UNICEF Mozambique Accelerated School Readiness [ASR] Pilot Program: Endline Findings Brief

Introduction to Program
UNICEF Mozambique and Save the Children (STC), in partnership with the Mozambican MINEHD, implemented an Accelerated School Readiness (Preparando-se para a entrada na escola!) pilot program from 2016 to 2019. AIR conducted a mixed-methods impact evaluation of the ASR pilot in the districts of Morrumbala and Derre in Zambezia. This Brief presents the mixed-methods endline results of the evaluation.

Program Aim and Activities
The program aimed to improve readiness in three spheres: children’s readiness for school, school’s readiness for children, and families’ readiness for school. The program provided three activities:

1. A 120-hour summer school readiness program for children aged 5 to 6, implemented by trained community volunteers.
2. Strengthening of school councils and local education professionals to support school readiness opportunities for children into primary school.
3. 12 weeks of parent-to-parent education sessions, conducted by trained parents in home settings to improve the skills of caregivers of children aged 5 to 6 to promote early success in school.

Methodology:
AIR designed a longitudinal, cluster randomized controlled evaluation and applied a difference-in-differences (DD) approach to estimate program effects.

Specifically, AIR used:
- The International Development and Early Learning Assessment (IDELA) developed by STC to measure children’s' school readiness outcomes.
- A questionnaire to measure caregivers’ outcomes on their attitudes, educational aspirations for their children, and parenting practices.
- KIIs to investigate how perspectives differed across classrooms that had high or low IDELA impact scores at endline.

Research Goals
Purpose: This evaluation tested the effects of the ASR pilot program, as implemented by STC, on children’s school readiness and successful transition to primary school in the Zambézia province of Mozambique.

Three Objectives:
1. To determine the impact of the ASR pilot program on children’s school readiness, on-time enrolment, and academic achievement in Grade 1.
2. To calculate the community- and child-level costs of provision of the ASR pilot program.
3. To identify which aspects of community context and implementation facilitated or inhibited the success of the ASR pilot program.

Research Sample
- 1,200 Children
- 30 treatment and 30 control schools from Morrumbala and Derre districts
- 16 Focus Groups with school professionals and parents
- 10 Key Informant Interviews (KII) with volunteer teachers, parent leaders, and implementers
- 10 KIIs with Grade 1 Teachers
- 3 KIIs with implementers and donors

Location of Primary Schools Selected in Derre and Morrumbala Districts:

Program Target
- 7,647 children aged 5 to 6

Child Level Results
Strong perceived improvements in children’s readiness:
- Teachers stated that students demonstrated higher level of Portuguese oral comprehension and oral vocabulary knowledge.
- Teachers reported that students demonstrated several socio-emotional competencies such as knowing how to play with others, knowing how to participate in classroom activities and ask questions, and knowing how to apologize when someone gets hurt.
- Teachers observed that students had higher levels of executive function such as having greater ability to focus and follow directions.
- Interviews also showed that the ASR pilot program encouraged school attendance. The program caused a 12% increase in Grade 1 attendance of the treatment group over control group.

Caregiver-Level Results

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Child-Level Results

Highly significant impact on the overall IDELA score and in most domains for children who attended the program (+0.93 Standard Deviations [SD] – a large impact)

Emergent Numeracy (0.55 SD)
- Driven by positive effects on comparison by size and length, sorting and classification, shape identification, one-to-one correspondence, addition and subtraction, and puzzle completion.

Emergent Literacy (+0.39 SD)
- Driven by positive effects on emergent writing print awareness, letter identification and first letter sound

Motor Skills (+0.44 SD)
- Driven by highly significant effects on all aspects of motor skills

The below graph shows the comparison of midline IDELA results (before children enrolled in first grade) to the endline results (at the end of first grade). The results are in terms of number of points in the IDELA assessment.

- Impact estimates at the endline wave were larger than the impacts at midline.
- Impact estimates persisted even after endline.

Caregiver-Level Results

Informants stated they perceived positive benefits from the ASR’s parent-to-parent sessions such as increased awareness and support for children’s eating, hygiene, dress, and promptness at school.

Program participants also cited two main strengths of the parent-to-parent education sessions:
- The use of local parents as parent leaders
- The program’s ability to create a space for parents to share experiences.

Program Implementation

- Most interviewees reported positive experiences with the selection (of parent leaders, summer school volunteer teachers) and training processes of the program.
- Summer readiness program: A minority of parents expressed confusion about the selection process to participate in the program.
- Parent-to Parent Session: Parents reported that the program did not offer adequate benefits for their participation, and the lack of snacks was the largest challenge.

Cost Analysis

The evaluation team conducted a cost analysis for the ASR program as implemented in the districts of Morrumbala and Derre. Engaging in a cost study provides essential information to policy makers and stakeholders. It includes a comprehensive picture of the program costs, of the resources needed to expand the program and to analyse whether the program is cost-effective in achieving the key outcomes of school readiness.

- The ASR program overall cost is USD $163,089 in the two study districts. The overall program costs includes the opportunity cost of activities by providing the in-kind costs of volunteers’ time allocated to the ASR program and the opportunity cost of time for volunteer parents. In-Kind Costs provides an accurate budgetary estimate of the program’s costs if it is to be replicated into an area where volunteers are reimbursed.
- If in-kind (volunteers time) costs are excluded, the total ASR program costs fall to USD $149,073.

Total Cost of the ASR Program in USD (*all costs in 2017 USD)

- Costs excluding In-Kind Costs: $149,073
- Costs including opportunity costs of time for volunteers: $163,089

55/Child
60/Child

**Program Costs by Activity Results**

The majority of the program’s costs are related to the implementation activity, followed by trainings, planning, and oversight activities.

**Percentage of the Total Costs of the ASR Program by Activity**

- **Implementation activity ($32/child):**
  - School capacity building (67% of Implementation Costs)
  - Parent component (11.2% of Implementation Costs)
  - School readiness activities with children (11.1% of Implementation Costs)
  - Purchase and delivery of materials to schools (10% of Implementation Costs)

- **Training activity ($21/child):**
  - Includes the trainings of volunteers, comprised by accommodation, per diems, and travel expenses.

- **Oversight activity ($4/child):**
  - Composed entirely of personnel and travel costs for monitoring officials.

- **Planning activity ($4/child):**
  - Primarily related to engagement through meetings and presentations with schools and communities to launch the program.

**To answer this question, we conducted a cost-effectiveness analysis. Cost-effectiveness is measured and displayed as ratios of cost per outcome. A smaller ratio means the intervention takes fewer resources to achieve a certain outcome and thus more cost effective. We report on the cost effectiveness in terms of increasing the IDELA score by 0.1 SD. As shown, the average cost of increasing the total IDELA score by 0.1 SD is $6.5 USD.**

The average cost of increasing the total IDELA score by 0.1 SD is lower than cost effectiveness ratios found in similar preschool programs in Kenya and Malawi (Donfouet et al, 2018; Ozler et al, 2018).

**Conclusions and Recommendations**

- The overall conclusion of the study is that the pilot ASR program generates large increases in school readiness to children in program areas and the cost of achieving such results are reasonable. More importantly, the results did not disappear after one full year of primary school.

- To strengthen the quality of the intervention, it is recommended to:
  - Keep the timing of the program for the months right before the start of primary school, but increase the reach of programming within communities.
  - Use of volunteers for program implementation may not be sustainable over time; Thus, alternatives need to be explored, for example, by involving students of pedagogical institutions as interns, which will also complement their training.
  - Maintain the introduction of Portuguese, as one of the languages of instruction in the ASR activities, to help students adapt better to primary school where Portuguese is the exclusive language of instruction.
  - Maintain the parent-to-parent sessions as an integral part of the model and explore ways to encourage fathers to attend.

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