 0-4 attended any formal ECD programmes (UNESCO, 2017). Primary school is compulsory and starts at the age of 6. One-year pre-primary education is provided for children in the ages 5-6. It was implemented in a pro-poor sequence, and has seen rapid expansion in enrolments. Other types of facilities available for young children include home-based facilities and ECD centre facilities from birth to age 5. In 2018, the gross enrolment rate in pre-primary education and early childhood development services was 34.20% (UIS Data). Namibia supports the integration of Early Childhood Development as one of the objectives of country's Vision 2030 through capacity building of 'educarers' or educators and care providers. Namibia is an exception where women comprise of only one third of the ECCE teachers. Pre-primary education is provided by teachers gualified to work with children in the ages 5-9 and minimum training includes a Diploma in early childhood education (ECE) (24 months); a Diploma in Early Childhood and Lower Primary Education (ECLPE) (36 months) provided at university, or a Bachelor of Education (B.Ed.) Degree in ECLPE (48 months). Universities in Namibia also offer a Master's Degree in Literacy and Learning in ECD (24 months), although graduates tend not to take up teaching positions at the ECD level but rather work in more specialized advisory roles (ISSA, 2016). Key challenges include high turnover of early childhood teachers' due to high prevalence of HIV/AIDS, lack of talent in early childhood services, standardised training, and capacity building for personnel.

Togo

ECCE services include both public and private preschools for ages 3-5, community structures in rural areas (including early childhood development centres developed by UNICEF) and crèches or day-care centres for ages 4 months-3 years (mostly in cities in very small numbers). Early Childhood Development figures as the first sub-objective in the country's Education Sector Plan 2014-2025, and the revised National Policy for Early Childhood Development aims to target 60% enrolment for pre-school coverage. Pre-school education is free in public and community schools. Over the years, the pre-school coverage has increased from 16.5% in 2013 to 22% in 2016 and 38.1% in 2017 and 2018 (National Yearbook of School Statistics, 2012-2013 to 2017-2018). In 2018, the gross enrolment rate in pre-school education was 38.1%, and the percentage of private enrolment in preprimary education was 23.1% (National Yearbook of School Statistics 2017-2018). The adjusted net enrolment rate, one year before the official primary school entry age, was 42.6% in 2018; and 31.7% of pre-primary teachers were qualified (UIS data). The 1975 Education Reform states that school is compulsory for all children aged 2 to 12, although the measures taken to implement this policy are insufficient. The majority of pre-school services (60%) are located in large cities and most of the private Early Childhood Development (ECD) centres are located in the country's capital, Lomé (Education International, 2010). The private sector is relatively small, less than 25% of the national economy, and is primarily operated by churches and individuals.

The minimum academic training required for recruitment to initial training for becoming a preschool educator is a secondary level diploma or its equivalent; as for in-service training, its duration is a few weeks or a month (Neuman, Josephson and Chua, 2015). The main challenges for the sub-sector in Togo include: strengthening and scaling up the initial and continuous training of preschool educators, and increasing the number of educators in order to reduce the child/educator ratio.

Southeast Asia

Of the 11 countries in the Southeast Asian region, seven have ECCE policy instruments (Vargas-Barón, 2015). However, the types of ECCE provision vary across countries. For example, in Viet Nam the different forms of ECCE provision include: public crèches (day care centres) for full time care for children 3 months to 3 years; public preschools and kindergartens for ages 3-5 years old; private mini-crèches (family day care homes) for children from birth to 6 years old; community childcare centres; and home-based childcare for infants ages 0-2 (Hayden & Thi Ngoc Lan, 2013). These different types of ECCE provision are funded by the Ministry of Education, local authorities, international organisations, and non-government organisations including UNESCO and UNICEF (Kamerman, 2007). In neighbouring Cambodia, there are three major types of preschool programmes: state preschools funded by the government and attached to local primary schools; community preschools currently subsidised by non-governmental organizations (NGOs) but intended to be financed by local community groups in the long term; and home-based programmes which are run by mothers' groups that are formed within and across villages in local communes (Rao et al., 2012). The policy leading to rapid expansion of pre-primary programmes for children over three years of age in several Southeast Asian countries has raised concerns that an expansion in quantity has lowered the quality of ECCE programmes due to increased staff-child ratios and less holistic programmes (Rao & Sun, 2010). Moreover, the shortage of qualified pre-primary educators further impacts programme quality (Rao & Sun, 2010). These concerns are further exacerbated by other factors in the low-and-middle-income context such as ethnicity and language, remote residence, disability, poverty, and lack of parental education.

Indonesia

Early Childhood Care and Development became a priority of the National Education System with its inclusion in Law No. 20 in 2003. It has rich experience in community involvement in expanding the outreach and availability of early childhood services. The gross enrolment ratio in early childhood education and care services from ages 3-6 in 2018 was 74.28% (Ministry of Education and Culture of the Republic of Indonesia, 2018). However, access to early education services has been unequal for children who come from economically weak backgrounds as they have lower enrolment rates than their wealthier counterparts (World Bank, 2019). Notably, services are provided in mother-tongue languages early on to ensure strong foundations for children's success, and the government collects a wide variety of administrative data related to early childhood development (ARNEC. n.d.). Key issues for the sector include, insufficient funding, vast disparities in coverage between rich and poor households as well as urban and rural families, teachers that may not be qualified, and very small percentage of centres that are accredited (World Bank, 2015).

The Philippines

Early Childhood Care and Development system refers to full range of health, nutrition, early education, and social services for the basic holistic needs of young children from age 0 to 4 years; and to promote their optimum growth and development. Republic Act 10410 recognizes the age 0 to 8 years as the first crucial stage of educational development and strengthening the early childhood care and development system, appropriating funds therefor and for other purposes. Ages 0 to 4 is the responsibility of the Early Childhood Care and Development Council. Department of Education is responsible for ages 5 to 8 (RoP, 2012). The ECCD Council and the Department of Education have both set qualifications for hiring: Child Development Teachers (CDT) handling children from 0 to 4 years old children and kindergarten teachers handling 5 year old children must hold a Bachelor's degree with focus or specialization in early childhood or pre-school education or teaching early grades (ECCD Council, 2015) (DePED, 2012). CDTs may also have degrees related to education, such as Psychology or Family Life and Child Development. On the other hand, kindergarten teachers, may have a degree in special education with early childhood education (ECE) units or secondary education with additional certification and experience in ECE.

The Philippines developed in-country teacher standards with an emphasis on teaching approaches that attribute to holistic development in children, reflecting national perspectives and culture (Miyahara and Meyers, 2008). Due to limited opportunities for promotion in pre-schools, teachers often transition to the primary school system (Shaeffer, 2015). This has implications on quality of ECCD as staff continues to be paid low incomes (UNICEF, 2016). Key challenge continues to be improving access, quality and sustainability of the services.

Viet Nam

Early childhood education (ECE) is the first level of the national education system and focuses on nurturing, caring and educating children from 3 months to 6 years old. Public preschools are linked to other services, including health, nutrition, and social protection. Various ECE institutions include preschools catering to children aged 3 months to 6 years, kindergarten classes for ages 3-6 and nursery for day care of children between 3 months and 36 months. In 2010, the Government of Viet Nam approved universalization of early childhood education targeting all 5-year-old children for 2010-2015 such that they are provided full day schooling for the whole year before starting primary school (SRoV, 2010). As a result, Viet Nam has achieved very high enrolment rates in preprimary education. The gross enrolment rate in pre-primary education was 100.23% in 2018 (UIS data). In 2014, the proportion of children aged 5 who were developmentally on track was 88.7% (UIS data). 87% of ECE institutions are public and almost all children participate in ECE one year before the official primary school entry age. Most teachers working in ECE services are qualified, and need to obtain a secondary education certification with two months of in-service training each year (Neuman, Josephson and Chua, 2015). In 2018, 99% of pre-primary teachers were trained (UIS data). While Viet Nam has made remarkable progress in improving ECE access and quality, challenges remain: teachers' capacity is still limited in knowledge, professional development, and pedagogical skills to implement the ECE curricular (especially for those working in rural, industrial, or border areas, and disadvantaged islands).

2. Project description

What is STEPP?

The Survey of Teachers in Pre-Primary Education (STEPP) an OECD-UNESCO joint initiative aimed at collecting pertinent information from ECCE personnel in low-and-middle-income countries. It supports the participating countries in implementing the SDG Target 4.2 on universalising quality early childhood care and education. Box 2.1 summarises the basic information for the project.

Box 2.1 Basic Information for STEPP

Survey title	Survey of Teachers in Pre-primary Education (STEPP)
Participating countries & languages	Dominican Republic (Spanish), Ghana (English), Indonesia (Bahasa), Namibia (English), the Philippines (English), Togo (French), and Viet Nam (Vietnamese)
Format	Paper-based
Scope	International Standard Classification of Education (ISCED) 0.2 (pre- primary education)
Key partners	UNESCO, OECD, ACER, cApStAn, GESIS, University of Namibia
Time frame	2017 – 2019 (Phase 1)

Source: Authors (based on the STEPP project reports)

What aspects of teachers were addressed in the study?

The fundamental themes for STEPP include personnel and setting characteristics, their training and professional development, pedagogical and professional practices, working conditions, and job satisfaction.

The origins of the STEPP framework can be found in the original conceptual work undertaken by the OECD for the Starting Strong Survey which was based on OECD's long-standing work on ECCE quality and the frameworks of the OECD's Teaching and Learning International Survey (TALIS) (Ainley & Carstens, 2018; OECD, 2010). Given that the focus of STEPP is on low-and-middle-income countries, its framework was adapted to better address the pre-primary context of developing countries. STEPP was informed by the 2015 literature review by UNESCO (Neuman, Josephson

and Chua, 2015) and the results of the priority-rating exercise of proposed themes and indicators provided by participating countries.

The simplified STEPP Conceptual Framework model (see Figure 2.1) suggests that structural quality factors affect educator competence, which influences the process quality factors and, in turn, impacts child outcomes³. This is a simplified model and does not capture the full complexity of ECCE contexts, nor the interrelated and non-linear relationships that occur within centres. Structural quality in this model is captured by three of the four STEPP Policy Issue areas: preparing and developing ECCE personnel (Policy Issue 2), attracting, motivating and retaining ECCE personnel (Policy Issue 3), and aspects of ECCE centre characteristics (Policy Issue 4). ECCE personnel competence and process quality are captured by Policy Issue 1, which focuses on ensuring quality learning environments and practices. The 10 themes that are comparable to the Starting Strong Survey themes (based on the draft Starting Strong Survey 2018 Conceptual Framework (Bélanger, Karoly and Stancel-Piątak, 2016)) are also depicted in this model. This simplified model has been adapted from the original STEPP Conceptual Framework model in the STEPP Conceptual Framework Document ⁴.

Early Childhood Care and Education (ECCE) Environment 鼢 **STRUCTURAL QUALITY** PROCESS PERSONNEL ← OUALITY COMPETENCE Prepare and develop ECCE personnel Attract, motivate and retain ECCE personnel Ensure quality learning environments and practices **Contextual and background information Theme 1: Pedagogical Theme 4: Initial education** beliefs and perceptions (e.g. pre-service training) (e.g. development of children's skills) Theme 5: Professional development (e.g. opportunities; barriers, in-service training; **Theme 2: Pedagogical** support provided to staff) practices CHILD (e.g. support children from **Theme 6: Working conditions** OUTCOMES diverse backgrounds and develop **Theme 7: Job satisfaction** Child development strategies to monitor and assess and learning children's progress) **Theme 8: Personnel characteristics** (e.g. ECCE head/ staff age, gender, gualifications **Theme 3: Professional** and experience) practices **Theme 9: Classroom characteristics** (e.g. for heads professional collaborations and stakeholder (e.g. child age & gender composition; group size) engagements; e.g. for staff planning Theme 10: Setting characteristics daily schedule and classroom (e.g. location; safety; facilities; resources; staff routine and lessons) characteristics) POI ICY **HOME LEARNING ENVIRONMENT** Goals, regulation implementation, and evaluation Resources, education, and activities

Figure 2.1 Simplified STEPP Conceptual Framework model

Data source: STEPP Project reports

³ All the figures and tables included in this publication are original to the STEPP project.

⁴ The conceptual framework is currently under development. This will become available once the STEPP main survey activities will have been completed.

Table 2.1 provides a summary of the distribution of items by STEPP themes in the ECCE Head and Staff field trial Questionnaires. This distribution is based on the priority ranking exercise by the countries, the questionnaire review feedback from the National Teams, International Advisory Group (IAG) and UNESCO and outcomes of the pilot study. This revision process has reduced the content by a third in the Staff Questionnaire and by a fifth in the Head Questionnaire compared to the Starting Strong Survey with the aim of making the questionnaires manageable in terms of required response time. These questionnaires were then nationally adapted and translated by the participating countries into their national languages.

Table 2.1 Major STEPP themes and relative item distribution within ECCE Head and Staff Questionnaires, along with comparison to the Starting Strong Survey (main survey instruments)

STEPP Themes	ECCE Head	ECCE Staff
1: Pedagogical beliefs and perceptions	-	-
2: Pedagogical practices	▼	-
3: Professional practices	-	-
4: Initial education / pre-service training		
5: Professional Development / In-service Training	-	
6: Working conditions		-
7: Job satisfaction	▼	•
8: Staff characteristics	-	-
9: Classroom characteristics	-	- 1
10: Setting characteristics		_

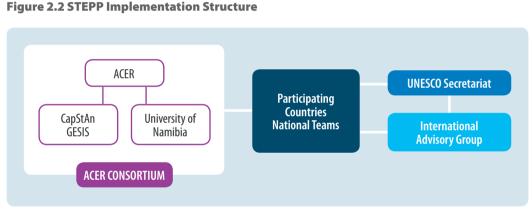
Data source: STEPP Project reports

Where possible, the STEPP questionnaire items were kept comparable to the items from the Starting Strong Survey main survey questionnaires after allowing for modifications based on the differences in country contexts (developing vs developed) and national suggestions. Table 2.1 also shows a similar representation of items across most themes in the two ECCE surveys (indicated by the flat yellow bar). The ECCE Head survey had more items (indicated by the green 'up' arrow) in Working conditions and Setting characteristics, and fewer items (indicated by the red 'down' arrow) in Pedagogical practices and Job satisfaction than in the Starting Strong Survey. The ECCE Staff Questionnaire had few items on Job satisfaction and more items on Initial education and

Professional development, compared with the Starting Strong Survey. It should be noted that as the Staring Strong Survey and the STEPP study progressed independently, they diverged from their similar beginnings, mainly as a response to context. Thus, STEPP focuses more on pre-service and in-service training and less on job satisfaction, for example.

How was STEPP Phase 1 conducted?

STEPP's overall policy guidance, management and coordination was provided by UNESCO Headquarters. Technical advice on the content and process of the project for a successful implementation was provided by the International Advisory Group (IAG).⁵ The Australian Council for Educational Research (ACER) was responsible for developing and operationalizing the survey instruments and methodology with support from its partner organisations cApStAn, GESIS and the University of Namibia. Figure 2.2 illustrates the STEPP implementation structure.



Source: Authors (based on the STEPP project reports)

Each of the STEPP participating countries had a dedicated National Team responsible for the in-country management of the project. The National Teams comprised of representatives of the ministry of education and other ministries or government agencies concerned with pre-primary education, research, and teacher training institutions. The National Teams were supported by the UNESCO Field Office staff when required. Table 2.3 provides information about the institutions that formed the National Teams for the respective participating countries.

⁵ Individual experts in the IAG are Linda Biesteker (Senior Consultant and Researcher), Jean Dumais (Senior Consultant), Dr Jan Peeters (Senior Consultant), Prof. Nirmala Rao (University of Hong Kong), Mamadou Thiam (InterMedia), Ursula ItziInger-Bruneforth, (Federal Institute for Educational Research, Innovation & Development of the Austrian School System - BIFIE). Institutional members in the IAG are Education International, ILO, International Taskforce on Teachers for Education 2030, OECD, OMEP, UNESCO, UNESCO-IICBA, UNESCO Institute for Statistics, and UNICEF.

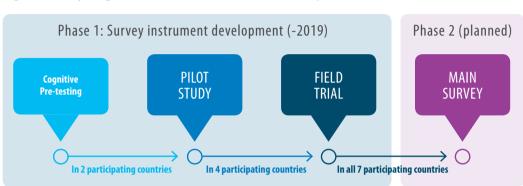
Table 2.3 STEPP National Team Composition

Participating Countries	National Team Composition
Dominican Republic	Directorate of Initial Education of the Ministry and the Dominican Institute of Evaluation and Research of Educational Quality - Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Ghana	Ministry of Education, Ghana Education Service and Teacher Unions, UNESCO Accra, Ghana National Commission for UNESCO, University of Education, Winneba, Reach for Change, Ministry of Education, Arts and Culture
Indonesia	Ministry of Education and Culture (MoEC), Southeast Asian Ministers of Education Organization Centre for Early Childhood Care Education, and Parenting (SEAMEO-CECCEP), and experts from Universities and Indonesia Kindergarten Teachers Association (IGTKI)
Namibia	Ministry of Education Arts and Culture (MoEAC), Ministry of Gender Equality and Child Welfare (MGECW), The University of Namibia, The National Institute for Educational Development (NIED), UNESCO
Philippines	Members from Southeast Asian Ministers of Education Organization Regional Center for Educational Innovation and Technology (SEAMEO INNOTECH), Early Childhood Care and Development (ECCD) Council, and Department of Education (DepEd).
Тодо	Ministry of Primary, Secondary and Vocational Education - Ministre des Enseignements Primaire, Secondaire et de la Formation Professionnelle (MEPSFP)
Viet Nam	Members from the Viet Nam National Institute of Educational Sciences (VNIES), and Departments of Education and Training (DoETs) from the three regions Northern, Middle and Southern Viet Nam (Hanoi, Nghe An, Tra Vinh), Centre for Educational Outcomes Assessment (CEOA)

Source: Authors (based on the STEPP project reports)

Phase 1 for STEPP started with a review of the relevant frameworks, priority rating exercise documents, and draft field trial questionnaires for the OECD TALIS Starting Strong Survey instruments (January 2017 versions). Concurrently, the STEPP Conceptual Framework development began. The other major outcome of this work was the STEPP pilot study instruments which underwent various rounds of reviews through the IAG and UNESCO Secretariat before they were

piloted. Figure 2.4 illustrates the key stages for the STEPP Instrument Development. The first three stages – cognitive pre-testing, pilot study, and field trial – were covered under the current phase of the project, while Phase 2 is expected to cover the main survey.





The target centres for STEPP are institutional (officially registered) settings providing ECCE programmes such as formal education and care for young children from age 3 up to the entry into primary education, also defined as ISCED 2011 Level 0.2 Pre-primary education (UNESCO-UIS, 2012).

In addition, centres must provide educational activities at ISCED Level 0.2 for at least the equivalent of 2 hours per day and 100 days a year to be classified as an eligible centre for this survey and need to support early development of children in the years prior to the start of primary school.

ECCE staff members for STEPP are defined as persons who, as part of their regular duties in the target centre, provide learning opportunities for children in their care. The definition includes creating learning and caring environments aimed at nurturing children's wellbeing and their cognitive, social, and emotional development. It also includes ECCE staff who share their time among different centres, along with ECCE staff who work with children in integrated programmes across ISCED levels, provided they are working at ISCED 0.2 Level. Substitute and emergency personnel - defined as personnel who are temporarily undertaking the activities of regularly employed personnel - are considered out of scope.

ECCE heads are defined as persons with most responsibility for the administrative, managerial, and pedagogical leadership at their ECCE centres. In some centres, the ECCE head may also spend part of their time working with the children.

Any centre entirely devoted to children with special needs is considered out of scope for this survey. However, personnel working with children with special needs in regular ECCE centres are in scope.

Source: Authors (based on the STEPP project reports)

The survey format is paper-based with two main questionnaires: one for ECCE staff and one for ECCE centre heads. A combined questionnaire has also been developed for small centres (in some countries) where the ECCE centre head also has pedagogical duties.

Prior to the pilot study, some items from the draft pilot study questionnaires were *pre-tested* in two languages (English and French) to examine the extent to which questionnaire items were understood by respondents. To this end, two focus groups were conducted per country for each of the target groups i.e. heads and staff, where a sample of questions from the pilot study questionnaires were pre-tested. In total, 12 items from the ECCE Head Questionnaire and 16 items from the ECCE Staff Questionnaire were tested.

The pre-testing was undertaken in Ghana and Togo. The countries were trained by GESIS for this activity and received all the necessary materials for the focus groups from the ACER Consortium.

The STEPP pilot study was conducted in four countries - Dominican Republic, Ghana, Namibia, and Viet Nam - during September and October 2017. It involved separate focus group sessions with ECCE centre heads and staff which required participants to complete the Head or Staff Questionnaire first, followed by a discussion which was moderated by a National Team member. The purpose of the pilot study was to test the appropriateness, relevance and completeness of the STEPP instruments in order to fine-tune questionnaires for the field trial. Questionnaires were piloted in English, Spanish, and Vietnamese. The following Box 2.2 lists the key activities for these stages, while chapters 3, 4, and 5 cover the outcomes from these stages.

Key Activities/Events	Responsible team
Cognitive-pre-testing	National Teams with support from the ACER Consortium
Questionnaire translation and adaptation	National Teams with support from the ACER Consortium
Piloting	National Teams
Questionnaire translation and adaptation	National Teams with support from the ACER Consortium
Drawing of the national country sample	National Teams with support from the ACER Consortium
Field trial and national quality monitoring	National Teams with support from the ACER Consortium
Data analysis and reporting	ACER

Box 2.2 Key activities for the pilot study and field trial (Phase 1)

Source: Authors (based on the STEPP project reports)

3. Pilot study outcomes

All participants found the questionnaires clear and fit for purpose. In general, the questions were logically arranged and mostly easy to understand. On average, participants took 56 minutes to complete the ECCE Head Questionnaire and 64 minutes for the ECCE Staff Questionnaire. Therefore, for the field trial it was recommended that the number of questions or some items from lengthy questions which were not so clear to the respondents should be removed. The other key suggestion was to review some of the answer scales as some respondents suggested a different order or rewording for greater clarity.

Some respondents expressed difficulties with terminology used in certain questions. In a few cases, it was difficult for the respondents to understand questions or items mostly because a few concepts were not commonly used among ECCE personnel in those countries. Additionally, some respondents expressed difficulties when answering specific questions. These included questions about different types of employment contract/employment status, years of work experience, highest level of qualification, formal education, professional development, ECCE centre location and sources of funding, children's background, and additional needs or children with disability. These questions and topics were given special attention when the questionnaires were revised for the field trial and were simplified.

Additional topics were suggested by some of the respondents which were then included in the field trial questionnaires. These included topics about general health of the ECCE personal, ECCE staff satisfaction with their remuneration, and professional development for ECCE heads.

Overall, the information from the pilot study provided valuable insights into how the questionnaires were perceived and understood by the ECCE heads and staff in the countries participating in STEPP. Together, the feedback on the questionnaires from the cognitive pre-testing and comments from IAG on the instruments, as well as on the Conceptual Framework, helped to further improve and refine the questionnaires for the STEPP field trial.

4. Field trial outcomes: instruments

Generally, the STEPP instruments seemed to be very well received by the participants and only a few issues were reported to ACER Consortium.

For the Head Questionnaire, the missing response rates were fairly consistent across most countries. Particularly high missing data rates occurred where items were more complex for respondents, such as those requiring an indication of the number of years of work experience in different settings and the number of staff working at the centre (by gender).

For the Staff Questionnaire, the missing rates were higher earlier in the questionnaire than for the second half. Some of these are likely due to respondents not answering because the question was not applicable to them.

The Head Questionnaire was overall well understood. There were a few instances where the respondents were somewhat confused when answering a question about their highest educational attainment and had asked for clarification while completing the questionnaires.

No content issue was reported for the Staff Questionnaire and the respondents were happy with the topics covered. Some confusions in concepts were reported as a result of translation/ adaptation limitations. For example, a few respondents were confused about the terms "status" and "community" within the local context and have suggested that these terms be explained better in the question.

The perceived Head and Staff Questionnaire length each exceeded an intended average response time of 40 minutes across all countries. Responses ranged from four minutes through to 90 minutes (noting that during data processing, 90 minutes was the maximum accepted duration, any durations beyond this were trimmed back to this time). The average time for all participating countries was reported to be around 54 minutes for both the ECCE Head Questionnaire (53.8) and ECCE Staff Questionnaire (54.4). Tables 4.1 and 4.2 provide the breakdown of the time taken to complete the questionnaires by each participating country.

Country	Mean number of minutes	Median	SD	Min	Мах
Dominican Republic	48.6	45	14.3	25	90
Ghana	54.6	54	19	10	90
Indonesia	57.4	60	19.2	15	90
Namibia	49.4	45	16.3	20	90
Philippines	43.5	45	14	4	90
Тодо	72.1	76.5	17.5	30	90
Viet Nam	51.2	45	13.2	40	90

Table 4.1 Descriptive statistics for time (in minutes) taken to complete survey as reported by ECCE Heads, by country

Data source: STEPP Project reports

Table 4.2 Descriptive statistics for time (in minutes) taken to complete survey as reported by ECCE Staff, by country

Country	Mean number of minutes	Median	SD	Min	Max
Dominican Republic	48.7	49	15.1	9	90
Ghana	56.8	60	19.4	10	90
Indonesia	58	55	19.6	26	90
Namibia	52.1	50	15.3	20	90
Philippines	42	42	14.7	5	90
Тодо	73.6	79.5	18.2	13	90
Viet Nam	49.9	45	13.5	15	90

Data source: STEPP Project reports

Recommendations from the field trial analysis report

A reduction in questionnaire length for both Head and Staff Questionnaires is recommended for the main survey to reduce the burden on participants. This will require re-examining priorities in light of what worked well in the field trial, the policy contexts of the participating countries, and the desire to compare with the outcomes of the Starting Strong Survey.

For the Head Questionnaire the key recommendation for the main survey is to review the country adaptations and translations. This is particularly important for the question on "highest level of schooling" attained and it has been suggested to combine this question with the question

on "highest level of post school education". Another suggestion is to develop further items on barriers towards professional development, keeping in mind that this would require dropping some other questions considering the questionnaire length. By and large, the recommendation for other questions was to consider retaining them in the main survey, with the exception of a few that would require further modifications such as the questions on "support for families" and "general climate in centre".

For the Staff Questionnaire, general suggestions have been made about the font size and formatting to improve readability, especially when the questionnaires were translated into another language, and to revisit national translation/adaptations. Similar to the recommendations for the Head Questionnaires it is suggested that the question for "highest level of schooling" should be combined with the "highest level of post-school education" question. Regarding the guestion on "education and training topics" it was recommended that some of the items should be removed or modified. It should also be noted that the content for this question was derived primarily from the Starting Strong Survey field trial where much of the content was subsequently omitted for the main survey with some new content included. Consideration should be given to whether this question remains a priority. A question which would need major adjustments is the question on "professional development barriers" where 55% of respondents indicated there were other barriers not listed. Hence, it is recommended to revisit the responses specified to see if common themes can be identified and explicitly included in the main survey. In line with the recommendations for the Head Questionnaire, it has been recommended that most other questions be retained unchanged or with a few modifications. More detailed technical findings and recommendations are included in the field trial analysis report for STEPP.

5. Field trial outcomes: country implementation experiences

The participating STEPP National Teams all reported that the ECCE centre staff participated willingly, were cooperative, and answered the interview questionnaire fully most of the time. The process of adaptation and translation of the instruments was timely, adequate, and with no identifiable major problems. The centre coordinators acknowledged that the training provided by the National Teams was very useful and they were well prepared to carry out the survey. The national quality monitoring reported that the National Quality Monitoring manual was very useful and the National Teams supported them throughout the activity.

With regards to survey administration, a few of the countries did not conform to the implementation model suggested by the ACER Consortium, i.e. selection of a person from within the centre as a coordinator for overseeing the survey administration. Instead, they sent out education officers/external survey administrators to the centres for conducting the survey. These changes were all confirmed with the ACER Consortium before commencing the survey and the modified process seemed to work well for these countries.

Table 5.1 summarizes the feedback from field trial preparation, administration, and data management processes. This summary table has been created using observations by the ACER Consortium and information from the national quality monitoring reports and the field trial experience reports from the National Teams.

Table 5.1 Summary of feedback from the field trial

Activities	Issues and observations
Sampling	National Teams from six out of the seven participating countries suggested that the timeframe for drawing up the sampling frame should be extended as the time needed to gather all the information from the different government agencies was much longer than expected.
Adaptation and Translation	In six of the seven participating countries some ECCE staff found it difficult to understand certain terms used in the questionnaires. As the participants' knowledge and understanding of different technical terms often vary to what the National Teams expect, adaptations should be revisited for the main survey.
Materials (Manuals, Forms, Guidelines)	A few coordinators from the participating countries reported that they found it difficult to fill out the Staff Tracking Form (STF). The issues were mostly around the terms used for different roles in the countries. The National Teams also highlighted the need for adapting and translating the project forms, guidelines and manuals.
Communication with centres during field trial	The National Teams faced some difficulties in communicating with centre coordinators in some of the sampled sites, mainly due to poor internet connectivity and weak phone connections.
National Quality Monitoring	The National Quality Monitors found that most Centre Coordinators were very cooperative during the site visit.
Trainings	Some of the national trainings took much longer to conduct than planned, which resulted in higher costs for the National Teams. Also, the ECCE Centre Coordinators in most countries received information about the training quite late. As a result, some coordinators could not attend the national trainings.
Staff Sampling and Data Management (SSDM) Software	Some countries found it a bit more difficult to set up and use the software used for sampling (SSDM) than other countries especially because some of the participating countries did not have their data management team present during the training sessions. The ACER data management team provided continuous support throughout the set-up, data entry, and data report submission. As soon as an issue was identified, the National Teams notified ACER and it was dealt with immediately.

Source: Authors (based on the STEPP project reports)

The next sections provide some general field trial impressions from each of the STEPP participating countries, along with some quotes from the country experience reports.

Dominican Republic

Both principals and teachers were very collaborative and interested in completing the survey and the reception in the centres was very good; no educator refused to participate. As we expected, there was a very good reception from the schools towards the survey. (IDEICE, 2019)

The field trial administration in the Dominican Republic received good support from the principals and educators of the centres and the National Team. While there were issues and challenges along the way, these were not detrimental to the overall processes of the survey and were adequately addressed by the National Team, ACER, and UNESCO. The whole experience of the field trial was worthwhile for the National Team, who now feel better prepared for the main survey implementation.

Ghana

The Ghana National Team's experiences of this field trial successfully gave insights on the technical and logistical aspects of the administration of the Survey of Teachers in Preprimary Education. These experiences will be of great value to the administration of the main survey (Ghana National Team Members, 2019).

The field trial instruments were successfully administered in Ghana. The training sessions and operational manuals proved to be enough in guiding the National Team throughout the field trial implementation process. While there were issues and challenges, these did not affect the overall implementation of the field trial and were sufficiently addressed by the National Team, ACER, and UNESCO.

Indonesia

As a whole, the process of administration, the field trial of The Survey of Teachers in Pre-Primary Education (STEPP) programme in Indonesia went smoothly, involving various stakeholders, including the Directorate General of PAUD and Dikmas, Ministry of Education and Culture, UNESCO Headquarters, ACER, SEAMEO CECCEP, practitioners and academics and Partner organizations (Indonesian National Team, 2019).

Indonesia has had a very beneficial field trial experience which will inform their planning for the main survey. The major issue they identified was around rigid translation which caused some ambiguity for the respondents in understanding these questionnaires. Therefore, in the next

phase, the National Team will be taking every possible measure to ensure that the adaptation and translation address these contextual issues.

Namibia

The experience with the field trial Administration was supported by the initial Webinar trainings organized by ACER and their team, which really helped to put everything in perspective. The National Team Members feel very much empowered and supported through that engagement... There was a tremendous learning curve that span from the National Team Managers and cascaded down to the end-users at the grassroots level and it is something the team wants to build on and strengthen going forward. (Namibia National Team, 2019)

The Namibian National Team overall had a good experience with the field trial and felt well supported by the resources, trainings, and collaboration with the ACER Consortium. One of their key suggestions is to develop an online survey administration mode for those participants who have access to the internet.

Philippines

Overall, the field trial administration went very well considering all factors that came into play. The training sessions and operational manuals proved to be enough in guiding the National Team Manager throughout the field trial process. Communication between the National Team Manager, ACER, and UNESCO went very smoothly, which led to efficient feedback loops and satisfactory issue resolution. The stakeholders involved with the National Team Manager and the target respondents were generally cooperative upon getting to know more about the project. While there were issues and challenges encountered, these were not detrimental to the overall implementation of the field trial and were sufficiently addressed by the National Team Manager, ACER, and UNESCO. (STEPPPhilippine National Team, 2019)

The Philippines found the field trial administration exercise highly beneficial. They identified potential areas for greater attention such as sampling and quality monitoring. In general, the administration went very well, and they were able to overcome all systemic issues that arose during the field trial implementation. This helped the National Team build a lot of capacity for future surveys in general.

Togo

L'expérience de l'équipe nationale du Togo lors de cet essai sur le terrain a permis de mieux comprendre les aspects techniques et logistiques de l'administration de l'Enquête auprès des enseignants de l'Éducation pré-primaire. Cette expérience sera utile quant à l'administration de l'enquête principale. [The experience of the Togolese National Team in this field trial led to a better understanding of the technical and logistical aspects of administering the Pre-Primary Education Teacher Survey. This experience will be useful for the administration of the main survey.] (MEPS, 2019)

Overall, the Togolese National Team had a positive experience and found the manuals and trainings to be particularly useful for guiding them through the field trial processes. Their involvement in this field trial created a good understanding of the technical and logistical aspects of administering the STEPP questionnaire, which will be very useful for the main survey. A few aspects of the field trial administration that could be improved for Togo include the distribution process for the questionnaires as well as quality monitoring and supervision.

Viet Nam

The managers and teachers in the survey sample were aware of the importance of the field trial in particular and the STEPP project in general for the development of Viet Nam's early childhood education (VNIES, 2018).

Overall, the Viet Nam National Team had a positive experience with the field trial. They found the trainings and manuals, questionnaires and other info materials very useful and fit for purpose. The National Team had the support of the UNESCO Viet Nam Country office for high quality translation of all the STEPP materials and were also provided interpreter services during the training webinar sessions. They are eager to participate in the main survey.

Recommendations from the field trial experience

Sampling timeframe. As most countries encountered delays while obtaining sampling information from the different government agencies, they suggested that the sampling timeframe for the main survey should be extended to allow for such administrative delays.

Questionnaire. The questionnaire adaptation (and translation for some) requires more attention from the National Teams, particularly on expressions/words that are not commonly used in the country and formatting issues after the questionnaires are translated. Other suggestions include allowing staff to take the questionnaires home as they took much longer than expected to complete and there are too many distractions in the classrooms for the participants to focus. Online questionnaires were also suggested by two National Teams.

Communication. National Teams have identified that in order to maintain regular communication with the centres and quality monitors, it will be useful to assign the task to one specific person who can monitor the progress on the field as well as flag and manage potential issues.

Survey Timing. The timing for survey administration should be carefully chosen, for instance in one of the participating countries the field trial administration dates clashed with other major events organised by the Ministry which made it difficult for a National Quality Monitor from the ministry to participate in quality monitoring during the survey administration period.

Quality monitoring. Selecting schools for quality monitoring visits that are closer to the National Quality Monitors save time and travel costs, although consideration has to be given to capturing the survey administration experience by more remotely located centres. Also, in many cases the quality monitoring visits took place after the survey administration. It is recommended that for the main survey the visits should be timed during the administration to make this activity more effective.

Training. Longer training session for Centre Coordinators and National Quality Monitors should be planned instead of just half-a-day workshops, since the content is quite complex and the field staff need to have a thorough understanding of all the documents for successfully administering the survey. Based on experiences with online training sessions for Phase 1, it is also recommended that whenever possible face-to-face trainings should be arranged for training the National Teams. This will ensure more efficient delivery of the training content and clearer communication without having to deal with the complexities around connectivity issues, such as those faced by the National Teams during Phase 1 trainings. Face-to-face training, if done in a collective meeting, also provides an opportunity for participants to share their experiences, challenges and solutions and helps build a professional learning community.

6. Conclusion and next steps

The project has made very good progress, resulting from the combined efforts of all National Teams and local agencies and institutes in the participating countries, UNESCO field offices, IAG members, ACER Consortium partners and UNESCO headquarters staff. Still, some delays were experienced in arrangements with countries which resulted in extensions of timelines to accommodate a few countries to catch up to others.

Most countries made excellent progress in a short time. Two countries participated in cognitive pre-testing and four in the pilot. All seven countries conducted their field trials for the STEPP questionnaires and shared their national datasets to ACER for international analysis. These activities were supported by the ACER Consortium by way of training sessions and manuals as well as phone and e-mail assistance. This publication highlighted some of the key findings from the cognitive pre-testing, pilot, and field trial.

The participating countries have gathered survey administration experience thorough this project, particularly on running large-scale surveys and national quality monitoring. The countries built considerable capacity with support from the ACER consortium. For some of them, it was the first time they had implemented a survey of this scale. The National Teams are all eager to learn from the outcomes of Phase 1 so that they can improve the main survey implementation.

UNESCO is currently in the course of developing a resource mobilization strategy for the second phase of the STEPP project – i.e. main survey, which will generate evidence and insights upon which to formulate concrete improvement measures in favour of quality teaching workforce – that will involve close consultation and coordination with the participating countries and partners.

References

- Ainley, J., & R. Carstens (2018), "Teaching and Learning International Survey (TALIS) 2018 Conceptual Framework", OECD Education Working Papers, No. 187, OECD Publishing, Paris, https://doi.org/10.1787/799337c2-en.
- Banu, M.S. (2014). Teachers' beliefs and perceptions of quality preschool education in Bangladesh: A postcolonial analysis.
- Bélanger, J., Karoly, L. & Stancel-Piątak, A., (2016), "TALIS Starting Strong Survey 2018 Conceptual Framework" Draft 1: August 2016. OECD.
- Beegle, K., De Weerdt, J., & Dercon, S. (2006). Orphanhood and the long-run impact on children. *American Journal of Agricultural Economics*, 1266-1272.
- Bowman, B., Donovan, M. S., & Burns, M. S. (2001). Eager to learn: Educating our preschoolers. Committee on Early Childhood Pedagogy. National Research Council Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press. Retrieved October, 8, 2014.
- Charles, L., & Williams, S. (2006). *Early childhood care and education in the Caribbean (CARICOM states)*. Paper commissioned for the EFA Global Monitoring Report 2007, Strong foundations: Early childhood care and education. UNESCO. https://www.unicef.org/easterncaribbean/spmapping/ Implementation/ECD/UNESCO_ECC_2006.pdf
- Center for the Development Child at Harvard University (n.d.). https://developingchild.harvard.edu/
- Consultative Group on Early Childhood Care and Development, International Step by Step Association (ISSA). 2016. Global Report on Equity and Early Childhood. Available at: https:// www.oise.utoronto.ca/atkinson/UserFiles/File/Publications/CGGlobal-FullReport-English-R2-WEB-LowRes.pdf
- Department of Education of the Republic of the Philippines, 2012. Additional Policy Guidelines on Hiring and Deployment of Kindergarten Teachers.
- Denboba, A, Hasan, A., Wodon, Q. (2015). Early Childhood Education and Development in Indonesia, World Bank Publications, The World Bank, number 22376, August.
- Denboba, A. D., Sayre, R. K., Wodon, Q. T., Elder, L. K., Rawlings, L. B., & Lombardi, J. (2014). Stepping up early childhood development: investing in young children for high returns.

- Early Childhood Workforce Initiative, 2019. Ghana Country Brief. Bridging Access with Quality: Empowering Kindergarten Teachers with Practical Training to Support Child-Centered Learning.
- Education International (2010) Early Childhood Education: A Global Scenario (a report on a study conducted by the Education International ECE Task Force El, Brussels), https://download. ei-ie.org/Docs/WebDepot/ECE_A_global_scenario_EN.PDF
- Fukkink, R. G., & Lont, A. (2007). Does training matter? A meta-analysis and review of caregiver training studies. Early Childhood Research Quarterly, 22(3), 294–311. https://doi.org/10.1016/j.ecresq. z2007.04.005
- Gakuru, O. N. (1992). *Class and pre-school education in Kenya*. Unpublished Doctoral Dissertation, University of Nairobi.
- Garcia, M. H., Pence, A., & Evans, J. (Eds.). (2008). *Africa's future, Africa's challenge: early childhood care* and development in Sub-Saharan Africa. World Bank Publications.
- Global Education Monitoring Team (2015). EFA Global Monitoring Report: Education for All 2000-2015 – achievements and challenges. Paris: UNESCO.
- Global Education Monitoring Team (2006). EFA global monitoring report, 2007: Strong foundations: early childhood care and education. Paris: UNESCO. Available at: https://unesdoc.unesco.org/ ark:/48223/pf0000147794
- Haraseb, V. (2011). Early Childhood Education for the San in Namibia: The Working Group of Indigenous Minorities Early Childhood Development Program. *Diaspora, Indigenous, and Minority Education*, 5(2), 135-141.
- Hayden, M., & Thi Ngoc Lan, L. (2013). Vietnam: The education system A need to improve quality. In L. Pe Symaco (Ed). *Education in South-East Asia* (pp. 323–344). London: Bloomsbury Academic.
- Huntsman, L. (2008). Determinants of quality in child care: A review of the research evidence. Centre for Parenting and Research, Service System Development, NSW Department of Community Services Available at: http://www.community.nsw.gov.au/__data/assets/pdf_ file/0020/321617/research_qualitychildcare.pdf
- Hyde, A. L., & Kabiru, M. N. (2003). *Early childhood as an important strategy to improve learning outcomes*. Grand Baie Mauritius: Association for the development of education in Africa (ADEA).
- Indonesia Country Profile: Early Childhood Care and Development (ECCD). Asia-Pacific Regional Network for Early Childhood (ARNEC), Available at: arnec.net/static/uploads/4%20 Indonesia%20ECCD%20Country%20Profile%20(3).pdf.

- Iniciativa Dominicana por una Educación de Calidad (IDEC), 2019. 4to Informe de Seguimiento y Monitoreo IDEC - Primer semestre 2019. Santo Domingo, D.N. 2019. Available at: http:// www.idec.edu.do/Home/Publicaciones/1
- International Labour Organization (ILO). 2012. Early childhood education and educators: Global Dialogue Forum on Conditions of Personnel in Early Childhood Education, Geneva, 22–23 February 2012/International Labour Office, Sectoral Activities Department. Geneva.
- Kamerman, S. B. (2007). *A global history of early childhood education and care*. Background paper prepared for the Education for All Global Monitoring Report.
- Litjens, I., & Taguma, M. (2017). Early Childhood Education and Care Staff Recruitment and Retention; A Review for Kazakhstan. OECD.
- Marope, P.T. M., & Kaga, Y. (2015). Investing against evidence: The global state of early childhood care and education. UNESCO Publishing.
- Miyahara, J., Meyers, C. (2008). Early Learning and Development Standards in East Asia and the Pacific: Experiences from Eight Countries. International Journal of Early Childhood, v40 n2 p17-31
- Ministerio de Educación de la República Dominicana (MINERD), 2016. Ley Orgánica de Educación de la República Dominicana.
- Ministry of Education and Culture of the Republic of Indonesia (KPDK), Center for Data and Statistics for Education and Culture. (2018). APK dan APM PAUD, SD, SMP, dan SM (termasuk Madrasah dan sederajat) 2017/2018 [Gross enrolment ratio and net enrolment ratio of early childhood education, elementary school, junior secondary school, and high school 2017/2018]. Jakarta.
- Myers, R. (2006). Quality in program of early childhood care and education (ECCE). Background paper Education for all Global Monitoring Report 2007, Strong foundations: early childhood care and education.
- Government of Togo. (2012-2013) (2017-2018). National Yearbook of School Statistics.
- Naudeau, S, Kataoka, N. A. Valerio, M. J. Neuman, L. K. Elder. (2011). Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation. Washington, DC: The World Bank.
- Neuman, M.J., Josephson, K., and Chua, P.G. (2015) A review of the literature: Early Childhood Care and Education (ECCE) Personnel in Low-and-Middle-Income Countries. UNESCO. Available at: https://bangkok.unesco.org/content/review-literature-early-childhood-care-andeducation-ecce-personnel-low-and-middle-income
- OECD (2010). "Overview of TALIS 2008 and Framework Development", in TALIS 2008 Technical Report, OECD Publishing, Paris, https://doi.org/10.1787/9789264079861-4-en.

- OECD (2019), "Providing Quality Early Childhood Education and Care: Results from the Starting Strong Survey 2018", TALIS, OECD Publishing, Paris, https://doi.org/10.1787/301005d1-en.
- OECD (2006). Starting Strong II: Early Childhood Education and Care, OECD Publishing, Paris, http:// www.oecd.org/education/school/startingstrongiiearlychildhoodeducationandcare.htm
- Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied developmental science*, 9(3), 144-159.
- Rao, N. & Sun, J. (2010). Early childhood care and education in the Asia Pacific region: Moving towards goal 1 Bangkok, Thailand: UNESCO Asia-Pacific Regional Bureau for Education & Hong Kong: Comparative Education Research Centre, the University of Hong Kong.
- Rao, N., Sun, J., Pearson, V., Pearson, E., Liu, H., Constas, M. A., & Engle, P. L. (2012). Is something better than nothing? An evaluation of early childhood programs in Cambodia. *Child Development*, 83(3), 864-876.
- Republic of the Philippines, 2013. Republic Act No. 10410.
- Richter, L. M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F. L., Behrman, J. R., ... & Bhutta, Z. A. (2017). Investing in the foundation of sustainable development: pathways to scale up for early childhood development. The lancet, 389(10064), 103-118.
- Shaeffer, Sheldon F. 2015. The Demand for and the provision of early childhood services since 2000: policies and strategies. UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/ pf0000232457
- Sim, M.P.Y., Bélanger, J., Stancel-Piątak, A., & Karoly, L. (2019), "Starting Strong Teaching and Learning International Survey 2018 Conceptual Framework", OECD Education Working Papers, No. 197, OECD Publishing, Paris, https://doi.org/10.1787/106b1c42-en.
- Socialist Republic of Viet Nam, 2010. Approving the scheme on universal pre-school education for children aged five years in the 2010-2015 period.
- Sylva, Kathy; Melhuish, Edward; Sammons, Pam; Siraj-Blatchford, Iram; Taggart, Brenda; (2004) The Effective Provision of Pre-School Education (EPPE) Project: Final Report: A Longitudinal Study Funded by the DfES 1997-2004. Institute of Education, University of London/ Department for Education and Skills/Sure Start: London. https://discovery.ucl.ac.uk/id/ eprint/10005309
- Thao, & Boyd, Wendy. (2014). Renovating early childhood education pedagogy: a case study in Vietnam. International Journal of Early Years Education. 22. 10.1080/09669760.2014.909306.

- UNESCO (2016). Education 2030: Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Available at: https://unesdoc. unesco.org/ark:/48223/pf0000245656
- UNESCO–BREDA. (2010). Early childhood care and education: A regional report: Africa. World Conference on Early Childhood Education and Care, Moscow, Russian Federation, September 2010 (Dakar). Available at: http://unesdoc.unesco.org/ images/0018/001894/189420e.pdf
- UNESCO Institute for Statistics (UIS). (2012). International Standard Classification of Education: ISCED 2011. UIS, Montreal, Quebec. http://uis.unesco.org/sites/default/files/documents/ international-standard-classification-of-education-isced-2011-en.pdf
- UNESCO Institute for Statistics (UIS), Global Education Monitoring Report Team. (2019). *Meeting commitments: are countries on track to achieve SDG 4?*, UNESCO. Available at: https://unesdoc. unesco.org/ark:/48223/pf0000369009
- UNICEF. (2004). Girls, HIV/AIDs, and education. New York: UNICEF.
- UNICEF. (2017). Telling the Integrated Early Childhood Development (IECD) Story.
- Vargas-Barón, E. (2015). *Policies on early childhood care and education: Their evolution and some impacts*. Paper commissioned for the EFA Global Monitoring Report 2015, Education for All 2000-2015: achievements and challenges
- Wolf, S., Aber, J.L., Behrman, J. R., Peele, M. (2019), Longitudinal causal impacts of preschool teacher training on Ghanaian children's school readiness: Evidence for persistence and fade-out, Developmental Science, 22, 5, (2019).Wiley Online Library. Available at: https://onlinelibrary. wiley.com/doi/full/10.1111/desc.12878#accessDenialLayout
- World Bank, 2019. Indonesia: Access to High-Quality Early Childhood Education Crucial for Continued Progress on Human Capital Development. Available at: https://www.worldbank. org/en/news/press-release/2019/09/11/indonesia-access-to-high-quality-early-childhoodeducation-crucial-for-continued-progress-on-human-capital-development
- World Bank, 2019a. Available from: http://www.worldbank.org/en/country/dominicanrepublic/ overview#1
- World Bank, 2019b. Available from: http://www.worldbank.org/en/country/ghana/overview
- World Bank 2019c. Available from: http://www.worldbank.org/en/country/namibia/overview
- World Bank 2019d. Available from: http://www.worldbank.org/en/country/togo/overview
- World Bank, 2018a. Available from: http://www.worldbank.org/en/country/indonesia/overview

World Bank 2018b. Available from: http://www.worldbank.org/en/country/philippines/overview

World Bank 2018c. Available from: http://www.worldbank.org/en/country/vietnam/overview

- Williams, S., & Charles, L. (2008). The experience of developing early childhood learning goals and outcomes in the Caribbean and the implications for curriculum development and implementation. *International Journal of Early Years Education*, *16*(*1*), 17-29.
- World Conference on Early Childhood Care and Education (WCECCE). (2010). *Early childhood care and education*. Regional report. Latin America and the Caribbean. Santiago: UNESCO/ WECECCE (Moscow 22-24 September).
- World Education Forum, Dakar, 2000. The Dakar Framework for Action: Education for All: meeting our collective commitments (including six regional frameworks for action). UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000121147

ANNEX A: Members of National Teams

Name	Title	STEPP Country	Institution
Massiel Cohen	Project Manager/ Sampling Manager	Dominican Republic	Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Alexandra Santelises	Director of Early Childhood Education	Dominican Republic	Director of Early Childhood Education, Ministry of Education
Francia Baez	Field Operation Coordinator	Dominican Republic	Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Esperanza Santos	Field Operation Coordinator	Dominican Republic	Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Rita Licelot Cruz	Programme Specialist	Dominican Republic	Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Luis Alba	Data Manager	Dominican Republic	Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Santa Yokasta Cabrera Perdomo	National Curriculum Specialist	Dominican Republic	Instituto Dominicano de Evaluación e Investigación de la Calidad Educativa (IDEICE)
Palham Oyiye	Head of Early Childhood Development	Ghana	Ghana National Association of Teachers
Ama Serwah Nerquaye-Tetteh	Secretary General	Ghana	Ghana National Commission for UNESCO
Riche-Mike Wellington	Programme Officer, Legal and Administrative Services	Ghana	Ghana National Commission for UNESCO
Prosper Kwasi Nyavor	National Professional Officer for Education	Ghana	UNESCO Accra
Francis Owusu- Mensah	Professor	Ghana	University of Education, Winneba

Solomon Twum	Country Manager	Ghana	Reach for Change
Edward Dogbey	Statistician and Computer Programmer	Ghana	Ministry of Education-EMIS
Irfan Anshori	Research and Development Program Officer	Indonesia	Regional Centre for Early Childhood Care and Education and Parenting (SEAMEO CECCEP)
Mutiara Amanah	Research and Development Program Officer	Indonesia	Regional Centre for Early Childhood Care and Education and Parenting (SEAMEO CECCEP)
Edi Rukmana	Head of Research and Development Division	Indonesia	Regional Centre for Early Childhood Care and Educating and Parenting (SEAMEO CECCEP)
Irwin Adrian	Head of Advocacy and Indonesia Partnership Division		Regional Centre for Early Childhood Care and Educating and Parenting (SEAMEO CECCEP)
Cecep Somantri	Programme Specialist	Indonesia	Ministry of Education and Culture
Dwi Priyono	Director	Indonesia	Regional Centre for Early Childhood Care and Education and Parenting (SEAMEO CECCEP)
Cavin Muchila	Deputy Director	Namibia	Ministry of Education, Arts and Culture
Marika Matengu	Lecturer for Early Childhood Development and Lower Primary	Namibia	University of Namibia
Ramon C. Bacani	Center Director	The Philippines	SEAMEO INNOTECH
Philip J. Purnell	Manager, Educational Research and Innovation Office (ERIO)	The Philippines	SEAMEO INNOTECH
Sherlyne Acosta	Senior Specialist and Head of Educational Research Unit	The Philippines	SEAMEO INNOTECH
Lovie Moneva	Senior Associate, ERU	The Philippines	SEAMEO INNOTECH
Robert Adrian N. Daulat	Project Associate ERU	The Philippines	SEAMEO INNOTECH

Merjielyn C. Emia	Project Associate	The Philippines	SEAMEO INNOTECH
Elaissa Marina E. Mendoza	Specialist	The Philippines	SEAMEO INNOTECH
Teresita G. Inciong	Vice-Chairperson and Executive Director	The Philippines	SEAMEO INNOTECH
Zenaida T. Domingo	ECCD ASM Advisor	The Philippines	Early Childhood Care and Development (ECCD) Council
Yolanda Quijano	Education Consultant	The Philippines	Early Childhood Care and Development (ECCD) Council
Khara Uy		The Philippines	Early Childhood Care and Development (ECCD) Council
Jocelyn S. Tuguinayo	Supervising Education Program Specialist	The Philippines	Department of Education, Bureau of Learning Delivery
Danise Macaraya- Tiongson	Technical Assistant, National Educators Academy of the Philippines	The Philippines	Department of Education
Forcefina E. Frias	Education Program Specialist II,	The Philippines	Directorate of Education, Bureau of Learning Delivery
Tawuim Titora	Secretary General, Inspector of National Education	Тодо	Ministry of Education
Koffi Oubonènalè Lantomey	Inspector of National Education, Director Preschool and Primary Education	Togo	Directorate of Preschool and Primary Education (DEPP)
Tinka Batolimba Samah	National Inspector and Focal Point for Early Childhood	Тодо	Ministry of Education
Outama Adzi	Educational Program Evaluator Head of the Teaching, Learning and Preschool Evaluation Section	Тодо	Directorate of Preschool and Primary Education (DEPP)
Pagbamèyo Tchala	Head of the Studies and Foresight Section	Togo	Directorate of Education planning and Evaluation Branch (DPEE) Ministry of Primary and Secondary Education (MEPS)

Nguyen Thi Lan Phuong	Associate Professor and Director of the Research Division on Educational Assessment	Viet Nam	Vietnam National Institute of Education Sciences
Nguyen Thi My Trinh	Associate Professor and Director of the Center for Early Childhood Education Research	Viet Nam	Vietnam National Institute of Education Sciences
Tran Thi Huong Giang	Deputy Director of Research Division on Educational Assessment	Viet Nam	Vietnam National Institute of Education Sciences

ANNEX B: Members of ACER consortium

Names	Organisation	Project roles/key responsibilities	
Maurice Walker	ACER	Project Director Phase 1 Part B	
Petra Lietz	ACER	Project Director Phase 1 Part A	
Kashfee Ahmed	ACER	Project Coordinator	
Katherine Dix	ACER	Survey Design Expert Questionnaire and conceptual framework development	
Toby Carslake	ACER	Questionnaire and conceptual framework development, project coordination	
Hillary Hollingsworth	ACER	Conceptual framework development	
Dan Cloney	ACER	Conceptual framework development	
Martin Murphy	ACER	Sampling Expert	
Clare Ozolins,	ACER	Sampling frame development	
Jorge Fallas	ACER	Sampling frame development	
Alla Routitsky	ACER	Staff Sampling and Data Management Expert	
Greg Macaskill	ACER	Staff Sampling and Data Management (SSDM) software and manual development	
Tim Friedman	ACER	Data Analysis Expert	
		Field trial data analysis and reporting	
Dulce Lay	ACER	Field trial data analysis and reporting	
Jessica Thompson	ACER	Field trial data analysis and reporting	
Nora Kovarcikova	ACER	Guidelines and manual development	
Juliet Young Thornton	ACER	Administrative support	
Shinoh Lee	cApStAn	Linguistic Expert	
		Questionnaire adaptation and translation	
Andrea Ferrari	cApStAn	Questionnaire adaptation and translation	
Emel Ince	cApStAn	Questionnaire adaptation and translation	
Natalja Menold	GESIS	Cognitive-pre-testing of instruments	
Cornelia Neuert	GESIS	Cognitive-pre-testing of instruments	
Patricia Hadler	GESIS	Cognitive-pre-testing of instruments	

ANNEX C: Glossary

- *Adaptation:* This includes the process of cultural adaptation and linguistic fine-tuning of the international STEPP questionnaires.
- *Cognitive-pre-testing:* Data collection from a small number of participants using focus group interviews to examine the extent to which questionnaire items are understood by respondents in some of the target languages.
- Conceptual Framework: A document that provides a detailed description of the theoretical underpinnings for any research project, such as Survey questionnaire development for STEPP. The STEPP Conceptual Framework documents the interrelationships between policy areas and the pertinent themes and provides a thorough understanding of the constructs behind the questionnaire items.
- *Field trial:* A small scale practice to test all processes that will be implemented in the main survey, and included sampling, quality monitoring, data entry and operational reporting.
- National Quality Monitoring: The process to ensure that the field trial was conducted in line with the STEPP Technical Standards. It included identification of national quality monitors, training for the monitors, monitor visits during the field trial administration, and reporting/feedback to the national team and Consortium.
- *Pilot Study:* A small scale testing undertaken to improve study instruments. *For STEPP* focus groups were organised with heads and staff from ECCE centres where the participants were asked to fully complete the Head and Staff questionnaires and the responses were discussed at the end of the exercise. All feedback was documented and used to revise the questionnaires for the field trial.
- *Process Quality:* This is the product of ensuring structural quality and having competent personnel who provide pedagogical and professional practices as well as embrace beneficial beliefs and perceptions that help to improve the quality of care and education.
- Structural Quality: Structural quality factors in educational settings include background characteristics of an institution or classroom such as a kindergarten classroom, as well as the staff characteristics comprising of their qualifications, experiences, attitudes, and motivations. These factors collectively create influence in the working climate.
- *Translation:* A source text is converted into another language in line with the rules of the target language and the country/cultural context, while ensuring that the translated text has the same meaning as the source text.



Survey of Teachers in Pre-primary Education (STEPP)

Lessons from the implementation of the pilot study and field trial of international survey instruments

The UNESCO Survey of Teachers in Pre-primary Education (STEPP) is the first international survey for low- and middle-income countries and aims to reshape pre-primary education by bringing meaningful improvements to the quality of the teaching workforce. Launched in 2016, STEPP is an OECD-UNESCO Joint Initiative in support of the implementation of Sustainable Development Goal (SDG) target 4.2 on early childhood care and education (ECCE). It seeks to generate a better understanding of the situations and needs of pre-primary education personnel and to identify strengths and opportunities for improvement, which will inform policy discussions and measures to strengthen the quality of pre-primary teachers' work.

This publication presents the achievements and lessons learned from the first phase of the STEPP project which included the participation of the Dominican Republic, Ghana, Indonesia, Namibia, the Philippines, Togo and Viet Nam.

With the support of





