

# A PROCESS EVALUATION OF THE MOZAMBIQUE EARLY CHILDHOOD DEVELOPMENT PROJECT (DICIPE)

2015-2019



Jem Heinzel-Nelson Alvarenga Lima Sandra Helena Barros Martins

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# EXECUTIVE SUMMARY

#### **Overview**

In 2012, the Government of Mozambique approved the National Strategy for Early Childhood Development Project (DICIPE) for 2012-2020. The ECD Strategy is conceived as a multi-sector program of strategic actions and care targeted to children from the prenatal period to six years of age to ensure their full and holistic development. Building on a) the momentum of the approval of the new DICIPE strategy; b) positive results from an impact evaluation of a community-based ECD program in Gaza Province in Mozambique; and c) worldwide evidence demonstrating the significant benefits of ECD interventions on children and their families, the Ministry of Education and Human Development (MINEDH) requested financial and technical support from the World Bank to pilot the provision of community-based ECD services.

The DICIPE Program (as it became known) was piloted 2012 through 2019 to 350 selected communities in the following five provinces in Mozambique: Gaza, Tete, Cabo Delgado, Maputo Province, and Nampula. MINEDH competitively contracted Third Party Providers (TPPs) to implement and provide ECD services throughout the five provinces, under its supervision and management. TPPs were responsible for providing all services at the community level including mobilization of communities, construction of the preschools facilities (*escolinhas*), training of teachers (facilitators,) and providing ECD services to children ages 3-5 in the *escolinhas*. MINEDH developed a Basic Service Package (BSP) outlining the minimum criteria required for each community and *escolinha*, to be adhered to by each TPP.

The DICIPE pilot was designed using a Results-based Disbursement Framework (RBDF), meaning that payments to the TPPs were tied to the delivery of specific results, or outputs/outcomes (e.g., number of participating communities, number of functioning ECD centers, etc.). Independent Verification Agents (IVAs) were then contracted by MINEDH to use the RBDF for the external verification of the ECD outputs that were reportedly being delivered by the TPPs.



The MINEDH was closely involved and provided leadership to all aspects of the program. A National Preschool Department was established under the National Directorate for Primary Education (DNEP) to oversee the implementation of the DICIPE strategy and program. Throughout implementation of the project, multiple capacity building exercises were held as MINEDH developed the human resources, knowledge, and capacity to eventually take over implementation and management of the *escolinhas* at

the community-level. As per the program design, during the last year of implementation, the TPPs and MINEDH created a transfer plan for MINEHD to assume full responsibility and management of all 350 *escolinhas* from the TPPs.

This Process Evaluation examines how the DICIPE program activities were delivered throughout the duration of the pilot, how closely the intervention was implemented as planned, and how well it reached the target population. More specifically, the Process Evaluation explains discrepancies between expected and observed outcomes of the DICIPE program; analyzes the type, quantity, and quality of services delivered; examines the practical problems encountered, and the ways such problems were resolved; explains how the various contexts influenced outcomes; and provides insights based on lessons learned to aid expansion and/or implementation in other contexts.

The methodology for this Process Evaluation included interviews and structured questionnaires with stakeholders from all levels: government officials, TPPs, IVAs, community coordination committees (CCCs), facilitators, and caregivers. It also included desk-reviews of key government, World Bank, TPP, and IVA reports, and formal classroom observations. The survey protocol was approved by the institutional Mozambique Review Board - *Comité Nacional de Bioética para a Saúde* (in Portuguese) and informed written consent was obtained from the respondents.



#### **Key Findings**

From 2014 to 2019, 350 *escolinhas* were constructed and became operational in Mozambique, with more than 50,000 children (ages 3-5) benefitting from at least one year of preschool services through the DICIPE pilot project. *Escolinhas* were well attended, with an average of 74 children per *escolinha* (close to the envisioned ratio of 70 children per *escolinha* as per program design). In addition, the ratio of children per facilitator was 15.5:1 (1 facilitator per 15.5 children), which is also very close to the envisioned ratio of 15:1 per program design. Student and facilitator participation and attendance was strong, with average dropout rates for both being 5% throughout the duration of the project.

The major successes of the DICIPE pilot were found in the community-based programming including the mobilization and sensitization of the communities, the establishment of a Community Coordination Committee (CCC,) and hiring of local facilitators. The original design of the program was anchored in a strong community involvement, with communities playing a vital role in developing and sustaining their escolinhas. The majority of the CCCs throughout all provinces functioned according to the model defined at beginning of the program. CCCs are seen as a central and important part of the overall functioning of escolinhas. CCCs are respected both by caregivers and facilitators and are seen as a major decision-making body of the escolinhas. 75% of CCCs interact either daily or weekly with the escolinha, including maintenance, cleaning, and overall management. Most importantly, "escolinhas" located in communities with actively engaged CCCs presented higher quality outcomes<sup>1</sup>.



The DICIPE program established an important institutional and ECD workforce capacity in Mozambique. Under the DICIPE Program, the National Preschool Department was established, and more than 50 fulltime staff are now working to coordinate the implementation of DICIPE and other preschool-related activities, including activities supported by other partners, in the 5 supported provinces. More than 2,000 locally hired facilitators were also trained during the duration of the program and lead classes in the *escolinhas*. While MINEDH established establish the required government structure to support this program and built its capacity, the use of TPPs facilitated early learning activities to begin as soon as

<sup>&</sup>lt;sup>1</sup> The quality of the *services* was measured using the quality module from the Measuring Early Learning Quality and Outcomes (MELQO).

possible. It would have been difficult for MINEDH to have reached this level and coverage of ECD-related services on its own within this time frame.

However, the Process Evaluation also captures significant challenges and deviations from the original project design. Initially conceived to start in 2012, construction activities and community mobilization in the first group of communities only began in April 2015. This was the start of many other delays faced throughout the lifetime of the project. While the project was originally envisioned to be completed in three years, it took more than five years (and significant design revisions) to reach the agreed-upon communities. One of the biggest design changes in the project was the removal of a third group of intervention communities from the pilot project, reducing the number of communities to benefit from the pilot from 600 to 350. Key factors that contributed to these delays and changes in program design included: a) lack of full envisioned government staff to support the project; b) complex procurement and negotiation procedures for the TPP and IVA contracts and amendments; c) significant changes to the design and construction of the preschool buildings (community-based structures using local materials versus more sustainable, concrete buildings); and d) a significant revision made to simplify the RBDF part way through implementation. Another key deviation from the project design was the parenting education component. The original project design called for parenting education sessions to be held once a month. However, sessions only occurred on average once every three months and only 50% of parents reported ever attending a single session.

Regarding the quality of the services provided, overall findings suggest the need for greater focus and improvement on the pedagogical aspects of the program. The MELQO captured major issues related to poor use of learning materials, lack of required pre- and in-service teacher training, and almost no use of a curriculum to guide learning processes. These in turn, during the assessment of the quality of service delivery, resulted in overall low scores in pedagogy in almost all subject areas (numeracy, literacy, language, fine/gross motor, etc.).

In addition, the lack of clear M&E guidance and tools (i.e. a template for harmonized reporting, unclear indicators, etc.), and the poor use of the IVA reports did not facilitate adequate support or trouble-shooting to improve quality at the *escolinhas*. The reports and instruments used in the verification process were found to be of low quality and suffered from a lack of harmonization, particularly in the early years of the project. In addition, these reports were used only for the TPP payment process and not as a tool to improve the quality of work.

Table 1 summarizes some of the key differences between the original project design and implementation.

Original design	Implementation		
Implementation Timeline and Beneficiaries			
3 groups of communities to receive intervention for a total of 120 communities per province- 600 in total	2 groups of communities received intervention for a total of 70 communities per province - 350 in total		

Table 1: Differences between original design and implementation

A total of 8,400 <sup>2</sup> children ages 3-5 were expected to benefit from the program.	A total of 50,742 children ages 3-5 benefited from the program (2015-2018) <sup>3</sup> .		
November 2012: The signing of TPP contracts	March 2014: The signing of TPP contracts		
May 2013: The start of activities in the first group of selected communities (30 per province)	April 2015: The start of activities in most of the first group of selected communities (30 per province)	Page   12	
October 2013: The start of activities in the second group of selected communities (40 per province)	August 2016: The start of activities in most of the second group of selected communities (40 per province)		
October 2014: The start of activities in the third group of selected communities (50 per province)	No third phase		
July 2015: End of pilot project	December 2019: End of pilot project		
Constru	ction		
"Community-based" conceptual model using mainly local materials and with contributions from the community to the construction of classrooms	Revised design with additional costs aimed to increase the sustainability, security and longevity. Contracting of outside construction firms		
Community and pare	ental involvement		
Communities play a vital role in developing and sustaining <i>escolinhas</i>	No deviation from the original design.		
Caregivers are to receive 1 parenting educations session per month	Parenting education sessions are held 1 per every 3 months		
Facilitators			
Facilitators are recruited from the community and selected by the community leaders or the community itself.	No deviation from the original design.		
A minimum level of education for the facilitators is required 7th grade	Majority of facilitators have an education level higher than 7 <sup>th</sup> grade		
4 Facilitators per escolinha	No deviation from the original design.		
15 Children per Facilitator	No deviation from the original design.		
Facilitators are to receive ten days of pre-service training	13% of facilitators report receiving more than 5 days of pre-service training		
Facilitators are to receive five days of in-service training	61% of facilitators report receiving one day or less of in-service training		
Institutional Capacity			
Central level should have six employees supporting the DICIPE project	For the majority of the project duration, the central level only had 2 full time staff members		
Each provincial level should have 5 employees supporting the DICIPE project (25 in total)	Each province had 1 employee supporting the DICIPE project (5 in total)		

<sup>&</sup>lt;sup>2</sup> This is the number of beneficiaries included in the 2012 Project Paper for the ECD Additional Financing. The team recognizes that this figure is quite low but given the time that has passed since the writing of the Project Paper, the team believes the number at that stage was significantly underestimated.

<sup>&</sup>lt;sup>3</sup> At the time of writing this Process Evaluation, data had not yet been collected for 2019

Each district should have 4 employees supporting the	No deviation from the original design.
DICIPE project (8 per province; 40 in total)	

#### **Key Lessons Learned**

The Process Evaluation aims to capture and summarize key lessons learned and recommendations for future scaling-up of ECD services. The following are a snapshot of some of the most important lessons learned (a full list can be found under Chapter 5.)

- <u>Separate Construction of Escolinhas from Operational aspects</u>: If using a public-private partnership (PPP) design, the construction of *escolinhas* should be contracted out separately from other operational-components (management, pedagogy, etc.) OR the capacity of TPPs to do construction should be better evaluated before the contracting process and if necessary, consortium with construction firms should be considered
- Focus on Pedagogy from the beginning: Pedagogical aspects such as curriculum, teacher training, and materials should not be considered as an afterthought to providing access. Instead, they should be considered a priority from the beginning and implemented and monitored as such
- <u>Keep the RBDF simple:</u> RBDFs should be kept as simple as possible with a minimal number of indicators to trigger disbursement and clearly identifiable and measurable criteria
- <u>Maintain Realistic Expectations for a Pilot Program -</u> in designing a pilot program (particularly one that is very new for a government) take into consideration the following: a) Smaller pilot size in a more condensed area; and b) Less "extremely" rural communities with easier access
- <u>M&E System in place prior to start of implementation</u> a harmonized M&E plan (particularly when using IVAs) with standardized data collection tools, reporting systems and protocols, and one that is aligned with the existing education M&E system, needs to be established at the beginning of project implementation.
- Fair Compensation of Facilitators mechanisms should be in place to ensure fair compensation for facilitators from the beginning of the project (easier than revising/increasing the cost later once the program has been established) and an efficient system needs to already be in place for facilitators in rural villages to receive their payments
- <u>Parenting Education</u> outsource the development of a high-quality parenting education package so that it is fully ready to be implemented at the start of the program

#### **Final Thoughts**

This Process Evaluation is one of three major tools to evaluate the DICIPE pilot. It will be accompanied by an impact evaluation and a costing exercise, results for both expected in 2020.

Impact Evaluations, especially randomized controlled trials (RCTs) are considered the most rigorous way to evaluate program or intervention effectiveness. Several RCTs have taken place in Africa to evaluate ECD programs, including the ongoing RCT in Mozambique to evaluate the impacts of the DICIPE pilot. However, it is not enough for an evaluation to report solely on program impacts. Evaluations should also provide information on the planning, delivery, and update of the intervention, the pathways through which the intervention was expected to act, and the contextual factors affecting the implementation and outcomes of the interventions- the "processes" that take place. This Process Evaluation aims to fill these gaps.

It is crucial to understand the cost of these impacts and the processes that led to these impacts. Standardized and accurate cost data can strengthen the case for investment by enabling more precise cost-benefit and cost-effectiveness analysis. It can also lead to more informed or better investments by improving the efficiency of administration, so that actual and expected expenditures are better aligned, investments are made in the most cost-effective interventions, and cost and quality trade-offs can be analyzed.

This is, to our knowledge, the first time that a Process Evaluation is accompanying the results of an Impact Evaluation and costing exercise focused on scaling up ECD interventions in a rural African setting. These three tools will provide policymakers with a better understanding of what is currently being spent on ECD interventions, what high-quality interventions cost, and what outcomes these interventions can produce. It is our hope that the successes and lessons learned captured through these studies will provide insight and guidance to the Government of Mozambique and to other countries as they make decisions regarding the future scale-up of ECD interventions.



## INTRODUCTION

The Mozambique National Strategy for Early Childhood Development Project (DICIPE) is led by the Ministry of Education and Human Development (MINEDH) to support the provision of community-based early childhood development (ECD) services. The DICIPE Program was implemented from 2012 through 2019 to 350 communities throughout 5 provinces. More than 50,000 children (ages 3-5) in Mozambique benefited from at least one year of preschool services from the DICIPE Project.

This Process Evaluation examines how the DICIPE program activities were delivered, how closely the intervention was implemented as planned, and how well it reached the target population. More specifically, the Process Evaluation explains discrepancies between expected and observed outcomes of the DICIPE program; analyzes the type, quantity, and quality of services delivered; examines the practical problems encountered, and the ways such problems were resolved; explains how the various contexts influenced outcomes; and provides insights to aid implementation in other contexts.

Data came from in-field observations, desk-reviews, financial records, structured questionnaires and focus group discussions at the community level, and interviews with key government stakeholders

This report is structured in 6 chapters:

**Chapter 1** provides an overview of the project background and the original project design, including the major players and their roles, the selection of communities to participate in the pilot, and key aspects of the project design such as the government structure to support the pilot, the community-based ECD model, and the results-based disbursement framework.

**Chapter 2** reviews key deviations from the original project design that occurred during implementation and how the original design, timeline, and number of intended beneficiaries of the project shifted throughout implementation.

**Chapter 3** captures key indicators of the project implementation and provides an overview of the project across the five provinces including construction and operationalization of *escolinhas*, attendance and dropout rates, facilitators recruitment and dropout, and parental education sessions.

**Chapter 4** analyzes the quality of service delivery at the *escolinhas* using the quality module from the Measuring Early Learning Quality and Outcomes (MELQO).

**Chapter 5** includes key take-aways, lessons learned and policy recommendations to be used for future program design and implementation.

**Chapter 6** provides concluding thoughts as the Government of Mozambique moves forward with its ECD agenda.



# CHAPTER 1:

# PROJECT BACKGROUND AND ORIGINAL PROJECT DESIGN

### I. Background and Rational for original design

In 2012, in Mozambique, there were 4.5 million children under the age of 5, but only four percent of them were enrolled in Early Childhood Development (ECD) programs<sup>4</sup>. The vast majority of programs were concentrated in urban areas via private ventures, making access to pre-school education concentrated among wealthier children. Very few programs existed in rural areas, where poverty is more acute. Lack of school readiness<sup>5</sup> upon primary school entry (at age 6) was a major concern in Mozambique, particularly among the poorest children<sup>6</sup>.



As strong evidence worldwide has shown,

cognitive and overall delays in early childhood lead to costly inefficiencies in the education sector and are difficult to reverse later in life. Skills developed in early childhood form the basis for future learning and labor market success, and failure to develop these foundational skills during the window of opportunity of early childhood can lead to long-term, often irreversible effects. Data from multiple countries show that poor children who do not have access to quality ECD interventions are more likely to experience poor school performance, including high rates of repetition and drop out, as well as high morbidity rates. They are also more likely to have low productivity and income as adults, to provide poor care for their children, and to contribute to the intergenerational transmission of poverty<sup>7</sup>.

#### Impact Evaluation Results from Save The Children

Between 2008 and 2010, Save the Children implemented a community-based ECD preschool program in Gaza Province in Mozambique. Activities were implemented in a context of high poverty, low education and poor nutrition status, which resulted in serious signs of developmental delays, including in the physical, linguistic and cognitive areas. In particular, most children were not prepared to learn in primary school and were considered at high risk of repeating grades or dropping out. A study prior to implementation of the program found extensive cognitive and linguistic delays of the 3 to 5-year-old children in the more disadvantaged and rural areas relative to their more advantaged peers, with serious implication in terms of school readiness and success<sup>8</sup>.

<sup>&</sup>lt;sup>4</sup> World Bank. 2012. Mozambique - Additional Financing for the Education Sector Support Project. Washington, DC: World Bank.

https://hubs.worldbank.org/docs/ImageBank/Pages/DocProfile.aspx?nodeid=16224215

<sup>&</sup>lt;sup>5</sup> School readiness is defined as the degree to which a child is prepared to learn and succeed in school. This includes not only cognitive skills, but also physical, mental, and emotional health, as well as the ability to relate to others.

<sup>&</sup>lt;sup>6</sup> World Bank. 2012.

<sup>&</sup>lt;sup>7</sup> Naudeau, Sophie, Naoko Kataoka, Alexandria Valerio, Michelle J Neuman, and Leslie Kennedy Elder. 2011. *Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation*. Washington, DC: World Bank.

<sup>&</sup>lt;sup>8</sup> Naudeau, et al. 2011.

In 2010, after two years of the ECD intervention, the World Bank led a rigorous impact evaluation of the Save the Children program and found significant positive effects not only for the child, but among family members as well (See Figure 1). In particular, children who participated in the community-based ECD intervention between age 3 and 5 were 24 percent more likely to enroll in primary school and to do so at the right age of six. These children were also better prepared to learn, as they performed significantly better on measures of cognitive, fine motor, and socio-emotional development than children in the Page | 19 control group. Parents of participating children also benefited: they showed better parenting behaviors, including spending more time playing with their children and believing less in physical punishment. Finally, important positive spill-over effects were observed among other family members. Older siblings were more likely to be enrolled in school, and caregivers were 26 percent more likely to have worked in the 30 days prior to the interview, with effects being largest for mothers, most likely because both siblings and caregivers no longer need to spend so much time taking care of young children at home.

Figure 1: Impacts of the 2008-2010 Save the Children Gaza ECD Program

#### Effects of ECD program on the child

- 24% more likely to be in primary school
- 11% more likely to be in the right grade for his/her age
- Significant positive outcomes across a range of child development domains, especially cognitive, socio-emotional, and fine motor (see graph below.)

#### Effects of ECD program on family members

- Caregivers 26% more likely to work
- . Older siblings 6% more likely to be enrolled in school
- Significant positive changes in parental self-reported behavior (early stimulation and type of discipline used)



#### Political Will from the Ministry of Education

Following the results of the above-mentioned impact evaluation, and in light of evidence from around the world demonstrating the significant benefits that ECD interventions can yield for young children, in 2011, the Ministry of Education and Human Development (MINEDH) began demonstrating strong leadership and interest in the area of ECD. In March 2011, the MINEDH established a Preschool Secretariat in the Directorate for Primary Education and also appointed an ECD commission tasked with the responsibility of drafting a multisectoral ECD strategy for Mozambique. This commission included representatives from the Ministries of Women and Social Affairs (MMAS), Health, Justice, Interior, Agriculture, and Public Works, as well as representatives from universities and



civil society organizations (CSOs) engaged in ECD activities. The National ECD Strategy (2012-2020) was approved by the Council of Ministers in 2012. In Portuguese, the Government ECD Strategy and program is referred to as DICIPE (*Desenvolvimento Integral da Criança em Idade Pré-escolar*- Holistic Development of Children of Preschool Age).

The Government's ECD Strategy explicitly acknowledges the importance of investing in the development of Mozambican children ages six and younger for two specific purposes: i) to ensure a healthy, fruitful and happy childhood that can provide the foundations for a prosperous future for all Mozambican children; and ii) to benefit the country as a whole in terms of individual and collective health, greater social cohesion, better performance in primary education, improved quality of life of future adults, and a greater and better participation in the processes of national development. The ECD Strategy is conceived as a multi-sector program of strategic actions and care targeted to children from the prenatal period to six years of age to ensure their full and holistic development.

#### Strong NGO Presence

While MINEDH had assigned a high priority to ECD, its implementation capacity was already being tested by the simultaneous rapid expansion in access to primary education. The MINEDH had virtually no presence or experience in the area of ECD during the previous decades, which posed additional challenges to a potential expansion of publicly provided preschool education programs. There was, however, substantial ECD capacity within Civil Society Organizations (CSOs), which had successfully demonstrated the effectiveness of the community-based ECD model in multiple interventions throughout the country. Both international and local CSOs had successfully supported the implementation of community-based ECD programs and effectively adapted best international ECD practices to the specific context of rural communities in Mozambique.

While the Government was interested in financing new ECD activities, substantial additional resources (both financial and technical) were required. As such, in 2012 the Ministry of Education and Human Development and the Ministry of Planning and Development formally requested the World Bank for technical and financial assistance for supporting the pilot of a national ECD program.

#### II. Overview of Original Project Design

The World Bank responded to the Government's request by introducing a new ECD component<sup>9</sup> to the Page | 21 Education Sector Support Project (ESSP). The ECD component was designed to support the Government's ECD Strategy by providing technical assistance and financial support to the implementation of ECD activities under the responsibility of the MINEDH. The ECD component focused on enhancing the capacity of communities and families to foster the development of children six years old or younger through the provision of community-based ECD programs and by enhancing knowledge on child growth and development, parenting, nutrition and health care among parents and community leaders. The component would support the first large-scale ECD program in Mozambigue.

The specific objectives of the ECD component under the project were: i) to expand access to quality Early Childhood Development (ECD) programs among children under six years of age living in rural communities in selected provinces and districts; and ii) to establish the foundations for a community-based ECD service delivery system that could be replicated nationwide.

The ECD component was to be supported through a three-pronged strategy. First, it would support the provision of ECD services through community-based programs implemented by a third-party provider (TPP) in selected provinces and districts of Mozambique (Component 1). Second, it would support the development of technical and institutional capacity at the national, provincial, and district levels as a first step toward establishing the foundations of a sustainable, nationwide community-based ECD program (Component 2). Finally, it would support knowledge building through an impact evaluation and other related studies (Component 3). The three components are explained in further detail below.

In addition, the ECD component under the ESSP was designed in parallel with a nutrition component under the World Bank-funded Health Service Development Project implemented by the Ministry of Health. The nutrition interventions target pregnant women and children aged 0-2 and include: weight gain monitoring and counseling; supplements of iron-folic acid, vitamin A and other micronutrients; promotion of breastfeeding; deworming; and community-based management of acute malnutrition. Studies show that programs that enhance both early childhood stimulation and nutrition are more likely to generate longlasting impacts than programs that just focus on one (i.e. either early stimulation or nutrition.) The components (ECD and early nutrition) under the two projects presented a unique opportunity to ensure that at least some geographical areas of the pilot received both types of interventions, thus maximizing the likelihood that beneficiary children would be both well-nourished and receive adequate cognitive and overall stimulation in the early years of life, thus optimizing their potential to succeed in school and to lead healthy and productive lives.

<sup>&</sup>lt;sup>9</sup> In 2012 the ECD Component was included as an additional financing of USD \$40 million to the Education Sector Support Project (ESSP). Another USD \$7.5 million were later added to the ECD Component under a third round of additional financing to the ESSP.

#### Selection of Provinces:

The implementation of the ECD project was piloted in 10 selected districts in five provinces. These five provinces—Gaza, Cabo Delgado, Tete, Maputo Province, and Nampula —were selected based on the following eligibility criteria:

- i) vulnerability and potential impact;
  - Prevalence of malnutrition
  - Lack of access to safe water sources and sanitation
  - Number of children age five and younger
  - Percentage of children age 6 that is not enrolled in 1st grade
- ii) local capacity;
  - Institutional capacity at the provincial level
  - Vibrancy of civil society in general and nongovernment organizations (NGOs) in particular
- iii) representativeness
  - Geographical location
  - Level of maturity of existing community-based ECD programs



*Figure 2: Map of ECD interventions in Mozambique* 

The five selected provinces were the ones that best met all the selection criteria: they exhibited great vulnerability and had a high potential impact; there was substantial government and/or civil society capacity; and they were located in the three distinctive geographical areas of the country— i.e., North, Center, and South—and reflected various levels of maturity of community-based ECD programs.

In two of the five provinces (Nampula and Cabo Delgado,) the ECD program is supplemented by the abovementioned nutrition component under the World Bank-funded Health Service Development Project implemented by the Ministry of Health<sup>10</sup> (Figure 2).

#### Selection of districts:

Two districts per province were selected for implementation, for a total of 10 districts. These districts were also selected based on objective eligibility criteria, including:

- i. Vulnerability and potential impact, as measured through
  - a. Percentage of children age 6 that is not enrolled in 1st grade;
  - b. Mortality of under-5 children;
  - c. Number of children age five and younger; and
  - d. Number of communities in the district

<sup>&</sup>lt;sup>10</sup> The ongoing impact evaluation (results expected in 2020) will assess any outcomes related to synergies between the ECD and nutrition components.

ii. Geographical/socio-cultural representativeness with, to the extent possible (i.e., in coastal provinces), the selection of one district from the coast and one district from the interior.

Based on these criteria, the 10 selected districts were as follows:

- Cabo Delgado: Macomia and Chiúre
- Nampula: Eráti and Memba
- Tete: Angónia and Changara
- Gaza: Xai-Xai and Mandlakazi
- Maputo: Manhiça and Boane

#### Selection of Communities:

Originally, 120 communities in each participating province were expected to benefit from this project, that is 600 communities overall. (In reality, only 70 communities per province, 350 in total, benefited. See Chapter 2 for more information on changes made to the original project design during implementation.) Preliminary criteria for eligibility of communities in each district included:

- (i) communities located in rural settings;
- (ii) existing primary school within the community;
- (iii) lack of existing ECD services;
- (iv) vulnerability and potential impact (including a minimum number of children ages 3-5); and
- (v) Finally, the specific list of communities was informed by the design of the rigorous impact evaluation implemented as part of Component 3- see below



#### IV. Component 1: Provision of Community-Based Early Childhood Development Services

This component supported the provision of ECD services delivered by the third-party providers through a community-based delivery model. This service delivery strategy presented several distinctive features, including:

- i) **The replication of the community-based ECD model** This component financed the Page | 24 implementation of the demand-driven, community-based ECD model that had been successfully tested in Mozambican rural communities by CSOs (Box 1).
- ii) **ECD-service delivery by third-party provider** Third-party providers (TPPs) selected by MINEDH through the Bank's competitive procurement procedures to implement the ECD programs in each of the participating provinces. See Key Players and Roles below.
- iii) Results-based disbursement framework The ECD project adopted a Results-based Disbursement Framework (RBDF). Payments were made to the TPPs based on the delivery of previously specified outputs/outcomes (e.g., number of participating communities, number of functioning ECD centers), which, in turn, were subject to independent verification. For more details on the RBDF, see Section 0.
- iv) Independent auditing mechanism: To avoid overtaxing the institutional capacity of the MINEDH, several independent verification agents (IVA) were selected on a competitive basis and were responsible for the external verification of the ECD outputs that are reportedly being delivered by the TPPs using the Result-Based Disbursement Framework. See Key Players and Roles below.

It is important to note that while the ECD component was inspired, in part, by the results from the Save the Children impact evaluation, it was not meant to be a scale-up of the *exact* interventions implemented by Save the Children in Gaza Province. The project was designed so that each TPP had a certain amount of flexibility to implement the program, building on their own experiences and strengths, as long as they adhered to some of the key aspects of the community-based model (see Box 1). Thus, the central pillars of the Gaza pilot were maintained (community-based model), but other features of the Gaza interventions were adjusted, as this document indicates.

#### V. Key Players and Roles

#### Ministry of Education and Human Development (MINEDH)

Although the MINEDH outsourced the implementation of the provision of ECD programs in the selected provinces to the TPPs, the MINEDH retained the overall responsibility for the oversight of the program. In MINEDH, the department in charge of pre-school education is under the management of the National Directorate for Primary Education (DNEP.) DNEP is responsible for the oversight and coordination for all activities related to the increase in access, equity and quality of primary education, which includes the area of ECD.

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DNEP at the central level had overall responsibility for:

- i. Establishing and appropriately staffing units at the central, provincial and district levels to oversee preschool activities
- Designing the Basic Service Package (BSP, a list of "non-negotiable" activities and services to be delivered by each TPP- Annex II) and the targets to be met by the TPPs as defined in the RBDF (Annex IV);
- iii. Ensuring procurement at central level for the contracting of the TPPs, IVAs, and for required goods, equipment, and technical assistance needed, in close collaboration with the Directorate of Administration and Finance (DAF);
- iv. Defining M&E standards and providing standard documentation as well as basic M&E/supervision procedures to local levels
- v. Supervising implementation of project at provincial and district levels;
- vi. Defining ECD service standards, such as curriculum, certification requirements for the ECD teachers, ECD child performance measures, etc., throughout duration of project
- vii. Organizing training and capacity-building events for provincial and district officials

Provincial and District Levels were responsible for:

- i. Defining the localization of *escolinha* (preschool) centers in consultation with selected communities;
- ii. Leading communication campaigns;
- iii. Mobilizing communities and parents to enroll children in the escolinhas;
- iv. Identifying and recruiting *facilitadores* (preschool teachers) in collaboration with community leaders
- v. Supervising the overall implementation of the program with support from the central level;
- vi. Coordinating and working alongside TPPs in daily implementation of program

#### Third Party Providers (TPPs)

MINEDH contracted out TPPs who were competitively selected to implement and provide ECD services throughout the five provinces, under its supervision and management. The strategic decision to include TPPs had two main advantages. First, it served to prevent the overburdening of the MINEDH's own implementation capacity, which was already being tested by the rapid expansion in access to primary education. Second, while the MINEDH had virtually no presence or experience in the area of ECD, there

was substantial ECD capacity within CSOs. The inclusion of TPPs allowed MINEDH to tap into these additional resources and effectively expand service delivery capacity in the education sector beyond that of the public sector.

The TPP was responsible for the delivery of services at the community level as defined in the ECD Basic Service Package (BSP) (Annex II). As stipulated in the BSP, ECD services provided by the TPPs included the mobilization of communities, construction of preschools (*escolinhas*) premises and playground, training of local instructors (*facilitadores*), acquisition of the pedagogical material, organization and implementation of parenting activities, implementation of their curriculum of choice,<sup>11</sup> and provision of ECD services to children in the *escolinha*. The TPP was also responsible for the coordination of ECD activities at the community level (i.e., with community leaders, the ECD *Comitê Coordenação da Comunidade* (CCC), the *facilitadores*, primary school principals, and first grade teachers) and with district and provincial officials.

The following TPPs were selected, based on a selected number of criteria, including past experience in similar provision of services, experience in engaging with communities in Mozambique and in the particular province and acceptable fiduciary capacity, among others:

- ADPP (selected to operate in Maputo Province);
- Aga Khan Foundation (selected to operate in Cabo Delgado Province); and
- Save the Children (selected to operate in Gaza, Tete and Nampula Provinces)

For more information on the procurement and selection process of the TPPs, see Chapter 2.



#### Figure 3: Project Implementation Structure

<sup>&</sup>lt;sup>11</sup> No national standards or curriculum had yet to be developed

#### Box 1: The Community-Based ECD Model

The community-based ECD model is characterized by: i) the efficient mobilization of local resources: ii) protocols for training and ECD curricula that effectively adapt international ECD best practices to low-income rural communities in developing countries; and iii) strong quality control mechanisms. These characteristics, in turn, generate great potential for replication and sustainability. Its main characteristics can be summarized as follows:

**Strong community involvement** – ECD services are demand driven, with communities playing a vital role in developing and sustaining their ECD centers— "escolinhas" in Mozambique. Communities that successfully respond to community mobilization efforts are provided technical support to set up and operate ECD programs. Communities contribute through the construction of classrooms and provision of services, such as cleaning and minor repairs, or goods, such as firing wood or food. *The Comité Coordenação da Comunidade (CCC)* – the Community Coordination Committee - formally links the ECD center with the community, playing both an advocacy and coordinating role.

**Local instructors (***"facilitadores"***)** – They are members of the community and are selected by the community leaders or the community itself. A minimum level of education is required (i.e., 7th grade) and teaching skills are complemented with upfront and ongoing training (i.e., two weeks of training per year and at least one day of training per month). Stipends are just nominal and paid through the state budget. There are usually two *facilitadores* in each classroom, with up to 35 children in a classroom.

**Low-cost technological solutions** - The physical infrastructure is basic, reflecting local building practices. Classrooms consist of an open structure with cement floor, straw walls and an aluminum roof, as well as an outdoor latrine and a safe water source (such as a plastic container with clean water). Educational activities utilize readily available, often recycled materials, such as bottle caps, rice sacks, sticks, and home-made educational materials.

**Well defined protocols** – All the activities involved in setting up and operating an *escolinha* are based on well-defined protocols that build upon international best practices and are effectively adapted to local contexts. These protocols guide activities led by the TPPs related to community mobilization, ECD curricula, instruction methods, class activities, training of *facilitadores* and monitoring. This approach has several advantages beyond the obvious economies of scale, including the possibility to systematize training and monitoring activities.

**Ongoing monitoring and training** – Monitors from the TPPs visit each "*escolinha*" at least once a month and observe the class during the entire three-hour class period. The monitor records performance along various dimensions, including attendance, cleanness of the classroom, sequencing of the classroom activities, and interactions between the *facilitadores* and the children. At the end of the class, the monitors provide feedback to the teachers. The monitor later input the data collected into a database and analyzes trends in overall performance. *Facilitadores* also receive a day of group training each month. Monitors are well familiarized with instructional protocols, as they actively participate in the training of *facilitadores*.

**Regular communications with parents and parenting classes** – Each month, the program monitor and the *facilitadores* hold a parent meeting. These meetings are used to provide individualized feedback to parents on the development of their children. They are also used to teach parents how to enhance their children's growth and development through improved nutrition, health care practices, enhanced interactions at home, and parenting in general.

**Linkage with primary schools** – The *escolinhas* are located in close proximity of a primary school to create positive synergies between the two. The primary school director supports the ECD center by providing and storing education materials (such as storybooks, papers, chalkboards, etc.) as well as providing informal oversight of ECD teachers. Often a representative of the primary school is also a member of the CCC.

**Partnership with district and provincial authorities** – District and provincial authorities are invited to participate in all community meetings, from the first time the TPPs make contact with the community. The inclusion of government authorities is an important aspect of the overall process and serves various purposes, such as enhancing the community's trust on the TPPs and its receptiveness toward the proposed ECD program, as well as decreasing potential resistance on the part of local official who might otherwise perceive the program as an intrusion into their communities. Program monitors also act as a liaison between the communities and the various government agencies, reporting for example, cases of domestic violence and other situations that merit government intervention.

#### Independent Verification Agents (IVAs)

Payments to the TPPs were made using the Results Based Disbursement Framework (RBDF) as explained in further detail below in Section VIII. The IVAs were contracted to carry out field visits to verify that the milestones within the RBDF were indeed achieved. IVAs then submitted detailed reports that were used to corroborate reports and disbursement requests made by the TPPs.

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The specific objectives of the IVAs were to:

- 1. Verify that outputs claimed under each disbursement were considered effectively achieved according to the definitions under the BSP and the RBDF; and
- 2. Based on the findings of the ECD external technical audit, make recommendations on the payment amount to be paid by MINEDH to each of the TPPs.

The following IVAs were competitively selected for the following provinces:

- Maputo Province: Ernst & Young (EY)
- Cabo Delgado: COWI
- Gaza: COWI
- Tete: COWI
- Nampula: Ernst & Young (EY)

For more information on the procurement and selection process of the IVAs, see Chapter 2.

#### World Bank (WB)

Funding for the DICIPE project was provided by the World Bank through the Education Sector Support Program (ESSP). The World Bank also provided technical support to the central level throughout all stages of project design and implementation. A World Bank consultant was hired throughout project duration to provide day-to-day support to the central level and ensure World Bank guidelines and policies were being followed. Formal monitoring, field visits, and recommendations for the ECD program took place through the World Bank ESSP implementation support missions, which took place every six months.

#### VI. Component 2: Technical and Institutional Capacity Building

Component 2 provided financing and technical assistance to strengthen: i) the MINEDH's policy and stewardship functions in the area of ECD; ii) the MINEDH's capacity to support ECD service delivery and to eventually assume responsibility from the TPPs for implementation of ECD services; and iii) oversight Page | 29 capacity using the results-based disbursement framework and overall M&E activities.

Support was provided for the MINEDH at all levels of Government—i.e., central, provincial, and district levels-to ensure that the entire government structure had the needed skills, management tools and equipment needed to perform their specific functions within the proposed ECD service delivery strategy.

This component supported three specific areas:

- 1. Developing the human personnel structure to support the project at all three levels of government;
- 2. Training the personnel; and
- 3. Providing resources for the personnel to carry out their needed functions

#### Structure of ECD Departments at all 3 levels

To ensure effective implementation of the Early Childhood Development pilot project, the Government envisioned the following structure (

Figure 4, Figure 5, and Figure 6) needed at the three levels of governance (central, provincial and district.) Some positions were funded by the project and others were assumed by existing roles within the MINEDH. Multisectoral teams/committees at all three levels were envisioned to support overall implementation.



#### Figure 4: Central level Organigram

Employees in the Pre-School Department at the central level: 6

#### Figure 5: Provincial Level Organigram



Pre-School Employees/DICIPE at Provincial Level: 15 (3 per province)





Pre-School Employees/DICIPE at District Level: 40 (8 per province)

#### **Institutional Capacity Building:**

This component supported the development and delivery of a capacity-building plan. Trainings coorganized by the World Bank and the central level preschool department were given to all relevant stakeholders involved in the project: MINEDH staff from the district, provincial, and central levels, the TPPs, IVAs, and other ministries and departments involved in the pilot. Additional implementation support and capacity building was provided at the district and community level directly by the TPPs, as part of their responsibilities under the contract.

The original Institutional Training Plan called for the delivery of the following trainings throughout the course of the project pilot:

• Introduction to ECD/DICIPE (Neuroscience, Introduction of Project, Parental Education, etc.)

- Startup of DICIPE Program (Project Design, Objectives and Responsibilities)
- Communication, Mobilization, and Sensitization Strategies
- Program Management and Financial Administration
- Monitoring and Evaluation
- Knowledge Sharing
- Quality Standards

#### Resources

Finally, in order for the government to successfully carry out the needed functions at each level, in addition to the training activities listed above, the project supported the following resources in terms of number of staff and tools and equipment as displayed in the table below:

District Level (per participating district)			
Staff:	Tools and Equipment		
DICIPE District Focal Point	1 Computer for Focal Point		
Escolinha Coordinator (1 per 5-7 escolinhas)	1 Cell Phone per person		
	1 Motorcycle per person		
	1 Fully equipped office		
	1 Pick-up truck		
Provincial Level (per participating province)			
Staff:	Tools and Equipment		
DICIPE Coordinator at Provincial Level	3 Computers		
Financial Manager (with Accounting Experience)	4x4 Car		
Implementation Manager (Focal Point)	Teaching and learning Materials		
Central Level			
<u>Staff:</u>	Tools and Equipment		
DICIPE Coordinator at National Level	4 Desk Top Computers		
Program Implementation Manager	2 Lap Top Computers		
2 DICIPE Technicians	1 Copier		
Procurement Assistant	1 Projector		
Administrative Assistant	1 Scanner		
M&E Specialist	Data Treatment and Analysis Software		
M&E Technical Assistant	Furnished Office		
	3 Cars		
	Word Processing Program		

#### Table 2: Resources needed to implement DICIPE project

#### VII. Component 3: Knowledge Building

This component supported overall knowledge building of ECD in Mozambique through:

- A rigorous impact evaluation of ECD activities supported through the pilot project. This impact  $Page \mid 32$ i. evaluation would allow the Government and the Bank team to assess whether the positive impacts observed in the context of the small-scale implementation of the Save the Children model in the Gaza province continued to exist once similar activities were scaled up under the leadership of the Government. This impact evaluation would also analyze the value-added and comparative cost effectiveness of doing both integrated ECD and early nutrition interventions implemented together versus only one or the other.
- ii. A study on the various models of ECD activities currently implemented in urban settings, including in Maputo city. This study was in response to a demand from the Government to gather sufficient data to elicit an informed debate as to whether the Government should prioritize these areas in a potential further scaling up exercise beyond the close of the project.
- iii. This Process Evaluation was later added to this subcomponent to accompany the impact evaluation and capture key aspects of implementation and service delivery and deviations from the original project design.

#### VIII. Results Based Disbursement Framework

The ECD Program was designed using a Results-based Disbursement Framework (RBDF), meaning that it used explicit, results-based payments for ECD provision; payments to the TPPs were tied to the delivery of previously specified outputs/outcomes (e.g., number of participating communities, number of functioning ECD centers, etc.), which, in turn, were subject to independent verification by the IVAs (see Figure 7).





The specific outputs/outcomes linked to the payments to the TPPs were aimed at balancing several critical aspects: i) to accurately reflect the policy objectives of the program (e.g., coverage of services; quality; etc.) while, at the same time, keeping implementation relatively simple; and ii) to provide incentives for the third-party providers to perform throughout the life of the project by tying payments to the stream of ECD services being provided.

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As per the original design and timeline, payments to the TPPs were originally to be done in five installments: the first was an upfront payment at the time of the signing of the contract and the four remaining payments were directly linked to the achievement of pre-agreed outputs. These outputs included: i) the number of "participating" communities (i.e. communities with fully constructed *escolinhas*); ii) the number of "functioning" ECD centers (i.e. *escolinhas* that had been operational for 4 months); and iii) the quality of the ECD program<sup>12</sup>. To receive the full payment, TPPs were expected to reach 100 percent of the targets. Those TPPs that did not meet the 100 percent of the targets but were above a pre-defined minimum threshold could receive partial payment proportional to the actual delivery of outputs.

TPPs were responsible for submitting Service and Disbursement Reports to MINEDH reporting the outputs achieved as per the RBDF and the corresponding payment request. The independent verification agents (IVAs) were contracted for the external verification of the ECD outputs that were reportedly being delivered by the TPPs. The IVA field visits and reports were aligned with the submission of the TPP Disbursement Reports, so that when TPPs felt they had achieved the requirements for disbursement, IVAs were able to confirm. IVA reports were the key source of information and guides to MINEDH on the disbursement of the funds to the TPPs.

See Annex IV for the RBDF.

#### IX. Payment to Facilitators

During the project design, the Government of Mozambique agreed to include the payment of stipends for the *facilitadores* within the Ministry of Education's annual budget. This was aimed at ensuring the institutionalization of this expense and the sustainability of the program beyond the end of the WB-funded project. The value of the subsidy for the *facilitadores* was set at 650 meticais per month, approximately USD \$11/month. This amount was decided by MINEDH based on the already established value of subsidies used to pay Adult Education facilitators. However, throughout the course of the project, the subsidy for the Adult Education facilitators increased, while the subsidy for the *escolinha facilitadores* stayed the same. More information on this amount and the challenges faced with the payment to facilitators can be found under Lessons Learned and Key Recommendations.

<sup>&</sup>lt;sup>12</sup> More detailed operational definitions for each of these terms "Participating", "functioning", and "quality" were included in the Operational Manual and the contracts with the TPPs.

CHAPTER 2: KEY DEVIATIONS FROM ORIGINAL PROJECT DESIGN

#### **Key Deviations from Original Project Design**

There were considerable deviations from the original project design throughout the duration of the project, which in turn had impacts on the envisioned project implementation and timeline. This chapter will go into more depth on the causes and impacts from these deviations. Lessons learned from such deviations are explored in Chapter 5.

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#### I. Project Timeline and Expected Beneficiaries (original versus actual)

The original design, timeline, and intended beneficiaries of the project shifted throughout implementation as summarized in Table 3.

The following highlights the main changes:

- The original project called for a total of 3 groups of communities to receive intervention for a total of 120 communities per province- 600 in total- starting in November 2012 and ending in July 2015. See Figure 8
  - A total of 8,400<sup>13</sup> children ages 3-5 (those who attended the *escolinhas*) were expected to benefit from the program over the course of 2 ½ years.
- The actual project only was implemented in a total of 2 groups of communities for a total of 70 communities per province- 350 in total- starting in March 2014 and ending in December 2019. See Figure 9
  - A total of 50,742<sup>14</sup> children ages 3-5 benefited from the program at the *escolinha* over the course of 5 ½ years.

Original design	Implementation		
Implementation Timeline and Beneficiaries			
3 groups of communities were supposed to receive intervention for a total of 120 communities per province- 600 in total	2 groups of communities received intervention for a total of 70 communities per province - 350 in total		
A total of 8,400 children ages 3-5 (those who attended the <i>escolinhas</i> ) were expected to benefit from the program.	A total of 50,742 children ages 3-5 benefited from the program at the <i>escolinha</i>		

 Table 3: Implementation Timeline and Beneficiaries (original versus actual)

<sup>&</sup>lt;sup>13</sup> This is the correct number of beneficiaries included in the 2012 Project Paper for the ECD Component. The team recognizes that this figure is quite low but given the time that has passed since the writing of the Project Paper, it is not clear how this expected number beneficiaries was originally calculated indicating a significant underestimation of the number of beneficiaries at that early stage of the project design.

<sup>&</sup>lt;sup>14</sup> This is the number of individuals (children) that benefited from at least one year of the DICIPE Project by attending the escolinha. If a child attended the escolinha for 2 or more years s/he is counted as one beneficiary. The calculation takes into account the number of children concluding (graduating) and the total enrolled.

The pilot was supposed to be fully implemented over the course of 2 ½ years (November 2012-July 2015)	The pilot was implemented over the course of 5 ½ years (March 2014- December 2019)		
November 2012: The signing of TPP contracts	March 2014: The signing of TPP contracts	Page   36	
May 2013: The start of activities in the first group of selected communities (30 per province)	April 2015: The start of activities in most of the first group of selected communities (30 per province)		
October 2013: The start of activities in the second group of selected communities (40 per province)	August 2016: The start of activities in most of the second group of selected communities (40 per province)		
October 2014: The start of activities in the third group of selected communities (50 per province)	No third group of communities		
July 2015: End of pilot project	December 2019: End of pilot project		

This chapter aims to explore and explain the key factors that contributed to these delays and challenges/changes in program design and implementation, including:

- i. Lack of required staff and capacities at all three levels of government;
- ii. Complex procurement procedures for the high value contracts for the TPPs and IVAs;
- iii. Delays in negotiations on the amendments to the contracts with the TPPs;
- iv. Lack of consensus between the MINEDH and the TPPs on the design and construction of the *escolinhas;* and
- v. Significant revisions made to the RBDF
### Figure 8: Original Project Timeline (2012-2015)



Figure 9: Actual Project Timeline (2014-2019)



### 11. Organigram to support Project (original versus actual)

Component 2 of the project (Technical and Institutional Capacity Building) was designed to support effective implementation of the Early Childhood Development pilot, including building the structure needed within the government to support ECD service delivery and eventually assume responsibility from Page 38 the TPPs and IVAs for implementation and supervision of ECD services.

As described in Chapter 1, the project envisioned a team structure at all 3 levels (central, provincial, district) to be able to effectively manage the project. ECD teams at the three levels of government were meant to coordinate their actions to ensure the effective, efficient, timely, and transparent implementation of the ECD Program in all participating districts and provinces.

### **Central Level:**

Within MINEDH, the implementation of the ECD Program is carried out by the Department of Preschool Education (DICIPE Department) within the National Directorate for Primary Education (DNEP).

An ECD National Coordinator was designated to coordinate the Program's overall implementation at the national level. This role was designed and budgeted directly by the MINEDH (i.e. not funded by the project). While the original project design called for this person to work full-time on the ECD project, in reality, the ECD National Coordinator often was responsible for other primary education-related activities. This had significant implications on overall team management, leadership, and supervision.

The project provided funds for and envisioned the following five positions at the central level:

- a) Monitoring and Evaluation Specialist;
- b) Training Specialist;
- c) Norms and Standards specialist;
- d) Implementation Specialist; and
- e) Administrative and Financial Assistant

MINEDHD was responsible for the overall hiring and contracting procedures of the team members. However, for the majority of the project, the structure at the central level envisioned to support the project was never fully implemented as shown Figure 10. Some of the key positions were never filled (i.e. the Norms and Standards Specialist,) and others were only filled temporarily. For example, the Training Specialist and the Administrative and Financial Assistant were originally recruited in 2013 for a 1-year contract. In 2014, when their 1-year contract finished, these individuals were not rehired, and the positions were left vacant for 3 years until a new recruitment process was launched in 2017. The only role (in addition to the ECD National Coordinator) that fully functioned throughout the duration of the project was the Monitoring and Evaluation Specialist. These delays and gaps in hiring personnel were due to multiple reasons, including lack of clear leadership in hiring of staff for the Pre-school Department and heavy internal administrative and bureaucratic processes within MINEDH related to hiring of new staff.

It was only in 2017 (4 years after the start of the project) that the Preschool Unit hired the Administrative Assistant and Implementation Support Officer and started operating with the five of the six staff members as originally designed.



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Figure 10: Original Versus Actual Organigram: Central Level (for the majority of the duration of the project)

Employees in the Pre-School Department at the central level: 62

### Provincial Level:

Each of the participating provinces also appointed an ECD Provincial Focal Point to coordinate the Program's implementation at the provincial level. While the original project design envisioned the hiring of Program Implementation Managers at the provincial level, these positions were never filled as described in Figure 11.

Figure 11: Original Versus Actual Organigram: Provincial Level



Pre-School Employees/DICIPE at Provincial Level: 15-5 (1 per province)

### **District Level:**

Each of the participating districts designated an ECD District Focal Point to coordinate the Program's implementation at the district level and hired *escolinha* coordinators who were responsible for the day-to-day management and support of approximately 3 *escolinhas*. The District Focal Points and the *Escolinhas* coordinators worked closely with the TPPs. As seen in Figure 12, positions at the District level Page | 40 were filled and functioned as envisioned in the original project design.





In total, the original project design called for a total of 61 employees at all three levels to support implementation of the project. However, throughout the majority of the project implementation total MINEDH staff accounted for 47 employees.

# III. Delays in Selection and Hiring of TPPs

### **Contractual History**

TPP contracts had to be revised and extended multiple times throughout project duration. What follows is a summary of the various contracts/amendments signed with the TPPs and brief explanation of the contractual-related delays. More details regarding these delays and each individual amendment can be found under Annex III.

### Original Contract (mid-2014 through July 2015):

As per original project design, the contracts with the TPPs were anticipated to be signed by November 2012. However, following a lengthy competitive bidding process, these contracts were only signed in March 2014.

The following are the three key challenges faced with the original contracts:

- 1. <u>Limited Options of Qualified Firms</u>: The overall procurement process was delayed from the beginning due to extending the opening period in order to increase the potential for eligible and qualified firms to submit proposals.
- 2. Delays in Procurement and Signing of Contract: The overall procurement, bidding and negotiation processes too much longer than envisioned due the high value and newness of these types of contracts for MINEDH. As a result, contracts with the TPPs were not signed until March 2014 (as opposed to November 2012). The direct implication was that the first community-based preschools were not operational in August 2013 as per the project design and the Terms of Reference for the TPPs.
- Forced End Date of Contract: The expiration date of the original TPP contracts (July 31<sup>st</sup>, 2015) was aligned with the closing date of the WB Education Sector Support Project (ESSP) that financed the ECD component. As such, even with the delays in the procurement and singing of the contracts with the TPP, it was impossible to extend the TPP contracts beyond July 31, 2015.

As a result of these delays, all parties (TPPs, MINEDH, and the WB) agreed that it would not be possible to implement the program across all three phases of communities as originally envisioned by July 31, 2015. TPP contracts were then revised to only include two phases of communities.

However, even with the removal of the 3<sup>rd</sup> phase of communities, due to other implementation-related delays (largely related to the construction of *escolinhas*- see Section V,) activities with the students in the *escolinhas* only began in April 2015 (almost 1.5 years later than expected). At that point, it was not feasible to implement the program even across 2 phases by July 31, 2015 (essentially a 3-month time period.)

### Amendments #1, #2, #3 and #4 (August 2015-July 2019):

TPP contracts were extended four times to: i) adjust for lessons learned along the way; and ii) due to extensive delays in implementation of the program.

Amendment #1 extended TPP contracts until December 31, 2016 and included: a) a revised construction template for the *escolinhas* (see Section V) and b) a revised RBDF (see Section VI.) It is important to note that negotiations for Amendment #1 took over 10 months to reach consensus on the redesign of the infrastructure for the *escolinhas*. During this period, all activities related to Phase II halted while activities for Phase I communities continued.

Amendment #2 extended TPP contracts until December 2017 and included extra funds to: a) cover the extra months that TPPs were running activities in Phase I communities using their own expenses during negotiations for Amendment #1; and b) to account for construction costs associated with the revised and improved design for *escolinhas* as included under Amendment #1.

Amendment #3 extended TPP contracts until July 2018 to give additional time for the TPPs to have all *escolinhas* fully operational.

Amendment #4 was a no-cost extension of the TPP contracts until July 2018 to allow the verification and completion of payments for all milestones under the RBDF as included in the TPP contracts.

*New Contract (2018-2019) for Transfer of Competencies and Handover of Escolinhas to Government:* 

At the end of 2017, Government created a new contract with the TPPs, via Single Source Selection, for the period January 2018- December 2019. This new contract focused on the development of a formal and gradual handover process of *escolinhas* from TPPs to the Government, including capacity building workshops, on-site training, mentorship and a phased-out plan so that the Government could assume full responsibility of the operation of all *escolinhas* by December 2019.

### Page | 42

Whereas in the previous contracts each TPP designed their individual programs, under the new contract, all three TPPs were expected to work together to transfer their knowledge to the Government. TPPs had to design a single training package, including modules and workshops, on-site training and mentorship, incorporating their experiences and best practices, to pass their knowledge of management of the *escolinhas* and implementation of ECD activities to the Government.

# IV. Selection and Hiring of IVAs

### **Contractual History**

### Original Contract (Sept 2014 through July 2015):

In September 2014, following a competitive process, MINEDH signed contracts with the IVAs (Ernst & Young and COWI.) The closing date of the original contracts was July 31<sup>st</sup>, 2015. However, due to above mentioned delays with the TPP contracts and associated delays with implementation of ECD activities, the contracts with the IVAs were extended several times to ensure continued verification throughout the duration of service provision led by the TPPs. Details on these extensions can be found under Annex IV.

### Amendments #1-3 (July 2016- July 2018)

IVA contracts were extended three times largely to accompany the delays associated with implementation so that IVAs could continue to provide verification of the indicators under the RBDF. In addition, amendments to the IVA contracts included the role of training MINEDH in the use of the RBDF and verification protocols to ensure that MINEDH could successfully take over verification of ECD activities by the end of the project.

The concept of using IVAs was new for MINEDH and this type of work was new for the IVAs. Lack of harmonized templates for reporting, the need to revise and simplify the RBDF, low capacity and understanding of ECD from the IVAs, complications and significant with the overall implementation of the project, and the lack of clear M&E guidance from MINEDH led to difficulties related to the IVA work. As such, the technical capacity of the IVAs to carry out the work and the supervision by the Ministry also affected the quality and timing of their work - *"at the beginning, the IVAs were confused. Their understanding about early childhood development was "very classic" and at the same time, the instructions from the Ministry were confusing and unclear; they didn't know how to deal with it (...). It was a learning process for all of us, including the IVA".<sup>15</sup>* 

<sup>&</sup>lt;sup>15</sup> Quote from TPP interview

### *V.* Lack of consensus on the design and construction of the *escolinhas*

TPPs were responsible for all aspects of implementing the ECD program at the community level, including the construction of the *escolinhas*. The design template and guidelines for the construction of the *escolinhas* was originally created with the concept of the "community-based" model using mainly local materials and with contributions from the community through the construction of classrooms and provision of related-services. The original bidding document for the TPPs and the contracts between MINEDH and the TPPs included a set of clear guidelines for what the construction should include, while also leaving room for flexibility to allow each TPP to maximize the use of local materials and to draw on lessons learned from their own experience in building *escolinhas* that promote child-centered and play-based interactions.

However, as construction for *escolinhas* in Phase I progressed, this flexibility led to different interpretations: some of the TPPs built more expensive structures using mostly non-local materials; most of the TPPs stuck to the "community-based model" using thatched roofs and basic walls, in accordance with the initial contract. However, MINEDH expressed dissatisfaction with the quality and durability of the infrastructures. MINEDH began to insist on the sustainability and long-term use of the *escolinhas* and started to make requests to the TPPs for repairs- which had implications on the original cost estimates prepared by each TPP in their financial proposals.

During project supervision and field visits, there were valid concerns over construction quality, the safety of some *escolinhas*, and the significant design differences of the *escolinhas* between the provinces, due to the construction cost estimates prepared by each TPP. In addition, it became clear that access to water was problematic in many *escolinhas* and communities, which could jeopardize the use of safe water and sanitation practices and perhaps deter student participation.

Some TPPs began to implement the requested changes from MINEDH, which led them to build at a higher price than they had envisaged, which contributed to increased construction costs. Other TPPs ceased building further *escolinhas* until an agreement could be reached. It became clear that the lack of established consensus on the exact specifications and characteristics of the physical structures was causing tension and needed to be resolved before moving forward. All TPPs eventually decided not to progress with construction of Phase II communities as they waited for an established consensus with MINEDH (and revised contracts) on the exact design of the *escolinhas*.

Eventually, it was agreed with MINEDH, the TPPs, and the World Bank that a more systematic template for construction design would be used by all TPPs across the 5 provinces starting with Phase II communities. This structure aimed to find the right balance between: (i) staying in line with the original philosophy of having a community-based structure that allows as much ventilation and natural light as possible; (ii) addressing MINEDH's concerns of quality and durability; and (iii) ensuring that the structure is safe and promotes developmentally appropriate interactions with children ages 3 to 5 years (i.e. not designed as a smaller version of a primary school). For Phase I *escolinhas*, a list of corrections and adjustments was given to each TPP to ensure that all Phase I *escolinhas* met the minimum basic safety requirements.

However, this new design template for Phase II communities included the use of conventional material (as opposed to the original contract in which TPPs were free to choose between a wide range of material), the addition of doors and windows, and other improvements that translated into a substantial increase in price for the TPPs. It took more than 12 months of intense negotiations with the TPPs and MINEDH to find a consensus on the revised template, design and cost estimate for the Phase II escolinhas, which resulted in significant delays for the completion of Phase I escolinhas and the start of activities in Phase II Page | 44 communities. The delays of activities in Phase II communities was especially critical as Phase II communities formed the treatment group of the ECD Impact Evaluation and all delays reduced exposure time to the intervention which would diminish the chances of the evaluation to detect potential impact.

Even after consensus was reached on the construction of Phase II escolinhas, construction still progressed slowly, and additional delays accumulated in some Phase II communities such that construction in all Phase II communities was not completed until the end of 2017. Further delays resulted from flooding and other natural disasters, lack of qualified local construction contractors and engineers, delays in delivery of construction materials, hard-to-access communities, etc. Construction was the number one bottle neck of the entire DICIPE project.

The Department of Infrastructure and School Construction (DIEE) within MINEDH was involved in the design of the first construction template as part of the original contract as well as the revised construction template included in Amendment 2. However, the poor articulation and unclear distribution of roles and responsibilities within the Ministry of Education affected the quality of the construction (i.e. construction team were not included in the supervision of construction activities). World Bank missions, safeguards visits, and aide memoires continuously noted collaboration between DIEE and DICIPE as an area for improvement throughout most of the project implementation. There was no formal plan of action for regular visits from DIEE specialists to the escolinhas to supervise construction, monitor maintenance, ensure compliance with design specifications, including minimizing the risks linked to harmful effects of climate, ensuring the safety of users (especially children,) and extending the lifespan of the infrastructure. In addition, no infrastructure maintenance plan was defined. These issues were continuously cited by World Bank safeguards and education teams as some of the key concerns related to the sustainability and continuity of service provision.

### VI. Significant revisions to the Results Based Disbursement Framework (RBDF)

Another feature of the program that created delays was the complexity of the Results-Based Disbursement Framework. The first reports from the IVAs in evaluating the results achieved by the TPPs were received by the MINEDH in September 2015. However, the reports and instruments used in the verification process were found to be of low quality and suffered from a lack of harmonization. They were not usable in determining whether or not agreed results had been achieved and there were significant discrepancies between what the TPPs had reported in their Disbursement Reports and what the IVAs reported. As such, there were significant delays associated with the second disbursement to the TPPs.

Some of the key weaknesses in the original RBDF included: the number of indicators was too large; some indicators left space for interpretation by the IVAs; and some indicators were not solely under the control of TPPs. In addition, a unified instrument/tool was not being used by all three IVAs for monitoring and reporting outputs, which created complications in comparing and analyzing results.

The World Bank worked with MINEDH to develop a simple, harmonized and consolidated tool for Page | 45 assessing results to facilitate the evaluation of results achieved. The numbers of indicators that triggered disbursement as part of the RBDF were significantly reduced and more thoroughly defined. The revised RBDF and consolidated tool to be used by all IVAs was reviewed and agreed on by the World Bank, the TPPs, and MINEDH and was then included as part of Amendment 1.

Delays in implementation and changes in the RBDF also required several rounds of revisions to the disbursement payment schedule to the TPPs based on the current time frame and status of implementation. The original project design called for 4 disbursements, but the final design included 6 disbursements.

Finally, the RBDF included two types of verification: construction-related verification (in which an engineer/architect would be needed); and verification of other program-related aspects (pedagogy, community participation etc.) The original IVA contract did not include a key team member with specific expertise in construction- which also created controversies and discrepancies between the reporting of the IVAs and TPPs in measuring the achievement of some of the construction-related indicators. As issues related to construction became a major issue during implementation, IVA contracts were revised to include specialists who had specific expertise related to the criteria for verification (including engineers/ architects for construction-related indicators.

See Annex III for the original RBDF (2014) and Annex IV for the revised RBDF (2016).

### VII. Multi-Sectoral Group

The program originally envisioned strong multi-sectoral coordination between various ministries (Ministry of Education, Ministry of Health, Ministry of Agriculture, and Ministry of Women and Children) at all three levels. During the initial program design, there was a central-level multi-sectoral committee responsible for drafting and presenting the National ECD Strategy. This committee played a key role and met regularly. However, following the finalization of the Strategy, the committee slowly dissipated and was no longer meeting or functioning by the end of the project.

Interviews and focus groups reported overall leadership of the Multisectoral Committee was weak, and that following the finalization of the National ECD Strategy, the overall objectives, roles and responsibilities of the various institutions, and the reporting mechanisms of the meetings were not clearly defined. Once the DICIPE project (under the Ministry of Education and Human Development) began, the majority of the focus was placed on the education-related aspects of ECD and resulted in a lack of ownership and commitment from members and institutions outside of the Ministry of Education.

### VIII. Parenting Education Sessions

The DICIPE project design stipulated that parenting educational sessions should be held once a month. – However, data indicates that deviations occurred in both the number of Parenting Sessions that took place as well as the themes and topics covered. For example, in 2018, on average there was only 1 parenting session every 3 months per community, as opposed to one session per month.<sup>16</sup> None of the TPPs managed to provide parenting education sessions on a monthly basis throughout the duration of the project.

As per the original vision of the project (i.e. each TPP had a certain amount of flexibility to develop their own program in their respective province,) the content of the parental education sessions was left quite open, with minimal guidance. The Basic Service Package provided flexible guidelines as to the general topics and themes to be covered during the parenting education sessions (provided that they were held on a monthly basis,) but ultimately, each TPP was responsible for designing their own parenting education package. Some TPPs focused more on parental engagement and awareness specifically with the *escolinhas* and education of the children attending the *escolinhas*, while other TPPs implemented a more extensive scope, including, for example, breastfeeding, maternal and child care, water and sanitation, nutrition, etc.

The more extensive approach to the parenting education sessions caused some friction at the community level due to non-alignment with existing program, particularly when there were inconsistencies between the materials and messages being delivered by the TPPs compared to other services (nutrition and child health, for example). In addition, the overburdening of the TPPs and increased attention given to construction-related aspects, which took away from the ability to concentrate on more substantive-related program aspects.

The initial design envisioned connections between *escolinhas* and health services, including liaisons with Community health Workers (APE), to ensure the implementation of the parental educations package. In 2014, the World Bank approved an additional financing for nutrition in three provinces of Mozambique, including Cabo Delgado and Nampula. The nutrition program was also implemented by third-part providers and it was an opportunity to complement nutrition and ECD interventions in the same communities. However, during the implementation phase the linkage between the nutrition and DICIPE project was almost inexistent and for most communities health services was not informed about this objective. The non-functioning of the Multi-sectoral Group had implications on the articulation and connection between the nutrition and DICIPE projects. In addition, the lack of technical capacity of the service providers to deliver a large scope of the messages (nutrition, health care practices, child/parent interactions at home, and parenting in general) and use appropriate messages and methodologies, as well as the capacity of the MoE to monitor the contents and implementation approach are also appointed as the reasons for the deviations from the original design.

<sup>&</sup>lt;sup>16</sup> See Chapter 3 for more information



# CHAPTER 3: KEY IMPLEMENTATION DATA

### **Key Implementation Data**

This chapter is based on the routine data collection and monitoring done by the TPPs and the Ministry of Education. The World Bank collected and systematized this data during 2017 and 2018 (and as such does Page | 48 not include data from 2019). As further explored in Chapter 5- Lessons Learned, the lack of a robust monitoring system with standardized data collection tools, reporting systems and protocols limit the analysis presented in this chapter. Nevertheless, the data and analysis presented in this chapter capture key indicators of the project implementation and provides an overview of the construction and operationalization of escolinhas, attendance and dropout rates, facilitators recruitment and dropout, and parental education sessions.

### Construction of *Escolinhas* 1.

In 2015, the first *escolinhas* under the DICIPE Program were constructed and became operational in all five Provinces. Despite the constraints and delays with construction (see Chapter 2), 141 out of the 150 planned Phase I escolinhas were constructed and operationalized in 2015. Gaza and Nampula were the only Provinces to fully complete the 30 Phase I escolinhas in 2015. All other provinces completed the 30 Phase I escolinhas in 2016 (with the exception of 1 community in Cabo Delgado). By the end of 2018, only 83% of all escolinhas (Phase I and Phase II) were completed. All 350 escolinhas were not fully completed until 2019.

Province	2015		15 2016 2017		2018		2019			
	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.	Const.	Oper.
Cabo Delgado	29	29	0	29	17	46	24	70	0	70
Tete	28	28	2	30	28	58	12	70	0	70
Gaza	30	30	0	30	40	70	0	70	0	70
Nampula	30	30	0	30	40	70	0	70	0	70
Maputo	24	24	6	30	15	45	21	66	4	70
TOTAL	141	141	8	149	140	289	57	346	4	350

### Table 4: Construction and Operationalization of Escolinhas per year and Province

\*Const. = Constructed Oper.= Operational

### 11. Student Attendance

Escolinhas follow the official school year calendar and are opened from February to November, with holidays in May and in August. Since the operationalization of the escolinhas in 2015, approximately 68,000<sup>17</sup> children throughout the five selected provinces in Mozambique have attended at least one

<sup>&</sup>lt;sup>17</sup> Note that this figure indicates the number of children enrolled by year and not the number of beneficiaries of the DICIPE Project as some children attended escolinhas for more than one year. This number does double count children who attended more than one year.

school year (i.e. 9 months) of preschool services at the DICIPE *escolinhas* (Table 5). The attendance rate increased as more *escolinhas* were built, with a peak of 26,009 in 2018 once most of *escolinhas* of both Phase I and Phase II were constructed.

		2015	2016	2017	2018	TOTAL	Page   49
	Phase 1	10,110	9,901	10,833	10,171	41,015	I
Number of children enrolled	Phase 2	N/A	N/A	10,356	15,838	26,194	
	Total	10,110	9,901	21,189	26,009	67,209	

Table 5: Number of children enrolled at Escolinhas by year (2015-2018)

Although all five Provinces have the same number (70) of *escolinhas*, there is significant variation on the number of children enrolled. For example, the number of children enrolled in *escolinhas* in Nampula is more than 50% higher than that of Maputo Province (Figure 13). Such differences can be explained by larger population sizes of selected communities in Nampula. The number of classrooms (2) and facilitators (4) per community was predetermined by the program design and not based on the number of children per community. However, according to the data collected during the interviews with key informants, the number of children aged 3-5 in the communities of Nampula was very high and the 2 DICIPE classrooms was not enough to meet the demand. As such, some communities in Nampula defined their own "*criteria to adjust to the demand for services*". Communities decided to prioritize and target children 5 years of age and to also increase the number of children per classroom. This was a strategy "(...) the community found to solve the demand, guarantee the confidence of parents and to avoid creating instability at the community level"<sup>18</sup>. This was an adjustment and decision made at the community level in agreement with the TPP and the CCC.





<sup>&</sup>lt;sup>18</sup> Coordinator from TPP interview

Although the absolute number of enrolled students in Maputo, Tete and Cabo Delgado is below that of Nampula and Gaza, the average number of children per *escolinha* throughout all five provinces is 74.3 (2018), which is quite close to the desired ratio of 70 children per *escolinha* as established per the program design (Table 6).

Table 6: Number of children enrolled by Province and phase in 2018

	Tete	Gaza	Nampula	Cabo Delgado	Maputo
Phase 1	2100	2468	2237	1841	1525
Phase 2	2711	3419	3645	2800	3263
Total	4811	5887	5882	4641	4788
Children/ <i>Escolinha</i> s	68.7	84.1	84.0	66.3	68.4

From 2015 to 2018, more than 17,000 children aged 6 concluded at least one year of schooling at the *escolinhas* before starting primary school (Table 7). Nampula and Gaza are the provinces with the highest number of children concluding<sup>19</sup>, due to the overall higher demand (due to population size in Nampula and strong community mobilization in Gaza) and the age of children (5 years old) enrolled. As previously explained, due to the high demand in these provinces some communities decided to prioritize children with 5 years of age. The number of children graduating from the *escolinhas* in 2017 was high due the number of children finishing the full 3 years of the program and the increased number of *escolinhas* operational.

### Table 7: Number of children graduated by Province (2015-2018)

Province	Year							
Flovince	2015	2016	2017	2018				
Cabo Delgado	947	962	1,461	2,194				
Tete	729	829	1,022	1,571				
Gaza	1,014	1,120	2,687	2,707				
Nampula	1,068	983	2,596	2,507				
Maputo	447	485	891	1 392				
TOTAL	4,205	4,379	8,657	10,371				

<sup>&</sup>lt;sup>19</sup> According to the Education Law in Mozambique, compulsory primary school starts at the age of 6. "Concluding" means children with 6 years old who attended the *escolinha* and attended primary school in next school year.

### 111. Student Drop-outs and Absenteeism

Over the course of the program (2015-2018) the dropout rate varied between 3% (2015) to 11.8% (2018). See Table 8. However, it is very important to note that the 11.8% dropout rate in 2018 is largely due to the instability<sup>20</sup> in the District of Macomia (Cabo Delgado) where all escolinhas were closed. If the data Page | 51 from the escolinhas in Macomia is removed from the analysis, the adjusted average dropout rate in 2018 would be 5%.

TOTAL **Province** Phase 2015 2016 2017 2018 Phase 1 0.0 2.0 2.0 7.9 3.0 Tete Phase 2 --0.0 3.6 2.1 ---Phase 1 7.6 1.8 8.5 12.8 11.9 Gaza Phase 2 9.1 4.9 ---1.2 --Phase 1 3.0 3.7 2.4 17.6 6.2 Nampula Phase 2 0.9 11.7 6.1 -----Phase 1 0.0 0.0 0.0 20.6 4.8 **Cabo Delgado** Phase 2 ---22.3 22.3 Phase 1 9.0 5.3 9.1 8.5 13.0 Maputo Phase 2 -----1.9 10.7 7.8 Phase 1 3.0 5.4 4.6 11.6 6.1 TOTAL 8.5 Phase 2 3.3 11.9 -----Total 3 5.4 4.0 11.8 7.1

### Table 8: Student dropout rate by year (2015-2018) and Province

At the beginning of the program, there were concerns that significant student drop out would occur during the machamba<sup>21</sup>/harvest season (June to August) and rainy season (September to October). However, the dropout patterns remained similar – including during harvest and rainy seasons - which indicates no correlation between the machamba working period and the dropout rate (Figure 14 and Table 9). Additionally, the Caregiver MELE Questionnaires (Ch. 4) also show that only 3% of caregivers completely withdrew their child from the escolinha due to machamba services. These results suggest that if the escolinha services are available in the communities and the families understand the importance of these services for child development, they will develop coping strategies to adapt during these harvest periods to allow their children to continue attending *escolinhas*. Interviews with key informants suggest that the parental education sessions at the community level are important for sensitizing parents and decreasing the probability of drop-outs, especially during the *machamba* season.

<sup>&</sup>lt;sup>20</sup> Starting in 2017, army attacks in the District of Macomia led to social instability and the displacement of the population

<sup>&</sup>lt;sup>21</sup> Machamba is subsistence farming



Figure 14: Escolinha frequency by month and year (2015-2018)

\*2018 does not include Escolinhas from Macomia

Table 9 presents drop-out data from 2018 by Province. As can be seen, due to the previously mentioned instability, the Province of Cabo Delgado has the highest number of dropouts. None of the *escolinhas* located in the district of Macomia (Cabo Delgado) were able to operate.

Province	February	March	April	May	June	July	August	September	October
Nampula	0	60	88	65	133	107	137	73	141
Tete	107	89	57	0	0	0	0	0	10
Gaza	0	0	0	0	0	0	0	0	0
Maputo	0	0	55	53	141	89	97	57	56
Cabo Delgado	319	399	358	421	572	495	494	486	547
TOTAL	426	548	558	539	846	691	728	616	754

### Table 9: Number of children drop-outs in 2018 by Province

### IV. Facilitator Data

In 2018, more than 2,000 facilitators worked in the *escolinhas*. The ratio of children per facilitator is 15.5 with some variations between the implementation year and Province. This is within the envisioned ratio of 15 children per facilitator and 2 facilitators per classroom as defined by the project design. In 2018, data shows a decrease in the facilitator per student ratio, particularly in Phase I *escolinhas*. The facilitator dropout rate hovers between 4% and 6% and no significant difference is observed between Phase I and Phase 2. (Table 10)

	Phase	2015	2016	2017	2018	TOTAL	
Number of facilitators	Phase 1	555	639	633	984	984	
	Phase 2	0	0	590	1,080	1,080	Dag
	Total	555	639	1,223	2,064	2,064	- ag
Facilitator	Phase 1	4.5	5.9	5.9	3.8	5.0	
Dropout Rate	Phase 2	0.0	0.0	2.2	7.2	4.7	
	Total	4.5	5.9	4.0	5.5	4.9	
Ratio facilitator/Children	Phase 1	17.4	15.7	17.3	10.4	15.2	
	Phase 2	0.0	0.0	17.2	14.5	15.8	
	Total	17.4	15.7	17.2	12.5	15.5	

Table 10: Facilitators recruitment, dropout and ratio by year

The mean facilitator dropout rate over the project lifetime is 4.9. Dropout rates peaked in 2016 with a mean of 5.9. Cabo Delgado shows the highest number of facilitators drop outs, due to the previously mentioned attacks and instability in Macomia (Figure 15). Interviews with key informants suggest that the facilitator drop out in Tete was significantly lower than other provinces due to lack of other employment opportunities.





### V. Parental Education Data

The DICIPE project design stipulated that parenting educational meetings should be held once a month. Over the course of the project, more than 9,000 parental education sessions were held throughout all communities. However, the number of parenting educational sessions per community (on average 1 per Page | 54 3 months) was significantly below the required one meeting per month (Table 11).

In addition, the number of parenting sessions decreased along the years despite the increase in the number of escolinhas. For example, even though the number of operational escolinhas doubled between 2017 and 2018, the number of parenting sessions in 2018 halved from that of 2017, bringing the average number of parenting sessions per community down to 3 for the entire year (compared to 7 in 2017). On average, from 2015-2017, parenting meetings were held once every 2 months; in 2018 parenting meetings were held every three



months. Although it is not clear why this happened, interviews suggest that this decrease in number of parenting sessions can be related to: i) insufficient monitoring by the Ministry of Education, as the contract of IVA to measure the indicators for the contract payments with TPP ended in 2017; and ii) limited capacity of the TPP to continue parenting education courses due to the increase in the number of operational *escolinhas*.

### Table 11: Parenting Education Session by year

	2015	2016	2017	2018
Number of Sessions	786	1,168	2,021	1,083
Mean sessions per Community	5.6	7.8	7.0	3.1
Mean per month	0.5	0.7	0.6	0.3



# **CHAPTER 4:**

ASSESSMENT OF QUALITY OF SERVICE DELIVERY: THE USE OF THE MEASURE OF EARLY LEARNING ENVIRONMENTS (MELE)

### I. Introduction

One key aspect of the DICIPE program that the Process Evaluation assessed and analyzed was the quality of service delivery at the *escolinha*/classroom level. Despite improvements in access, in many countries, the quality of programs is below what is required to promote child development. Experience from high-, middle- and lowincome countries demonstrates that even

**United Nations Sustainable Development Goal 4.2** 

"By the year 2030, all girls and boys have access to **quality** early childhood development, care and preprimary education so that they are ready for primary education."

UN, 2015

when access to early childhood education goes up, children's outcomes do not always improve (e.g., Bouguen, Filmer, Macours, and Naudeau, 2013; Richter and Samuels, 2017; Wong et al., 2013). It is globally agreed upon that simply providing access to ECE programs is not enough. Without an adequate emphasis on quality, children will not reap the benefits and systems will waste resources. A basic level of quality in the learning environment- comprising of aspects such as the content of teacher-child interactions, availability of materials, the safety and atmosphere of the physical space, the attention to health and nutrition, and the level of parent/community engagement- is critical to ensure that children receive the maximum benefit from ECE (MELQO report, 2017). Children will only benefit from increased access to ECE if the services being provided meet core standards for quality.

### II. Background of the Measuring Early Learning Quality and Outcomes (MELQO)

The Measuring Early Learning Quality and Outcomes (MELQO) initiative was launched in 2014 as a collaborative effort of UNESCO, UNICEF, the World Bank and the Brookings Institution. It was created in response to the demand for an efficient approach to early childhood measurement that would simultaneously promote national-level monitoring and inform global monitoring, by providing scientifically-grounded items that could be supplemented and modified to work for each country. The MELQO modules were generated based on existing measures of early childhood development and early learning environments, as well as the expertise of a technical advisory group.<sup>22</sup> They are intended for adaptation and use across countries to support the design and implementation of locally-relevant measurement.

Following the premise that there are already many existing tools with similar items<sup>23</sup>, the leading organizations' core team worked to build upon current measurement tools to create a common set of items organized into two modules for measuring:

1. The Measure of Development and Early Learning (MODEL), which assesses children's cognitive and socioemotional development (ages 3-6); and

<sup>&</sup>lt;sup>22</sup> For more information on the development of MELQO, please refer to the MELQO Background Report (UNESCO et al., 2017).

<sup>&</sup>lt;sup>23</sup> For example, the Early Development Instrument (EDI); the Early Childhood Development Index of UNICEF's Multiple Indicators Cluster Surveys (MICS-ECDI); the Early Childhood Environmental Rating Scales (ECERS); Classroom Assessment Scoring System (CLASS)

2. The Measure of Early Learning Environments (MELE), which assesses the quality of preschool settings

What sets the MELQO apart from other existing tools is that the MELQO modules are designed to be implemented at scale, with an emphasis on feasibility for low- and middle-income countries (LMICs). In general, the monitoring of quality and outcomes in early childhood is limited in LMICs (Winthrop and Page | 57 Anderson Simons, 2013). As such, a key feature of the MELQO modules is the process of cultural adaptation and alignment with national standards. In recognition of the profound influence of culture and context on young children, the MELQO modules are designed to be further adapted and aligned with curricula, national goals for learning, and cultural contexts. Many constructs that underlie child development are universal and applicable across contexts. However, the items that are most appropriate to measure these constructs might be different in one country versus another. MELQO seeks to provide a global tool suitable for use everywhere (particularly in LMICs) with still allowing the room and flexibility for context-specific adaptation.

### 111. Overview of the MELE Module (Measure of Early Learning Environments)

### Measure of Early Learning Environments (MELE)

MELQO and its quality module, the MELE, is a set of constructs that are important for quality in preprimary settings. The module is intended to serve as a starting point for national adaptation, to develop measurement tools that are locally relevant and useful for improving policies and practices in early childhood education. Results from the tools can be used to inform policies, professional development, and classroom practices for young children. (MELQO Report, 2017)

The MELE is designed to assess the quality of group-based care in community centers, schools, and kindergartens, for children from age 3 to primary school entry. The MELE module uses four approaches to measuring the quality of early learning environments:

- a classroom observation tool; 1.
- 2. a teacher interview;
- 3. a CCC interview; and
- 4. a parent or caregiver survey

The use of these multiple approaches allows Figure 16: MELE Module triangulation of data to arrive at a more accurate and comprehensive picture of the quality of early learning environments (Figure 16.)

A growing body of research demonstrates that the quality of children's learning environments is impacted by several important elements of the learning setting. In general, high-quality



ECE in pre-primary settings is characterized by attention to certain key 'domains' affecting children's

experience, an overall focus on child development, presence of learning materials, an emphasis on language and literacy, and teacher-child interactions. However, quality is also impacted by broader policy elements, such as support for teachers' professional development and the provision of adequate funding and support for pre-schools. The MELE module is therefore designed to account for the classroom environment as well as the level of support and engagement from parents, communities and teachers (MELQO Report, 2017).

The MELE module was developed based on existing measures of ECE quality and feedback from experts. Through this process, the following domains of quality were chosen for inclusion in the MELE:

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- a. Play
- b. Pedagogy
- c. Interactions
- d. Environment
- e. Parent/community engagement
- f. Personnel
- g. Inclusion

Figure 17 contains tables presenting the MELE domains and sample items.

### Figure 17: Constructs and Sample Items for MELE

CONSTRUCT	Play	Pedagogy	Interactions	<b>Environment</b>	Personnel	Parent & Community Engagement	Inclusiveness
DEFINITION	Emphasis of the pro- gramme on creating opportunities for all children to explore and engage in free play and group play; the presence of adequate toys and spaces to play.	Approaches that teachers take in teaching children, including individu- alized and/or group lessons and oppor- tunities for dialogue, and in supporting a successful transition to primary school independent work.	Type and quality of interactions between teachers and chil- dren, and between children and their peers.	Physical space and safety of the classroom, including access to clean water and toilets, and adequate space for each child.	Experiences of teach- ers and directors in training, years of service, compensa- tion, supervision and mentoring.	Extent to which par- ents and community members are en- couraged and able to engage in childrens education.	Extent to which the classroom is able to support participa- tion for all children, which may include gender, learning needs, and cultural, ethnic and linguistic accommodations.
SAMPLE ITEMS	<ul> <li>Do all children have time for play during the school day?</li> <li>Do all children get an opportunity to use toys during play?</li> <li>Do all children have access to sufficient, varied and challenging materials, such as blocks, books and coloured pencils?</li> </ul>	<ul> <li>Has an age- appropriate curriculum or set of guidelines been developed outlining competencies and lesson plans?</li> <li>Do children use objects to learn mathematics; for example, do teachers encourage children to use objects for numerical exploration like sorting, counting and operations?</li> <li>Do teachers introduce new vocabulary by reading storybooks to children daily?</li> <li>Are children learning to perform new skills independently?</li> </ul>	<ul> <li>Do teachers discipline and maintain order without being excessively negative?</li> <li>How often do teachers smile or verbally praise children?</li> <li>Do teachers patiently coach children who struggle to learn a new concept?</li> <li>Do teachers encourage childrenss questions and respond to them with sentences of explanation?</li> </ul>	<ul> <li>Is there clean drinking water available for the children? Are toilets available for both boys and girls?</li> <li>Are there safety hazards?</li> <li>Is indoor and outdoor space sufficient for play?</li> <li>Is there enough space for all children to sit and room for play?</li> </ul>	<ul> <li>How many years have you been a teacher overall?</li> <li>Do you receive support from your supervisor, through in-class observations and professional development?</li> <li>During the last 12 months, how often have you been observed in your classroom teaching as a part of supervision, monitoring or training?</li> <li>How useful was the feedback you received from supervisors and from peers?</li> </ul>	<ul> <li>Do parents have regular meetings with teachers to discuss children's learning and development?</li> <li>Do community members who are not parents (in the neighbourhood or village) participate in making decisions about the programme?</li> <li>How often does your pre-primary programme provide group sessions on parenting or home visits?</li> </ul>	<ul> <li>Does the programme show evidence of encouraging enroiment and participation of all ethnic, linguistic, religious and gender groups?</li> <li>Are children with disabilities included in the programme?</li> <li>Does the programme include a focus on mother- tongue instruction?</li> </ul>

MELE Classroom Observation:

The MELE Classroom Observation Tool is designed to capture key activities throughout the day and organized to provide information about the activities and interactions that occur during a typical class session. Most items are based on an actual classroom observation and are scored on a 1-to-4 scale, with higher scores reflecting higher levels of quality.

The MELE Classroom Observation Tool is split into six key sections:

Section I: School/Observation Information:

Records basic information about the school (i.e. name and location) and observation (i.e. start time, end time)

Section II: Basic Classroom Information

Items related to number of children enrolled, number of children present on day of observation, availability of weekly/daily schedule, etc.

Section III: Learning Activities

Items related to instruction practices employed by teachers for the various learning activities that take place during the observational period (literacy/language, math, fine motor, free play, music/movement, gross motor, expressive language, listening, etc.)

Section IV: Classroom Interactions and Approaches to Learning

Items on interaction between teacher and student and approach to learning that include positive engagement, negative engagement, discipline, individualized attention, diversity, child engagement, etc.

Section V: Classroom Arrangement, Space, and Materials

Items referring to the way in which a classroom is set up for learning and the available materials (including books)

Section VI: Facilities and Safety

Items referring to the condition and availability of water source, toilets, hygiene, and safety conditions

### **MELE Interviews:**

The MELE interviews are administered to:

- a) teachers;
- b) CCC members; and
- c) caregivers (of both children who attended *escolinhas* and children who did not attend *escolinhas*.)

The interviews collect key information on:

- pre- and in-service training of teachers and CCC members;
- teacher qualifications and supports;
- supports and trainings offered to caregivers through the *escolinhas*;
- feedback and reflection of the program among teachers, CCC members, and caregivers;
- the extent of cooperation between the community, the escolinha, and caregivers;
- parental and community engagement in the escolinha

## IV. Adaptation Process

As mentioned, a key feature of the MELE is the process for context-specific adaptation. The adaptation process calls for examination of key quality domains with local experts to design a scale and tool that is appropriate for the Mozambique DICIPE program. A team of both international and national experts familiar with the DICIPE and Mozambique context reviewed both the MELE Classroom Observation tool and the three sets of interviews to adapt accordingly. This process involved reviewing the quality domains, discussing relevant items and deciding upon a set of items that were viewed as accurately representing the goals of early learning settings in Mozambique specifically.

While the MELE tool remained unchanged in its basic structure and maintained the majority of the original items and constructs, there were a few slight changes introduced. For example, the original MELE tool includes an interview for a "supervisor." As a result of the design of the DICIPE program, the MELE for Mozambique was adapted to remove the supervisor interview and replace it with an interview for the head of the CCC (Community Coordination Committee). In addition, specific questions within the surveys were adapted to better suit the context of the DICIPE program, such as the inclusion of questions related to albinism and use of local native languages in the classroom. Finally, a key part of the adaptation process was the translation of the tools into Portuguese, ensuring that the integrity of the items was maintained.

Based on the fact that the MELE a) is based on existing tools and a globally agreed-upon set of measures for measuring the quality of early learning environments; b) developed specifically to be used and adapted in low-income countries; and c) included a process for local adaptation, it was decided to use the MELE module<sup>24</sup> in Mozambique as a way to assess and identify strengths and areas for improvement in the quality of the service delivery of the DICIPE program.

# V. Implementing MELE in Mozambique

### (Brief Summary of the Methodology and Data Collection Process)

Data was collected in a sample of 40 *escolinhas* throughout the five provinces (Maputo, Gaza, Nampula, Cabo Delgado, and Tete). Eight *escolinhas* per province were randomly selected (4 per each of the 2 districts). The criteria for the selection was based on the operationalization of the *escolinhas*, which means at least four months of functioning. The survey protocol was approved by the institutional Mozambique Review Board - *Comité Nacional de Bioética para a Saúde* (in Portuguese)<sup>25</sup> and informed written consent was obtained from the respondents and from the CCC for the video recording.

In each of the 40 communities, data was collected as follows:

- 1 Classroom Observation
- ➢ 8 parent/caregiver interviews

<sup>&</sup>lt;sup>24</sup> The MODEL module was not used during the Process Evaluation. A separate tool was developed for measuring child development as part of the DICIPE program and will be implemented as part of the Mozambique ECD Impact Evaluation (results expected in end of 2019 or early 2020)

<sup>&</sup>lt;sup>25</sup> Approval reference: 225/CNBS/18

- 4 facilitator interviews
- ➤ 1 CCC interview

### Selection of Enumerators

The design of the Mozambique MELE data collection called for five field teams, one per province. Each team was made up of the following five members: Supervisor, MELE Classroom Observer and three Enumerators to lead the interviews with the caregivers and the CCC. The field teams were managed by the Lead Researcher and Lead Field Coordinator.

Field team members were recruited by the survey firm in the selected provinces. The requirements for the field team pre-selection were:

- i) previous household survey experience with tablets;
- ii) be a resident in the survey province;
- iii) be a native speaker of the national languages most spoken in the survey province;
- iv) availability during the survey period; and,
- v) for the supervisors: proven leadership and coordination skills.

### Training of Enumerators

The training of the MELE data collection team was conducted in Maputo City, from June 11th to 22nd, 2018. The training lasted ten (10) days: nine (09) days of in-class trainings and one (01) day in the field for a pilot exercise in Boane District, Maputo Province. Twenty-five (25) enumerators and supervisors attended the training.

Mixed methods were applied for the delivery of the training sessions, including power point presentations, group reading, group and in-pair simulation of interviews for all three questionnaires using the tablet, group simulation of listing, observation of MELE videos, and group and individual MELE coding.

For the MELE classroom observation tool, four initial training days were held with all trainees. Following this, the top six trainees were selected to carry out the MELE during the pilot exercise. These top six trainees were selected based on the video reliability exercises. Enumerators who achieved at least 90% in each of the 5 video coding exercises were selected to be the classroom observer. Following the pilot exercise, two additional half-day training sessions were held with this group of six trainees to further strengthen their capacity to perform the observation and coding. After this additional training, reliability rates were between 95-100%.

A key part of the MELE includes video recording of the classroom to ensure reliability of the observation. An external filming team was brought into the training, to train the field team on use of video equipment, basic filming techniques, machine operation procedures, and back-up protocol. The questionnaires were in Portuguese. Because of the high number of local languages in Mozambique<sup>26</sup>, it was not feasible to translate the questionnaires into all local languages. However, during the training key words from the questionnaires were translated and discussed for each language, for example child development, service provider, Ministry/Government, etc. One of the criteria for the selection of the enumerators was to be a native speaker of the local language most spoken in the survey province and the interview was then conducted in the local languages.

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### Pilot Exercise

A one-day pilot exercise took place on June 20th, at the end of the second week of training, at the *Escolinha* of Chinonanquila, located in Boane District, Maputo Province.

The pilot exercise had two main goals: i) evaluate the readiness of the trainees to perform the listing exercise<sup>27</sup> and apply the data collection tools (the caregiver questionnaire, facilitator questionnaire, CCC questionnaire and MELE observation tool), and; ii) assess the need for improvement changes in the data collection tools.

The pilot exercise was scheduled to reflect a typical fieldwork day. The community and *escolinha* were informed beforehand by both the TPP and the District Supervisors regarding the data collection exercise.

The MELE team arrived at the *escolinha* prior to the start of classes to set-up for the MELE classroom observation. MELE trainees were divided into two groups of three people, one group per classroom. Each group observed and filmed one classroom from the beginning to the end of the class, including breaks and outside activities. The filming had an average duration of 02h30. The MELE tool was filled-in during the classroom observations. At the end of the class period, the MELE trainees interviewed the *facilitadores* using tablets.

The other part of the team (supervisors and enumerators,) were responsible for an initial meeting with the community leaders, the community listing, selection of the sample of caregivers, and performing the interviews with the CCC and caregivers. Due to the high number of trainees – 19 enumerators and 5 supervisors- the team was split into five sub teams, each headed by a supervisor. The community was defined as the two blocks (*quarteirões*) where the *escolinha* was located. Two sub-teams listed the first block, and three sub-teams listed the second block. At the end of the listing, the sub-teams gathered to randomly select the sample of eligible households<sup>28</sup> whose caregiver would be interviewed, as well as substitute households, by using a table of random numbers. Immediately following the listing and selection of the sample, the teams began the caregiver and CCC interviews.

Following the pilot, an additional day of training was held to discuss any issues that arose and to adjust as needed.

<sup>&</sup>lt;sup>26</sup> There are 41 local languages spoken in Mozambique (Ethnologue, 2019)

<sup>&</sup>lt;sup>27</sup> Due to the inexistence of a systematized list with the households at the community level, a full listing exercise of all households in each community was done to identify eligible caregivers

<sup>&</sup>lt;sup>28</sup> Households who had at least one child aged 3-5 years.

### Fieldwork

The fieldwork started on June 26th, 2018 for all field teams and ended on July 10th, 2018. It lasted a total duration of 11 days during which all 40 communities were listed, MELE was performed in all 40 escolinhas, and all sampled escolinhas and communities were surveyed. The field teams worked from Monday to Friday, the escolinhas' working period. Saturdays were used to pursue absent respondents and Sundays Page | 64 to rest.

The data collection and sample methodology requested that, per community, eight caregivers<sup>29</sup>, four facilitadores and one CCC member be interviewed. In total 320 caregivers were interviewed (100% of the sample), along with 139 facilitadores (87% of the sample) and 40 CCC (100% of the sample).

### **Deviations in Data Collection Plan**

The majority of the fieldwork was carried out as envisioned. There were a few minor deviations:

- As per the initial plan, data collection in each escolinha and community should have taken one full day. However, in 24 escolinhas (60% of the sample) data collection required a second visit the day after or a few days later due to access and accessibility of the escolinhas and availability of the respondents.
- With regards to the MELE observation duration, MELE was performed in all 40 sampled escolinhas, including video recordings of all classrooms (for validity check of data). The duration of the classroom observation was for the entire duration of the class (i.e. three hours). However, in eight escolinhas the class duration was 2 hours, or less. In most cases this was due to the late arrival of the children, which dictated a later start and shorter duration of the class.
- > In 15 escolinhas it was not possible to interview all four facilitadores. This was due to various reasons, most commonly absenteeism due to illness, pregnancy or maternity leave. Six of the 15 escolinhas operated on a regular basis with only 2 or 3 facilitators, less than the required 4 facilitators.
- A series of ongoing armed attacks was taking place in Macomia District (Cabo Delgado) at the time of data collection, posing a threat to the safety and security of the data collection team. This led to the decision to replace the 4 escolinhas in Macomia district with 4 escolinhas from the Chiure, the other district in Cabo Delgado.

### **Quality Control and Validity Check of Data**

Specific procedures were set up to ensure the quality of collected data, both in the data collection process and the collected data itself.

In regard to the data collection process, fieldwork was reported on a daily basis by the field Supervisors to the Lead Researcher based in Maputo. Additionally, the Lead Field Coordinator accompanied the first

<sup>&</sup>lt;sup>29</sup> Being four caregivers of children aged 3-5 years who attend the *escolinha* and four caregivers of children aged 3-5 years who do not attend the escolinha.

1.5 weeks of data collection in the field, both in the community and in the *escolinha*, visiting all five provincial teams.

At the end of each working day, teams held group discussions to address difficulties and matters of concern. The field Supervisors also paid back-check visits to one surveyed caregiver per community, running a number of selected key questions from the caregiver questionnaire. No inconsistency was found between survey and back-check data.

During the MELE classroom observations, video recordings were taken in every classroom. The video recordings were selected at random to review to ensure consistency and reliability in classroom ratings.

Parallel to this, the Database Manager performed daily checks of the collected and transmitted data, comparing it to the reported progress. He informed the Lead Researcher of the database progress as well as any missing reported data.

The Database Manager also performed consistency checks of the collected and transmitted data three times a week. Inconsistencies found were reported back to the respective provincial Supervisors, who corrected the inconsistent data with the responsible Enumerator, and sent the corrected data back to the Database Manager. In this process the Database Manager kept direct communication with the field teams to i) request non-transmitted data and ii) transmit inconsistencies found and monitor correction. The Lead Researcher was also involved in this communication. Data were analyzed using STATA version 15.

# VI. Brief Descriptions of Sample Population

### **Escolinhas**

On the day of data collection, classrooms on average had a total of 27 children present (55% female; 45% male.) 78% of students attending were between 4-5 years old. Note that, as per project design, every *escolinha* had 2 classrooms and the average number of children per classroom was 35 (for a total of 70 children per *escolinha*).

75% of *escolinha*s visited had been operational for more than 12 months; the remaining *escolinha*s visited were operational for less than 6 months. *Escolinha*s operate from February to November every year. Students attend the *escolinha*s Monday through Friday, 3 hours every day.

### **Facilitators**

As per program requirements, the majority of the classrooms have two facilitators (92%). 64% of all facilitators interviewed are female and 36% are male. 100% of all facilitators come from the community of the *escolinha* where they work, as per project design. The mean age of facilitators is 30 years old (with a range between 16 and 65 years.) Prior to the DICIPE program, 85% never had experience teaching and 30% had another supplementary job (such as working in the fields). 78% of all facilitators had a child of their own attending the *escolinha*.

### Parents

Around half of the respondents were the mothers of the child (55%), 22% were the father, and 23% made up other caregivers (i.e. grandparents or other relatives). 55% of primary caregivers had no formal education and only 6% achieved secondary education or more. All caregivers interviewed were aware of Page | 66 the escolinha in their communities.

CCC Members

Interviews were administered to the President of the CCC within the selected communities. CCCs consist on average of 10 members with 5 members being women and 5 men. Almost all CCCs report that the original founding CCC members are still part of the CCC. 28% of CCCs were established in 2016 and 65% in 2017. Around 40% of CCC members have children who attend the escolinha.

80% of CCCs reported following the CCC structure as per the DICIPE project design. This includes a president, vice-president, treasurer, health official, construction official, and human resources official (to manage facilitator issues). The majority of CCC members (93%) reported clearly understanding their role on the CCC.

### Key Findings of Quality across Domains- Physical Environment VII.

The physical environments of schools have long been recognized as central to children's learning. Early learning environments are ideally designed to support children's learning, by providing safe, clean spaces for learning, play and socializing. TO meet quality standards, the physical space should be safe, clean and Page | 67 promote good health practices. (MELQO Report, 2017)

A key feature of the DICIPE program design is that *escolinhas* are considered community-based and should be located within a central area of the community, close to the primary school. Almost 70% of parents reported that they walk between 0 to 15 minutes from the family homes to the escolinha. See Figure 18 below.

In terms of space, 98% of escolinhas reported classroom space being large enough for all attending children to fully and comfortably participate in all indoor activities and 93% reported a schoolyard with adequate space for play and equipment for gross motor activities (for example, swings and slides.)

In general, escolinhas were found to have satisfactory access to toilet facilities. 95% of all escolinhas visited had composting toilets, and 78% of all toilets were ranked highly satisfactory having met basic conditions in terms of cleanliness, separation of gender, and being appropriately child-sized. Only 2.5% of all escolinhas visited did not have toilet facilities<sup>30</sup>.

A common challenge among escolinhas seems to be availability and use of water. 73% of escolinhas did not have access to drinking water and 48% did not observe any hand washing practices. 35% reported having no structure or system in place whatsoever available to wash hands (see Figure 19.)

Finally, 90% escolinhas were considered to be structurally safe, with only 10% reported having more than 5 dangerous conditions (such as broken or uneven floors, leaking roofs or holes in the ceiling, broken windows or doors, inadequate natural lighting or ventilation, open pits or holes, etc.).

Time: Home-to-Escolinha	%
0-15 minutes	67.4
16-30 minutes	26.1
31-45 minutes	4.9
46-60 minutes	1.1
More than 60 minutes	0.5

*Figure 18: Time traveled from home to escolinha* 

Figure 19: Data captured on access and use of water at escolinha

Access and use of water	%
No drinking water available	72.5
No hand-washing station in school	35.0
No hand washing practice observed	47.5
No toilet facilities available	2.5

<sup>&</sup>lt;sup>30</sup> These *escolinha*s were located in Maputo Province and were lacking toilet facilities at the time of the visits due to construction delays. Toilet facilities are scheduled to be completed in these communities in the foreseeable future

### VIII. Key Findings of Quality across Domains- Materials in the Classroom

For children to reach learning goals, a variety of culturally relevant learning materials should be provided, including access to toys, books, and writing and math materials. (MELQO Report, 2017)

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79% of facilitators reported using a combination of locally and commercially produced materials at the *escolinhas*. (13% of *escolinhas* reported exclusively using locally-produced materials.) However, trainings on how to produce local materials were not delivered to all facilitators. Only 61% of facilitators reported receiving training on how to make learning materials using local products.

The DICIPE Project Implementation Manual includes criteria and a mandatory list of materials that every *escolinha* must have. For example, the Manual stipulates that every *escolinha* must have a chalkboard, writing utensils and books. The MELE found that access and use of learning materials was very irregular. Only 53% of all *escolinha* had books and 63% had writing utensils (Figure 20). The maximum number of books found in an *escolinha* was three, demonstrating an extremely limited use of this material. **10% of** *escolinhas* did not have any available learning materials. When asked to indicate the main problem of the *escolinha*, 22% of facilitators responded: *"not enough material to work with children."* 





### IX. Key Findings of Quality across Domains- Personnel

Personnel refers to the experiences of staff in training, years of service, compensation, supervision and mentoring through professional development. Teachers should be well-supported in improving their practices throughout their tenure. (MELQO Report, 2017)

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### **Education Levels:**

The majority of the facilitators interviewed (96%) completed 7<sup>th</sup> grade or higher before teaching in the *escolinhas,* indicating that most teachers have a higher level of education than the minimum required by the project (7<sup>th</sup> grade).

### Training:

Findings indicated challenges related to both pre- and in-service training received by facilitators. According to project requirements, facilitators should receive a minimum of 10 days of pre-service training. While the majority of facilitators had received some form of pre-service training before entering the classroom, only 13% reported having received more than 5 days of training. 20% of facilitators did not receive any sort of pre-service training. Furthermore, the DICIPE Project requires that facilitators receive a minimum of 5 days of in-service training per year. Results indicated that 61% of teachers had received one day of in-service training or less. See Table 12.

It is not entirely clear why (or if) these trainings were (or were not) reportedly carried out as planned in the project. This Process Evaluation captured conflicting information. On one hand, one of the indicators under the RBDF was directly related to the achievement of pre- and in-service teacher training, for which all TPPs achieved and received payments. However, during the MELE interviews, facilitators reported not having received trainings as planned.

Number of days of training	%
In-service training	
None	30.2
One day Training	30.9
2-5 days training	21.6
More than 5 days training	17.3
Pre-Service Training	
No pre-service training	20.1
One day training	3.6
2-5 days training	63.3
More than 5 days training	12.9

Table 12: Percentage of Facilitators trained according to type of training and number training days

Subsidies:

A basic subsidy of 650 meticais/month (US\$11) is being provided by MINEDH to all facilitators for working 3.5 hours/day. According to the data collected, approximately 90% of facilitators received only the amount allocated by MINEDH (i.e. they do not receive any addition payments or in-kind contributions from the community or parents.) In Boane (Maputo Province,) facilitators received up to 1950 meticais (US\$30) due to additional contributions from the families. In these communities, parents agreed to pay an additional amount to increase the *escolinhas*' functioning hours (5-6 hours per day) to reflect parents' Page | 70 or primary schools' working/functioning time. Most (68%) facilitators reported not receiving their subsidy on time, and in 75% of all communities, facilitators reported that they use up to 40% of their subsidies to pay for transportation to the designated locations to receive their payments. 61% of facilitators consider the amount of the subsidy the main problem of their work.

### Facilitators Perceptions:

When asked about their motivation to become a preschool facilitator, the most often sited factor was enjoyment of teaching (55%) and helping the children and community (60%). 95% of facilitators reported that they did not intend to teach in an early childhood program as their life long profession.

Facilitators were asked to rate on a 1-5 scale how much they agreed with statements such as, "I am satisfied with my job" and "I have adequate resources to carry out my duties." The mean rating for these items was 3.19, indicating that teachers felt fairly well supported and resourced.

87% of all teachers indicated that they believe the *escolinha* prepares children very well for primary school. Figure 21 below indicates the types of changes observed in the children, as reported by facilitators<sup>31</sup>.



Figure 21: Changes observed in children (as reported by facilitators)

<sup>&</sup>lt;sup>31</sup> These results will be compared to hard outcomes measured by the Impact Evaluation

# X. Key Findings of Quality across Domains- Family Engagement

Family engagement in children's education, beginning with ECE, is one way that ECE programs may create positive benefits for children over time. By engaging parents in children's learning, ECE programs build parents awareness of the importance of education and a deeper understanding of how best to support it. (MELQO Report, 2017)

91% of caregivers interviewed reported that their children always attend *escolinha* (i.e. throughout the entire school year) and 89% reported that their children attend the *escolinha* 5 days a week. This data is consistent with data collected by the TPPs, which shows that 90% of *escolinha*s from 2015-2018 operated with student attendance above 80%.

Among the caregivers with children aged 3-5 years who chose not to send their child to the *escolinha*, the main reasons reported were: "child too young" (32%); "*escolinha* was far or difficult to access" (19%); "child is sick" (12%); and "no feeding program" or "no availability of places at *escolinhas*" (both 10%) (see Figure 22).





81% of all respondents with children in the *escolinha*, reported attending meetings at the *escolinha*, which encouraged them to keep their children in the *escolinha*. However, over half of the caregivers (58%) indicated they did not meet with the facilitators to discuss their child's development and/or how their child is doing in school. In addition, almost 50% of respondents reported that they had never attended a Parental Education class at the *escolinha*, which is worrisome considering that a key part of the DICIPE program design stipulated holding parenting classes at least once a month. This is consistent with the data as collected by MINEDH/TPPs shown in Chapter 3 which also demonstrates low numbers of parenting sessions.

According to the DICIPE Project Implementation requirements, caregivers are expected to contribute to the functioning of the *escolinha* via: 1) financial support; 2) in-kind support (i.e. providing food); or 3) providing services such as cleaning, bringing water, etc. Over half of the caregivers (66%) do not pay fees or provide in-kind contributions. Only 8% reported paying fees and 23% provide in-kind contributions on a regular basis. However, only 61% report that in the future they will continue to make contributions. More than 60% of caregivers support the *escolinha* with services such as overall maintenance and Page | 72 clearning of the *escolinha* (Figure 23).



95% of caregivers reported that their child was happy to attend the *escolinha*. Caregivers were also asked to rate on a 1-5 scale how much they agreed with statements such as, "I am satisfied with the quality of education my child receives", "As a parent I feel involved in the school," and "As a parent I feel my opinion matter". The mean rating for these items was 4.04, indicating that caregivers felt well supported and thought positively about school.

Figure 24 below analyzes how caregivers responded to their perceived household and child changes as a result of the *escolinha*.




XI. Key Findings of Quality across Domains- Involvement of the ECD Community Coordination Committee (CCC)

The local community should be actively involved in planning, decision-making and action to improve ECE. High quality programs should share information, promote positive relationships and create multiple opportunities for community engagement (MELQO Report, 2017)

90% of all CCC members interviewed felt that there was very strong and active participation by all CCC members. In 50% of CCCs, some members of the CCCs were replaced. In these cases, the CCC and communities chose the new members. 76% of CCCs reported no difficulties to find members to serve on the CCC. 60% of communities hold CCC meetings once a month and 25% hold CCC meetings once a week. The remaining communities reported having irregular meetings.

73% of CCCs interviewed reported having a representative from the local primary school as a member of the CCC (the majority of these representatives being the primary school director), indicating strong linkages with the primary school.

Most of the CCC members (85%) indicated they had received at least one day of training prior to their membership (only 15% reported receiving more than 3 training sessions) and 62.5% responded they have received ongoing training as a part of the CCC. Trainings were reported as given by the TPPs. Trainings covered topics such as child development, community mobilization, *escolinha* management, and role-specific trainings. The trainings were rated as very useful by 88% of members interviewed.

75% of CCCs interact either daily or weekly with the *escolinha*, including maintenance, cleaning, and overall management. CCC members feel that they are also the primary party responsible for educating parents and community on the importance of the *escolinha*, with 85% of respondents indicating the CCC as the organization primarily responsible for community mobilization (over facilitators, TPPs, parents, or government officials). In addition, 75% of CCCs reported that the CCC is the entity primarily responsible

for maintenance and cleaning of the *escolinha*/latrines and 82% indicated that the CCC is responsible for addressing any issues with attendance in the *escolinha*. This indicates a strong community ownership of the *escolinhas*. However, there is more variation on the amount of times the CCC interacts with parents: 10% indicated every day, 17% every week, 35% every month, 22% other, and 15% none. In general, interaction with parents/caregivers is viewed more as the responsibility of the facilitators.

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18% of communities reported problems with vandalism of *escolinha* property and materials. For 61% of respondents in these communities, the lack of security guards at the *escolinhas* is the main reason for the vandalism. All communities who reported issues with vandalism are located in Maputo Province, which is the most urban of all Provinces. During multiple interviews, the assumption was made that due to its urban nature, crime and vandalism was more of an issue in Maputo Province compared to the other provinces, where no vandalism was reported.

Overall, CCC members feel the program has a positive effect on the children (85% of respondents affirming). CCC members (85%) feel there is a strong participation by children in *escolinhas* and 88% of members also feel the community values the CCC management of the schools. Many of the parents (85%) reported that they feel the CCC is a valuable contribution to the *escolinha* and 92% facilitators feel that the CCC is a beneficial support for the *escolinha*. Further analysis showed significant positive correlations between key indicators of quality at the *escolinha* with both having a qualified CCC in the community who is actively engaged in the school and CCC members who understand their roles.

The main challenges with the *escolinhas* as reported by the CCC members overwhelmingly were related to the low amount of contributions supplied by parents as well as the physical environment of *escolinha* (inadequate infrastructure and water availability) (Figure 25). CCC members reported that addressing these types of problems and challenges was both the responsibility of the CCC (40%) and the TPPs (40%).



Figure 25: Problems with Escolinhas as reported by CCC members (%)

### XII. Key Findings of Quality across Domains- Inclusion

Inclusion refers to the extent to which the classroom is able to support participation for all children, which may include addressing diversity in gender; learning needs; and cultural, ethnic, religious and linguistic backgrounds. (MELQO Report, 2017)

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Facilitators were observed in their inclusive practices to support participation of all children. 70% of facilitators were observed giving equal attention to both girls and boys. When teaching, 80% of facilitators used a mixture of languages (Portuguese and local languages.) The local languages depended on the location of the community within Mozambique. Finally, when interviewing the facilitators, they reported that 28% of all classrooms had at least one child with special needs and 5% have albinism.

### XIII. Key Findings of Quality across Domains- Pedagogy

Pedagogy refers to the approaches that teachers take in teaching children new skills, including individualized and/or group lessons and opportunities for dialogue. Child-centered teaching should encourage initiative, curiosity, cooperation, participation and active engagement. Children should engage in age-appropriate play, activities and routines. Curriculum content should address children's physical, social-emotional, language and cognitive development needs and stimulate early literacy and numeracy skills. (MELQO Report, 2017)

The MELE Classroom Observations collected key information on instruction practices employed by teachers to teach specific subject areas (i.e. numeracy, literacy, language skills, fine motor skills, etc.). Scoring took into consideration the type of lessons, activities, and or experiences geared towards introducing, practicing, and mastering skills in each particular area.

Each item was rated on a 4-point scale:

- 1= learning activity did not occur;
- 2= basic level (lesson taught using rote learning, limited interactions)
- 3= medium level (some play-based cleaning, connections to concrete objects, etc.)
- 4= high level (play-based, open ended questions, real-life connections)

The majority of *escolinhas* scored a basic level for most of the subject areas (Figure 26). In particular, half of all observed *escolinhas* did not include any learning activities related to literacy (i.e. identifying letters/words) and listening/attention (i.e. whether children hear a cognitively stimulating storybook). The exception is gross motor skills, under which 70% of all *escolinhas* scored a high level.



### Figure 26: Percentage of Escolinhas that scored each level for the different subject areas

As noted above and as part of the DICIPE program design, TPPs were responsible for creating and training facilitators in use of curriculum and lesson planning<sup>32</sup>. However, only 15% of facilitators reported using a curriculum to guide and encourage learning processes. 55% of facilitators reported that they prepare daily lesson plans in collaboration with another teacher; 30% reported they prepare lesson plans themselves, and 14% reported that the TPPs prepare lesson plans.

Grouping refers to teachers using different groups of children throughout the observation. Good practices in terms of grouping would be a teacher who uses all forms of groupings throughout the lessons, including whole group, small groups, pairs working together, or even working one-on-one with several children. In Mozambique, the MELE found that 43% of all learning activities were done in a whole group/entire class. Most facilitators did not use other grouping methodologies, which has potential implications on the overall quality of pedagogy and learning outcomes.

<sup>&</sup>lt;sup>32</sup> At the time of program implementation, there were no national curriculum or guidelines outlining competencies or lesson plans.

### XIV. Key Findings of Quality across Domains- Interactions

Interactions refer to the type and quality of interactions between teachers and children, and between children and their peers. Children should experience daily interaction with teachers who are nurturing, emotionally supportive, trained in pedagogy and ECD, and attuned to children's individualized needs. Interaction between teachers and children is perhaps the most critical element of ECE quality. (MELQO Report, 2017)

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Data was collected on overall classroom interactions and approaches to learning focused on how the facilitator engages with students, disciplinary methods, children engagement, and other key concepts. Once again, observation items were scored on a 4-point scale, with higher scores indicating high levels of quality (i.e. 1= lowest level of quality, 2= basic level of quality, 3= medium level of quality, 4= highest level of quality).

Facilitator Engagement: 50% of all classrooms scored a 4 (highest level) indicating that facilitators genuinely appeared to enjoy teaching, showed affection towards students, and were welcoming and encouraging of student ideas and participation. Table 13

Children Engagement: 45% of all classrooms scored a 3 (medium level) indicating that most of children observed were engaged throughout the observation and were waiting periods of only 5-10 minutes between activities. 75% of all classrooms reported children never waiting more than 10 minutes with no specific activity. Table 13

Disciplinary Strategies and negative interactions: 93% of all teachers scored a 3 or 4 on use of disciplinary methods which means that the vast majority of teachers used positive techniques for redirecting or guiding children's behavior. In addition, 73% of all teachers were observed as rarely or never engaging in negative physical or verbal interactions with children (i.e. yelling, pinching, striking, etc.) Figure 27

#### Facilitator Children Frequency Engagement Engagement Does not occur 2.5 2.5 Basic Level 12.5 20.0 Medium Level 35.0 45.0 High Level 50.0 32.5



### Table 13: Facilitator and Child Engagement

### XV. Key Conclusions

Further analyses of the data above were performed, specifically to examine associations between the MELE quality observations and demographic information obtained through facilitator, caregiver, and community variables. Zero-order correlations were estimated between MELE classroom observations and demographic information and regression variables were performed to evaluate the associations between context variables (caregiver, facilitator and CCC) and MELE classroom observation scores.

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Due to the limitations of the data, the qualitative aspects of these tools and study, and the small sample size, caution should be used when interpreting the results that are found. Results represent associations between variables but do not indicate why these relations exist.

Findings indicate:

### 1. Facilitator education and training is key to improving quality of *escolinhas*.

Facilitator education levels (i.e. grade level completed) were used to conduct linear regressions with MELE scores<sup>33</sup>. The total model accounts for 62% of the variance, but not all of the variables were significant. Positive correlations were found between facilitator education level and some aspects of quality (such as physical space, engagement of child, health and safety, and teacher interactions.)

<u>Item</u>	<u>B</u>	<u>Beta</u>	<u>P</u>
Pedagogy	084	169	.036
Space	-1.324	503	<.001
Materials	143	234	.002
Total Number of Storybooks	.390	.219	.001
Health and Safety	149	266	.001
Teacher Interactions	.485	.431	.001
Wait Time of 10 minutes or more	406	096	.069
Theme	400	240	.002
Individualized Instruction	.075	.050	.395
Portfolio	.478	.066	.275
Teacher Tracks Child Development	.547	.139	.027
Teacher Engagement	.3115	.146	.091
Teacher Discipline	.466	.155	.035
Child Engaged	-1.128	510	<.001

### Table 14: Regression Between Teacher Education Level and MELE Scores

In addition, analysis also suggests a positive correlation between facilitator training and the pedagogical approach used (See Table 15). Facilitators that received pre and in-service trainings

<sup>&</sup>lt;sup>33</sup> As previously mentioned, the majority of the facilitators interviewed (96%) completed 7th grade or higher before teaching in the escolinhas, indicating that most teachers have a higher level of education than the minimum required by the project (7th grade).

present better scores during their classroom observations of key aspects of quality, mainly: pedagogy, materials, and overall health and safety.

Item	Pearson Correlation	Р	N	Page   80
Pedagogy	.297 **	<.001	185	-
Space	403*	<.001	185	
Materials	.350**	<.001	185	
Health and Safety	.378**	<.001	185	
Teacher Interactions	077	.296	185	
Curriculum Used	049	.504	185	
Wait Time of 10 minutes or more	120	.104	185	
Theme	163*	.026	185	
Individualized Instruction	068	.357	185	
Portfolio	.049	.509	185	
Teacher Tracks Child Development	211**	.004	185	
Child Engaged	.141	.056	185	

### Table 15: Correlations Between Teacher Training and MELE Scores

*Note:* \*\*. *Correlation is significant at the 0.01 level (2-tailed).* 

\*. Correlation is significant at the 0.05 level (2-tailed).

The overall low pedagogy score from the *escolinha* observations (2.3 out of 4) and the limited use of learning methodologies, particularly in literacy and numeracy, illustrate the need to invest in improving the quality of the *escolinha* learning environment. The deviations throughout implementation from the original 2012 project design, particularly in regard to facilitator training, could be contributing to the low pedagogy score. For future programming, this implies that the more attention should be given to the education level of teachers as well as the quality and quantity of in- and pre-service facilitator training in order to improve overall classroom quality.

### 2. <u>Strong CCC contributes to higher level of quality</u>

In a community-based preschool, the CCC has an important role to play not only for parent and community engagement aspects but also related to the quality of the learning environment. *Escolinhas* located in communities with trained and actively engaged CCCs (i.e. who visited the escolinhas at least once per week) present better outcomes in terms of classroom pedagogy, child engagement and facilitator interaction (Table 16 and Table 17).

Table 16: Correlations Between	CCC Training	and MELE Scores
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Item	Pearson Correlation	Р	N
Pedagogy	.446 **	<.001	185
Space	159*	.031	185
Materials	.231**	.002	185
Health and Safety	.275**	<.001	185
Teacher Interactions	.325**	<.001	185
Curriculum Used	.114	.123	185

Wait Time of 10 minutes or more	.193**	.009	185
Theme	.156*	.034	185
Individualized Instruction	.224**	.002	185
Portfolio	167*	.023	185
Teacher Tracks Child Development	304**	<.001	185
Child Engaged	.470**	<.001	185

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed). \*. Correlation is significant at the 0.05 level (2-tailed).

### Table 17: Regression Between How Often CCC interacts with the School and MELE Scores

Item	В	Beta	P
Pedagogy	080	340	<.001
Space	.461	.367	<.001
Materials	.088	.300	<.001
Teacher Interactions	.194	.361	<.001
Total Number of Storybooks	158	187	.005
Wait Time of 10 minutes or more	.384	.191	.001
Portfolio	840	244	<.001
Individualized Instruction	285	397	<.001
Child Engaged	.220	.209	.001

See Annex V for the complete findings from the MELE data analysis.



# CHAPTER 5: LESSONS LEARNED AND KEY RECOMMENDATIONS

### Lessons Learned and Key Recommendations

Pulling from the data captured in the previous chapters, this chapter summarizes the key successes and challenges of the project. It focuses on knowledge accumulated throughout the design and implementation process that can be beneficial for future ECD policy and programming. The first section Page | 83 focuses on positive aspects of the project and the second section focuses on areas that should be improved or receive more attention for future program expansion or design.

#### 1. **Good Practices**

### **Community-Based Programming**

The majority of the CCCs throughout all provinces are functioning according to the model defined at beginning of the program. CCCs are seen as a central and important part of the overall functioning of escolinhas. They are respected both by caregivers and facilitators and are seen as a major decision-making body of the escolinhas. They are also important for establishing linkages with the public sector and other related services, primarily with the primary school. Continuous training (specifically in terms of planning and management capacities) and formative supervision will be important to ensure the sustainability of the community-based management approach.

### **Community Mobilization and Sensitization**

The envisioned community-mobilization approach by using community leaders via the CCC seems to be one of the most positive aspects of the program. Data collected throughout the Process Evaluation indicated a high awareness from caregivers on the presence and importance of the escolinha due to interventions and meetings organized by the CCC. Caregivers were engaged in the escolinha regardless of their level of education. The caregiver's education level (i.e. highest level of schooling completed) was not associated with the overall level of quality of the escolinhas or whether they sent their child to escolinha. Through the community-mobilization methods led by the CCC, escolinhas seem to have become a central part of some of the poorest and least educated communities in Mozambique where the pilot was implemented.

### **Hiring Local Facilitators**

The original program design called for local facilitators and indeed, data collected during the Process Evaluation found that all facilitators were from their local communities and that the CCCs are involved in their recruitment process. Facilitators are dedicated to support their own communities and improve the lives of local children. Although concerns remain regarding the overall sustainability of the program due to low facilitator stipends current data shows very low dropout rates of facilitators (5%). One factor that may contribute to this is the high number of facilitators (78%) with their own children attending the escolinha.

### • Governance Structure at District Level

MINEDH structure at the district level seems to be functioning as envisioned. Field visits indicated that the *escolinha* coordinators were knowledgeable and engaged with the *escolinhas*, communities, facilitators, and TPPs.

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### • TPP-led Implementation

While there were challenges that arose from the TPP-led implementation, it would have been challenging and difficult for MINEDH to have reached this level and coverage of ECD-related services on its own within this time frame. This method and program design also allowed young children from some of the poorest communities to access ECD programs. Using TPPs facilitated early learning activities to begin as soon as possible within these rural communities while giving MINEDH time to build capacity, become familiar with ECD, design its own curriculum, and establish the required government structure.

In addition, throughout the project lifetime, it became apparent that each TPP had different strengths: some TPPs excelled in community mobilization, others had strong pedagogical resources, others developed strong facilitator engagement and training programs, others were more successful in construction-related aspects. This method gave MINEDH the opportunity to learn and build upon the different strengths of each of the TPPs in deciding the future of ECD programming in Mozambique.

### II. Lessons Learned

### Focus on Pedagogy from the Beginning

For almost the first 2 years of the project, most of the focus from both the TPPs and the Government was on construction of the *escolinhas.* This consumed a huge amount of time and attention, particularly given the remoteness of many communities, and distracted from key issues related to quality, mainly: materials, teacher training, and curriculum. Pedagogical-related issues were considered more of an after-thought and only given attention once the project was well underway.

Under the original project design, the Basic Service Package stipulated the minimum requirements for quality-related aspects: a) the package of learning materials that should



be included in each classroom (i.e. books, writing utensils, etc.); b) the number of days for both pre- and in-service required by facilitators; and c) a set of guidelines for use of curriculum. However, the Process Evaluation shows that these three pedagogical aspects (curriculum, trainings, and materials) were not being implemented as defined and these minimum standards were not met. *Escolinhas* scored low on the amount and types of learning materials available; an overwhelming majority of teachers reported receiving only a small fraction of the trainings required; and only 15% of facilitators report using a curriculum to guide learning processes in the classroom. Because so much focus was given to the construction of the *escolinhas*, these pedagogical issues were not properly monitored or implemented as envisioned, impacting the quality of the *escolinhas*.

### **Recommendations:**

- Pedagogical aspects such as curriculum, teacher training, and materials should not be considered as an afterthought to providing access. Instead, they should be considered a priority from the beginning and, implemented and monitored as such
- In moving forward with the next phase of the DICIPE program, it will be important for the Ministry of Education to have an officially endorsed preschool curriculum, teacher training program, and set of required materials already in place before further scale-up

### Facilitator Training is one of the most important determining factors for quality

More-so than anything else, results from the MELE<sup>34</sup> demonstrated a positive correlation between facilitator trainings and improvements in quality at the *escolinha* level. Teachers who received more training scored higher in terms of pedagogical approaches in the *escolinhas*. For future programming and planning, the pre- and in-service training contents and delivery approaches need to be closely examined from the beginning as means for improving the overall quality of the *escolinhas*, and as such should be given high priority. These trainings can address areas such as the creation and use of local materials that can be used in the classroom as well as how to use a curriculum to support learning.

Recommendations:

- Pre- and in-service facilitator training are key to improving the overall quality of the escolinhas.
- In moving forward with the next phase of the DICIPE program, the Ministry of Education should have a clearly defined (and piloted) facilitator training program (for both pre- and in-service training) ready for roll-out

### Separate Construction of Escolinhas from Operational aspects

TPPs were responsible for all aspects of implementing the ECD program at the community level, including the construction of the *escolinhas*. While all TPPs had significant expertise in operational aspects of ECD, there was not the same level of expertise in school construction. Issues related to interpretation of construction guidelines, the quality, sustainability and safety of the structures, and complicated negotiations related to revised construction costs led to significant program delays and had profound impacts on implementation. Construction of the *escolinhas* should have been contracted out separately.

### **Recommendations:**

- If using a public-private partnership (PPP) design, the construction of escolinhas should be contracted out separately from other operational-components (management, pedagogy, etc.).
- The capacity of TPPs to do construction should be better evaluated before the contracting process and if necessary, consortium with construction firms should be considered
- The school construction department within the MINEDH should be strongly involved in all stages of the project- from initial design of construction guidelines/template, through supervision of the construction, and beyond to support with maintenance issues

### • Keep Results-Based Disbursement Frameworks Simple

### Ensure well-designed Results-Based Disbursement Frameworks

The complexity of the original RBDF led to significant program delays Key issues in the original RBDF design included: too many indicators which challenged proper monitoring and prioritization by TPPs; lack of clarity/definition on how to assess some of the indicators; some of the indicators

<sup>&</sup>lt;sup>34</sup> See Chapter 4

were out of the control of the TPPs; and a lack of a unified instrument being used by all IVAs for monitoring and reporting outputs. The managing of the RBDF was made even more difficult given the newness of this type of financing for Mozambique and the overall low-capacity to ensure proper monitoring of the indicators. Once the revised RBDF and monitoring tool was in place, implementation improved and accelerated significantly.

Recommendations:

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- RBDFs should be kept as clear as possible with the number of indicators to trigger disbursement adequate to the specific project features and context (particularly in countries with lower capacity) and clearly identifiable and measurable criteria
- A unified RBDF instrument must be developed involving all stakeholders, and users should be thoroughly trained on the utilization of the instrument in order to ensure a common understanding of all stakeholders from the beginning
- All external verification agents should use the same instrument (instead of each verification agent designing their own instrument)
- Irrespective of how the verification is done (either with IVAs or through the government) it is important to include specialists who have specific expertise related to the criteria for verification (including engineers or architects for anything construction-related)

### Maintain Realistic Expectations for a Pilot Program

Due to the overall rural nature of Mozambique, many of the communities were in extremely rural areas and very difficult to access. This made implementation on all levels very difficult - from shipping construction materials to build the *escolinhas*, ensuring running water at the *escolinhas* (which wasn't feasible for many of the rural communities,) and providing consistent support and monitoring from both district officials and the TPPs. While studies have shown that rural communities may benefit the most from such a program, it was not ideal for a pilot in which a completely new model was being tested and new competencies/capacities being developed. The logistics of piloting a completely new program in such extremely rural areas did have an impact on the quality of services delivered. For future programs, the expansion of a project to such rural areas could be considered after a successful pilot.

In addition, although this program was considered a "pilot project," it was an extremely large pilot (350 communities in total) and spread out across all geographical areas of the country (North, Center and South). While on one hand, this was advantageous to be able to compare and contrast implementation of the program model throughout different contexts and realities in Mozambique, it was quite difficult to manage such a large pilot size spread out over such a wide region, particularly that this was such a new area for MINEDH. The capacity and experience of the government in ECD and managing new programs should be a major factor in determining the size of a pilot.

### Institutional sensitization increases leadership, ownership and performance

Throughout program implementation there were multiple changes in leadership at a) the highest levels of MINEDH (such as the Minister of Education and Permanent Secretary); b) within the Primary School Department at the Director and technical staff level supporting the project; and c)

the Task Team Leader leading the project at the World Bank. All of these changes in leadership and turn over in staff had implications on the overall delivery of the project, onboarding and understanding of the project, and differences in addressing bottlenecks.

Two multi-sectoral, high-level workshops were organized throughout the duration of the "Within MINEDH the perception and understanding on the role and importance of the preschool varies, depending on the knowledge and degree of exposition to ECD concepts and approaches. There is a belief that preschool is competing with the primary education in terms of availability of funds and this (understanding) undermines the preschool policy within the Ministry of Education."

TPP informant from interview

project (one in the beginning in 2012 and one at the mid-point in 2016) to try to gain ownership and create momentum for the program at the highest levels of Government. After both workshops, there was an increase in commitment and ownership from the Government, however shortly thereafter, a change in government and leadership resulted in starting completely over with sensitization of the project (there were four Ministers of Education throughout the entire project). As these workshops were costly and time-consuming to organize, it was impossible to re-organize after each new administration.

In general, and particularly towards the end of the project concerns were noted on the overall management of the program and on the unclear prioritization and ownership of this component within MINEDH. Repeated delays in program execution without close monitoring, and lack of well-defined distribution of responsibilities within the DICIPE team, and the lack of coordination among relevant MINEDH departments were raised as issues adhering the overall success and sustainability of this program. The sustainability and further expansion of the program will depend, to a large extent, on successfully resolving these challenges.

### **Recommendations:**

- Need for ongoing program and ECD sensitization at all levels of government (one kick-off sensitization campaign is not enough)
- Ensure high-level ownership to increase political will and commitment, and improve institutional capacities
- Need for strong and qualified technical team within the Preschool Department to coordinate the early learning policy and help quickly resolve day-to-day issues confronted throughout implementation, particularly in an environment with high turnover in leadership and administration

- Need for clear definition of roles and responsibilities and coordination between the various ministries within the Government to increase program awareness, efficiency and effectiveness
- In moving forward for the Mozambique Ministry of Education, particularly given the new education law that formally recognizes preschool as a subsystem, it will be important to have a strong and qualified technical team within the Preschool Department to help build the preschool system, coordinate the early learning policy, and resolve day-to-day issues confronted throughout implementation

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### • <u>Need for High-Quality Ongoing Capacity Building</u>

The original program design called for a series of trainings to take place over the course of the project lifetime. Trainings were originally envisioned to be decentralized and held at the provincial levels, however the central level team ultimately decided it would be easier to organize the majority of the workshops at the central level in Maputo. As such, most of the central level team's attention was given on sorting out logistics of the workshops rather than focused on ensuring high quality content and training material.

For staff at all three levels (particularly at the most local levels,) the concept of early childhood development and the overall project design were brand new - most had no exposure previously to ECD, working in local communities, or even basic project skills such as M&E, program management or financial administration. In addition, throughout the project lifetime, there was a turnover of staff. In most cases, if staff were hired after the training had already taken place, there was no opportunity to make up for the missed training. As such, offering trainings on a one-time basis was insufficient.

### **Recommendation:**

- A clear capacity development plan should be designed in the beginning, including refresher trainings on an ongoing basis for new staff (if there is a high turnover) and to ensure existing staff have a strong grasp of the matter
- Ensure a team member within the central level team who can lead the organization of trainings, including to write ToRs for workshops, support with overall workshop agenda and design, indicate and hire experts and facilitators to lead trainings, support with developing materials, organize logistics, etc.

### <u>M&E System in place prior to start of implementation</u>

There were three key problematic issues related to the M&E during the implementation of this program:

(i) <u>Lack of harmonized data collection, monitoring and reporting system/tool (used by</u> <u>TPPs/IVAs)</u> Prior to the start of the program, no standardized reporting system or tools were in place. Each of the three TPPs used their own reporting systems and each of the three IVAs used their own reporting systems. This made flow of information and overall monitoring of the program

"The capacity to engage and guide the IVA was a key bottleneck for the project management"

MINEDH informant

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very difficult as there was not 1) a standardized list of indicators or data to be collected and 2) a harmonized tool for reporting data. As a result, initial reports sent in from both TPPs and IVAs had significant discrepancies, were difficult to analyze, and were not useful to clearly understand and troubleshoot specific bottlenecks across the different provinces.

### (ii) Lack of clear reporting system and contract management within MINEDH

In addition to the data being collected by the TPPs and the IVAs, the original program design called for MINEDH to develop their own M&E system and protocol so that a clear flow of data collection could be shared from the community level to the district level to the provincial level and finally to the central level of MINEDH. The idea was to train local level MINEDH officials in use of data collection systems so that MINEDH could begin to use and rely on their own data reporting systems. This never materialized and as such MINEDH was completely dependent on the reporting system of the TPPs and IVAs for collecting and using any data from the preschools.

Indeed, within the MINEDH Preschool Department there was overall weak contract management and capacity to monitor the quality of the services provided by the TPPs. Specific training (see section immediately below) should have been provided to the central level on both M&E and contract management. These types of trainings should have been included in the original project design.

### (iii) Lack of capacity within MINEDH for collecting data and analyzing/reviewing reports submitted by TPPs/IVAs

Not only was there never an established M&E system within MINEDH, there also was very little capacity to make use of data collected. At the most basic level, officials at the local levels had very little to no experience in using any type of data collection tools or software. However, even more importantly, there was an apparent lack of skills across all levels in how

"The IVAs collected the data, but we didn't receive any feedback from the IVAs or MINEDH on how we could improve our work. (...) At the district level, it was very difficult for the technical staff to understand the addedvalue of the IVAs. The MINEDH could have prepared them better."

TPP informant

to translate M&E data into useful daily program implementation. Because the project was so spread out geographically, M&E training was scarce and not as comprehensive as needed. IVA and TPP reports submitted to the central level were often not given the full attention or detailed review as needed and as such data was not used in a meaningful manner to identify and address any major bottlenecks, challenges, or successes and promote adjustment to the project implementation.

### **Recommendations:**

- An M&E plan with standardized data collection tools, reporting systems and protocols, and one that is aligned with the existing education M&E system needs to be established at the beginning of project implementation.
- Need for continuous training for staff on planning, M&E, and making use of data to adjust to programming needs

### • <u>Take into consideration procurement capacity of MINEDH</u>

The contracts and amendments for both the TPPs and IVAs were new for MINEDH and quite complex to manage. The original project timeline factored in time for slight delays related to the procurement and contracting processes, however, these delays were significantly larger than projected. First of all, because of the high-value, all procurement steps for these contracts had to go through several levels of approval within the World Bank which added significant back-and-forth and time to the approval of the contracts. In addition, due to it being an international bidding process, all contracts, TORs, amendments, and negotiations had to be held and recorded in English. Finally, the difficulties and delays in implementation added to the complexity as they required multiple amendments and rounds of negotiations. Ongoing capacity building and close support from the World Bank team was required throughout the procurement procedures for both the MINEDH procurement team and the DICIPE technical team.

### **Recommendations:**

- During project design, factor in more than expected time for procurement processes to account for unexpected delays and learning curves
- Ensure that the DICIPE team has the capacity to develop strong ToRs, review bidding documents, liaise with the procurement department, and help lead the negotiations with TPPs/IVAs

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### Fair Compensation of Facilitators

The amount of the subsidy received by facilitators (US \$11/month) was continuously cited as a major concern of the project by all levels of government, TPPs and community leaders. Because of the complex bureaucracy involved in revising their subsidy, it was not possible to do so during the lifetime of the project.

Only 5% of facilitators reported intending to teach in an early childhood program as their life long profession. This is particularly alarming regarding the sustainability of preschool program in Mozambique. As the facilitators and their continuation in this role is key to the overall sustainability of this "The value for the facilitator subsidy is our key challenge to the implementation of this project. In Maputo Province, for example, due to the proximity to urban areas and the availability of other job opportunities, it is very difficult to hire facilitators with this amount of subsidy. In some communities, the parents are contributing to increase the subsidies and the number of hours per day of escolinha functioning to adjust to the parents needs but also to ensure the retention of the facilitators. With 650 meticais, they cannot buy anything; it's not sufficient, at all."

### Escolinha Coordinator

"The sustainability of this model will depend on the capacity of the Ministry of Education to adjust the value of the subsidies."

**TPP** informant

program (especially in light of the extensive trainings they have received led by the TPPs), a higher and more fair compensation could encourage longer term career prospects, which will have large benefits for both facilitators and students (and the system as a whole) in the long term.

### **Recommendations:**

- Ensure fair compensation for facilitators from the beginning of the project (easier than revising/increasing the cost later once the program has been established)
- Ensure an efficient system is already in place for facilitators in rural villages to receive their payments (via mobile banking or other innovative processes)

### Parenting Education

In the future, the development of the content and curriculum for the parenting education sessions could be outsourced to another organization. In the DICIPE project, the TPPs were overburdened with the construction of the *escolinhas*, the development and implementation of *escolinha*-activities, and the development and implementation of parenting education sessions, among other key activities. The development of a unified parenting education package could easily be outsourced, and then subsequently implemented by the TPPs (who had the existing community relationships).

Attention needs to be given to ensure alignment with existing approaches and other parenting/community-based education programs be implemented by other sectors. This could also be an opportunity for multi-sectoral coordination, as the topics of the sessions are cross-cutting (nutrition, safety, agriculture, education, etc.) and institutions could work together to create one harmonized package.



### **Recommendation:**

- Outsource the development of a high-quality parenting education package so that it is fully ready to be implemented at the start of the program
- In moving forward for the Mozambique Ministry of Education, the parental education package, including the approach, implementation mechanism, messages and tools to be used should be aligned with existing materials and experiences (particularly with other sectors).



# CHAPTER 6: CLOSING

### Closing

In December 2018, the Education Law of Mozambique (Law 18/2018, Art. 10) was revised to recognize preschool as a subsystem of the national Education System. The revised law gives clarity on the responsibilities and functioning of the preschool subsystem and formally recognizes the potential benefits Page | 95 preschool can bring to improving primary school performance and subsequent lifelong opportunities for the Mozambique population. Although the inclusion of preschool into the national education system was a result of many factors, the DICIPE pilot is considered the driving force behind this.

The inclusion of preschool into the official education system is a major step forward to ensuring access to ECD services in Mozambique. However, as noted throughout the Process Evaluation, government ownership of the DICIPE pilot was a challenge at various stages throughout implementation. Although the formal inclusion of preschool can be considered the biggest success of the DICIPE pilot, ideally this should have been in place prior to the start of the project. It would have helped to have preschool as an already established place of importance within the education system.

While there were significant deviations throughout implementation from the original 2012 project design overall the DICIPE program was successfully delivered using the community-based approach with high levels of satisfaction, particularly within the communities and families served. Feasible models for scaling up delivery of ECD services to a national level require further investigation. To that end, the forthcoming impact evaluation and costing exercise, together with this Process Evaluation, will help to provide the Government of Mozambique with the knowledge and data to make appropriate decisions regarding the future expansion of early childhood education in Mozambique.

At the end of 2019, the World Bank Education Sector Support Project (under which funding for this pilot was provided) will close. At the time of writing this Process Evaluation, there was no confirmation as to future funding or activities to be supported by the World Bank beyond December 2019. At the same time, the contracts with the TPPs will also conclude in December 2019, and the Government of Mozambique will assume full responsibility of the 350 escolinhas under the DICIPE pilot. Given that the current National ECD Strategy ends in 2020, this is an opportunity for the Government of Mozambique to revise this strategy, building on the lessons and findings from the DICIPE Pilot and to align with the new 2018 Education Law. With preschool as an established and officially recognized part of the education system, this is the window of opportunity for the Government of Mozambique to develop, budget, and scale a nation-wide comprehensive early learning and care program.



# ANNEXES

### Annex I: Methodology of Process Evaluation

The Mozambique ECD Process Evaluation used both quantitative and qualitative methods to collect data in communities throughout all five provinces. Data collection methods included structured observations, questionnaires, semi-structured interviews, focus groups and logs. Both qualitative and quantitative assessments monitored the fidelity of the interventions and identified potential modifications to improve future intervention delivery. Review of program description and data logs as well as structured observations of the *escolinha* classes, provided verification that the intervention was (or in some cases, was not) delivered as intended. Interviews and focus groups yielded a multidimensional assessment of how the intervention was delivered and received, as well as identifying the barriers to and facilitators of the intervention across and within participating communities.

The procedures used to obtain both qualitative and quantitative data are described below.

### **Desk-Review of Program Documents**

The first step of the Process Evaluation was to establish a clear description of the intervention itself, together with the specification of what constituted complete and acceptable program delivery. The following documents were reviewed:

- ESSP Project Appraisal Document (ECD Additional Financing)
- Mozambique National ECD Strategy
- DICIPE Project Implementation Manual
- World Bank Supervision Mission Aide Memoires from 2012-2018
- TPP and IVA Contracts and Amendments
- IVA Reports (including progress tracked on Results Based Disbursement Framework)

### Data Collected by TPPs

Data collected by the TPPs throughout the duration of the project (2014-2018) in all communities was also used to analyze key information on construction of *escolinhas*, attendance, dropout rates, facilitator turn over, etc. This information was collected by the TPP Community Supervisors at the community level and reported to the central level TPP on a monthly basis.

### Structured Observations of Escolinhas

From June-July 2018, structured classroom observations were held in a sample of forty *escolinhas* from Phase II throughout the five provinces (Maputo, Gaza, Nampula, Cabo Delgado, and Tete.). Eight *escolinhas* per province were randomly selected (4 per each of the 2 districts). Data was collected using the MELE classroom observation tool. For more information on this methodology, see Chapter 4.

### Structured Interviews with Facilitators/CCC/Caregivers

From June-July 2018, interviews with facilitators, CCC members, and caregivers were conducted in the same sample of the 40 Phase II communities. All facilitators (in most cases, 4) at each *escolinha* in the communities were interviewed. The president of the CCC in each community was interviewed.

Due to the inexistence of a systematized list with the households at the community level, a full listing exercise of all households in each community was first done to identify eligible caregivers (i.e. households

who had at least one child aged 3-5 years.) Once all eligible caregivers were identified, eight were randomly selected for the caregiver interviews.

In total 320 caregivers were interviewed (100% of the sample), along with 139 *facilitadores* (87% of the sample) and 40 CCC (100% of the sample). Interviews were conducted using the MELE questionnaires. For more information on this methodology, see Chapter 4.

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### Interviews with Key Stakeholders

Qualitative interviews were held with key implementers and policy makers to explore their perspectives on the DICIPE program scope and implementation process. In total 19 individuals from the Ministry of Education (central, provincial and district level), members of the multisectoral group, and TPP representatives (project coordinators, provincial and district coordinators) were interviewed. Semistructured methodology was applied whereby an interview guide contained a defined set of questions answered by all interviewees. Additional questions, not included in the guide, were asked during interviews to clarify and/or further expand certain issues. On average, the interviews lasted a duration of one hour. The interview analysis was triangulated with other information collected for this process evaluation.

### World Bank Team Member Perspectives

Finally, qualitative inputs were received from key World Bank team members who worked closely with both MINEDH and the TPPs throughout the full duration of the project.

## **Annex II:** ECD Basic Service Package (BSP) to be implemented by Third Party Providers (TPPs) in each participating province

The following Basic Service Package (BSP) was created through a consultative 3-day workshop with MINEDH staff from the district, provincial and central levels. This Basic Service Package was to be implemented and used by all Third-Party Service Providers across the five selected provinces. The Basic Service Package outlines the minimum requirements to be included in all escolinhas involved in the Ministry of Education's DICIPE project. The minimum requirements are divided into the following 9 themes and further described in detail below:

- Parents and Families
- Curriculum and Program
- Teaching Methods
- Materials
- Teachers
- Escolinha Environment
- Management of Escolinha
- Coordination with local Health Services
- Local Government

### Parents and Families

### Involve and work with parents, families and community

- Hold community sensitization campaigns regarding the importance of ECD and escolinhas
- Carry out focus group discussions and key informant interviews with children, parents, teachers, health workers, and community leaders to understand the specific ECD needs and parents' interest in specific issues for the "parenting" meetings
- Hold "parenting" meetings once a month to share information regarding the development and education of the children
  - "Parenting" meetings are open to all community members with children 0-8, including pregnant mothers
  - Parents of eligible children must commit to attending "Parenting" meetings
  - o "Parenting" meetings are led by project staff and community facilitators
  - o Each "parenting" meeting has a theme based on need and requests from community
  - These themes include:
    - Engagement in the escolinha
    - Child development domains
    - Gender equality, children's rights and citizenship
    - Health hygiene and nutrition
    - Emergent literacy and math
    - Child rights and positive discipline

- Families and communities must commit to contributing to the escolinha (in kind contributionscleaning, providing materials, etc., or monetary contributions)
- Involve parents and families in the construction and maintenance of the escolinha infrastructure
- Involve parents in maintaining the proper safety and hygiene of the escolinha
- Involve parents in the learning of the children (i.e. have them participate in escolinha activities, invite them to tell a story to the students, etc.)
- Involve parents in developing the escolinha daily schedule
- Involve parents in developing and monitoring escolinha regulations
- Allow and encourage parents to participate and attend some of the trainings for the teachers
- Measure changes in children's skills, teacher and parent attitudes, knowledge and practices through assessments that include all community stakeholders

### Curriculum and Program

Use a curriculum and program that promotes learning and development in each of the following areas: social, emotional, physical, language and cognitive

- Use the curriculum and program created by MMAS (Ministry of Women and Social Affaris)
- Have at least 15 hours of ECD services a week
- Have at least 9 months of ECD services a year
- Children eligible for program are between 36-59 months old
- Create and use a daily program that includes outdoor and indoor activities
- Create and use a daily program that includes teacher-directed learning and self-initiated learning
- Use Patriotic Education
- Focus on oral development through the use of language, songs, dances, stories, images, objects, symbols, etc.
- Use local and national languages to facilitate communication
- Use a program which reflects gender equality, children's rights and citizenship
- Include weekly activities to develop sensory motor skills
- Create an environment of inclusive learning

### **Teaching Methods**

Guarantee developmentally, culturally and linguistically appropriate and effective teaching methods

- Differentiate teaching methods based on the need and capabilities of each child
- Use teaching methods which reflect gender equality
- Provide regular mentoring and coaching to committees and teachers using program monitoring tools
- Provide ongoing assessment to gain information on children's learning and development
- Use teaching methods which are appropriate given the local realities
- Develop mutual and respectful relationships between teachers

### **Materials**

### Use appropriate learning materials

- Materials must include chalkboard, writing utensils and books
- Produce majority of learning materials from local resources
- Emphasis should be placed on learning materials that reflect gender equality, children's rights and citizenship
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- Majority of books in escolinha must be child-friendly and centered around children's stories

### **Teachers**

In coordination with local community leaders, select and recruit teachers and provide them with the training, skills and knowledge to promote children's development

- Teachers should come from the local community
- Teachers must be qualified, responsible, committed to ECD and not have any form of criminal background
- Teachers should be between 18 and 50 years old
- Teachers must have attended school through the 7<sup>th</sup> grade (or display the skills/knowledge equivalent to a 7<sup>th</sup> grade graduate)
- Teachers must pass a basic math and Portuguese test
- Teachers agree to work at least 3.5 hours a day/ Monday Friday (3 hours for the classes and at least half an hour to prepare and wrap up each day.
- Teachers must sign a contract agreeing to the basic subsidy which will be provided by the Ministry of Education
- Teachers cannot be members of the ECD Community Coordination Committee (CCC)
- Teachers must be willing to participate in training and other learning opportunities
- Teachers must receive 10 days of pre-service training
- Teachers must receive 5 days of training per year (workshops, learning days, etc.)
- Teachers must receive 5 hours of training per month (individual and group coaching)
- Trainings tropics include:
  - Child development domains
  - Setting up a school classroom with learning corners
  - o Implementing the daily routine, including emergent math and literacy
  - Producing learning materials from local resources, reflecting gender equality, children's rights and citizenship
  - Children's participation
  - Classroom management
  - Health and hygiene
  - Positive discipline
  - Facilitating parenting meetings
  - Transitions to primary school

### Escolinha Environment

Create a safe and healthy environment that provides appropriate indoor and outdoor physical environments

- Ensure 1 staff member for every 15 children
- Learning and play areas must have 1.5 square meters per child
- Infrastructure must accommodate people with physical disabilities
- The escolinha infrastructure must adhere to the construction standards provided by the Ministry of Education
- Indoor and outdoor infrastructure must be made from a combination of traditional and contemporary materials
- Indoor infrastructure must have appropriate light and ventilation
- Indoor infrastructure must provide a clean and dry place for children to sit
- Outdoor play equipment must be appropriately designed for small children
- Outdoor play area must have shade, and play equipment must be on soft sand or grass
- Classrooms should have the minimum requirements to accommodate all children (i.e. mats, chairs, benches, etc.) and walls should be decorated in a child-friendly manner
- Premises must have potable water, proper sanitary conditions and gender separate latrines
- Children and staff must wash hands regularly
- Escolinha must have access to garbage pits

### Management of Escolinha

### Escolinhas have a management structure that ensures strong administration

- Each escolinha has an ECD Community Coordination Committee (CCC) which is made up of members of the community
- CCCs have 10 members
- The members of the CCC should have an equal representation of gender and include a teacher from the closest primary school
- Positions on the CCC should include a president, vice-president, treasurer, health official, construction official and human resources official
- Positions on CCC must have clearly defined roles and responsibilities
- Teachers of the escolinha may not be part of the CCC
- CCC meetings are held at least once a month to guide the functioning of the escolinha
- The CCC must have and follow a sustainability plan for the escolinha
- The CCC should:
  - Ensure transparent management of the escolinha
  - Record the minutes of meetings and disseminate them as needed
  - o Organize the files and archives of the escolinha
  - Develop and implement the Escolinha Development Plan
  - o Ensure active participation of various social actors involved in escolinha

- Encourage and ensure that parents contribute to the functioning of the school
- $\circ$   $\;$  Guarantee sound management of the contributions and funds of the escolinha
- o Develop tools to monitor attendance at escolinha (of both students and teachers)
- o Ensure that proper hygiene and cleanliness exist at escolinha
- Ensure that children participate in health campaigns
- The CCC should create a strong relationship and connection between the Director of the closest primary school and the leaders of the escolinha to coordinate the transition and enrollment of children from the escolinha to the Primary School
- The CCC will receive training in the following areas:
  - Child development domains
  - Gender equality, children's rights and citizenship
  - o Community mobilization to support escolinha activities
  - Planning and carrying-out activities related to functioning of escolinha
  - o Links to wraparound health services and birth registration
  - Reporting on activities
  - Transitions to primary school

### **Connections to Health Services**

### Create connections between ECD services and health services

- The ECD project must include liaisons with local health activists
- Every escolinha must be under the supervision of a health worker
- Each escolinha must have access to a school health package
- Each escolinha must have access to a basic first aid kit
- Teachers must be trained to encourage parents to send their children to the escolinha (i.e. the benefits of ECD intervention)
- Teachers must be trained in creating parent awareness regarding their child's health (i.e. vaccinations, infectious diseases, how to fill in the national height and weight card, etc.)
- The escolinha (through "parenting" meetings or through teachers) must provide parents with information on providing children with a balanced diet
- Sensitize parents on better nutrition using local foods

### Local Government

### Work, involve and train members of the local government in ECD activities

- Create a Memorandum of Understanding between the community of the escolinha, the government and the 3<sup>rd</sup> Service Providers to formally define each of their roles and responsibilities for the ECD program
- Inform local government officials of ECD best practices
- Inform local government officials of any difficulties or challenges facing the escolinha
- Promote the exchange of experiences and practices with the district level government

- Hold a training for all government technicians from the provincial, district and local levels regarding the implementation of the ECD program (once a year)
- Training topics include:
  - Child development domains
  - o Gender equality, children's rights and citizenship
  - Preschool learning program
  - Monitoring and coaching system
  - o Transitions to primary school

### **Annex III:** Details Regarding the Delays in the Selection and Hiring of TPPs and Associated Amendments

### **Contractual History**

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TPP contracts had to be revised and extended multiple times throughout project duration. What follows is a summary of the various contracts/amendments signed with the TPPs and brief explanation of the contractual-related delays.

### Original Contract (mid-2014 through July 2015):

As per original project design, the contracts with the TPPs were anticipated to be signed by November 2012. However, following a lengthy competitive bidding process, these contracts were only signed in mid-2014.

The following are key delays and issues faced with the original contracts:

**Limited Options of Qualified Firms:** Despite extensive advertisement and a direct market campaign, there were very limited options in terms of qualified firms who applied to this process. In 4 out of the 5 provinces, only 1 firm met the minimum requirements to even proceed to the Financial Evaluation. Procurement-related delays began at this early stage due to extending the opening period in order to increase the potential for eligible and qualified firms to submit proposals.

**Delays in Procurement and Signing of Contract:** The signing of the original contracts with the TPPs was significantly delayed due to complexities in the procurement and bidding processes (because of the high value and newness of these types of contracts for MINEDH). As a result of the delays in the procurement process, contracts with the TPPs were not signed until March 2014. The direct implication was that the first community-based preschools were not operational in August 2013 as per the project design and the Terms of Reference.

**Forced End Date of Contract:** The expiration date of the original TPP contracts (July 31<sup>st</sup>, 2015) was aligned with the closing date of the WB Education Sector Support Project (ESSP) that financed the ECD component. As such, even with the delays in the procurement and singing of the contracts with the TPP, it was impossible to extend the TPP contracts beyond July 31, 2015. As the TPP contracts were only signed in March 2014, all parties (TPPs, MINEDH, and the WB) agreed that it would not be possible to implement the program across all three phases of communities as originally envisioned by July 31, 2015. TPP contracts were then revised to only include two phases of communities with the intention to include the third phase if and when contracts were extended (depending on the extension of the ESSP.)

However, even with the removal of the 3<sup>rd</sup> phase of communities, due to delays related to the construction of *escolinhas*, activities with the students in the *escolinhas* only began in April 2015 (almost 1.5 years later than expected). At that point, it was not feasible to implement the program even across 2 phases by July 31, 2015 (essentially a 3-month time period.)

### Amendment #1 (through December 2016):

In early 2015 the ESSP was formally extended until December 2018 (ESSP AF II) and as such in mid-2015, negotiations began between the TPPs and MINEDH for the extension of the program to ensure implementation of the ECD component as initially designed ("Amendment 1"). Besides an extension of the contracts for 1.5 years until December 31, 2016, Amendment 1 also took into consideration lessons Page | 106 learned from implementation of Phase I activities, mainly the need for a revised construction template for the escolinhas of Phase II (See Section V of this chapter below).

Negotiations for Amendment 1 took place between August 2015 to June 2016. Negotiations for Amendment No.1 took longer than expected as consensus was needed on the redesign of the template for the infrastructure of Phase II community preschools to ensure that key features were included while maintaining low costs for construction. This negotiation period led to extensive delays in the implementation of the project. During this period all activities related to Phase II were halted until agreement was reached on the revised construction design. In the meantime, activities for Phase I (functioning of preschools and associated monitoring and supervision) continued.

Furthermore, during the first round of verification using the RBDF, it was discovered that the results framework was too complex and made it impossible for disbursements to be made to the TPPs (see Section VI of Chapter 2 for more details.) Amendment #1 also included the revised RBDF.

Due to the nature of the Results-Based Framework, during this time of negotiations, disbursements for Milestone 2 and 3 which were associated with construction of *escolinhas* could not be made. This meant that TPPs had to cover costs of continued Phase I activities until these funds were made available. In order to move forward with Phase II, make the disbursements to ensure cash flow and avoid the risk of jeopardizing the achievements of the project up to this point, Amendment #1 was signed as quickly as possible once consensus was made on the construction template. Further negotiations for costs incurred during the negotiation period for Amendment #1 (Jun 2015- Aug 2016) such as costs related to the ongoing functioning of Phase I communities were not included as this would have only led to further delays in the implementation of Phase II activities.

### Amendment #2 (through December 2017):

After the signing of Amendment No.1, implementation of Phase II activities accelerated significantly. However, due to the various delays previously associated with the construction template and negotiations of Amendment No. 1, there was not sufficient time for the TPPs to fully implement all activities of Phase II by December 2016. As such, TPPs requested another extension of the contract (Amendment No. 2) until December 31, 2017 to allow them to complete construction and fully operationalize preschools in Phase II. This Amendment No.2 also included additional costs to: a) cover the extra 11 months that the TPPs had been running activities in Phase I escolinhas particularly during the negotiation process for Amendment #1; and b) to account for construction costs associated with the revised and improved preschool construction design template used in Phase II communities.

Amendment No.2 was signed in June 2016 with the agreement by all parties that there would be no further extensions and that by December 31<sup>st</sup>, 2017, all TPPs were expected to have escolinhas in all Phase I and Phase II communities (70 per province; 350 in total throughout Mozambique) fully operational.

### Amendment #3 (through July 2018):

Despite accelerated implementation of Phase II activities and agreement from all parties, TPPs were unable to fully operationalize all 350 escolinhas by December 31st, 2017. Amendment #3 was created to extend the original contract for a final time to allow the TPPs to operationalize the remaining escolinhas. Amendment #3 was signed in March 2018 and extended the deadline to July 2018, with the agreement Page | 107 that all escolinhas would be operational by April 2018 and that the additional months were reserved for the verification and disbursement processes.

Amendment #4 (through July 2019):

There were delays in the final verification and disbursement processes. As such, a final no-cost Amendment #4 extended all TPP contracts until July 30, 2019 to allow the verification and completion of payments for all milestones included in the TPP contracts.

### New Contract (2018-2019) for Transfer of Competencies and Handover of Escolinhas to Government:

At the end of 2017, Government created a new contract, via Single Source Selection, with the current TPPs for the period January 2018- December 2019. This new contract focused on the consolidation of ECD activities implemented during Phase I and II. The contract also included the development of a formal and gradual handover process of escolinhas from TPPs to the Government, including capacity building workshops, on-site training, mentorship and a phased-out plan that under which the Government could assume full responsibility of the operation of all *escolinhas* by December 2019.

Negotiations for the new contract began in late 2017 with the expectation that the new contract would go into effect as of Jan 1<sup>st</sup>, 2018. However, the new contract was only signed in May 2018. A key factor that contributed to this delay was that many Phase II escolinhas were still not operational. TPPs could not focus on the activities to begin the handover of escolinhas as specified under this new contract until all escolinhas were in fact operational. This issue was resolved by extending the contract for the operationalization of escolinhas to July 2018, under Amendment #3 (more information is above.)

In addition, whereas in the previous contracts each TPP designed their individual programs, under the new contract, all three TPPs were expected to work together to transfer their knowledge to the Government. TPPs had to design a single training package, including modules and workshops, on-site training and mentorship, incorporating their experiences and best practices, to pass their knowledge of management of the escolinhas and implementation of ECD activities to the Government. This took significant time and delayed negotiations for the new contract.

### **Annex IV:** Details Regarding the Delays in the Selection and Hiring of IVAs and Associated Amendments

### **Contractual History**

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### Original Contract (Sept 2014 through July 2015):

In September 2014, following a competitive process, MINEDH signed contracts with the IVAs. The closing date of the original contracts was July 31<sup>st</sup>, 2015. However, due to above mentioned delays with the TPP contracts and associated delays with implementation of ECD activities, the contracts with the IVAs were extended several times to ensure continued verification throughout the duration of service provision led by the TPPs.

### Contract #2 (through June 2017):

In mid-2016, the Government signed a new contract with the IVAs, via Single Source Selection for the period of July 01<sup>st</sup>, 2016 to June 30<sup>th</sup>, 2017. The new contract focused on two main activities: 1) Continued independent verification of implementation of ECD activities in all *escolinhas;* and 2) To lead workshops for a transfer of competencies from the IVAs to the Government. This second activity was specifically included to ensure that MINEDH could take over verification of ECD activities by the end of 2017.

### Amendment #1 (through December 2017)

Due to the delays in implementation of Phase II of the ECD activities, Amendment #1 extended IVA contracts to December 31<sup>st</sup>, 2017 to coincide with the close of TPP contracts (at that time) and to allow IVAs to complete the verification of all *escolinhas*. Amendment #1 also provided additional time for the IVAs to complete the workshops and carry out the field practicum as part of the transfer of verification competencies to MINEDH. Amendment #1 was a no-cost extension.

### Amendment #2 (through July 2018)

Multiple delays in the implementation schedule of ECD activities and the decision by MINEDH to grant additional time to TPPs to fully operationalize Phase II *escolinhas* meant that once again, IVA verification was also delayed. In order to offer more time to IVAs to complete their reporting, their contracts were extended for 6 months, until July 31<sup>st</sup>, 2018. Amendment #2 was also a no-cost extension.
# Annex III: Original Results Based Disbursement Framework (RBDF) (2014)

	Physical evidence and	Means of independent ver	fication for disbursement
Disbursement Outputs	supporting documentation	Desk review at district offices	Field visit
1. Participating communities - Te	o be considered a participating comm	nunity, the following conditions are to	b be met:
A Community ECD Committee (CC) is in place.	<ul> <li>Letter from the community leader to both district authorities and the third-party provider formally announcing the establishment of the CC committee, with an Annex including the list of members, addresses and cell phones whenever possible, and the indication of who is the President.</li> <li>Letter is on file at district offices.</li> </ul>	<ul> <li>Verify that the letter is on file at the district offices</li> <li>The list of the names of the CC members and the President is consistent with those listed in the service provider's records</li> <li>Random phone calls to at least two members of the CC to verify their affiliation</li> </ul>	<ul> <li>Personal interview with the at least two CC members, preferably one of them being the President, to ascertain whether the CC has actually been constituted</li> </ul>
An agreement of understanding has been signed by the CC president, the district ECD Focus Point and representative of the third-party provider.	<ul> <li>Agreement of Understanding signed by the CC president, the district ECD Focus Point and representative of the third-party provider is on file at the district offices.</li> </ul>	• Verify that the Agreement of Understanding signed by the CC president, the district ECD Focus Point and representative of the third-party provider is on file at the district offices.	
The classroom(s) and other supporting infrastructure (such as latrines, a community tap, etc.) have been built as specified in the BSP.	<ul> <li>Record of physical inspection by district authorities shows that the facilities have been constructed according to the BSP standards</li> <li>Photo of the classroom(s) in district records</li> </ul>	<ul> <li>Verify that, based on district records, physical facilities have been constructed according to the BSP standards</li> <li>Verify that photo of the classroom(s) is in district records</li> </ul>	<ul> <li>Physical verification that the classroom(s) and supporting infrastructure has been built according to BSP standards</li> <li>Verification that the photo of the classroom(s) in district</li> </ul>

				1
			records corresponds to the actual classroom(s)	
The <i>animadoras</i> (s) has been selected.	• The name(s) of the <i>animadoras</i> (s) is listed on		• Verification that the name of the <i>animadoras(s)</i> is consistent with	Page   110
	district records		the one listed in district records	1 080   110
The <i>animadoras</i> (s) has received pre-training.	<ul> <li>District records show the pre- training received by <i>animadoras(s)</i> including focus, date, length</li> </ul>		<ul> <li>Personal interview with <i>animadora(s)</i> to verify that pre-training was received</li> <li>Verify that actual pre-training activities are consistent with what is reported in district records</li> </ul>	
Enrollment of children ages 3-5 meets the minimum threshold defined in the BSP.	• Enrollment roster for each <i>escolinha</i> by classroom, including children's name and age on file at district's office <sup>35</sup>	• Verify that, based on district records, the <i>escolinha</i> 's enrollment is above the minimum threshold established in the BSP	• Verification that the actual roster (including children's name and age) is consistent with the one in district records	
		<ul> <li>Based on the enrollment roster, verify that the student/ animadora(s) ratio is below the maximum specified in the BSP</li> </ul>		
At least one parenting meetings held (i.e., topic, presenter, attendance, length, date).	<ul> <li>District records show programmed schedule of parenting meetings (i.e., topic, presenter, attendance, length, date), as well as log of actual meetings</li> </ul>	<ul> <li>Verify that at least one parenting meetings was held as shown on district records</li> </ul>	<ul> <li>Personal interviews with the at least two randomly selected parents to ascertain whether the reported parenting meeting was held</li> </ul>	
2. Operational ECD centers (i.e.	, escolinhas) - To be considered oper	ational, ECD centers need to meet the	e following conditions:	
All the conditions specified for participating communities have been met.	See conditions above	<ul> <li>See verification protocol above</li> </ul>	See verification protocol above	

<sup>&</sup>lt;sup>35</sup> Records might be kept in a database.

The ECD center has been offering classroom instruction on a regular basis and according to the BSP standards regarding daily and weekly instruction time for at least six months prior to the end of the school year. <sup>36</sup>	<ul> <li>District records show date when regular ECD classes first began</li> <li>District records shown the daily number of hours taught every day since the ECD center began to operate</li> </ul>	<ul> <li>Verify that the date when regular ECD classes first began as shown on district records is at least six months prior to the end of the school year.</li> <li>Verify that, based on district records, the average daily and weekly number of classroom hours taught since the ECD center began to operate is consistent with the service standards specified in the BSP</li> <li>Verify that, based on district records, once ECD classes began, the ECD center has offered classroom instruction at least 90% of the days during which classes were offered by the primary school in the same community</li> </ul>	• Personal interviews with at least 20% of randomly selected parents of children enrolled in the ECD program at the time of the visit to verify that the ECD center has been operating as reported	Page   111
The classroom(s) and supporting infrastructure are clean and adequately maintained.	• Record of physical inspection by district authorities shows that classroom(s) and physical facilities are clean and adequately maintained on file at district's office		<ul> <li>Physical verification that classroom(s) and supporting infrastructure is clean and adequately maintained</li> </ul>	
The number of <i>animadoras(s)</i> is consistent with the teacher/student ratio specified in the BSP.	<ul> <li>District records show the name(s) of <i>animadora(s)</i></li> </ul>	• Verify that, based on district records, the number of <i>animadora(s)</i> is consistent with the teacher/student ratio specified in the BSP	• Verify that the name of the <i>animadora</i> ( <i>s</i> ) is consistent with the one shown on district records	

<sup>&</sup>lt;sup>36</sup> Communities in the First Phase are required to have been offering regular classroom instruction for at least <u>two</u> (as opposed to six) months prior to the end of the school year to be considered operational in 2013,

The <i>animadoras</i> ( <i>s</i> ) has received ongoing training as specified in the BSP	<ul> <li>District records show the training received by <i>animadoras(s)</i> including focus, date, and length</li> </ul>	<ul> <li>Verify that, based on district records, the training being given to <i>animadoras(s)</i> is consistent with the specifications in the BSP</li> </ul>	<ul> <li>Personal interview with animadora(s) to verify that pre- training was received as reported</li> </ul>	Page   112
Effective attendance is at least 80% of enrollment	<ul> <li>Attendance statistics are being kept at the district's office</li> </ul>	<ul> <li>Verify that, based on district records, effective attendance is at least 80% of enrollment</li> </ul>	<ul> <li>At least 80% of enrolled children are present for at least 80% the entire class period during the randomly scheduled on-site verification visit</li> </ul>	
Parenting meetings held (i.e., topic, presenter, attendance, length, date) in a manner consistent with the specifications in the BSP	<ul> <li>District records show programmed schedule of parenting meetings (i.e., topic, presenter, attendance, length, date), as well as log of actual meetings</li> </ul>	<ul> <li>Verify that at parenting meetings are being held according to the specifications in the BSP</li> </ul>	<ul> <li>Personal interviews with the at least two randomly selected parents to ascertain whether the reported parenting meetings are being held as reported</li> </ul>	
<b>3. Quality ECD services-</b> To be conditions:	onsidered to provide quality ECD ser	rvices, an operational ECD centers ne	eds to meet the following	
The ECD center has to be operational	See conditions above	See verification protocol above	See verification protocol above	
Early Childhood Environment Rating Scale (ECERS) annual assessment renders a Satisfactory or above			<ul> <li>ECERS annual assessment is satisfactory or above</li> </ul>	

# Annex IV: Revised Results Based Disbursement Framework (RBDF) (2016)

# Participating communities

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Participating Communities have to meet the following conditions (P1-P6):

	Verification			
Condition P1	ECD Community Committee (CC) in Place	<ul> <li>For condition P1 to be considered achieved, <u>at least one</u> of the following criteria must be met:</li> <li>Criteria P1.1: A Letter or Act from the CC to the district authorities and the TPP formally announcing the establishment of the CC is on file at the district offices of the SDEJT or TPP;</li> <li>Criteria P1.2: Personal interviews with the at least two CC members, preferably one of them being the President, to ascertain whether the CC has actually been constituted.</li> </ul>		
Condition P2	A Memorandum of Understanding has been signed by the CC president, the district ECD Focal Point, and a representative of the TPP	<ul> <li>For condition P2 to be considered achieved, the following criteria must be met:</li> <li>Criteria P2.1: Agreement of Understanding signed by the CC president, the district director of SDEJT and representative of the third-party provider is on file at the district offices.</li> </ul>		
Condition P3	Adequate Infrastructure has been built	<ul> <li>For condition P3 to be considered achieved, all of the following criteria must be met:</li> <li>Criteria P3.1: Interior and exterior infrastructures are safely constructed per the following conditions: <ul> <li>The roof is correctly and completely attached to the building structure;</li> <li>There is no apparent risk of the collapse of the structure;</li> <li>There are no hard surfaces or sharp objects at the height of children in the escolinha area;</li> <li>There are no pits or ditches in the physical terrain surrounding the escolinha;</li> <li>If a playground exists, it is safe and appropriate/adapted for children: the playground is located in the shade; the material used is adapted for children not to hurt themselves while they play: e.g. use of tires or other soft material, avoid rough wood for slides, ensure the structure is resistant and sustainable enough to be used by a significant amount of children on a daily basis, avoid sharp</li> </ul> </li> </ul>		

Condition	Soloction of	<ul> <li>objects, thus ensuring proper finishing as well as ensuring the playground equipment is not too high to prevent injuries in case children fall.</li> <li>Criteria P3.2: As much as possible and given the fact that windows are not compulsory in the proposed design, the indoor infrastructure should be protected from the effect of excessive humidity/ rain (such as water proof painting).</li> <li>Criteria P3.3: Indoor infrastructure must provide a clean and dry place for children to sit.</li> <li>Criteria P3.4: Sanitary facilities are available for children, differentiating the sexes.</li> <li>Criteria P3.5: The minimum area of land should be of 50 m x 50 m.</li> <li>Criteria P3.6: Appropriate sanitary conditions are in place (i.e. septic tank system or improved latrine).</li> </ul>	Page
P4	Teachers	two criteria must be met:	
	(Educadores/ Animadores)	- Criteria P4.1 The names of the teachers (Educadores/ Animadores) are listed on the district records;	
		<ul> <li>Criteria P4.2 The names of the teachers (Educadores/ Animadores) observed in the escolinhas during field visits is consistent with the names listed in the district records</li> </ul>	
Condition P5	Pre-service Training of	For condition P5 to be considered achieved, the following two criteria must be met:	
	teachers	<ul> <li>Criteria P5.1: District or TPP records show the pre- service training received by teachers (<i>Educadores</i>/ <i>Animadores</i>) including focus, date and duration.</li> <li>Criteria P5.2: The teachers (<i>Educadores</i>/</li> </ul>	
		Animadores) received pre-service training for a minimum of 40 hours (verified in the district or TPP records or by interviews with the teachers (Educadores/ Animadores).	
Condition	Parenting	For condition P6 to be considered achieved, the following	
P6	Meetings	criteria must be met:	
		<ul> <li>Criteria P6.1: Personal interviews with the at least two randomly selected parents to ascertain whether at least one parenting meeting was held.</li> </ul>	

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<sup>\*\*</sup> The instrument to be used in determining if the above outputs have been met to be considered a Participating Community will be shared by MINEDH with the Third-Party Providers at the signing of the amendment.

# **Operational Escolinhas**

Operational Escolinhas have to meet the following conditions (O1-O8):

	1		r
		Verification	
Condition O1	All the conditions specified for Participating Communities have been met	For condition O1 to be considered achieved, <u>all of the criteria</u> under participating communities (P1-P6) have been met:	Page   115
Condition O2	Existence of adequate Infrastructures and equipment	<ul> <li>For condition O2 to be considered achieved, the following four criteria must be met:</li> <li>Criteria O2.1: There is a playground with appropriate and safe equipment (see condition P.3) for children made from conventional or local material.</li> <li>Criteria O2.2: Premises should be equipped with a water tank and the TPP should ensure in accordance with communities and CCs that the drinking water is being stored in proper hygienic conditions: proper location of the water tanks, on site regular monitoring to check the water tanks are closed and cleaned up, as well as distribution of <i>certeza</i> and / or water filters if funding available.</li> <li>Criteria O2.3: the premises must have conditions for Children and staff to wash hands regularly, especially after using the latrine.</li> <li>Criteria O2.4: The process of legalizing the land (property registration, DUAT, etc.) has been initiated and followed-up regularly by the TPP.</li> </ul>	
Condition O3	Escolinhas are offering ongoing classroom instruction	<ul> <li>For condition O3 to be considered achieved, the following two criteria must be met, verified through personal interviews with at least 20% of randomly selected parents of children enrolled in the escolinha:</li> <li>Criteria O3.1: Classes have been offered for at least 15 hours a week during four months.</li> <li>Criteria O3.2 Teachers (Educadores/ Animadores) work at least 3.5 hours a day, Monday through Friday (3 hours for classroom instruction and at least half an hour to prepare and wrap up each day).</li> </ul>	
Condition O4	Escolinhas are regularly Maintained	<ul> <li>For condition O4 to be considered achieved, the following criteria must be met:</li> <li>Criteria O4.1 Upon field visit, physical verification that classroom and supporting infrastructure is clean and adequately maintained.</li> </ul>	
Condition O5	Learning Materials	<ul> <li>For condition O5 to be considered achieved, the following two criteria must be met:</li> <li>Criteria O5.1: District records have a list of all the learning materials that have been distributed to each escolinha.</li> </ul>	

		- Criteria O5.2: During site visits, it is noted that	
		appropriate learning materials is available in each	
		escolimita (a combination of writing utensits, children's	
	la consica Training	books, and materials made with local material).	
Condition	In-service Training	For condition O6 to be considered achieved, the	
06	for the teachers	following two criteria must be met:	Page   116
	(Educadores/	- Criteria 6.1: District records show that the teachers	0 1
	Animadores)	(Educadores/ Animadores) have received at least 5	
		days per year of in-service training;	
		<ul> <li>Personal interviews with teachers (Educadores/</li> </ul>	
		Animadores) verify that in-service training was	
		received as reported (i.e. 5 days per year).	
Condition	Student	For condition O7 to be considered achieved, the	
07	attendance	following three criteria must be met:	
		- Criteria 07.1: The escolinha has a roster of the	
		names of the enrolled students.	
		- Criteria 07.2: The escolinha has an updated roster to	
		track student attendance on a daily basis.	
		- Criteria 07.3: District records show that average	
		attendance is at least 80% of enrolled students.	
Condition	Ongoing Parental	For condition O8 to be considered achieved, at least one	
08	Education	of the following criteria must be met:	
	Meetinas	- Criteria 08.1. District records show programmed	
	(one per month)	schedule of parental education meetings (with the	
		topic presenter attendance length date) as well as	
		the log of actual meetings that have already taken	
		place at least one per month	
		Critoria O8 2: Porconal interviewe with at least two	
		- Uniteria UO.2. Fersurial interviews with at least two	
		ranuonity selected parents ascertain whether the	
		reported parental education meetings are being held	
		as reported, at least one per month.	

\*\* The instrument to be used in determining if the above outputs have been met to be considered an Operational Escolinha will be shared by MINEDH with the Third-Party Providers at the signing of the amendment.

# **Annex V:** Executive Summary Mozambique Early Childhood Quality Study (MELE)

Analyses of the data were performed using the classroom observation (MELE), teacher interview, caregiver interview and CCC interview. Data were collected from 320 caregiver, 139 teachers, 40 CCC members and 40 classrooms. The aims of the analyses were to

- 1) Understand the frequency with which quality outcomes were occurring in in communities and
- 2) Examine associations between quality observations and demographic information obtained through teacher caregiver and community variables.

Multiple sets of analysis were performed. First descriptive statistics were calculated for the classroom observations, teacher interviews, caregiver interview and CCC interviews across the full sample. Second zero-order correlations were estimated between classroom observations and demographic information. Third regression variables were performed to evaluate the associations between context variables (caregiver, teacher and CCC) and classroom observation scores.

The Report aims to answer the following research questions:

- 1) What were the characteristics of the programs, teachers, caregivers and CCC?
- 2) Were there significant differences between groups?
- 3) What quality indicators, teacher characteristics, community characteristics, were associated with each other?

	Number Collected
Classroom Observation	40
Teacher Interview	139
Caregiver Interview	320
CCC Interview	40

Table 1. Number of measures collected.

## MELE items and scales

MELE items were grouped into the following scales:

- Pedagogy: Mean of seven items scored on a one-to-four scale on the teacher's method of instruction across various domains (literacy, math, music/movement, fine motor skills, storybook reading, free play, and gross motor skills).
- Space: Three dichotomous (yes/no) items related to learning centres, indoor space, and schoolyard.
- Availability and use of materials: Six dichotomous (yes/no) items related to different types of materials.
- Books: Two items coded by number of Sesotho or English books present
- Health and safety: Mean of five items scored on a one-to-four scale relating to water, toilets, and safety conditions

- Daily topics: Six dichotomous (yes/no) items on inclusion of topics in daily lesson plans (math, literacy, art, etc.)
- Teacher positivity: Mean of two items scored on a one-to-four scale

In addition, the following individual items were also examined:

- Use of theme: one-to-four scale
- Child engagement: one-to-four scale
- Individualized instruction: one-to-four scale
- Wait time between activities: yes/no
- Use of child portfolios: yes/no
- Teacher tracks children's progress: yes/no

# Teacher Interview Items and Scales.

Teacher interview items were grouped into the following scales:

- Teacher Attitudes: 5 question Likert scale (0=strongly disagree, 5= strongly agree) items on teachers attitudes towards teaching
- Teacher Motivation: dichotomous (yes/no) items on teachers' motivations for becoming a teacher
- Teacher Training: dichotomous (yes/no) items on whether teachers receive training throughout their careers

In addition, the following individual items were also examined:

- Teacher Education Level
- Teacher Gender
- Teaching Status
- Teacher Paid On Time

# CCC interview Items and Scales.

CCC interview items were grouped into the following scales:

- CCC training: 3 dichotomous (yes/no) items on training the CCC has received.
- CCC support: 6 dichotomous (yes/no) items on support provided by the CCC.
- CCC advantages: 5 dichotomous (yes/no) items on advantages of the school.

In addition, the following individual items were also examined:

- CCC understand their Role
- Family Values CCC's Role in School
- How Often CCC Interacts with the School

# Caregiver Interview Items and Scales.

Caregiver interview items were grouped into the following scales:

- Caregiver attend meeting: 3 dichotomous (yes/no) items on whether the caregiver attended meetings at the school.
- Caregiver helps at School: 8 dichotomous (yes/no) items on whether parents or others help the school in different ways.
- Caregiver attitudes: 7 question likert scale (0= strongly disagree, 5+ strongly agree) items on caregiver's attitudes towards the school.

In addition, the following individual items were examined:

- Caregiver is a Member of the CCC
- Highest Level of Education Caregiver Has Received
- Time it Takes the Family to Get to the School

#### **Key Findings**

#### **Teacher Interview**

Of the 139 teachers who completed the interview, 64% were female and 36% were male. Many of the teachers (95.7%) had completed 7<sup>a</sup> class or higher before teaching in an early childhood classroom. When asked about their motivation to become a preprimary teacher were encouraged to select each answer that applied, teachers often sited enjoyment of teaching (55.4%) and helping the children and community (59.7%). Teachers reported that they did not intend to teach in an early childhood program as their life long profession with 95% of teachers responding no to this question. While teachers enter the field to support children, they do not view it as a long-term career. A majority of teachers have received some form of pre-service training before entering the classroom with 76.2% of teachers receiving 2 or more days of training. Once teachers enter the classroom, they are also likely to receive some form of in-service training. Many Teachers responded that they receive 1 day of inservice training at 69.8%. Many of the teachers teach alongside a co-teacher (92.1%) and also lesson plan as a team (76.3%). In addition 54.7% of teachers reported that they create daily lesson plans in collaboration with another teacher, 29.5% reported they create lesson plans themselves and 13.7% reported that service providers create lesson plans. However, 75.5% reported that they do not receive support from other teachers in the school. Teaching materials are typically a mix of both created and commercially produced materials (82.7%). 63.3% of teachers report receiving training on how to use these materials in the classroom. When teaching young children, 79.9% of teachers use a mixture of languages for their instruction. Teachers for the most part feel that CCC is a beneficial support for the school (92.1%). In addition, teachers were asked to rate on a 1-5 scale how much they agreed with statements such as, "I am satisfied with my job", "I have adequate resources to carry out my duties". "I am overwhelmed", etc. These items were reverse coded. The mean rating for these items was 3.19, indicated that teachers felt fairly well supported and resourced.

## **Caregiver Interview**

Caregiver interview were conducted to better understand caregivers' views of early childhood education. Around half of the respondents were the mothers of the child (54.7%), 22.5% of were the father and 22.8% made up other caregivers. Around two thirds of households had one child who was between 3-5 years of age (77.5%) at the time of the interview. Many of the children attend school 5 days a week (88.6%). Parents also reported that their children attended school always 90.8%. Pertaining to school home partnerships over half of the parents 58.2% indicated they did not meet with their child's teacher to talk about their development and how their child is doing in school. However 81% reported attending meetings at the school that encourage them to keep their children at the school. Over half of the parents (65.8%) do not pay fees or contributions to send their children to school. In addition, caregivers were asked to rate on a 1-5 scale how much they agreed with statements such as, "I am

satisfied with the quality of education my child receives", "As a parent I feel involved in the school". "As a parent I feel my opinion matter", etc. The mean rating for these items was 4.04, indicated that caregivers felt fairly well supported and thought positively about school.

# **CCC** Interview

The CCC members currently a part of the study indicated that CCC's consist of an average of 10.35 members with an average of 5 members being female and 5.35 male. Half of the CCC programs were created in 2016 with the oldest created in2016 and the newest created in 2018. Of the CCC members who were interviewed, 72.5% reported the CCC having a representative from the primary school as a member. Many of the members (85%) interviewed indicated they had received training prior to their membership. In addition, 62.5% responded they have received ongoing training as a part of the CCC. A majority of CCC members understand their role (92.5%). They are also the primary party responsible for education parents and community on the importance of preprimary school with 85% of respondents indicated they interact with the school every week. There is more variation on the amount of times the CCC interacts with parents 10% indicated every day, 17% every week, 35% every month, 22% other, and the other 15% none. Overall CCC members feel the programs they enact have a positive effect on the school and the children with 85% of respondents affirming. Many members (85%) feel there is a strong participation by children in school. 87.5% of members also felt the community values the CCC management of the schools.

# **Classroom Observation**

Classroom observation items were grouped into subscales or included as individual items. Mean scores on a 1-4 scale (1= not present, 2= basic level of quality, 3= higher level of quality, 4= highest level of quality) are shown in Figure 1. Classrooms overall had a mean score of 2.3 when examining pedagogy in the classroom. Health and safety scores were calculated by taking a summary score of the health and safety items of the classroom observation. Classrooms had a mean score of 2.57. Classrooms had a mean score of 3.15 for teacher interactions in the classroom. Classrooms had a mean score of 3.0 for children engagement. Classrooms had a mean score of 2.18 for the use of a theme in the classroom. Finally, classrooms received a mean score of 2.45 in individualized instruction. For key items scored as yes or no, the percentage of programs that scored yes on those items are displayed in Figure 2.4. Over half of the children (65%) had access to materials in a learning corner as shown in figure 2. When evaluating whether children had a wait time of 10 minutes or more throughout the observation 75% of children did not experience a wait time as shown in figure 3. Finally, 72.5% of teachers track children's development on a regular basis as shown in figure 4.

Figure 1. Mean Scores on Classroom Quality Scales and Key Items.



*Figure 2. Percentage of programs where children have access to materials in learning centers.* 





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Figure 4. Percentage of program where teacher tracks child development.





Teacher's attitude and motivation and receiving training correlations and MELE scores

Teacher attitudes, motivation and education level were examined. An association was found between teacher's motivation and teachers' attitudes. There was not a significant association found between teacher's education and motivation or attitudes. Several key findings emerged when teacher attitudes were examined with MELE scores. Teacher attitudes were positively associated with space and if the teacher tracks children's development on a regular basis. Teacher's attitudes were negatively correlated with pedagogy, whether a curriculum was used and the use of a theme. There were no significant correlations between the teacher's attitude and materials, health and safety, teacher interactions, children having a wait time of 10 minutes or more, individualized instruction, each child having a portfolio and children being engaged throughout the classroom observation. When examining teacher's motivations, positive correlations were found with space, each child having their own portfolio and the teacher tracking children's development on a regular basis. There were negative associations between teacher's motivation and pedagogy, health and safety, teacher interactions, children having a wait time of 10 minutes or longer during the observation and theme. The data did not reveal associations with the teacher's motivation and materials, curriculum being used, individualized instruction and if children were engaged throughout the observation. The data also showed some key associations with teacher's receiving training. Teacher training was positively correlated with pedagogy, materials and health and safety. Teacher training was negatively correlated with space, theme, and teacher tracking children's development on a regular basis. There were no significant correlations between teacher training and teacher interactions, curriculum used, children having a wait time of 10 minutes or more, individualized instruction, each child having their own portfolio and children engaged throughout the observation. For further information on the associations consult tables 2, 3 and 4 below.

## Table 2

		_	
ltem	Pearson Correlation	<u>P</u>	<u>N</u>
Pedagogy	165*	.025	185
Space	.148*	.045	185
Materials	.098	.184	185
Health and Safety	133	.072	185
Teacher interactions	133	.071	185
Curriculum Used	214**	.003	185
Wait time of 10 minutes or more	129	.081	185
Theme	243**	.001	186
Individualized instruction	035	.634	185
Portfolios	.121	.102	185
Teacher tracks child's development	.196**	.008	185
Child engaged	128	.081	185

#### **Correlations Between Teacher Attitudes and MELE Scores**

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

# Table 3

Correlations Between Teacher Motivation and MELE Scores

<u>ltem</u>	Pearson Correlation	<u>P</u>	<u>N</u>	
Pedagogy	195**	.008	185	
Space	.196**	.007	185	
Materials	040	.589	185	
Health and Safety	187*	.011	185	
Teacher Interactions	185*	.012	185	Page   124
Curriculum Used	113	.126	185	
Wait time of 10 Minutes or More	205**	.005	185	
Theme	423**	<.001	185	
Individualized Instruction	073	.321	185	
Portfolio	.307**	<.001	185	
Teacher Tracks Child's Development	.393**	<.001	185	
Child Engaged	012	.876	185	

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

#### Table 4

Correlations Between Teacher Training and MELE Scores

ltem	Pearson Correlation	<u>P</u>	<u>N</u>
Pedagogy	.297**	<.001	185
Space	403**	<.001	185
Materials	.350**	<.001	185
Health and Safety	.378**	<.001	185
Teacher Interactions	077	.296	185
Curriculum Used	049	.504	185
Wait Time of 10 Minutes or More	120	.104	185
Theme	163*	.026	186
Individualized Instruction	068	.357	185
Portfolio	.049	.509	185
Teacher Tracks Child's Development	211**	.004	185
Child Engaged	.141	.056	185

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

# CCC characteristics correlations with MELE scores

Several key findings emerged when CCC characteristics were correlated with MELE scores. CCC training was positively correlated with pedagogy, materials, health and safety, teacher interactions, children having a wait time of 10 minutes or more, theme, individualized instruction, children being engaged throughout the classroom observation and daily topics. CCC training was negatively correlated with space, if children have their own portfolio, if the teacher regularly tracks child development and daily topics. There was no significant correlation between CCC training and curriculum used. When examining CCC support for schools there were positive correlations with children having a wait time of

10 minutes or more and if each child has their own portfolio. There were negative correlations between CCC support for schools and pedagogy, materials, health and safety, teacher interactions, theme, individualized instruction and children being engaged throughout the observation. There were no significant correlations between CCC support for schools and curriculum used. Perceived advantages from CCC members were positively correlated with materials. There were negative associations between CCC member's perceived advantages and space and children having a wait time of 10 minutes or more. There were no significant associations between CCC member's perceived advantages and pedagogy, health and safety, teacher interactions, curriculum used, theme, individualized instruction, if children have their own portfolio, teacher tracks children's development regularly, children being engaged throughout the observation and daily topics. For further information on the associations consult tables 5, 6 and 7below.

Table 5

ltem	Pearson Correlation	<u>P</u>	<u>N</u>
Pedagogy	.446**	<.001	185
Space	159*	.031	185
Materials	.231**	.002	185
Health and Safety	.275**	<.001	185
Teacher Interactions	.325**	<.001	185
Curriculum Used	.114	.123	185
Wait Time of 10 minutes or more	.193**	.009	185
Theme	.156*	.034	185
Individualized Instruction	.224**	.002	185
Portfolio	167*	.023	185
Teacher Tracks Child Development	304**	<.001	185
Child Engaged	.470**	<.001	185

Correlations Between CCC Training and MELE Scores

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 6

correlations between CCC support and MELE scores				
ltem	Pearson Correlation	<u>P</u>	<u>N</u>	
Pedagogy	558 **	<.001	185	
Space	.348**	<.001	185	
Materials	202**	.006	185	
Health and Safety	249**	.001	185	
Teacher Interactions	473**	<.001	185	
Curriculum Used	029	.694	185	
Wait Time of 10 minutes or more	.292**	<.001	185	
Theme	238**	.001	185	
Individualized Instruction	288**	<.001	185	
Portfolio	.249**	.001	185	
Teacher Tracks Child Development	.043	.561	185	

Correlations Between CCC Support and MELE Scores

Child Engaged	.200**	.006	185	
Note: **. Correlation is sig	nificant at the 0.01 level (2-tailed).			

\*. Correlation is significant at the 0.05 level (2-tailed).

Table 7

Correlations Between CCC Perceived Advantages and MELE Scores

Ρ Ν Item Pearson Correlation .119 .107 Pedagogy 185 -.275\* <.001 185 Space .205\*\* Materials .005 185 Health and Safety .118 .110 185 **Teacher Interactions** -.010 .895 185 Curriculum Used .000 .996 185 Wait Time of 10 minutes or more -.215\*\* .003 185 .095 .196 Theme 185 Individualized Instruction -.066 .374 185 .074 Portfolio .320 185 **Teacher Tracks Child Development** -.102 .166 185 Child Engaged -.027 .714 185

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

# Caregiver characteristics correlations with MELE scores

Several more key findings emerged when caregiver interview characteristics were correlated with MELE scores. Parents who attended meetings throughout their child's time in school was positively correlated with space and child had a wait time of 10 minutes or more. There were negative correlations with pedagogy, materials, total number of storybooks, health and safety, use of theme and teacher engagement throughout the observation. There were no significant correlations with child engagement, individualized instruction, each child having their own portfolio, teachers tracking child development on a regular basis and teacher disciplinary strategies and daily topics. When examining how parents help at the school there was a significant positive correlation with space. There were significant negative correlations with pedagogy, materials, and health and safety. There were not significant correlations with number of storybooks, teacher interactions, theme, child engagement, child wait time of 10 minutes or more, individualized instruction, each child has their own portfolio, teacher tracks child's development regularly and daily topics. There were also key findings when parent's attitudes towards schools were correlated with MELE scores. There were positive significant correlations between parent's attitudes and materials, total number of storybooks, teacher interactions and the use of themes. There were no significant correlations with pedagogy, space, health and safety, child engagement, child wait time, individualized instruction, child having their own portfolio, teacher tracking child's development regularly and daily topics. For further information on associations consult table 8, 9, and 10 below.

	6		
ltem	Pearson Correlation	<u>P</u>	<u>N</u>
Pedagogy	360**	<.001	182
Space	.288**	<.001	182
Materials	355**	<.001	182
Total Number of Storybooks	188*	.011	182
Health and Safety	273**	<.001	182
Teacher Interactions	236**	.001	182
Curriculum Used	067	.368	182
Wait Time of 10 minutes or more	.187*	.012	182
Theme	211**	.004	182
Individualized Instruction	025	.733	182
Portfolio	062	.405	182
Teacher Tracks Child Development	.018	.813	182
Child Engaged	154*	.038	182

Correlations Between Caregiver Attends Meetings and MELE Scores

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

# Table 9

Correlations Between Caregiver Helps at School and MELE Scores

ltem	Pearson Correlation	<u>P</u>	<u>N</u>
Pedagogy	252**	.001	182
Space	.201**	.007	182
Materials	182*	.014	182
Total Number of Storybooks	010	.897	182
Health and Safety	169*	.023	182
Teacher Interactions	074	.319	182
Curriculum Used	.001	.990	182
Wait Time of 10 minutes or more	.059	.426	182
Theme	076	.308	182
Individualized Instruction	011	.879	182
Portfolio	.034	.649	182
Teacher Tracks Child Development	.089	.230	182
Child Engaged	048	.522	182

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

## Table 10

Correlations Between Caregiver Attitudes and MELE Scores

Item	Pearson Correlation	<u>P</u>	<u>N</u>
Pedagogy	.117	.114	182
Space	065	.385	182
Materials	.200**	.007	182

Total Number of Storybooks	.166*	.025	182	
Health and Safety	.075	.317	182	
Teacher Interactions	.200**	.007	182	
Curriculum Used	.201**	.006	182	
Wait Time of 10 minutes or more	.076	.305	182	
Theme	.286**	<.001	182	Page   128
Individualized Instruction	.053	.479	182	
Portfolio	078	.297	182	
Teacher Tracks Child Development	.031	.682	182	
Child Engaged	038	.610	182	

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

# Multivariate results for teacher characteristics and MELE scores

Teacher's highest level of education was examined with MELE scores. The first model tested looked at pedagogy, space, materials, health and safety teacher interactions, total number of story books, Teacher engagement, teacher disciplinary strategies, child engagement, Child wait time of ten minutes or longer, theme, individualized instruction, each child has their own portfolio and teacher tracks children's development on a regular basis. The model accounted for 62% of the variance, but not all of the variables were significant. See table 11 below for further details on individual variables. A between groups ANOVA was run to better understand the differences in MELE scores for teacher gender. All MELE items were the same for both genders except for each child has their own portfolios where males were greater than females. See table 12 for further details on individual variables. Teacher's status was also examined with the same MELE items. The overall model accounted for 25.8% of the variance. For this model only pedagogy, and child have a wait time of 10 minutes or more were significant to the model. The rest of the items did not contribute to the model. When a model was found were all independent variables were significant the overall model accounted for 15.8% of the variance and included pedagogy and teacher interactions. For further information see tables 13 and 14 below. A between groups ANOVA was conducted to examine the differences of MELE scores for teachers who are paid on time and those that are not. For each of the MELE items there was no difference in the group of teachers that were paid on time and those that were not. For further information see table 15 below.

Regression Between Teacher Educati	on Level and MELE Scores			
ltem	<u>B</u>	<u>Beta</u>	<u>P</u>	
Pedagogy	084	169	.036	
Space	-1.324	503	<.001	
Materials	143	234	.002	
Total Number of Storybooks	.390	.219 .0	01	
Health and Safety	149	266	.001	
Teacher Interactions	.485	.431	.001	
Wait Time of 10 minutes or more	406	096	.069	

Table 11 Regression Between Teacher Education Level and MELE Scores

Theme	400	240	.002	
Individualized Instruction	.075	.050	.395	
Portfolio	.478	.066	.275	
Teacher Tracks Child Development	.547	.139	.027	
Teacher Engagement	.3115	.146	.091	
Teacher Discipline	.466	.155	.035	Page   129
Child Engaged	-1.128	510	<.001	

Summary of MELE scores and Teacher Gender

lt e ve		N 4	Ctal	NI
<u>item</u>		iviean	<u>5t0</u>	<u>IN</u>
Pedagogy				
	Male	19.79	3.71	68
	Female	18.04	3.15	117
Space				
	Male	3.26	.44	68
	Female	3.56	.72	117
Materials				
	Male	13.98	2.31	68
	Female	14.41	3.05	117
Health and Safetv				
,	Male	15.47	2.92	68
	Female	15.47	3.15	117
Teacher interactions				
	Male	10.13	1.64	68
	Female	9 01	1 29	117
Total Storybooks	i ciliaic	J.UI	1.29	±±/
	Male	1 50	1 11	68
	Fomalo	1.50 Q1	70	117
Child Engagement	וכווומוכ			11/
Child Engagement	Mala	2 22	69	<u> </u>
	Iviale	3.32	.08 70	00 117
	remale	2.91	.79	11/
Wait time of 10 minute	es or more			
	Male	1.76	.43	68
	Female	1.81	.392	117
Theme				
	Male	2.29	1.07	68
	Female	2.23	1.01	117
Individualized instruction	on			
	Male	2.94	.96	68
	Female	2.28	1.16	117
Portfolio				
	Male	2.00	.00	68
	Female	1.91	.293	117

Teacher Tracks Develop	oment			
	Male	1.19	.396	68
	Female	1.29	.456	117

Regression Between Teaching Status and MELE Scores

8				
<u>ltem</u>	<u>B</u>	<u>Beta</u>	<u>P</u>	
Pedagogy	.089	.221	.045	
Space	.211	.098	.262	
Materials	.084	.169	.091	
Total Number of Storybooks	.066	.045	.597	
Health and Safety	021	045	.679	
Teacher Interactions	.209	.227	.082	
Wait Time of 10 minutes or more	908	262	<.001	
Theme	022	016	.861	
Portfolio	.003	.000	.995	
Teacher Tracks Child Development	176	055	.523	
Child Engaged	.031	.017	.828	

# Table 14

Regression Between Teacher Status and MELE Scores Final Model

ltem	<u>B</u>	<u>Beta</u>	<u>P</u>
Pedagogy	-118	.292	<.001
Teacher Interactions	.152	.166	.044

# Table 15

Summary of MELE scores for Teachers receiving pay on time and not receiving pay on time

•			<b>e</b> 1 7		
Item		<u>Mean</u>	<u>Std</u>	<u>N</u>	
Pedagogy					
	Pay on time	19.76	3.77	71	
	Pay not on time	18.018	3.09	114	
Space					
	Pay on time	3.42	.60	71	
	Pay not on time	3.47	.68	114	
Materials					
	Pay on time	14.11	2.69	71	
	Pay not on time	14.35	2.88	114	
Health and	safety				
	Pay on time	16.13	3.17	71	
	Pay not on time	15.06	2.93	114	
Teacher inte	eractions				

	Pay on time	9.62	1.53	71	
	Pay not on time	9.30	1.52	114	
Total Numb	per of Storybooks				
	Pay on time	.89	.62	71	
	Pay not on time	1.28	1.10	114	
Child Engag	gement				Page   131
	Pay on time	3.08	.554	71	
	Par not on time	3.04	.886	114	
Child wait 1	10 minutes or more				
	Pay on time	1.89	.318	71	
	Pay not on time	1.74	.442	114	
Theme					
	Pay on time	2.08	1.079	71	
	Pay not on time	2.36	.988	114	
Individualiz	ed instruction				
	Pay on time	2.68	1.079	71	
	Pay no in time	2.43	1.167	114	
Portfolio					
	Pay on time	1.90	.300	71	
	Pay not on time	1.96	.185	114	
Teacher tra	icks development				
	Pay on time	1.30	.460	71	
	Pay not on time	1.23	.421	114	

# **Multivariate Analysis**

## **CCC** characteristics and MELE scores

A between groups ANOVA was run to examine whether CCC members understanding their roles show associations for MELE scores. The total amount of storybooks presents in the classroom increased when CCC members understood their role in the schools. Portfolios and space increased when CCC did not understand their role. The amount of time children waited increased when CCC members understood their role. There were no differences observed when CCC members understood their role for pedagogy, materials, health and safety, teacher interactions, child engagement, theme, individualized instruction and teacher tracking child development on a regular basis. See table 16 below for further details on individual variables. How often the CCC interacts with the school were used to conduct linear regressions with MELE scores. The total model accounts for 53% of the variance. In the complete model health and safety, theme and teacher tracks child's development regularly were not significant with the dependent variable. This indicates that there is lack of evidence that CCC interacting with the school has influence on these aspects of quality. When regressions are conducted to find the model with only significant variables the model accounts for 48.9% of the variance ad includes: pedagogy, space, materials, teacher interactions, total number of storybooks, Child engagement, wait time of 10 minutes or longer, individualized instruction and each child has their own portfolio. For more information see table 17 and 18 below.

Summary of MELE scores with CCC members understanding their Role

Item	MELE Scores with eee membe	Mean	Std	N	
Pedagogy		wear	<u>5tu</u>	<u>IN</u>	
1 6445057	Understand Role	19.11	3.25	169	Page   132
	Don't understand role	14.25	2.35	16	
Space					
	Understand role	3.33	.52	169	
	Don't understand role	4.75	.45	16	
Materials					
	Understand role	14.42	2.83	169	
	Don't understand role	12.50	1.71	16	
Health and s	safety				
	Understand role	15.75	2.99	169	
	Don't understand role	12.50	2.13	16	
Teacher inte	eractions				
	Understand role	9.51	1.54	169	
	Don't understand role	8.50	.89	16	
Total Numb	er of Storybooks				
	Understand role	1.21	.96	169	
	Don't understand role	.25	.45	16	
Child Engage	ement				
	Understand role	3.07	.72	169	
	Don't understand role	3.00	1.27	16	
Child wait 1	0 minutes or more				
	Understand role	1.78	.42	169	
	Don't understand role	2.00	.00	16	
Theme					
	Understand role	2.21	1.01	169	
	Don't understand role	2.75	1.13	16	
Individualize	ed instruction				
	Understand role	2.62	1.11	169	
	Don't understand role	1.50	.894	16	
Portfolio					
	Understand role	1.93	.25	169	
	Don't understand role	2.00	.00	16	
Teacher tra	cks development				
	Understand role	1.25	.437	169	
	Don't understand role	1.25	.447	116	

Table 17

Regression Between How often CCC interacts with the school and MELE Scores	

<u>Item</u>	<u>B</u>	<u>Beta</u>	<u>P</u>	
-------------	----------	-------------	----------	--

Pedagogy	072	306	.001	
Space	.432	.344	<.001	
Materials	.109	.375	<.001	
Total Number of Storybooks	168	198	.004	
Health and Safety	048	180	.071	
Teacher Interactions	.153	.286	.011	Page   133
Wait Time of 10 minutes or more	.381	.189	.001	
Theme	.109	.138	.070	
Individualized Instruction	312	435		
Portfolio	925	268	<.001	
Teacher Tracks Child Development	.221	.118	.104	
Child Engaged	.291	.276	<.001	

Regression Between How Often CCC interacts with the School and MELE Scores-Final Model

ltem	<u>B</u>	<u>Beta</u>	<u>P</u>	
Pedagogy	080	340	<.001	
Space	.461	.367	<.001	
Materials	.088	.300	<.001	
Teacher Interactions	.194	.361	<.001	
Total Number of Storybooks	158	187	.005	
Wait Time of 10 minutes or more	.384	.191	.001	
Portfolio	840	244	<.001	
Individualized instruction	285	397	<.001	
Child Engaged	.220	.209	.001	

# **Caregiver characteristics and MELE scores**

A between groups ANOVA was conducted to summarize MELE scores and if parents were a member of the CCC. There were no differences between MELE scores for parents who were a member of the CCC and parents who were not members. For more information consult table 19. A linear regression was conducted to see the interaction of MELE scores and the highest level of education of the primary caregiver. The overall model accounted for 20.2% of the variance. The only significant item was teacher tracks child development. Meaning as caregiver's education increases so does the teacher tracking child development. The other variables do not support the hypothesis that when caregivers' education increases so does the level of quality. For more information see table 20 below. A linear regression was also conducted to examine the amount of time it takes families to travel to school and the MELE scores. The complete model accounts for 16.2% of the variance. Each child having their own portfolio and theme were significant to the model. The other MELE items were not significant for the amount of time it takes families to travel to school. For more information see table 21 and 22 below.

Table 19 Summary of MELE scores for Caregiver Being a Member of the CCCC Std Item Mean Ν

Pedagogy

	Member	20.43	4.91	14	
	Nonmember	18.57	3.30	168	
Space					
	Member	3.14	.36	14	
	Nonmember	3.48	.67	168	
Materials					Pag
	Member	14.92	2.12	14	
	Nonmember	14.21	2.80	168	
Health and sa	fety				
	Member	16.86	2.77	14	
	Nonmember	15.33	3.07	168	
Teacher inter	actions				
	Member	9.14	1.88	14	
	Nonmember	9.44	1.52	168	
Total Number	of Storybooks				
	Member	1.07	.92	14	
	Nonmember	1.14	.97	168	
Child Engager	nent				
	Member	3.29	.61	14	
	Nonmember	3.05	.78	168	
Child wait 10	minutes or more				
	Member	1.79	.43	14	
	Nonmember	1.80	.40	168	
Theme					
	Member	2.07	1.14	14	
	Nonmember	2.27	1.03	168	
Individualized	instruction				
	Member	2.86	.95	14	
	Nonmember	2.48	1.15	168	
Portfolio					
	Member	1.93	.27	14	
	Nonmember	1.94	.24	168	
Teacher track	s development				
	Member	1.21	.436	14	
	Nonmember	1.26	.44	168	

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Table 20

Regression Between Caregiver's Highest Level of Education and MELE Scores

<u>ltem</u>	<u>B</u>	<u>Beta</u>	<u>P</u>	
Pedagogy	.030	.055	.630	
Space	157	053	.570	
Materials	.082	.121	.249	
Total Number of Storybooks	240	121	.177	
Health and Safety	105	168	.147	

Teacher Interactions	284	226	.101	
Wait Time of 10 minutes or more	.353	.074	.315	
Theme	.172	.093	.336	
Portfolio	311	038	.628	
Teacher Tracks Child Development	1.976	.450	<.001	
Child Engaged	066	026	.745	Page   135

Regression Between Time it takes Families to Get to School and MELE Scores					
ltem	<u>B</u>	<u>Beta</u>	<u>P</u>		
Pedagogy	032	165	.163		
Space	180	175	.072		
Materials	030	122	.253		
Total Number of Storybooks	108	156	.091		
Health and Safety	.030	.139	.249		
Teacher Interactions	.034	.077	.584		
Wait Time of 10 minutes or more	.053	.032	.679		
Theme	.145	.223	.025		
Portfolio	553	197	.019		
Teacher Tracks Child Development	066	043	.639		
Child Engaged	029	033	.693		

# Table 22

Regression Between Time it takes Families to Get to School and MELE Scores-Final Model				
ltem	<u>B</u>	<u>Beta</u>	<u>P</u>	
Theme	.120	.185	.011	
Portfolio	645	230	.002	

# Implications

Due to the limitations of the data, caution should be used when interpreting the results that are found. Results represent associations between variables but do not indicate why these relations exist. The associations that were found lead to three conclusions: 1. Having a qualified CCC in the community that is actively engaged in the school, and CCC members who understand their role are associated with key quality indicators. 2. Teachers' level of education is associated with some indicators of quality. Teacher's education should be examined as a means for improving overall quality of the schools. The final implication found is the importance of the topics and subjects that are covered in training for both CCC members and teachers. Additional support in these areas may lead to improvements in quality and engagement.