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Measuring Early Learning Quality and Outcomes in Tanzania



Institutional assessment for integrating early childhood measurement in the pre-primary system

Kate Anderson
Rebecca Sayre

Authors

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

Rebecca Sayre is a consultant in the Center for Universal Education at the Brookings Institution.

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MELQO Core Team

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

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Acronyms

3Rs	Reading, writing, and arithmetic
BEST	Basic Education Statistics
BRNEd	Big Results Now in Education
DFID	UK Department for International Development
ECD	Early Childhood Development
ECE	Early Childhood Education
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
EQUIP-T	Education Quality Improvement Programme-Tanzania
ETP	Education and Training Policy
GPE	Global Partnership for Education
LGA	Local Government Authority
M&E	Monitoring and Evaluation
MCDGC	Ministry of Community Development, Gender, and Children
MELE	Measure of Early Learning Environments
MELQO	Measuring Early Learning Quality and Outcomes
MODEL	Measure of Development and Early Learning
MoEVT	Ministry of Education and Vocational Training
MoHSW	Ministry of Health and Social Welfare
NACTE	National Council for Technical Education
NECTA	National Exams Council of Tanzania
PMO-RALG	Prime Ministers' Office–Regional and Local Governance
RTI	Research Triangle Institute
SSME	Snapshot of School Management Effectiveness
TIE	Tanzania Institute for Education

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I. Introduction

The measuring early learning quality and outcomes (MELQO) initiative

The Measuring Early Learning Quality and Outcomes (MELQO) initiative aims to improve early childhood education worldwide through measurement of children’s development and learning and the quality of learning environments. Led by UNESCO, UNICEF, the World Bank, and the Center for Universal Education at the Brookings Institution, MELQO comprises an international consortium of individuals and institutions working to improve outcomes for young children by making early learning assessment more accessible around the world. MELQO’s measurement modules propose a core set of items with relevance across countries, with the goal of devising items that are globally comparable but locally adaptable.

While approaches to measuring early childhood development and learning have been developed across countries, less attention has been placed on coordinating across instruments to improve the efficiency of measurement, or on using the modules at scale across countries or regions, especially in low- and middle-income countries. MELQO builds on the strengths of measurement initiatives that have already been developed through the following activities:

- Bringing together and building upon existing regional early learning and quality assessments;
- Identifying core items across instruments to build regional and global comparability, using the most promising, technically robust, and feasible approaches for measurement, especially for low- and middle-income countries;
- Working closely with national stakeholders to map their existing assessment efforts and ensuring that the modules are informed by national perspectives and research;
- Providing guidance to countries on how to move from prototype piloting to implementation at scale by assessing the institutional changes needed and the cost involved;
- Designing modules to help governments take measurement to scale to integrate within existing data systems and develop policies that improve early learning environments and outcomes;
- Making all modules and manuals open-source and freely available and providing technical guidance to users.

The assessment modules are designed for use by national governments, teachers, and school administrators and can be administered by someone with limited training. The emphasis is on producing data that can be used to improve the quality of learning environments and children’s development and learning through links with national curricula, quality standards, and teacher/parent support and training. If a sufficiently large number of countries adopt the modules and report on results, the data will also help in regional or global tracking of children’s readiness for school

Two technical advisory groups have been formed through MELQO, one developing a Measure of Development and Early Learning (MODEL) and another developing a prototype Measure of Early Learning Environments (MELE). The technical groups were first asked to identify constructs of interest and then, based on inventories of items used in existing modules, were asked to identify items that were viewed as being especially valuable or reliable in diverse settings. The goal for both the MODEL and MELE modules is to obtain reliable evidence establishing validity, including predictive validity.

As noted above, the purpose of MELQO is to improve the efficiency of measurement by providing a core set of items that can be used in any country. The items were selected as a starting point for testing and adaptation within countries. Because much of the research to date on predicting children's school achievement comes from a small number of high-income, Western cultures, it is anticipated that some of these constructs and items will not be relevant in all settings while others will be useful across countries. As part of the validation process, information on how relevant the items are across contexts will be collected and used to modify the modules over time.

Table 1 summarizes the design and use of the MODEL and MELE modules.

Purpose of the institutional assessment

The MELQO modules are intended to be integrated into existing national monitoring and evaluation systems. This institutional assessment was undertaken to understand the current policies, curricula, standards and monitoring and evaluation systems for pre-primary education in Tanzania. The

information from this analysis was used to adapt the MODEL and MELE modules to meet the needs of the Tanzanian context.

The process in Tanzania

1. Launch

In July 2015, the government of Tanzania, with leadership from the Ministry of Education and Vocational Training (MoEVT),¹ convened national and international experts to launch the MELQO initiative in Tanzania and plan for implementation of piloting the modules. Participants included government representatives from MoEVT, the Prime Minister's Office for Regional and Local Government (PMO-RALG), the Ministry of Health and Social Welfare (MoHSW), the Ministry of Community Development, Gender, and Children (MCDGC), the Tanzania Institute for Education (TIE), and the National Exams Council of Tanzania (NECTA); non-government representatives from academia and civil society, including the Tanzania Early Childhood Development Network (TECDEN), the Tanzania Child Rights Forum (TCRF), Aga Khan University (AKU), and the University of Dodoma (UDOM); and local partners from UNICEF, UNESCO, and the World Bank. National stakeholders were joined by the MELQO Core Team from the Center for Universal Education at the Brookings Institution, the World Bank, and UNICEF as well as technical experts from academic institutions from Kenya, the United States, Canada, and Hong Kong.

2. Adaptation and field testing

After the launch, the MODEL and MELE modules were translated to Kiswahili, adapted, and

¹ At the time of this assessment, the ministry was named Ministry of Education and Vocational Training, but has since been changed to Ministry of Education, Science and Technology (MoEST).

Table 1: MELQO MODEL and MELE Modules

Module	What does it measure?	How can the module be used in the long term?
Measure of Development and Early Learning (MODEL)	<p>Four basic areas of children’s development at the start of school:</p> <p>Executive function (self-regulation, attention, etc.)</p> <p>Social-emotional development</p> <p>Early mathematics skills</p> <p>Early literacy skills</p>	<p>Identify areas of strength and difficulty for groups of children in classrooms or schools (for example, whether many children already know their numbers, or whether working memory is a challenge). This could include:</p> <ul style="list-style-type: none"> • Informing approaches to curricula at the policy level • Setting reasonable expectations for what children will be able to accomplish by the end of the year • Identifying areas where additional support is needed • Tracking changes within one country over time, or providing some degree of comparison between countries on a core set of items, if all countries in a region agree to use the same set of items
Measure of Early Learning Environments (MELE)	<ol style="list-style-type: none"> 1. Environment and physical setting 2. Family and community engagement 3. Personnel 4. Interactions 5. Inclusiveness 6. Program structure and curriculum 7. Health, safety, and hygiene 	<p>Track the overall quality of children’s learning environments and identify the areas in which specific actions are needed, including:</p> <ul style="list-style-type: none"> • Providing teachers with more training and support in interacting with young children • Providing professional development opportunities for all teachers • Ensuring that classrooms have access to high-quality, age-appropriate learning materials for all children

field-tested. MoEVT convened an initial adaptation workshop in August 2015. The Research Triangle Institute (RTI) conducted a five-day training with DataVision, a Tanzanian research firm, and representatives from MoEVT. Enumerators from DataVision then piloted the modules and collected data on 209 pre-primary children in 20 schools in and around Dar es Salaam in mid-October 2015. The sample of schools included higher- and lower-performing government schools and private schools. The MELE module was piloted in 18 schools in late September and mid-October. A detailed report on

the pilot experience prepared by RTI will inform the revision process and 2016 study design.

3. Consultations with stakeholders

In October-November 2015, one-on-one interviews and group discussions were conducted with national stakeholders, including the MoEVT Pre-Primary Unit, the MoEVT Quality Assurance Division (formerly the School Inspectorate), the MoEVT Department of Policy and Planning, TIE, PMO-RALG, TCRF, UDOM, EQUIP-T, Plan

International, the Tanzania Education Network (TEN/MET), UNICEF, and others. Stakeholders were asked to share their opinions on the appetite for measuring early learning in Tanzania, the needs for a national study on pre-primary learning outcomes and quality, and options on how to best integrate the MELQO modules into the existing education system. Sections IV and V of the present report summarize input from stakeholders on the key features of the existing system and the relevance, feasibility, and sustainability of measurement in the pre-primary sector in Tanzania.

4. Planning for 2016 national study

In 2016, Tanzania plans to conduct a nationally representative study using the MODEL and MELE modules. The study methodology will draw from the field test experiences in 2015. The specific sample size and sampling frame will be determined through a joint process with the MELQO Core Team, RTI, and the MELQO Task Force.

II. Overview of the pre-primary system in Tanzania

Pre-primary policy and planning landscape

MoEVT is responsible for policy formulation and regulation, quality assurance and curriculum, teacher training, examination and assessment, standards setting, planning, monitoring and evaluation, and education research.

The administration functions of primary and secondary education are decentralized to local government authorities (LGAs), overseen by PMO-RALG. PMO-RALG is responsible for the delivery of pre-primary (and primary and secondary) education through Councils; delivery is complemented by non-government provision of education. Delivery includes supply of teachers (payment of teachers' salaries), physical facilities, and school materials, and supervision of the Education Management Information System (EMIS).

TIE, a parastatal organization under MoEVT, is responsible for the design and development of curricula and teaching and learning materials for pre-primary, primary, secondary, and teaching education levels. TIE also conducts training programs to build capacity on the national curriculum for teachers, education officers, education coordinators, inspectors, and other relevant stakeholders.

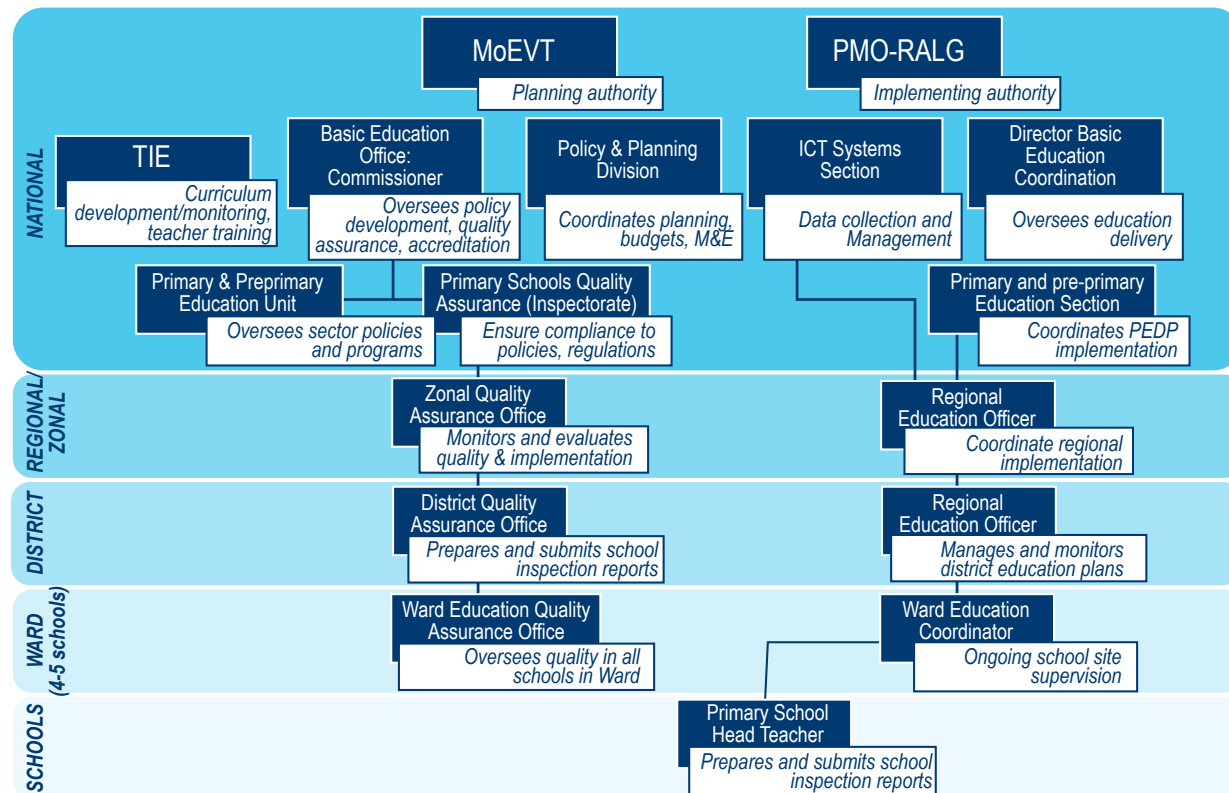
Figure 1 displays the institutional arrangements for the national leadership of quality assurance and delivery of pre-primary education in Tanzania. Civil society, the private sector, academic institutions,

development partners, and others also play a key role in the pre-primary sector. Annexes A and B display the organizational structure of the overall MoEVT and PMO-RALG. In addition, the Ministry of Health and Social Welfare and the Ministry of Community Development, Gender, and Children are involved in early childhood development (ECD) in general, but not specifically in pre-primary.

In 2014 the government of Tanzania released its new Education and Training Policy (ETP), which calls for increasing opportunities and quality of all levels of education in the country. The policy shifts the official age of entry to Standard I (first year of primary school) from age 7 to 6, and calls for pre-primary education for 3-5-year-olds, with compulsory enrollment for one year. The ETP also emphasizes quality pre-primary education through adequate teaching and learning methods and materials, relevant curriculum and teacher training, and strengthened quality control and assurance. MoEVT is in the process of developing an implementation plan, which will include a specific plan for pre-primary, for effective application of the ETP.

In the short term, the government's Short-Term Early Childhood Education (ECE) Action Plan was developed to prioritize key issues and action areas in the pre-primary subsector. The ECE Action Plan is a collaborative effort across MoEVT, MCDGC, TIE, the Agency for Development of Educational Management (ADEM), and partners including the World Bank, UNICEF, the Global Partnership for Education (GPE), Dubai Cares, Children in Crossfire, the

Figure 1: Institutional Arrangements for Pre-Primary



Aga Khan Foundation, Aga Khan University, and EQUIP-T. Priority action areas comprise plans to: (1) develop costed pre-primary action plans to support implementation of the new ETP; (2) develop and test quality program models to enable expansion of pre-primary access and equity, including a national satellite pre-primary model and a parent education strategy; (3) update and align the pre-primary quality framework (including curriculum and standards) to the new ETP for children ages 3,4, and 5 with a focus on pre-3Rs (reading, writing, and arithmetic); (4) strengthen the teacher training, development, and professionalization system, including by conducting a national baseline survey on the pre-primary workforce, piloting a satellite pre-primary teacher and mentor training program, and developing a professional development/certification plan; (5) include pre-primary education within school management and planning

systems; (6) conduct a national baseline survey on pre-primary learning outcomes and quality; and (7) strengthen pre-primary sub-sector planning and coordination.

Current status of pre-primary programs in Tanzania

In 2014, approximately one-third of 5- and 6-year-olds were enrolled in pre-primary education (the gross enrollment rate was 36.9, the net enrollment rate 33.4). According to Tanzania's Basic Education Statistics, approximately 95 percent (992,356) of children are enrolled in government pre-primary classes, while 5 percent (54,013) are enrolled in registered non-government pre-primary classes. The government tracks enrollment for registered

pre-primary schools, but the number of other early learning programs provided by the private sector or community organizations is unknown.

As of 2014, 14,719 pre-primary institutions were operating in Tanzania. These include government-operated pre-primary schools operating within the country's 16,648 primary schools as well as non-government pre-primary schools that have registered with MoEVT.

Pre-primary schools are overcrowded. While the 2009 Basic Standards for Pre-Primary and Primary Education in Tanzania call for a maximum pupil-to-teacher ratio of 1:25, the average ratio is 1:77 (BEST 2014). The difference is stark between non-government and government pre-primary schools, with 1:90 in government schools compared to 1:21 in non-government schools.

As displayed in Table 2, as of 2014, 13,600 teachers were teaching pre-primary (BEST 2014). The official requirement for teachers to work in pre-

primary is completion of Form IV of secondary and a Grade A teaching certificate (requiring completion of a two-year full-time pre-service teaching course). In 2014, less than half of teachers were "qualified," and a majority of these had the minimum requirement of the Grade A certificate. The government is considering increasing the minimum requirement from certificate to diploma. At the same time, MoEVT and TIE are supporting the development of alternative teacher training initiatives.

There are currently no national data on school readiness outcomes. However, a national assessment in 2013 revealed that only 8 percent of Standard II students were reading with comprehension, and the majority struggled with conceptual mathematic tasks. Ensuring children arrive to school ready to succeed is critical, as international evidence suggests that intervening before primary school will have a significant impact on later school performance (Heckman and Masterov 2007; Reynolds et al. 2001; Lynch 2005).

Table 2: Pre-Primary Teaching Staff by Qualification (BEST 2014)

Grade A certificate		Diploma		Graduates		Others		Total
<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>	<i>Number</i>	<i>Percentage</i>	
6,090	44.7%	511	3.7%	97	1.4%	6,902	51%	13,600

III. Key features of quality assurance and assessment

Pre-primary education in Tanzania is incorporated within the formal education structure, existing as a sub-sector within the primary sector (Standards I-VII for children ages 6-13 years). In general, no specific monitoring and evaluation (M&E) mechanisms have existed for pre-primary. Some features of the primary education system, including standards and inspection procedures, have been applied to pre-primary classrooms. With the launch of the new ETP, the government is in the process of considering how to update and improve its system for monitoring, evaluating, and ensuring the quality of pre-primary.

Pre-primary curriculum

In the past eight years, the National Pre-Primary Curriculum (2007) has served as a guide for the content, skills, teaching, and learning strategies for pre-primary education. In 2015, TIE led an extensive review and revision of the curriculum that concentrates on one year of pre-primary education (as stipulated in the new ETP).¹ The updated curriculum aligns to a new quality framework for pre-primary, which focuses on pre-3Rs and outlines desired competencies for both pre-primary teachers and pre-primary students (including communication, recognition of the environment, pre-literacy, writing, and

relationships). TIE has also updated a pre-primary syllabus, which will provide detailed guidance for teachers to implement the national curriculum. The syllabus is divided into six main areas: (1) socialization, (2) communication, (3) health and protection, (4) caring for the environment, (5) artistic competencies, and (6) identifying mathematical concepts.

Inspection and service delivery standards

In addition to TIE's leadership in developing and monitoring the curriculum, responsibility of assuring quality pre-primary services also spans across PMO-RALG and MoEVT (see Figure 1). The Pre-Primary and Primary Education Section of PMO-RALG is responsible for preparing and disseminating operational guidelines and circulars on management and administration of pre-primary classrooms. Under PMO-RALG, regional education officers, district education officers, and ward education coordinators periodically supervise classrooms, teachers, and overall education delivery. Under MoEVT, the Quality Assurance Division (formerly the School Inspectorate) is responsible for ensuring compliance with policies, laws, regulations, and other standards in the delivery of pre-primary, primary, and secondary education.² The

¹ As of December 2015, the new curriculum and syllabus have been drafted and are under review for finalization and dissemination in early 2016.

² In 2015, the government changed the name of the Inspectorate to Quality Assurance Division to capture the ministry's intentions to ensure continuous improvement of quality through feedback loops and coordination with other education stakeholders.

Quality Assurance Division collaborates with TIE and the National Exams Council of Tanzania to design and develop an internal and external quality assurance framework and oversees district and ward quality assurance officers (formerly school inspectors) to inspect schools and recommend remedial measures to continuously improve the quality of education.

The quality assurance and M&E system are framed by several key documents. The National Basic Education Standards created in 2009 give guidance on design and implementation of pre-primary and primary education programs and include requirements for infrastructure, environment, curriculum, teaching and learning process and materials, teachers, school management, and capacity building. The national standards call for school inspection at least once every two years, as well as ongoing school site supervision carried out by head teachers and a ward education coordinator. During inspection and advisory visits, quality assurance officers use the MoEVT Whole School Inspection Checklist and the Handbook for School Inspectors and suggest recommended remedial measures as per government regulations. The Guidelines for School Supervision provide guidance to ward education coordinators, heads of schools, district education officers, and regional education officers on effective supervision to enhance school performance and ensure quality education.

In 2014, only 22 percent of pre-primary classrooms were inspected (BEST 2014). Data are not publicly available to indicate how many classrooms complied with national standards.

In addition to the officially recognized national standards for all of basic education, Operating Guidelines and Standards for ECD Services have been promulgated, but not formalized. In 2013, the Inter-Ministerial ECD Steering Committee, with support from UNICEF, released guidelines for a

variety of services, including home-based services, community-based ECD centers, and state and non-state institutions.

National assessment

To date, the government has never assessed children in pre-primary. However, Tanzania's recent experience with the assessment in early primary grades presents several important lessons that can be applied to the MELQO experience. In 2013, in response to declining trends in primary and secondary student learning outcomes, the government launched the Big Results Now in Education (BRNEd) program to fast-track the improvement of quality of basic education service delivery. While BRNEd does not specifically focus on pre-primary, it emphasizes quality learning of the 3Rs in the early primary grades. One of the nine key initiatives within the BRNEd program is 3R Assessment and 3R Teacher Training, which serve as a mechanism for annual monitoring of student learning for children in Standard II (8-year-olds) in reading, writing, and arithmetic.

MoEVT conducted a national 3Rs baseline assessment in July 2013. With technical assistance from USAID/RTI, data were collected on a nationally representative sample using the Early Grade Reading Assessment (EGRA), the Early Grade Mathematics Assessment (EGMA), and the Snapshot of School Management Effectiveness (SSME). A total of 2,266 Standard II students randomly selected from within 200 randomly selected schools took the EGRA and EGMA assessments. The baseline findings have contributed to the development of 3R teacher training materials and the government's commitment to improved student learning in these foundational areas. The National 3Rs Program includes a revised curriculum and teacher training program for Standards I and II, which is currently being rolled out with Global Partnership for Education funding.

The National Exams Council of Tanzania is legally responsible for all national assessment. After the 3Rs baseline assessment, the government appointed NECTA to develop a national assessment for Standard II. In 2015, NECTA worked with national experts to develop a 3Rs assessment for children in Standard II and an “advanced” 3Rs assessment for children in Standard IV. The assessments are aligned with the national curriculum and are intended to show teachers, education officials, parents, and the public how children are faring. In November 2015, NECTA piloted a national assessment with a sample of children in Grade 2 (3Rs assessment) and Grade 4. Rather than a sampling approach, the government plans to assess every child in primary and publicly share data for every child

and school online.³ NECTA is in the process of creating a database of all children, starting in primary education, which will track the performance and movement of every child in Tanzania. Each child will have a unique identifier number, which will allow the government to compare and track children throughout the system.

While NECTA’s experience with primary (and secondary) education is promising, stakeholders identified several risks to directly applying national assessment at the pre-primary level. Primarily, stakeholders had concerns with ranking and/or excluding children in pre-primary and are hesitant to make judgments about individual children in pre-primary.

³ NECTA’s website (<http://www.necta.go.tz>) displays exam results publicly. Previously, Tanzania had Primary School Leaving Exams, which are being eliminated and replaced with the new assessment system, which includes 3Rs assessment.

IV. Tanzanian perspective on measuring early learning

Through consultation with national stakeholders, the following issues related to opportunities, needs, and challenges to measuring early learning quality and outcomes have been identified:

1. **Priorities and expectations for early learning need to be aligned.** Implementation of MELQO in Tanzania will be timely for the country, particularly with the launch of the government's new ETP, which has initiated new policy dialogue and initiatives to expand access and improve the quality of pre-primary education. MELQO is viewed as an opportunity to inform the planning process for ETP operationalization and serve as a catalyst for further efforts in advancing quality pre-primary in Tanzania.

The new policy states that the goal of pre-primary education is to prepare children for Standard I. It emphasizes quality pre-primary education through adequate teaching and learning methods and materials, relevant curriculum and teacher training, and strengthened quality control and assurance. The government's priority on improved 3Rs achievement presents an opportunity to improve the quality and measurement of early literacy and numeracy in quality pre-primary school to set the foundations for quality learning of 3Rs in primary school. Unfortunately, the increased focus on quality in early education currently begins at Standard I and has mostly overlooked the role of pre-primary education in providing early literacy and numeracy. Stakeholders feel that

MELQO can help gain attention to the strong links of pre-3Rs and 3Rs. MoEVT has recently announced that the National 3Rs program will include pre-primary education. GPE funds are available to roll out pre-primary teacher training of the new curriculum.

While the ETP shapes the overarching goal of pre-primary education, specific objectives and expectations are different for various stakeholders involved in the pre-primary sector. Every stakeholder consulted expressed that, in Tanzania currently, there is an extremely varied perspective on the definition of quality pre-primary education. For example, TIE, which is responsible for development and monitoring curricula, might define quality pre-primary based on the extent to which a classroom has an adequate *setting quality* (defined by the MELQO quality module constructs of language development, curricular areas, lesson planning, positive interactions, etc.). On the other hand, PMO-RALG, which is responsible for infrastructure and allocation of teachers, may focus on whether classrooms have adequate *structural quality* (defined by the MELQO quality module constructs of personnel qualifications, the safety and organization of space and materials of physical environment, etc.). Meanwhile, MoEVT, which is responsible for overall supervision of the sector, may focus on *system quality* (defined by the MELQO quality module constructs of engaging families and communities, teacher knowledge, in-service training and management, etc.).

Expectations for what children should be learning and what and how teachers should be teaching also vary at the service delivery level. For example, teachers, many of whom have not received training in early childhood development, may not be familiar with learning and teaching methodologies appropriate for 5- and 6-year-olds. Parents often expect a very “academic” setting for pre-primary where their children learn English and obedience. They may not consider play-based learning activities to be high quality, believing that high-quality pre-primary should look the same as quality primary education.

2. **National data on learning outcomes and quality are needed.** Stakeholders believe that, with recent progress in major policy decisions, there is now more than ever a need to have data to (1) inform operationalization of detailed sector planning and (2) show the impact of these new policies. Tanzania urgently wants data on early learning outcomes and pre-primary quality. Until now, no national-level data have existed on early learning or school readiness outcomes, and thus having a nationally representative snapshot of the overall skill level of children at school entry will be extremely valuable.

In addition, stakeholders would like to see the links between pre-primary quality and learning outcomes for medium-term policy planning as well as longer-term integration of measurement in the pre-primary system. As the government is embarking on new initiatives to improve the quality of pre-primary (including the 2016 launch of a new pre-primary curriculum, and plans to improve pre-primary teacher training programs—including possible alternative certification programs), understanding how teacher background, curriculum, infrastructure, etc. predict children’s achievement will be extremely valuable for decision-making around where to concentrate efforts and investments.

3. **Global comparability is valuable, but national focus is the priority.** The majority of stakeholders expressed the view that, while the primary value of early learning measurement was for national policy planning and implementation, there is also value in having evidence that is globally recognized. Through its experience using global learning measurement modules with EGRA/EGMA, MoEVT saw value in conducting research that is internationally recognized and based on global expertise.

However, there is also some hesitance to participate in research that may lead to Tanzania being ranked and compared to other countries. Often, when the concept of global comparability arises (related to both MELQO and more generally with other international measures), stakeholders express concern about being compared to other countries. Some see the value in learning from and sharing lessons with other countries, especially other countries with similar contexts (such as Kenya), while others are hesitant to be rated and compared to other countries and contexts.

4. **The role of assessment in pre-primary education will need to be carefully defined.** Stakeholders have mixed thoughts on exactly how children in pre-primary should be assessed in the future. With leadership from NECTA, as well as external technical support from donors, a comprehensive national assessment system is emerging for primary and secondary education. While some of this experience could be translated into pre-primary, stakeholders also recognize that children in pre-primary will need to be treated differently than their older counterparts.

In addition, Tanzania’s experience with 3Rs assessment has taught the country that transitioning from an internationally supported research study assessing children’s learning outcomes and integrating learning assessment into

the national system can be challenging. NECTA's 2015 pilot assessment was generally based on the EGRA and EGMA assessments used in 2013 (with technical support from USAID/RTI), but has not been validated to show comparability across time or construct validity of the new measures. To ensure comparability for payment-by-results funding (supported by the World Bank, the UK Department for International Development (DFID), and the Swedish Embassy), USAID commissioned RTI to support the government in conducting a comparable 3Rs assessment in 2016. Moving forward, national stakeholders and partners will need to work together to agree on a streamlined approach to reconcile the need for valid data that accurately portray the situation while still following a feasible approach that will meet national priorities.

5. **Inspection and quality assurance needs a more defined approach based on children's learning needs in pre-primary, and MELQO can help shape this.** While a system is somewhat in place for quality assurance, there is room for improvement. The quality standards and expectations for a pre-primary classroom should cater to the needs of 3-, 4-, and 5-year-olds and will be different than those standards in a primary classroom. The Quality Assurance

Division at MoEVT has acknowledged the need to update the system to emphasize quality more than quantity. Furthermore, with plans to launch the new curriculum in 2016, the government will need to consider how to update and adapt the existing standards, which are currently aligned to the 2007 pre-primary curriculum. In addition, school inspectors, head teachers, and district education officers will need to be oriented on the new curriculum and teacher's guide. National studies have shown that quality assurance officers/inspectors very often provide inappropriate advice to teachers.

Stakeholders see the MELQO study and modules as an important opportunity to catalyze improvement in quality assurance. In Tables 3 and 4, the areas measured by MELQO MODEL (socioemotional skills, pre-academic skills such as language, pre-literacy and pre-numeracy, and areas that support learning across multiple domains, such as executive function, persistence, self-regulation, and approaches to learning) and quality (environment and physical setting, family and community engagement, personnel, interactions, structural support, inclusiveness, program structure and curriculum, and health and hygiene) are outlined and aligned with the existing documents in Tanzania that define learning needs and quality.

Table 3: MELQO Child Development and Learning and Linkages to Old and New Tanzanian Curriculum

Construct measured by MELQO	A. Old national pre-primary curriculum (2007)	B. Draft quality framework for pre-primary (expected to be launched 2016)
<p>Early math skills <i>Foundational skills in mathematics include skills such as knowing how to name numbers, compare quantities, and perform basic addition, all which have been shown to be important in developing later math skills. The MELQO assessment modules includes verbal counting, producing a specified set/number of objects, shape and spatial awareness, and comparison and number identification.</i></p>	<ul style="list-style-type: none"> • Content area 5.3: Mathematics <i>Interpreting numbers, distinguishing different dimensions and shapes, developing positive outlook on mathematics, and using mathematics in daily lives.</i> 	<ul style="list-style-type: none"> • Child competency 2.6: Counting <i>Identifying concept of numbers, shapes of numbers, actions of numbers, various shapes, times.</i>
<p>Early language/literacy <i>Foundational skills in literacy include relating oral language to written language, phonological awareness, print knowledge, and oral language, as well as alphabet knowledge, listening comprehension, and name writing.</i></p>	<ul style="list-style-type: none"> • Content area 5.1: Language <i>Development of communication skills in everyday life. These skills are listening, speaking, writing, and reading. Includes Kiswahili and English learning activities.</i> 	<ul style="list-style-type: none"> • Child competency 2.1: Communication <i>Speaking, listening, drawing, reading photo.</i> • Child competency 2.2: Recognition of the environment <i>Identifying objects found at home and school, names of things, names of living things, different melodies and sounds.</i> • Child competency 2.4: Reading <i>Identifying concepts in print, sounds of letters, names of letters, syllables.</i> • Child competency 2.5: Writing <i>Recognizing foundation/initial steps of writing, recognizing shapes of letters, creating letters.</i>

Construct measured by MELQO	A. Old national pre-primary curriculum (2007)	B. Draft quality framework for pre-primary (expected to be launched 2016)
<p>Socioemotional development <i>This construct refers to skills that facilitate children’s competence in social relationships and interactions with others including peers, family members, and teachers. Socioemotional skills that can be assessed through direct assessment include social cognition and emotional knowledge. These skills may help facilitate children’s social functioning in school. Parent/ teacher reports of social/emotional development focus on children’s social behavior and emotional well-being.</i></p>	<ul style="list-style-type: none"> • Content area 5.4: Elimu ya Jamii <i>Knowledge, interpretation of how behavior and practices affect people’s environments; learning different skills to appreciate and communicate through art; instill determination, perseverance, cooperation, love, respect for society.</i> • Content area 5.5: Values and beliefs <i>Prepare child on different principals including tolerance, responsibility, honesty, justice, and value of life. Includes character and games and religion lessons.</i> 	<ul style="list-style-type: none"> • Child competency 2.7: Relationships <i>Performance in cooperation, self-awareness, obedience, identifying rights and responsibilities.</i>
<p>Memory and attention (executive functioning) <i>Refers to skills that support learning in math, literacy, and other areas. Children’s executive function refers to the ability to focus their attention, ignore distractions, and move from one task to another. Self-regulation refers to the ability to control behavior and emotions.</i></p>		
<p>General knowledge <i>Refers to general knowledge that a child knows, including identity and the name of his/her community.</i></p>		
<p><i>Not directly included in MELQO instrument, but part of system</i></p>	<ul style="list-style-type: none"> • Content area 5.2: Science <i>Understanding of the real world in which children live, learning concepts, skills, and processes in conducting simple experiments with objects existing in the local environment.</i> 	<ul style="list-style-type: none"> • Child competency 2.3: Creativity <i>Drawing, pottery, creating various items, making different things, singing songs, playing games, using primary colors.</i>

Table 4: MELQO Quality Linkages to Tanzanian Quality Assurance System

Domain measured by MELQO	A. MoEVT National Basic Education Standards	B. Guidelines for School Supervision	C. Draft TIE Competency Framework for Pre-Primary (expected to be launched 2016)
<p>Environment and physical setting Includes safety, organization of space and materials.</p>	<ul style="list-style-type: none"> • Infrastructure standard <i>Sufficient and appropriate school buildings for effective teaching and learning; availability of playgrounds and facilities for sports and games; sufficient and appropriate land according to the size of school; effective school physical facilities set up and efficient land use; adequate furniture for effective teaching and learning; a healthy and clean environment.</i> • School environment standard <i>Secured and learner protecting environment, appropriate distance to school.</i> 	<ul style="list-style-type: none"> • Characteristics of good quality school <i>Conducive teaching and learning environment that is child friendly.</i> 	
<p>Family and community engagement Includes supporting positive parenting and child development practices; engaging families and communities in the program.</p>	<ul style="list-style-type: none"> • Teaching and learning processes standard <i>Effective parent/ caregiver relationships, based on mutual respect and understanding.</i> 		<ul style="list-style-type: none"> • Teacher competency 1.5: promote cooperation <i>Engaging stakeholders in developing early education, promoting communication about children's growth and development, developing relationships and collaborating with various stakeholders to support development of children with special needs.</i>

Domain measured by MELQO	A. MoEVT National Basic Education Standards	B. Guidelines for School Supervision	C. Draft TIE Competency Framework for Pre-Primary (expected to be launched 2016)
<p>Personnel <i>Includes knowledge, skills, qualifications; supervision and training of teachers and supervisors / directors.</i></p>	<ul style="list-style-type: none"> • Teacher standard <i>Well-trained and competent teachers, teachers provided with regular professional support, motivated and committed teachers.</i> • Quality assurance standard <i>Effective advisory and professional support to school, effective inspection of schools.</i> 	<ul style="list-style-type: none"> • 5.3 Focus of school supervision <i>Curriculum management and school management (also relevant to program structure and curriculum).</i> • 5.4: Provision of administrative and professional support by supervisor <i>identify and support underperforming teachers, facilitate professional mentorship of new teachers.</i> 	<ul style="list-style-type: none"> • Teacher competency 1.1: knowledge <i>Enabling children to gain knowledge based on capabilities, using curriculum, identifying stages of child development, conducting research on quality.</i> • Teacher competency 1.2: using teaching skills <i>Using teaching and learning techniques based on children's age and needs. (Also see Inclusiveness below.)</i>
<p>Interactions <i>Includes positive interaction, encouraging reasoning, feedback/ scaffolding.</i></p>	<ul style="list-style-type: none"> • Teaching and learning processes standard <i>Learning that reflects the learner's sociocultural context; teaching and learning activities that are planned with consideration of learners' diversity; competence-based approaches with a special emphasis on critical thinking; appropriate teacher workload that ensures quality teaching and learning; sufficient time devoted to learning; regular, relevant, and efficient assessment of learning; effective teacher-learner parent/ caregiver relationships, based on mutual respect and understanding.</i> 		<ul style="list-style-type: none"> • Teacher competency 1.4: follow the rules/procedures of teaching <i>Have good morals, use appropriate language, acceptance in the community.</i>

Domain measured by MELQO	A. MoEVT National Basic Education Standards	B. Guidelines for School Supervision	C. Draft TIE Competency Framework for Pre-Primary (expected to be launched 2016)
<p>Inclusiveness <i>Includes meeting the needs of all children.</i></p>	<ul style="list-style-type: none"> • Child rights standard <i>Effective prevention of child abuse and labor, effective support for most vulnerable children.</i> 	<ul style="list-style-type: none"> • 5.5.2 Special needs education <i>Ensure schools enroll children with disabilities and schools are adequately equipped with facilities for such disabilities.</i> 	<ul style="list-style-type: none"> • Teacher competency 1.2: Using teaching skills <i>Includes catering to children with special needs.</i>
<p>Program structure and curriculum; comprehensiveness of services <i>Includes basic program characteristics; language development; curricular areas (math, science, arts); Child Choice.</i></p> <p><i>Connections with other sectors including social protection and child protection.</i></p>	<ul style="list-style-type: none"> • Curriculum standard <i>Well-structured curriculum framework, appropriate, relevant, and user-friendly curriculum.</i> • Teaching and learning materials and equipment standard (from national curriculum) <i>Time to study and number of periods (five 20-minute sessions per day, five days week).</i> 	<ul style="list-style-type: none"> • 5.3 Focus of school supervision <i>Curriculum management and school management.</i> 	<ul style="list-style-type: none"> • Teacher competency 1.6: Standard guide <i>Maintaining daily schedule, managing school regulations. (Also see Finance below.)</i>
<p>Health and hygiene <i>Promotion of health and nutrition practices; healthy environment.</i></p>	<ul style="list-style-type: none"> • Care and support services standard <i>Effective school feeding programs; effective health services.</i> • Environmental education standard <i>Effective conservation of school environment.</i> 	<ul style="list-style-type: none"> • 5.5.4 Cross-cutting issue <i>Issues to be addressed during supervision include gender, disability, HIV/AIDS, and environmental protection.</i> 	<ul style="list-style-type: none"> • Teacher competency 1.7: Managing the health and safety of the child <i>Provide first aid, supervise children's nutrition, identify specific ways to identify children in various situations.</i>
<p>Finance <i>Income sources and expenditure categories and estimates</i></p>	<ul style="list-style-type: none"> • Financial audit standard <i>Properly managed finance and materials.</i> 		<ul style="list-style-type: none"> • Teacher competency 1.6: Standard guide <i>Managing income/ expenditures.</i>

6. **In the future, several options exist to integrate the MELQO modules into the national M&E system.** After the 2016 national study, stakeholders considered several different approaches Tanzania could take for continued measurement and monitoring of early learning quality and outcomes:

a. Sampling approach for national research

Using the validated MELQO modules for research studies in Tanzania will provide reliable data to inform pre-primary policy planning. In 2015-2016, the government is implementing the modules with the support of an international firm. Eventually, a sustainable nationally led approach will be needed.

One risk stakeholders have identified with research studies is that sometimes results may not be translated into improvements in the systems. Some have expressed concerns that research studies with international support may not prioritize practical application in Tanzania. The government and partners can encourage national researchers from Tanzanian universities to use MELQO modules in their own research. In addition, the capacity of members of the Policy and Planning Division of the MoEVT can be strengthened to ensure government officials are equipped with the skills to conduct and analyze national research.

b. Monitor the quality of every classroom

Linking the MELE module to the existing quality assurance/inspection system could help PMO-RALG and MoEVT monitor the quality of learning environments and provide better support to address gaps in quality service provision. Various models for pre-primary education exist in Tanzania, and as the ETP is operationalized a large number of children will be entering the system through traditional,

satellite, privately provided, and other pre-primary programs. To ensure that all children are accessing quality learning opportunities, regardless of the type of program, it will be helpful for the government to monitor and enforce basic quality standards.

It would not be feasible in terms of cost or logistics for teachers, district education officers, or quality assurance officers to use the full set of MELQO modules in their current form. However, the modules can be adapted for practical classroom-level use. In the immediate and medium term, it may be more realistic for adapted modules, such as a checklist with guidance, to be used primarily at the classroom and school level as a guide for teachers. In the long term, once the overall EMIS and quality assurance systems in Tanzania are strengthened and streamlined, data from the modules could be integrated into a national system.

c. Monitor every child's learning

Several stakeholders suggested that MELQO modules could be linked to the existing assessment system to monitor the learning outcomes of every child. However, the majority felt that it is not feasible to test every child given the length of test and training required to implement the MODEL modules. In addition, there are ethical considerations for assessing individual children. It is considered ethical to screen for developmental delays or learning issues only if help is available to address any delays discovered. Identifying a specific score or cut-off is not possible with the MELQO modules, which are designed as population measures to identify patterns and gaps with groups of children.

The MELQO modules were designed for measurement at scale and not intended to make decisions about specific classrooms, teach-

ers, or children. Screening for developmental delays of individual children is very important, but must be undertaken carefully and in close collaboration with health care providers and educators who will provide services to treat delays. In the short and medium term, it may not be feasible to plan for national assessment of pre-primary children until challenges in the overall M&E system (including NECTA and EMIS) are addressed. In the long term MoEVT, in coordination with MCDGC and MoHSW, can consider what this might look like. In addition, as Tanzania gains more experience in measuring early learning, perhaps it will be feasible in the future to identify a common core set of items in the MODEL that can be used at the classroom level.

The options described above may not be mutually exclusive. In planning for future integration of early learning measurement, the government will need to consider how it prioritizes the various uses of MELQO, from providing data to inform planning, to serving as modules for service providers and those directly supporting service providers (quality assurance officers, district education officers, ward education coordinators), to framing a general approach to quality early learning and teaching. An evolving hybrid of the various options described above may be best. In the following section, several key recommendations are described to plan for effective and sustainable measurement of early learning in Tanzania.

V. Recommendations

➔ Encourage continued government leadership and engagement with national stakeholders

Regardless of which modalities MELQO is integrated with moving forward, it will be essential to have strong government engagement. In general, MELQO should be a nationally driven initiative, with opportunities for Tanzanian input and leadership throughout the process. Multiple stakeholders have recommended that, during the entire study process in 2015-2016, from planning and adaptation to analysis, synthesis, and dissemination, there should be opportunities for representatives from Tanzania to contribute their expertise and perspective as well as build their capacity. Some interviewees expressed concern that in the past they have felt excluded from research efforts involving internationally supported studies, and they expressed the opinion that Tanzanian stakeholders should play an integral role in the national study.

The government, with leadership from MoEVT, is already actively committed to improving early learning. The government's Short-Term Plan of Action for Pre-Primary Education 2015/2016, approved by the commissioner of education in June 2015, outlines concrete areas to prepare for the operationalization of the ETP's goals for the pre-primary sector. Implementation of MELQO is one of the nine key actions and complements many of the other priority areas.

A clear mechanism is also already in place to promote government leadership of MELQO activities. After the launch of MELQO in Tanzania, the MoEVT permanent secretary appointed a MELQO Task Force, with representatives from the Primary Section, the Quality Assurance Division, and the Policy and Planning Division of MoEVT, as well as representatives from PMO-RALG, TIE, and NEC-TA. The Task force is responsible for coordinating MELQO activities on behalf of the government.

➔ Design research studies that can directly influence system improvements

While the first national study will focus on a set of specific research questions and will be valuable to initiate strong measurement in early learning, stakeholders acknowledge that one study alone cannot answer all of the country's questions. Additional studies in the future will have the potential to reveal other important trends in the pre-primary sector. With that said, besides the challenges associated with cost and logistics, stakeholders feel that the major risk to strictly using MELQO modules to conduct research is that findings will not be effectively synthesized and communicated to decision makers. It will be essential to use results of future research to identify areas in which specific actions are needed. Table 5 presents several key research questions Tanzanians feel would be helpful to answer and indicates how answering these questions can lead to system improvements.

Table 5: Examples of How Research Using MELQO Instruments Can Lead to Improvements in the Pre-Primary System in Tanzania

Research questions	How this will inform policy/program improvement
<p>Do children’s scores on the MODEL at the start of Standard I predict primary achievement (Standard I attendance, 3Rs assessment scores, etc.)?</p> <p>Which items in the MODEL and quality measures predict children’s achievement in school in Standard I or Standard II?</p>	<p>Evidence that shows how achievement in pre-primary leads to success in primary school will make a strong case for investment, particularly for parliamentarians and high-level officials and donors. Furthermore, understanding which specific areas have the strongest link to early primary achievement could show the government exactly where to invest its scarce resources to achieve the desired impact.</p> <p>With recent national emphasis on 3Rs and 3Rs assessment by the government and donors, there has been a major political priority placed on achievement in early grades of primary. While a small clique of ECD experts and technicians in Tanzania understand the links of pre-primary success to primary success, there is a need for national evidence to broaden policy dialogue and action within the rest of the Tanzanian education sector. A longitudinal study that could show the impact of pre-primary on subsequent learning on 3Rs would provide extremely valuable evidence to convince policymakers to prioritize concrete efforts in pre-primary.</p>
<p>What is the overall skill level of children entering Standard I?</p> <p>At what ages do children typically gain specific competencies?</p>	<p>Evidence on the status of cohorts of children will inform teachers, TIE, and others where children are so that they can cater teaching to their specific learning needs. Understanding the specific gaps in, for example, pre-literacy could facilitate the development of improved training and support to teachers in promoting children’s early literacy. In addition, this evidence could be particularly useful as the government develops its implementation strategy for the ETP to best support 3-, 4-, and 5-year-olds in the system (currently the new pre-primary curriculum is for only one year, but does not specify an age).</p>
<p>Does higher quality lead to more gains in learning in pre-primary?</p>	<p>Understanding the relationship between quality and learning can help identify gaps in teachers’ pedagogies, which could lead to improved training and support to ensure that teachers know how to conduct age-appropriate learning activities and have adequate teaching and learning materials.</p>
<p>How do children do over time? Do MELQO MODEL or quality scores predict success in later school and life?</p>	<p>Longitudinal evidence, which to date does not exist in Tanzania (or in the majority of developing countries) could inform policymakers and practitioners about the long-term consequences of the age at which children acquire certain skills and competencies.</p>
<p>How do quality and learning outcomes differ by setting (public vs. private, traditional pre-primary classrooms vs. satellite, urban vs. rural) or by teacher background/experience?</p>	<p>Evidence on how quality and outcomes may differ by setting would have major implications for where the government and donors will choose to invest as the new ETP is operationalized. Understanding the scope of different settings may also inform improvements to the existing standards for early education.</p> <p>If it can identify particular strengths and weaknesses of different types of settings and/or service delivery models, the government will be better equipped to provide the necessary support to the various settings.</p>

➔ Strategically communicate and widely disseminate MELQO results

Stakeholders have expressed the need for a strong communication and dissemination strategy so that a wide scope of stakeholders can have access to MELQO results and use the findings in their respective agencies/positions. Results should not only be communicated at the national level but also at the community level, so that schools understand how teachers and children are doing. Based on past experience with the 3Rs assessment, government representatives see a need for targeted communication of national study results to cater to specific audiences (including civil society organizations, district/ward education officials, teachers, and parents). One important opportunity to share MELQO findings with a large group of stakeholders is National Education Week, which is held in May each year and has the audience of the media, the general public, parents, teachers, and local, regional, and national education leaders.

➔ Strike a balance in aligning while also differentiating measurement in pre-primary vs. measurement in early primary

Stakeholders feel that there is an opportunity to align 3Rs and pre-3Rs, not only in curriculum and training but also in framing and communicating the new concept of measuring early learning to the public. However, there is also a need to differentiate 3Rs and MELQO. With NECTA efforts to publish primary learning outcomes online as well as extensive 3Rs dissemination efforts, parents now might expect to receive a score for their child who is assessed in pre-primary. While the exact mechanism for measuring pre-primary children's development still needs to be defined, it will not look exactly the same as the 3Rs assessment, and this will

need to be carefully communicated to stakeholders at all levels.

➔ Build capacity and understanding of measuring and supporting early learning

The MELQO findings alone will not improve quality of pre-primary education in Tanzania. But having evidence on how children are learning and how quality affects how they learn will be an important step forward in beginning to shift mindsets at multiple levels around the needs for pre-primary quality improvement. Sensitization and training for a range of stakeholders to strengthen the attitudes, knowledge, and skills on both how to measure and what to do with what is measured to improve learning will be necessary:

- a. *National ECE leaders:* TIE, PMO-RALG, NECTA, MoEVT, and national leaders need to come together to synthesize MELQO findings and discuss options for a way forward. The agencies can draw from their previous experience with quality assurance, M&E, and assessment, but given the relatively nascent position of monitoring early learning in Tanzania, some technical assistance may be required.
- b. *Teachers:* Currently in Tanzania, approximately half of pre-primary teachers are not qualified (i.e., do not meet the official requirement of a Grade A teaching certificate). And even those who are qualified are not necessarily trained on all areas of learning for young children. The MELQO module will be valuable for the government in considering strategies to improve the teacher qualification and professional development system in Tanzania. While the new pre-primary curriculum is already in the final stages of finalization, training on the new

curriculum has not yet been developed, presenting a timely opportunity to incorporate MELQO into a new training program that will hopefully reach all pre-primary teachers in the near future.

Measuring the quality of early learning environments can also inform the government's plans for a pre-primary professional development and certification plan (part of the Short-Term Plan of Action for Pre-Primary Education 2015/2016). MELQO data will help Tanzania understand the profile of "qualified" and "unqualified" providers who are currently teaching in pre-primary classrooms. This will help MoEVT, TIE, and the National Council for Technical Education (NACTE) understanding options for a pre-primary professional development plan.

- c. *District education officers, ward education coordinators, quality assurance officers, and head teachers:* Currently, local education officials monitor quality of pre-primary the same way they monitor Standards I-VII and have limited knowledge on early childhood. In addition to incorporating MELQO into professional development for pre-primary teachers, training of school inspectors and ward education officers, who currently have little knowledge of what is appropriate for young children's development, will be critical. The Quality Assurance Department at MoEVT has suggested that training materials such as pictures, fliers, and videos could be helpful modules in sensitizing ward education coordinators and inspectors on measuring early learning quality.
- d. *Parents:* Parents and community members will play an important role in the integration and uptake of MELQO. It will be important to sensitize parents on the purpose of the modules and set realistic expectations for parents and communities that the MODEL module is not intended to test children on whether they "pass" pre-primary, but rather help teachers and parents understand a child's level of development. Existing mechanisms, such as parent-teacher associations, should be leveraged to ensure that parents play an integral role in improving pre-primary quality. Different information dissemination strategies, including radio and TV programming, could be helpful in sharing MELQO findings to parents and communities. For example, using the parent report can help parents become more aware of their own child's development and learn ways they can better promote development. TIE has suggested that a curriculum handbook for parents could be a potential option to help sensitize parents on quality pre-primary.
- e. *Local researchers and research initiatives:* As recommended above, MELQO will be valuable in future national research in Tanzania. Researchers from the University of Dodoma, Aga Khan University, and the University of Dar es Salaam, among others, are already actively engaged in researching pre-primary education. Partnering with national researchers and ensuring that they are equipped with the skills to conduct rigorous research using the MELQO modules will promote sustainability.
- f. *Civil society organizations, the private sector, NGOs, and advocacy groups:* Besides government stakeholders, non-governmental stakeholders, who make up a significant part of the pre-primary subsector, will also be important to sensitize on early learning measurement. They should also be sensitized on how to make use of information gathered by modules to promote advocacy and further awareness on how to foster quality early learning.

➔ Develop complementary materials and modules that are practical and user-friendly

In their current form, the MELQO modules would be challenging to implement across every single pre-primary class in Tanzania. With that said, synthesis of the upcoming findings from the 2016 MELQO study as well as further review and testing of the modules in various pre-primary settings can lead to a better understanding of how to measure and monitor how children are learning and what they are learning. Stakeholders have suggested several complementary modules that could be developed, including:

- a. *Practical classroom level module:* At a classroom level, teachers need resources to understand how their quality affects children's learning at development. A classroom instrument could be used as a monitoring module for head teachers or ward education coordinators, or as a module for teacher self-evaluation.
- b. *Checklist for inspectors:* The government has recognized the need to shift the current approach of inspection to focus on school improvement and quality assurance. Existing inspection modules are currently more focused on quantity than quality. Quality assurance officers and ward education coordinators can use elements of the MELQO MELE module to not only inspect but also to give advice to teachers and heads of schools to improve the conditions of the pre-primary environment and pedagogical practices.

➔ Link to ongoing and planned initiatives in the existing pre-primary system

The pre-primary subsector in Tanzania is experiencing an exciting time, with the new ETP, a new Early Education Curriculum, and a growing emphasis from civil society and other partners. Coordinating early learning measurement efforts with other ongoing and planned initiatives within the government's Short-Term Plan of Action for Pre-Primary will be beneficial. Some examples include:

- a. *Further align to new curriculum:* As Tables 3 and 4 showed, the constructs measured by MELQO are already directly linked to different areas within the new quality framework drafted by TIE. At the time of drafting this brief, the government had not yet publicly shared the new draft curriculum or syllabus. When they are available, it will be helpful to further align the new curriculum and syllabus to the MELQO instruments. During an ECE stakeholders meeting in November, TIE explained that the new curriculum will be dynamic and flexible, and it believes that the MELQO results will inform further refinements to it.
- b. *Seek synergies with partners:* As MELQO gains momentum, there will be increased demand for measuring early learning outcomes and quality. For example, representatives from the EQUIP-T School Readiness program (a DFID-supported quality education program providing condensed alternative early education program to children before they enter primary) and the Fursa kwa Watoto (an initiative to test two quality-enhanced cost-effective government models for pre-primary education, with impact evaluation to document improvements in school readiness and Standard II learning outcomes) have expressed interest in using MELQO modules.
- c. *Include pre-primary in planned improvements of the education-sector-wide M&E*

system: Currently, EMIS does not collect data on learning outcomes at any level. NEC-TA has a national database on standardized assessments for primary and secondary school students, but this is not currently integrated into EMIS. MoEVT (with donor support) plans to develop a sector-wide M&E

framework to improve data collection and management through an integrated EMIS. While concrete plans are still under development, both child-level and classroom-level indicators from MELQO could eventually be integrated into this M&E framework.

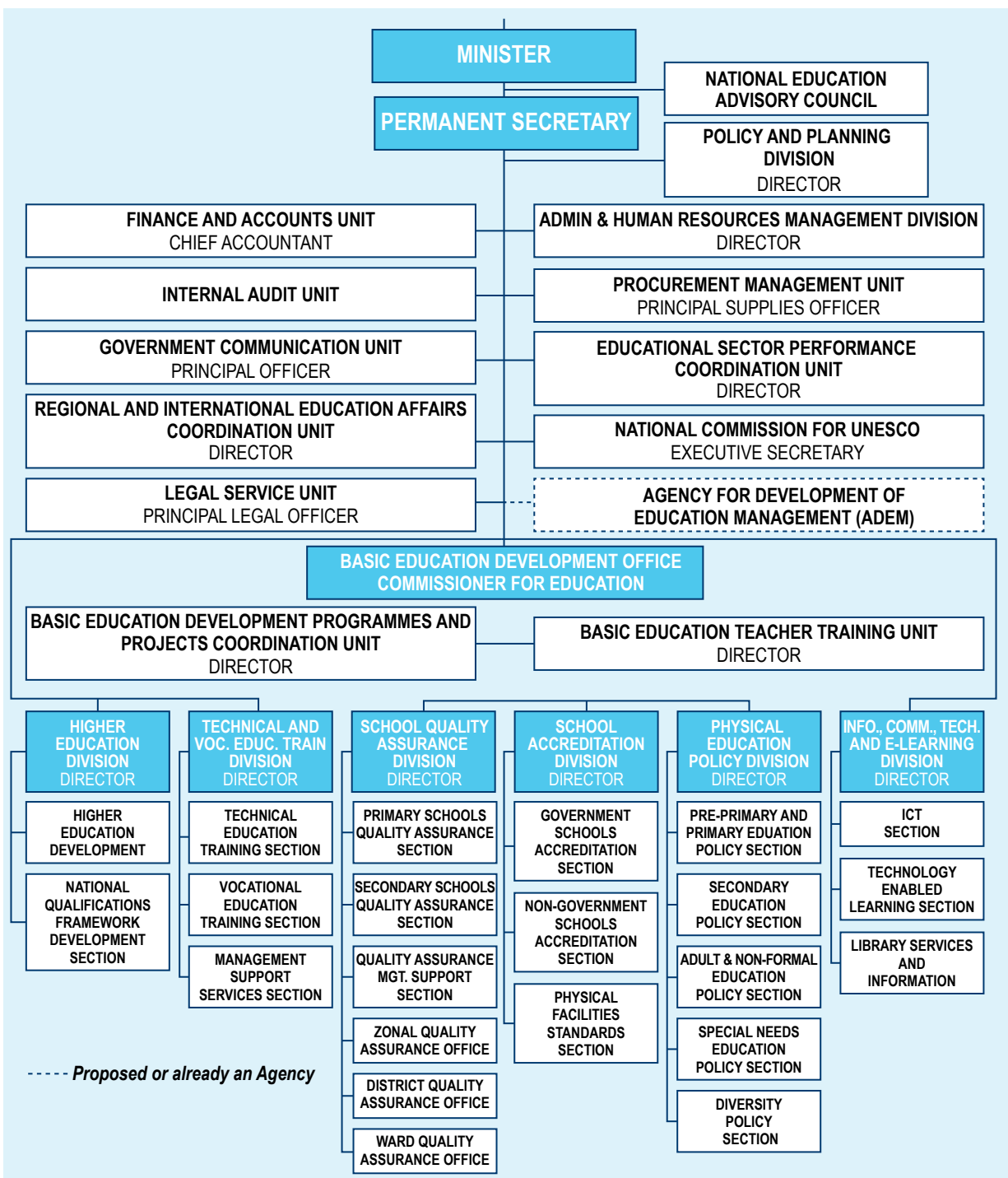
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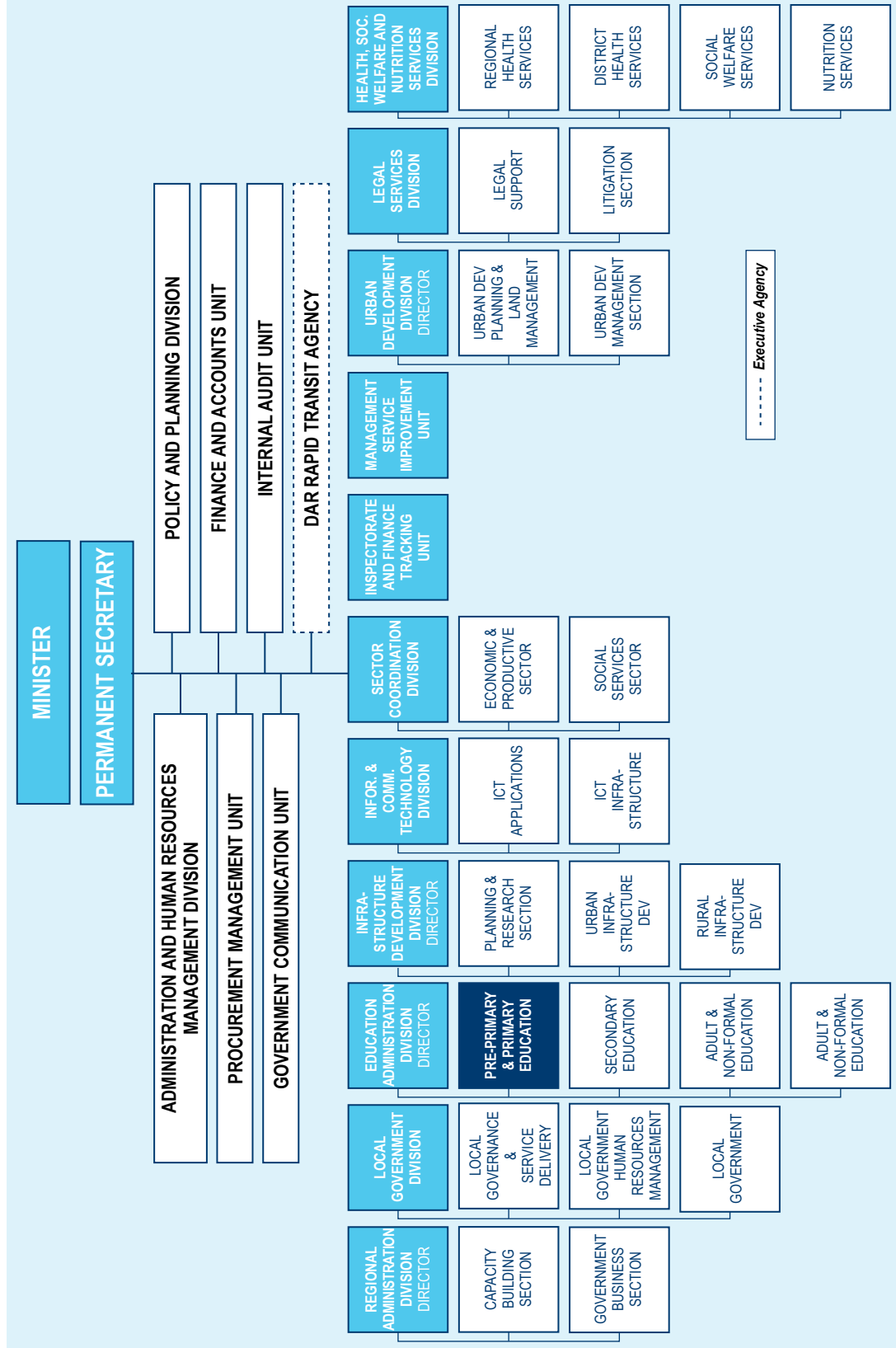
Annexes

Annex A. Functions and organization structure of the Ministry of Education and Vocational Training (MoEVT)

(Approved by the President on 12th February, 2015)



Annex B. Functions and organization structure of the Prime Minister's Office—Regional Administration and Local Government (PMO-RALG)
 (Approved by the President on 12th February, 2015)



Annex C. Protocol for national stakeholder interviews

Guiding questions for national stakeholder interviews

1. **Tanzanian priorities for early learning:** Which outcomes for ECD/early learning are most important in Tanzania (for Gov't, communities)?
 - a. What is the goal of pre-primary education in the country? What does Government/your specific agency want it to accomplish?
 - b. Which child outcomes does the Government/your specific agency care about most?
 - c. What information is most critical for the Government/your specific agency to track at a national level?
 - d. How important is global comparability for the Government/your specific agency?
2. **Perceptions of good quality:** What do you think a “good” pre-primary classroom looks like? Ask interviewee to describe what, in their opinion, a “good” quality classroom looks like. Once they do this, ask them whether they think this description would be the same if they had responded as a teacher or a parent. How would parents describe “good” quality?
 - a. What are the children doing? (prompt about structure, interactions, play-based activities, etc.)
 - b. What is the teacher doing?
 - c. What does the room look like?
 - d. How are the parents engaged?
3. **Need for monitoring and uses of MELQO:** Do you think monitoring early learning outcomes and quality is needed in Tanzania? How do you think MELQO findings could be best used in Tanzania? Open discussion about benefits. If prompts are needed, gather opinions about the following uses:
 - a. Monitoring module for school heads
 - b. Classroom improvement as feedback module for teachers
 - c. For parents to understand their children’s development
 - d. For District, Regional, and National Gov’t to understand how the pre-primary sub-sector is performing
 - e. For equity and to allow targeting of children most in need
4. **Appetite for MELQO:** How much do you think the following stakeholder groups would support or oppose large-scale measurement of early learning quality and outcomes? Mention each of the stakeholder groups. Discuss why or why not they would support and their thoughts on specific risks and/or opportunities to national adoption of MELQO. Interviewees can speak about past experience with 3Rs and/or ideas about perceptions of MELQO.
 - a. Policymakers
 - b. Teachers unions
 - c. Educators
 - d. Students
 - e. Parents
 - f. Media
 - g. Think-tanks, NGOs, etc.
 - h. Teacher training colleges
5. **Linkages to primary school:** How and what do you need to align to the primary education system?
 - a. What are the expectations of what children should know and be able to do upon Standard I entry and how does this influence the content and expectations for the pre-primary education programs?
 - b. What does it mean to be ready for school in Tanzania?
6. **Responsibilities for long-term integration:** Which group do you think would be best fit to use the MELQO modules? Mention each of the groups and gauge why/why not this group would be well-suited. Note more than one group could use the modules. What is the

capacity of this group to implement large-scale data collection? What capacity do each of these groups already have and what are their weaknesses (i.e. identify specific capacity building needs)? To who is this group accountable?

- a. NECTA (national exams council)
 - b. Quality Assurance Unit/Inspectors
 - c. Regional Education Officers
 - d. District Education Officers
 - e. Private Firm
 - f. Head Teachers
 - g. Teachers
 - h. Specific programs (TZ 21, Fursa Kwa Watoto, NGO-led programs, etc.)
 - i. Other groups?
7. **Feasibility of data collection:** What kind of measurement is feasible? How will modules be used and managed? Discuss feasibility in terms of cost, logistics, and human resources.
- a. Is a sampling approach best or does every child need to be tested?
 - b. Who can collect the information? Could teachers be the enumerators or District Education Officers? Or University students?
 - c. How/where can the information be aggregated? Would this feed into EMIS? NECTA?
 - d. Would modules need to be designed to align with existing EMIS data collection efforts or inspection efforts? Or would a new system be created?
 - e. What have been challenges with assessment/EMIS/inspection in the past? (for example-delays in administering, poor training/guidelines of test administrators/inspectors, weaknesses in assessment/inspection protocol design, errors in data processing, etc.)
8. **Feasibility of documentation and dissemination:** What would be the best way to technically document MELQO findings as well as disseminate findings to the public? Ideas could include: technical report (publicly or not publicly available), online portal, school/district/region-specific reports, media briefings to discuss results, workshops/presentations for key stakeholders on results, etc.
9. **Overall challenges:** What are the main risks or challenges to integrating MELQO? If not already discussed, gather information on additional specific challenges for measuring pre-primary quality and outcomes. Can also link to risks/challenges of 3Rs:
- a. What went well? What didn't go so well?
 - b. How were results used by the Government, teachers, and communities?
10. **Considerations on study design:** We have limited amount of flexibility in what we can do in the upcoming national study. In your opinion, what are the most important questions to answer? What type of data would be most valuable for Tanzania?
- a. Difference between quality and child outcomes in:
 - Public vs private schools
 - Urban vs. rural
 - Girls vs. boys
 - High-performing vs. low-performing (PSLE pass rates)
 - Whether children in different regions are performing better than others
 - b. How do Kiswahili speakers fare compared to children whose mother tongue is not Kiswahili?
 - c. Relationship between child outcomes/quality
 - d. Anything else?

Annex D: List of stakeholders consulted during Phase I

Name	Title	Affiliation	Inputs provided via
Dr. Charles Msonde	CEO	National Exams Council of Tanzania	One-on-one interview
Dr. Meena	Director	Tanzania Institute for Education	One-on-one interview
Dr. Lyabwene Mtahabwa	ECD Expert	University of Dodoma	One-on-one interview and ECE Stakeholders Group Discussion
Eric Guga	Coordinator	Tanzania Child Rights Forum	One-on-one interview and ECE Stakeholders Group Discussion
Clarence Mwinuka	Principle Education Officer	MoEVT	One-on-one interview and ECE Stakeholders Group Discussion
Hawa Selemani	Education Officer	MoEVT	One-on-one interview and ECE Stakeholders Group Discussion
Francisca Tarimo	Senior Curriculum Coordinator	Tanzania Institute for Education	One-on-one interview and ECE Stakeholders Group Discussion
Vida Ngowi	Curriculum Coordinator	Tanzania Institute for Education	One-on-one interview and ECE Stakeholders Group Discussion
Christopher Amwine	Monitoring and Evaluation and Learning Specialist	PLAN International	ECE Stakeholders Group Discussion
Ian Attfield	Education Advisor	DFID	ECE Stakeholders Group Discussion
Borase Chibura	ECD Coordinator	PMO-RALG	ECE Stakeholders Group Discussion
Rupert Corbishley	Regional Senior Programme Officer Education & ECD	AKF	ECE Stakeholders Group Discussion
Ray Harris	Advisor, Teacher Professional Development	Equip-TZ	ECE Stakeholders Group Discussion
Cyprian Iraba	Principal Finance Management Officer	MoEVT	ECE Stakeholders Group Discussion
Christina Kamamba	Curriculum Developer	TIE	ECE Stakeholders Group Discussion
Alistidia Kamugisha	Programme Officer	TEN/MET	ECE Stakeholders Group Discussion

Name	Title	Affiliation	Inputs provided via
Laurence Kunambi	Curriculum Developer	TIE	ECE Stakeholders Group Discussion
Stephen Myamba	Program Officer, Education	Embassy of Sweden	ECE Stakeholders Group Discussion
Yonafika Mzungu	Education Officer	MoEVT	ECE Stakeholders Group Discussion
Masozi Nyirenda	Secretariat	Education Development Partners Group	ECE Stakeholders Group Discussion
Anna Smeby	Education Specialist	UNICEF	ECE Stakeholders Group Discussion
Douglas Taylor	Education Advisor	Canadian Cooperation Office	ECE Stakeholders Group Discussion
Wellu Mpanda	Registration Officer	National Exams Council of Tanzania	ECE Stakeholders Group Discussion
Nkahiga Kaboko	Education Specialist	World Bank	ECE Stakeholders Group Discussion
Frederick Shuma	Director Teacher Education Unit	MoEVT	ECE Stakeholders Group Discussion
Mwansith Kitogo	Education Coordinator Primary	PMO-RALG	ECE Stakeholders Group Discussion



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