

ENHANCING QUALITY AND INCLUSIVE EDUCATION PROGRAM



RIGHT TO PLAY
PROTECT. EDUCATE. EMPOWER.

July
2021

Baseline Evaluation Report
Mozambique - FINAL

Acknowledgements

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With special thank you to the team of Ministry of Education supervisors/observers

And to team of enumerators:

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Contents

Acknowledgements.....	3
List of acronyms and abbreviations	8
1. Executive summary	10
Project background	10
Methodology.....	10
Key findings and recommendations	11
2. Background and context	15
Right to Play	15
Cynosure Evaluation	15
Mozambique context.....	15
RTP's involvement in Mozambique	17
EQIE program in Mozambique.....	17
Direct beneficiaries	18
Indirect beneficiaries	18
Main intervention pathways	18
3. Approach.....	19
3.1 Evaluation purpose and evaluation questions	19
3.2 Evaluation questions.....	19
3.3 Overall evaluation design	19
3.4 Ethical considerations	21
3.5 Training	22
3.6 Dissemination plan.....	22
3.7 Risks and mitigation	22
4. Evaluation Methodology.....	22
4.1 Tools	22
Learner assessment	22
4.1.1 Early Grade Reading Assessment (EGRA)	23

4.1.2 ISELA.....	24
4.1.3 Washington Group Short Set	27
4.1.4 Teacher classroom interviews	27
4.1.5 Principal classroom interviews	27
4.1.6 Parent phone survey	28
4.1.7 Classroom observations.....	28
4.2 Sampling Framework	28
4.3 Representativeness of the sample.....	28
4.4 Cohort tracking	29
4.5 Data quality and Security Assurance	29
4.6 Challenges and limitations.....	29
4.6.1 COVID-19	29
Data quality and Security Assurance	30
4.6.2 Selective administration of EGRA tasks	30
4.6.3 Imperfect recall and self-reported data	31
4.6.4 Quasi-experimental nature of research design	31
5. Key characteristic subgroups and barriers at baseline	32
5.1 Respondent demographics	32
5.1.1 Students	32
5.1.2 Teachers	34
5.1.3 Principals	34
5.1.3 Parents	35
5.2 Demographics by marginalized group	35
5.2.1 Girls	35
5.2.2 Girls’ daily patterns of activities	35
5.2.3 Girls’ dropout rates.....	36
5.2.4 Children with disabilities.....	36
5.3 Barriers to participation.....	38
5.3.1 Barriers for girls.....	38
5.3.2 Barriers for children with disabilities	39

6. BASELINE FINDINGS AND ANALYSIS.....	40
6.2 Learning outcomes.....	40
6.2.1 How similar are intervention and comparison schools?	40
6.2.2 EGRA - What can the baseline assessment tell us about students’ reading skills, and how do these reading skills differ by equity indicator?.....	42
6.2.2.1 EGRA scores disaggregated by Grade (1 to 4) and sex	42
6.2.2.2 EGRA Task 1: Letter Identification	44
6.2.2.3 EGRA Task 2: Phonemic Awareness.....	46
6.2.2.4 EGRA Task 3: Familiar Words.....	48
6.2.2.5 EGRA Task 4: Reading Passage and Reading Comprehension	48
6.2.2.6 EGRA Task 5: Listening Comprehension	50
6.2.4 Differences in EGRA task scores by marginalized group	52
6.2.4.1 Girls	52
6.2.4.2 Children with disabilities	52
6.2.4.3 ECD attendance.....	52
6.2.4.4 SES score	52
6.3 Life skills scores in intervention schools, and their determinants	52
6.3.1 What can the baseline assessment tell us about students’ life skills, and how do these life skills differ by equity indicators?.....	52
6.3.1.1 Stress management	54
6.3.1.2 Collaboration	55
6.3.1.3 Empathy	57
6.3.1.4 Perseverance.....	58
6.3.1.5 Conflict resolution.....	60
6.3.1.6 Self-concept	61
6.3.1.7 Summary of findings	63
6.3.2 Life Skills and gender	63
6.3.3 Life Skills and disability	64
6.3.4 Life Skills and poverty levels	65
6.3.5 Life skills and daily activity patterns	66

6.3.6 Life skills and EGRA	71
6.4 Reading activities in the community: Parent survey	71
6.4.2 What supplemental reading activities are available to children (in homes and communities)? Of those activities, which do children take part in? How frequently? ...	71
6.4.3.1 How does participation differ by equity indicators?	75
4.3 How does participation in at-home reading activities differ by presence of reading materials in the home?	75
EGRA scores	75
Life skills	76
6.5 TEACHER PROFESSIONAL DEVELOPMENT.....	77
6.5.1 How does teaching practice correlate with teacher well-being?.....	77
6.5.2 How does teachers' perception of their self-efficacy affect their ability to adapt to new teaching practices?.....	77
6.5.3 What teaching knowledge, attitudes, & practices regarding inclusive PBL/literacy instruction are common among teachers at baseline?	78
6.5.3.1 Educational and recreational material observed in classrooms.....	78
6.5.3.2 Knowledge and techniques accessible to teachers	79
6.5.3.3 Attitudes influencing the uptake of best teaching and PBL practices	81
6.5.3.4 How do teachers adapt teaching practices for CWD and gender-responsiveness?	82
6.5.3.5 How do these knowledge, attitudes, and practices differ by teacher background (sex, # of teaching years, teacher qualification, and grade)?.....	83
6.5.3.6 To what extent does RTP training influence teacher knowledge, attitudes, and practices regarding inclusive PBL/literacy instruction?	84
6.5.3.7 Further need for RTP training and support.....	86
6.6 BUILDING A CULTURE OF READING IN THE COMMUNITY: CAREGIVER SURVEY	87
6.6.1 Knowledge and practice of PBL and inclusive education amongst parents.....	87
6.6.2 How do parents' beliefs about teaching support or conflict with RTP's approach and teacher's approach to learning?	89
6.7 SAFE AND INCLUSIVE LEARNING ENVIRONMENTS	90
6.7.1 Emotional and physical safety in the learning spaces	90

6.7.1.1 Do children and teachers know how to report and get support with safety issues?	90
6.7.1.2 What is the baseline capacity (measured by knowledge, attitudes, and practice) of parents in creation and maintenance of safe learning environments?	92
6.7.1.3 What barriers do community members face in creation and maintenance of safe learning environments, despite knowledge and attitudes, according to parents?	93
6.8 LEAVING NO ONE BEHIND	94
6.8.1 What are the beliefs held by parents, teachers and principals regarding gender and disability and access to education, and how much do all the actors support inclusive teaching versus differentiated teaching for CWD?	94
7. Key findings and recommendations	98
Annex 1 – PMF Baseline indicators – Mozambique	102
Annex 2 – Terms of Reference	103
Annex 3 – Analysis framework	104
Annex 4 – ISELA competencies map	105
Annex 5 – Baseline survey research instruments	106
Annex 6 – Inception Report	107

List of acronyms and abbreviations

4Cs	Concentration, Communication, Collaboration, Critical Thinking
COTT	Continuum of Teacher Training
CSO	Civil Society Organization
CWD	Children with disabilities
ECD	Early Childhood Development
EGRA	Early Grade Reading Assessment
EQIE	Enhancing Quality and Inclusive Education
FCDO	UK Foreign, Commonwealth, and Development Office

INDE	National Institute for Education Development
ISELA	International Social and Emotional Learning Assessment
MDE	Minimum Detectable Effect
MINDEH	Ministry of Education and Human Development
MLA	Monitoring Learning Achievement
NORAD	Norwegian Agency for Development Cooperation
OECD-DAC	Organization for Economic Cooperation and Development - Development Assistance Committee
PA	EGRA Task 2: Phonemic Awareness
PMF	Program Management Framework
PPI	Progress out of Poverty Index
PTA	Parents and Teachers Association
RTP	Right to Play
SDG	Sustainable Development Goals
SEL	Social and Emotional Learning
SES	Socio-economic status
SMC	School Management Committee
UNDP	United Nations Development Program
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund

1. Executive summary

1.1 Project background

The overall goal of the project is to enhance quality and inclusive education as it relates to Sustainable Development Goal (SDG) 4, the underlying principles within the SDGs of “leave no one behind,” the Mozambique Government Education Strategic Plan (2102-2019) and the priorities of Civil Society Organization (CSO) partners.

The main objectives of the project are to: 1) Improve children’s minimum proficiency level in reading and life skills, focusing on children in Grade 1-4; and 2) Increase access and retention of out-of-school girls and children with disabilities, in the Namacurra District of the Zambezia Province. A total of 250 educational staff will be trained on play-based learning teaching practices to enhance children’s reading skills, 550 children will be provided with learning materials, 348 parents, community members and teachers will be trained to implement supplemental reading activities for children both inside and outside school, 150 SMC and PTA members will be trained to support school development and inclusion initiatives, 4 CSO partners will be trained and mentored on organizational development needs, and 1,000 out of school girls and 50 out-of-school children with disabilities will be supported to enroll into target educational institutions, temporary learning spaces or alternative education programs.

The project aligns to OECD DAC Purpose Codes including category 100: Social Infrastructure and Services, which relates to developing the human resource potential of developing countries. The project will focus on DAC 5 CATEGORY CODE: 112 Basic Education and CRS PURPOSE CODE: 11220 Primary Education. These codes include formal and non-formal primary education for children, all elementary and first cycle systematic instruction, development and provision of learning materials and teacher education (where the level of education is unspecified) through in-service and pre-service training.

1.2 Methodology

The baseline evaluation of Mozambique follows the overall five-country EQIE baseline strategy. It uses a set of quantitative surveys adapted from the global tools to gather baseline data from key target groups of students, teachers, parents, principals, and classrooms which can be compared at midline and endline. Data gathered are reported against the analysis framework and the Program Management Framework (PMF), and to answer a series of evaluation questions set out in the baseline inception report. The program tracks two key sets of outcomes, performance on the Early Grade Reading Assessment (EGRA) and on selected Socio-Emotional Learning (SEL) life skills scores.

The Mozambique evaluation has a quasi-experimental design, with data from the intervention district, Namacurra, compared with a neighboring district, Mocuba. This comparison allowed target-setting at baseline and will enable a difference-in-differences comparison at midline and endline. The evaluation also follows a cohort approach, where the same individual students will be tracked using student ID numbers through to midline and endline.

1.3 Key findings and recommendations

1.3.1 Low levels of Portuguese language are a bottleneck to better learning outcomes

Overall and across the two grades (1 and 4), very low levels of Portuguese language ability of students at all levels hinder uptake of reading and understanding of Portuguese. Teachers report giving classes for 5.6 hours daily on average. However, teachers report spending only 1.7 hours (30%) teaching in Portuguese. As we know, students who speak Portuguese at home with their families represent only 37% of the learners' sample, which means that with 1.7 hours of Portuguese per day, it seems unlikely these students would achieve a satisfactory level of Portuguese language comprehension. In the rural regions such as Zambezia, teachers use native language (Echuabo) to support teaching process for Portuguese and other subjects. However, all textbooks and reading materials are still in Portuguese. The Ministry of Education is still piloting bilingual teaching in some schools however this is still not widespread in the RTP's intervention areas. We believe that RTP will not see significant progress on EGRA tasks, particularly in reading and reading comprehension, at midline or endline without addressing underlying low levels of Portuguese language by both teachers and students now.

We would therefore recommend that RTP consider providing additional Portuguese language training for teachers, parents, and/or students. Recent research has shown native language education, specifically home language literacy, makes a huge difference in learning gains. Though education and public affairs are conducted in Portuguese, native language pride and empowerment movements are on the rise – as is the case globally. Bilingual programming is becoming a government focus, with the CapED program and others that look to offer youth and adult education in Portuguese and Mozambiquan native Languages. These have been shown to increase retention, engagement, achievement, and confidence¹. Instead of focusing on a narrow measure of literacy success (Portuguese), we would recommend that RTP consider supporting inter-language skills transfer. This would mean including home language skill development, in combination with parent engagement in literacy and other activities. This could rely on partnerships linked to CapED, to try to get parents to develop literacy abilities in multiple languages to support kids' learning. This is based on the idea that parent capacity, support,

¹ <https://en.unesco.org/news/breaking-educational-language-barriers-mozambique>

attitudes matter, and aligns with our further recommendations for involving parents as much as possible in change management activities.

Additionally, the national focus on the bilingual CapED programs could prove a good opportunity for teacher education and get them trained via the same bilingual education model.

1.3.2 Life Skills levels can benefit from specific approaches for high and low-scoring students

At baseline, before the intervention has started, Grade 4 Life Skills scores are already mostly above 50%. Although the PMF has set a target of an average score, this focus masks different needs of high and low scoring students. We recommend that RTP look to target the sub-groups of students who have below-average Life Skills scores and need the most support. We have found that amongst Grade 1 students, three socio-economic status (SES) home assets are consistently correlated with higher life skills: Households with a motorbike or a television have a weak positive correlation with life skills, while households with solar panels have a weak negative correlation². Attendance at early childhood development centers or schools (ECD) is weakly positively correlated with higher life skills scores on four out of six measures. Finally, three activity markers – doing chores, playing with friends and, playing with family – whether this is before or after school are highly significant and relatively strongly positively correlated with higher life skills scores. From an identification perspective, children in households where they are given room to play with friends, parents who take time to play with them, who have a reasonable number of chores to do (not across morning, afternoon, and evening), have attended ECD and whose household possesses a television and/or a motorbike are the most likely to have high Life Skills scores by Grade 1. In contrast, the children whose households have the lowest SES scores, do not possess these appliances, and did not attend ECD, and whose daily schedules do not allow for playing time are the most likely to have poor Life Skills scores. Poverty and lack of possibility to play thus seem to be the main risk factors to track for RTP in terms of holistic skills development.

Instead of looking at increasing scores for children already scoring in the upper quartile, RTP could target students scoring 0 to 2 points on the life skills indices. More research is needed to identify main markers for low-performing students. Additionally, central to play-based learning is the idea of cooperation; such a wide divergence in student scores could lead to investigating whether more peer work and “mentorship” could be organized. For example, RTP could specifically identify and rely on high-scoring students to model and support peers’ development.

1.3.3 Children who do not correctly report harmful behavior have the lowest Life Skills scores

When asked the question “If you or a friend were harmed, what would you do?”, the answer “Nothing/ No reply” (instead of “tell a trusted adult”) is significantly correlated with much lower

² We would posit that motorbikes and/or televisions may proxy households with higher wealth, while solar panels may have been provided to more needy or deprived households.

scores across most relationship variables and Life skills scores for children compared to children who answered, “tell a trusted adult”.

Over half of the children in our sample would not report being harmed or witnessing a friend being harmed to an adult (73% of Grade 1 and 59% of Grade 4), and these children are lower performers across all Life Skills scores (up to 27% lower scores). The answer to this question allows to quickly proxy which students are the most likely to have the lowest Life Skills scores. It is not clear whether this is a marker of overall childhood development or there is a causal connection, but we suggest using it as part of ongoing monitoring efforts and whenever some discussions are led with students to automatically flag and target the lowest performing half of the students with specific interventions.

Students who reported teachers asking questions about what they read in class also scored lower on three life skills indexes. Right to Play should observe or supervise these sessions to confirm that this practice is not contributing to a stressful or negative classroom environment.

1.3.4 By Grade 4, differences on learning outcomes between girls and boys, and between children with and without disability have become significant

By Grade 4, children with disabilities have significantly lower perseverance score than average, girls’ access to supplemental reading is significantly less than boys’ access, and boys outperform girls on most EGRA tasks. In Grade 1 there are no significant differences in any of these areas. Gaps in performance may in part be due to self-perpetuating stereotypes – for instance, teachers and principals both characterized girls as ‘shy’ and participating less in class. Broader research on stereotypes suggests that stereotypes and gender roles start getting entrenched between 5-6 years old. However, evidence also suggests that slightly older children may be able to override these stereotypes. We would recommend that RTP better understand the drivers for performance gaps between girls and boys, and children with and without disabilities, post-Grade 1 and consider whether this may in part be due to pre-conceived gender roles and stereotypes. If so, RTP could consider leading a smaller piece of research around stereotype flexibility (self-awareness about stereotyping) or including questions on this topic in the research instruments for midline.

1.3.5 Teachers’ attitudes, beliefs and practices represent an opportunity for RTP

The intervention district, Namacurra, benefits from a strong base of experienced teachers, with stability in their current roles, high self-efficacy scores, and encouraging attitudes to inclusiveness and new education practices alongside some more traditional views about learning. However, self-reported knowledge of play-based learning (PBL) concepts and techniques is low and would benefit from further training, which is one of the most important type of support they report needing.

1.3.6 Potential early effects of RTP training around teachers' attitudes and practices

Teachers having received RTP training have significantly more inclusive attitudes towards learning abilities, increased awareness of gender equality, more observed child-led activities, and higher scores on the five skills reading dimension. These could be early signs that RTP training is having a positive effect. However, to identify these improvements as attributable to RTP training only and not to external causes, RTP team should keep on closely monitoring their training effectiveness to be able to confirm these results further at midline and investigate this correlation further.

1.3.7 Significant effects of having reading material at home on EGRA and Life Skills scores

There is a significant difference on most EGRA and Life Skills scores depending on whether children have reading material available at home and depending on the type of reading material. A significant difference is observed between 0 and 1 reading material available, and the proportion of children with access to no materials is around 20%. We recommend that RTP explore whether there is a causal relationship between providing child-friendly reading materials in the home and increased life skills and EGRA outcomes. If shown, targeting students with no reading materials may have a significant impact on their life skills and reading scores.

1.3.8 Participation of children with disabilities is low, and should be prioritized for intervention

Classroom observations reveal low level of participation of children with disabilities and insufficient efforts to ensure this participation, despite teachers reporting using several strategies to include them. They report needing more training, medical devices, and support as well as adapted educational material as a priority for support. This may be one factor in the proportion of children with disabilities halving from Grade 1 to Grade 4.

1.3.9 Parents' attitudes are key to decreasing dropout, and an opportunity to seize for RTP

Parents mostly display inclusive attitudes towards gender and disability, and a mixture of traditional and more modern attitudes towards ability to learn and constructivist education approaches. We recommend involving them as much as possible when advocating for change, as they are ultimate decision makers when it comes to children dropout and inclusive access to education. The main reason for dropping out for both boys and girls, as reported by Principals, is household or outside work. For girls, second and third most quoted reasons are getting married and getting pregnant. We recommended centering parents' intervention on developing reading at home and advocacy to hold schools accountable.

Indeed, research shows that reading to children 1) makes them feel safer and more secure (which ties in with the previous finding on child protection), 2) improves future reading skills, given listening is a precursor for reading, developmentally, and 3) improves interaction, which, like cognitive priming techniques (asking what will happen next, etc.) are great predictors of ability scores.

2. Background and context

2.1 Right to Play

Right to Play (RTP) is a global organization committed to improving the lives of children and youth affected by conflict, disease, and poverty. Established in 2000, Right to Play has pioneered unique play-based approach to learning and development which focuses on quality education, life skills, health, gender equality, child protection and building peaceful communities. With programming in several countries, Right to Play transforms the lives of more than 2.3 million children each year, both inside and outside of the classroom. In addition to work with children, Right to Play advocates with parents, local communities, and governments to advance the fundamental rights of all children.

Right to Play is implementing the Enhancing Quality and Inclusive Education (EQIE) program in Ethiopia, Lebanon, Mozambique, Palestine, and Tanzania. The EQIE program is a five-year education initiative being implemented from 2020-2024. The program aims to:

1. Improve learning outcomes of boys and girls, specifically minimum proficiency level in reading in lower primary Grade 1-4;
2. Increase retention of out-of-school girls and children with disabilities

This will be achieved by building the capacity of education staff, teachers, and parents to give children better and more opportunities to practice reading skills, both inside and outside school, using child-centered, play-based and active learning methodologies. Right to Play will also build the capacity of Civil Society Organization (CSO) partners to identify out-of-school children and to develop follow-up and support system, together with schools and local communities, which ensure access and sustained retention in school. Through these interventions, the program will contribute to achieving the Sustainable Development Goals (SDGs), particularly SDG 4, ensuring 'inclusive and equitable quality education and promoting lifelong learning opportunities for all', including its underlying principle of 'leave no one behind'.

2.2 Cynosure Evaluation

Cynosure Evaluation is a UK-based employee-owned company specializing in monitoring and evaluation of international development programs, with an emphasis on education programs. Cynosure has conducted evaluations of education programs for the UK Foreign, Commonwealth, and Development Office (FCDO, formerly the Department for International Development) and UNICEF. The lead evaluator was involved in the program evaluation of the Girls' Education Challenge Fund.

2.3 Mozambique context

Over the past decade, Mozambique has demonstrated a strong commitment to education as a driver for economic, social, and human development. This is outlined in its Agenda 2025 and

the current Five-Year Action Plan, both of which prioritize the enhancement of inclusive, quality education. Reforms introduced to improve the quality of primary education have included revisions to the curriculum and teacher training standards (currently being undertaken), greater decentralization of educational authority and larger government provisions for classroom infrastructure and for teaching and learning materials. These reforms have taken place in response to the rapid increase in primary enrolment over the past 20 years that resulted in a shortage of teachers, high pupil-to-teacher ratios, and a consequent reduction in education quality.

Educational attainment remains low across many parts of the country including Zambezia Province. Findings from an Early Grade Reading Assessment showed only 3.9% of Grade 2 students demonstrating Oral Reading Fluency and just 0.13% demonstrating Reading Comprehension (USAID, 2015). Data from the National Reading Achievement Test in 2017 showed that only 5.4% of Grade 3 students in the Province have basic reading competences.

Without adequate reading skills, students are more likely to repeat a grade (further straining an already overburdened education system), dropout, or fail to complete primary education. Dropout rates in Zambézia Province are 10.7% (the second highest in Mozambique) with 35% failing to complete primary school (57% are girls) (MINDEH, 2017). National efforts to address these challenges are incorporated into the government's National Action Plan for Reading and Writing (2018-2022) and the Education Strategic Plan (PEE) 2012-2019. Additionally, the Ministry of Education and Human Development (MINDEH), through the National Institute for Education Development (INDE) carried out a targeted review in 2014 of the Grade 1 and 2 curricula. This resulted in a revised curriculum focused on basic learning skills in the first cycle of education from Grade 1-3, applying a child-centered approach to literacy.

However, children's reading skills are undermined by the lack of trained and qualified teachers. In Mozambique just 1% of teachers in Grades 1-3 demonstrated knowledge of at least 80% of the curriculum and only 1% of Grade 4 teachers had the minimum knowledge of primary-level Portuguese (identifying only 2 of the 20 language errors) (World Bank, 2017). Poor teaching quality is reinforced by findings that on average, teachers scored only 15 out of 100 points in pedagogy, reflecting difficulties in successfully preparing lesson plans (19 out of 100) (EFA, 2015). Changes to teaching pedagogy are vital as research shows teacher quality is the most important variable influencing pupil achievement (OECD, 2005). Yet evidence indicates that existing in-service teacher training in Mozambique lacks sufficient content and practice on child-centered, participatory methods, leaving teachers insufficiently prepared in the classroom (World Bank, 2017). Teaching is further undermined by high absenteeism levels. On a national level, 45% of teachers were absent on any given day and a further 11% were at school but not teaching, resulting in less than two hours of instruction per day (World Bank, 2017). Resulting in a significant loss of student time on task that has a negative impact on student learning

(USAID, 2015). These issues have also been identified in Namacurra District, alongside a lack of teaching and learning aids, textbooks and reading materials, limited after school reading programs, and inadequate primary school facilities (Right to Play Needs Assessment, 2019).

The poor standard of primary school facilities and a lack of upgrades can act as key barriers to attendance and retention at school, particularly for girls. Namacurra District is characterized by socio-cultural practices, perpetuating negative attitudes toward girls' education, exposure to early marriage, high levels of gender-based violence (GBV), and stigma attached to girls who become pregnant. All of which serve to restrict girls' access to schooling or mean they are more likely to drop out of education (MINEDH, 2015). This creates barriers to girls attending and staying in education (the out-of-school rate for primary school age girls is 7.5%; only 11% transition to secondary school; and 66% graduate primary without proper reading and writing skills) (UNESCO, 2018; USAID, 2019). The longer-term impact is huge levels of illiteracy, with only 28% of women able to read and write.

Access and retention issues also affect children with disabilities. It is estimated that 80% of children with disabilities do not attend school (Mozambique Education Report, 2008). The impact of this exclusion feeds into wider levels of discrimination against people with disabilities, particularly in remote areas, as they have limited access to basic services and are among the poorest and most vulnerable people in the country (SINTEF, 2009). Inadequate identification and assessment of children, a lack of teachers trained on inclusive education, limited assistive devices and specialist educational resources and stigma have all been identified as additional barriers limiting children with disabilities engagement in education (ACPF, 2014). Girls with a disability are subjected to double discrimination based on their gender and disability status. This leads to a high proportion of women and girls with disabilities being denied access to school and lower literacy and education rates for women and girls with disabilities (ACPF, 2014).

2.4 RTP's involvement in Mozambique

Right to Play began working in Mozambique in 2002 through a partnership with the Ministry of Youth and Sports. Through the partnership, youth received training to lead play-based programs in their communities. In 2005, in partnership with the Ministry of Education and Human Development, Right to Play started working directly in schools to promote holistic child development, HIV awareness, and sexual and reproductive health and rights.

In 2019, Right to Play had reached 85,000 children in Maputo City and Maputo, Gaza, and Zambézia provinces.

2.5 EQIE program in Mozambique

The EQIE program was originally supposed to start in January 2020 but was postponed for a year due to the COVID pandemic. The overall goal of the project is to enhance quality and inclusive education as it relates to SDG 4, the underlying principles within the SDGs of "leave no one

behind,” the Mozambique Government Education Strategic Plan (2012-2019) and the priorities of CSO partners.

2.5.1 Direct beneficiaries

Direct beneficiaries include educational staff, parents, community members, and teachers, SMC and PTA members, and children in Grades 1-4 in Namacurra District.

A total 250 educational staff will be trained on play-based learning teaching practices to enhance children’s reading skills, 17500 (8750 females) children will be supported to improve their learning outcomes with 1,100 children directly provided with learning materials, 348 parents, community members and teachers will be trained to implement supplemental reading activities for children both inside and outside school, 150 SMC and PTA members will be trained to support school development and inclusion initiatives, 4 CSO partners will be trained and mentored on organizational development needs, and 1,050 out of school children (1,000 girls and 50 children with disabilities) will be supported to enroll into target educational institutions, temporary learning spaces or alternative education programs.

2.5.2 Indirect beneficiaries

Indirect beneficiaries include other students and teachers from other school clusters and outside Grades 1-4, and parents and caregivers who will benefit from the *Learning Together* toolkit training.

2.5.3 Main intervention pathways

The overall objective of the project is to improve holistic learning outcomes of boys and girls, including children with disabilities, in primary institutions in Namacurra District, Zambezia Province, Mozambique. This includes the number and percentage of children in schools achieving minimum reading proficiency levels in lower primary Grade 4 (OBJ 1000). To achieve this the project will increase teacher’s knowledge and pedagogical skills that will enhance the reading skills of children through play-based learning (INT 1100; IMM 1110; OUT 1111). Teaching and learning materials will be provided to further support teachers delivery of child-centred learning (OUT 1112). The project will also increase children’s participation in supplemental reading activities, using play-based learning to motivate and ignite an interest in reading, as well as ensuring that children increase the time they spend reading inside and outside school (INT 1200; IMM 1210; OUT 1213). To secure local ownership the project will also increase community and parental engagement to support home-based reading activities, and work in close collaboration with SMCs and PTAs to facilitate activities that support opportunities for children to read outside school (OUT 1211; OUT 1212).

To address the high rates of out-of-school children, the project will increase the enrolment of girls and children with disabilities (INT 1400; IMM 1410). In close collaboration with CSO partners and supporting them in strengthening organisational development needs (OUT 1411), the project will implement initiatives to address barriers to education for girls and children with

disabilities (OUT 1412; OUT 1413). This will include community sensitization events and training teachers on inclusive education practices. The project will also connect CSO partners with government education officers, SMCs and PTAs to form School Inclusion Committees (OUT 1313), support construction and rehabilitation work (OUT 1311) and child protection referral mechanisms (OUT 1312). This will act as a means to increase the capacity of school communities to create and maintain safe and inclusive learning environments (INT 1300; IMM 1310).

3. Approach

3.1 Evaluation purpose and evaluation questions

The baseline evaluation aimed to:

1. Assess the program's starting point within each of the programming contexts
2. Inform program design and strategy
3. Establish baseline measurements against which improvement and impact will be measured during midline and endline evaluations.

3.2 Evaluation questions

Aligned to the evaluation purpose and scope, this evaluation seeks to answer agreed-upon evaluation questions and sub-questions. A full list of these questions can be found in Annex 6.

Furthermore, the overall evaluation purpose articulated by RTP has been considered in relation to the OECD DAC criteria³. The DAC criteria enable the determination of merit, worth or significance of an intervention. Each criterion is a different lens or perspective through which the intervention can be viewed. Together they provide a more comprehensive picture of the intervention, the process of implementation, and the results.

This baseline equips Right to Play to design and adjust the program, so it remains relevant and reaches all segments of the target population, including the most vulnerable.

As described in the evaluation design and sampling framework, the evaluation questions establish the baseline values of key indicators from which effectiveness and impact of the program can be measured at baseline and midline/endline. There is also an opportunity to examine sustainability through the longitudinal study design, increased in capacity of teachers and community leaders. See Annex 3 for the full analysis framework.

3.3 Overall evaluation design

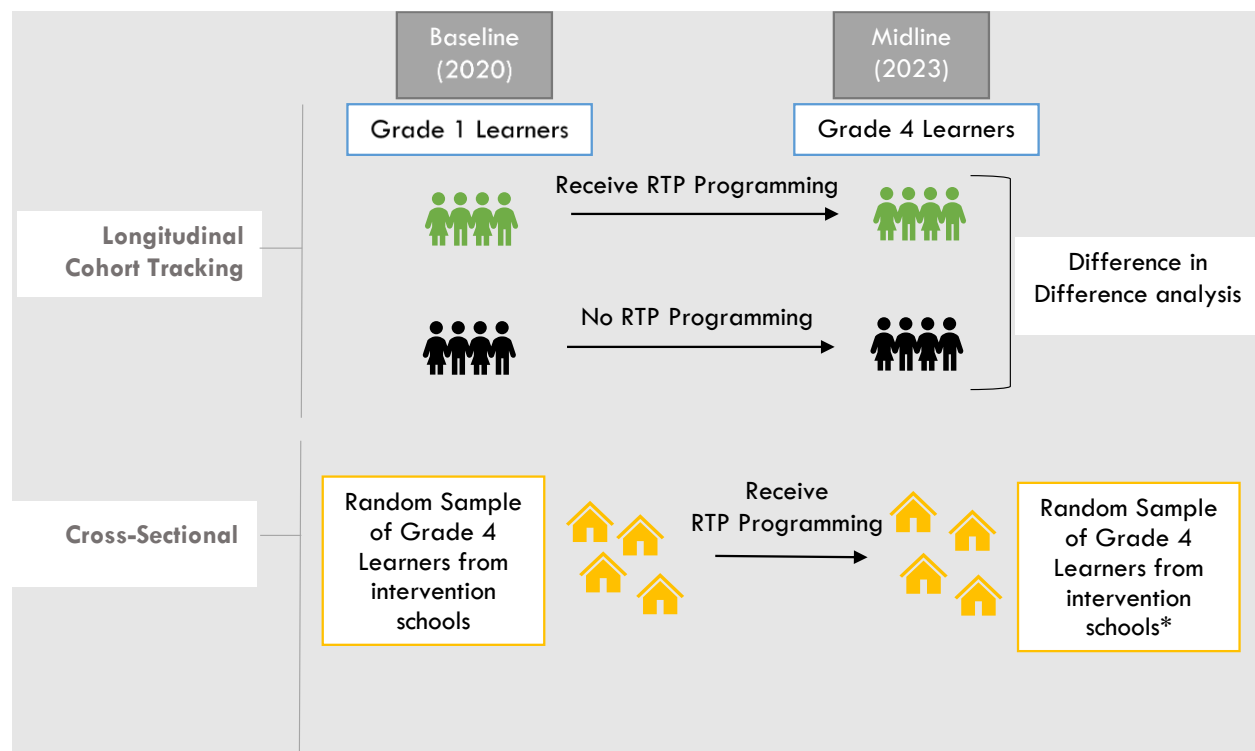
The overall program evaluation employs a quasi-experimental design, allowing Right to Play to measure effectiveness and impact of their intervention at midline and endline. The program will

³ OECD DAC Criteria (2020):

<https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm>

establish a baseline cohort of Grade 1 students in each country to be followed longitudinally throughout the life of the program. The program will attempt to follow and reassess the same students in Grade 4.

In Mozambique, the baseline identified 20 intervention schools in Namacurra district as well as 20 comparison schools in neighboring Mocuba district. The sample included Grade 1 students from both intervention and comparison schools. This will allow for a difference in difference analysis, comparing learner gains in intervention schools to learner gains in comparison schools from baseline to endline. In addition, the program sampled learners in Grade 4 intervention schools to establish the baseline performance which will be used to set the end-of-program target.



This study design allows for flexibility at endline⁴, depending upon the evaluation questions that are to be prioritized. The RTP team can reassess a random sample of Grade 4 learners in the intervention site to add to the cross-sectional comparisons in Grade 4 learner performance between baseline, midline, and endline.

The baseline established a sample of students to be followed longitudinally throughout the life of the program. These students were identified at baseline in Grade 1 in 20 intervention schools and will be followed up with and re-assessed in Grade 4, at the program's midline in 2023. Additionally, the project sought to establish the baseline performance of learners in Grade 4

⁴ The endline is currently scheduled for 2024, one year after the midline.

(the age used to measure the EQIE indicator target) with a random sample of Grade 4 learners from 20 intervention schools. This performance can be used to compare with the cohort of Grade 4 learners at midline.

In addition to the learners assessed, data were collected from other stakeholders in the education ecosystem. This includes interviews with teachers, principals, parents/caregivers, district education officials, and community leaders, as well as classroom observations.

Furthermore, the program team will have the opportunity to examine sustainability of the program results by re-assessing the longitudinal cohort group which will be in Grade 5 at endline. Doing so will examine the evaluation question: assuming RTP students outperformed their counterparts in Grade 4, do they continue to do so in Grade 5, despite the end of programming in Grade 4?

One additional option would be to re-establish a cohort of students at midline to follow longitudinally over the last few years of the program. To do so would allow the organization to re-examine impact through a difference in difference analysis. The comparison between the two longitudinal cohort studies would allow the team to examine the program impact over the length of the program, encouraging reflections on program implementation: did programming become stronger or weaker over the length of the project?

3.4 Ethical considerations

The evaluation team followed the UN Evaluation Group's (2008) 'Ethical Guidelines for Evaluation' and UK FCDO's (formerly DFID's 2011) 'Ethics Principles for Research and Evaluation' as the fundamental ethical guidelines for the evaluation. The team used the following as guidelines:

- Evaluation standards: intentionality; managing conflict of interest; appropriate interaction with participants; accuracy, transparency & reliability; critical friendship response mechanisms.
- Practical measures: informed consent; researcher screening, child and young people friendliness and awareness of protocols related to children and young people and vulnerable people, adequate reporting mechanisms, procedures for responding to participant harm, application of appropriate evaluation toolkits.
- Procedural principles: reference to existing data; linkage to program objectives; implementation of specific evaluation methodology; respect for principles of participation and for protection of rights, welfare, and confidentiality.
- Research permissions were received at the Provincial Directorate of Education and at the District level education authorities.

3.5 Training

In Mozambique, enumerators were selected from a RTP database of experienced individuals that worked in similar projects with emphasis on their experience with EGRA administration.

Training of the data collection team occurred in Quelimane. The training was conducted by RTP MEL Specialist, MEL coordinator, with the participation of the staff of Right To Play.

Training aimed to build capacities in survey administration, sampling, standardized testing in EGRA, data management as well as ethical and child protection protocols. Data collection coordinators were trained separately for three days following the training of the main quantitative team. Data collection coordinators were trained on the various conceptual frameworks of the evaluation and how to gather qualitative data on these dimensions using the qualitative methods.

A pilot data collection was organized as part of training, to observe each enumerator and correct survey administration errors prior to beginning field work.

3.6 Dissemination plan

Baseline findings, lessons and recommendations will be disseminated in the following ways with varied stakeholders.

- Validation workshop with project partners and participants in Mozambique via PowerPoint presentation, and gallery walk of data placemats.
- Presentation meetings, narrative report, and project implementation planning (PIP) workshop held with internal RTP project implementation team to inform delivery and adaptation for better performance.
- Final report shared with the Provincial Directorate of Education and the District level education authorities for system wide learning and action.
- Final narrative report shared with NORAD (project donor) for accountability and contribution to the wider international education development portfolio learning

3.7 Risks and mitigation

To mitigate risks, particularly with EGRA JavaScript tool, fieldwork inputs were monitored on a daily basis. Issues were raised with country managers to address.

4. Evaluation Methodology

4.1 Tools

Learner assessment

The learner assessment contains questions on student background, household literacy activities and relationships, community literacy, and safety of the learning environment. It also contains

an assessment of learning outcomes (the Early Grade Reading Assessment) and life skills (the International Social and Emotional Learning Assessment).

4.1.1 Early Grade Reading Assessment (EGRA)

The Early Grade Reading Assessment (EGRA) measures students' progress towards reading. EGRA gauges early literacy skills through a 15-minute individual oral assessment composed of five tasks measuring fundamental reading skills. Given the increasing difficulty of the tasks, the Country Office decided to administer certain tasks to Grade 4 only. In Mozambique, EGRA tasks were administered as follows:

Task #	Task Description	Task Description	Grade 1	Grade 4
Task 1	Letter Identification	Learners give names of 100 Portuguese letters	√	√
Task 2	Phonemic Awareness	Learners say initial sound of 10 common words from Grade 1 / 4 curriculum	√	√
Task 3	Familiar Words	Learners read 50 common words from Grade 4 curriculum		√
Task 4a	Reading Passage	Learners read a 134-word passage		√
Task 4b	Reading Comprehension	Learners answer four oral comprehension questions, both factual and inferential, about the passage they just read		√
Task 5	Listening Comprehension	Learners answer four oral questions, both factual and inferential, about a passage the enumerator reads aloud to them	√	√

Given students were starting a new school at the time of the baseline assessment and considering the long period of school closure from COVID-19, EGRA assessments were

calibrated to the grade prior to that being assessed. All tasks were adapted to suit the level of difficulty for children out of KG and grade 3 for Grade 1 and 4 assessment respectively.

RTI International, the developer of EGRA, cautions that the tool should be used as a diagnostic rather than a means of assessment, however EGRA has become commonly used as the latter. Moreover, RTI cautions not to make comparisons across countries, as the timeline of language acquisition varies according to context and the language itself. EGRA provides insights into country-specific strengths and weaknesses of children in terms of reading skills and will be used to assess whether the program can be seen to have strengthened these skills at midline and at endline.

4.1.2 ISELA⁵

The International Social and Emotional Learning Assessment (ISELA) helps program staff understand the development of Social and Emotional Learning (SEL) skills in children between the ages of 6 and 12 years. ISELA maps out skills across five different Social and Emotional Learning (SEL) competency areas put forth by the Collaborative for Academic, Social, and Emotional Learning. The figure below shows the full mapping of SEL skills.

Country Offices chose the ISELA indicators most adapted to their context. In Mozambique, the country office chose indicators which were developed and validated by D's and Krupal (2019) in Iraqi Kurdistan. These are:

Measure	Variables	Question
Stress Management	Stress1	Can you tell me one thing you do to calm down when you are angry or upset?
	Stress2	Can you tell me another thing you do to calm down when you are angry or upset?
	Stress3	Is there anything else you do to calm down when you are angry or upset?
	Relate2	Do you talk to anyone at home when you are sad?
	Relate3	Do you talk to anyone else at home when you are sad?
	Relate10	Do you talk to any of your friends when you are sad?
	Relate15	Do you talk to any adult in your school when you are sad?
Collaboration	Relate2	Do you talk to anyone at home when you are sad?

⁵ Save the Children, 2019. *International Social & Emotional Learning Assessment (ISELA)*.

	Relate3 Relate4 Relate5 Relate10 Relate11 Relate15 Relate16	Do you talk to anyone else at home when you are sad? Do you ask anyone at home for help when you have a problem with a friend? Do you ask anyone else at home for help when you have a problem with a friend? Do you talk to any of your friends when you are sad? When you have a problem with another child, do you ask any of your friends for help? Do you talk to any adult in your school when you are sad? Do you ask any adult in your school for help when you have a problem with a friend?
Empathy	Selsad1 Selsad2 Selsad3 Selangry1 Selangry2 Selangry3 Relate8 Relate13 Relate18	Now let's look at these pictures. How do you think these children are feeling right now? What would you do to help them feel better? Is there anything else you would do to help them feel better? Now let's look at this picture. How do you think these children are feeling right now? What would you do to help them calm down? Is there anything else you would do to help them calm down? Do you know when someone in your home is feeling sad? Do you know when your best friend is feeling sad? Do you know when an adult in your school or community is feeling sad?
Perseverance	Relate6 Relate7 Relate12 Relate17	If you are working on something difficult, do you ask anyone at home for help? If you are working on something that takes a lot of time and it is difficult to finish, do you ask anyone else at home for help? If you are working on something difficult, do you ask any of your friends for help? If you are working on something difficult, do you ask an adult in your school for help?
Conflict management		**I want you to imagine a situation where you are playing with a toy that you like. Another child wants to play with that same toy, but there is only one toy.**

	Conflict1	What would you do in this situation?
	Conflict2	Is there anything else you would do?
		Now, I want you to imagine the same situation: you are playing with a toy that you like, another child wants to play with the same toy, but there is only one toy. This time the other child takes the toy away from you and starts playing with it without asking you.
	Conflict3	What would you do in this situation?
	Conflict4	Is there anything else you would do?
	Selsad4	Why did the other child bump into these children while making a line?
	Selsad5	How do you think the other child felt after they started crying?
	Selangry4	Why did the other child spill water all over the drawing?
	Selangry5	How do you think the other child felt when the children got angry?
Self-concept	Sel3	Can you describe what you hope will happen in your life in the future?
	Sel4	Can you tell me one thing that could happen that would stop you from doing this?
	Sel5	Can you tell me who or what will help support you in this?
	Sel6	Can you tell me one other thing that you hope will happen in your life in the future?
	Sel7	Can you tell me one thing that could happen that would stop you from doing this?
	Sel8	Can you tell me who or what will help support you in this?

4.1.3 Washington Group Short Set⁶

The Washington Group Short Set is a set of questions designed to identify (in a census or survey format) people with a disability. The questions ask whether people have difficulty performing basic universal activities (walking, seeing, hearing, cognition, self-care, and communication). The questions are designed to be part of a larger survey.

InformEd, the original program baseline evaluators, modified the Washington Group Short for inclusion in the learner assessment to make it more relevant to the classroom environment. For example, an original Washington Group question was: *Do you have difficulty seeing, even if wearing glasses?* This was re-worded to *Do you have difficulty seeing words in your books or on the blackboard, even if wearing glasses?*

The Washington Group questions asked in the survey were:

Do you have difficulty seeing words in your books or on the blackboard, even if wearing glasses?

Do you have difficulty hearing peoples' voices or music, even if using a hearing aid?

Do you have difficulty walking or climbing steps?

Do you have difficulty remembering or concentrating on fun activities/activities you enjoy?

Do you have difficulty feeding or dressing yourself?

In (insert child's home language), do you have difficulty communicating with your family or friends?

4.1.4 Teacher classroom interviews

Teachers were interviewed using Right to Play's Teacher Survey Tool.⁷ The survey includes questions on teacher background, training, and support, learning environment, and current use of play-based learning techniques. The same Grade 1 and grade 4 teachers who teach the section of students for Learning Assessment were interviewed.

4.1.5 Principal classroom interviews

At each school sampled, the principal was interviewed using Right to Play's Principal Interview. The survey includes questions on principal background, play activities within the school, teaching methods and discipline, gender dynamics within the school and school safety. The interview collects information on pupil-teacher ratio, pupil-textbook/reading book ratio, supplemental reading initiatives in the schools, proportion of trained/qualified teachers, and proportion of teachers who have participated in RTP trainings previously.

⁶ <http://www.washingtongroup-disability.com/washington-group-question-sets/short-set-of-disability-questions/>

⁷ This tool will be adjusted and adapted as needed to fit the context.

4.1.6 Parent phone survey

Parents of a subset of learners in Grade 1 and 4 were interviewed regarding student learning achievement and home literacy environment.

Parents were contacted by telephone. This allowed parents who were working or away from the home during the day/unable to come to the school to respond. Carrying out phone surveys also protects Right to Play staff, community members, and enumerators from in-person contact which will ensure everyone is following COVID-19 public health protocols. Phone surveys require that the schools have phone numbers of parents and are able/willing to share with the evaluation team and Right to Play. Any phone numbers used for the survey are kept private and only used by project team members. They are stored separate from names, to ensure privacy.

4.1.7 Classroom observations

Classroom observations were conducted by Mozambique Ministry of Education staff, who used the classroom observation tool based on the global tool and received training from Right to Play.

4.2 Sampling Framework

The following sampling framework was achieved in Mozambique.

Figure 0: Sampling Framework

Tool	Target	Achieved (Valid)	Notes
Grade 1 Learner Assessment	800	1,095	20 students per intervention and comparison school.
Grade 4 Learner Assessment	300	285	15 students per intervention school.
Lesson Observation	40	34	Conducted by Mozambique Ministry of Education.
Teacher Interview	40	35	Target two teachers per intervention school.
Principal Interview	40	40	Target one interview per school for both intervention and comparison schools.
Parent Interview	100	91	Target one in six parents from intervention schools.

4.3 Representativeness of the sample

Students were randomly selected from targeted grades with quotas for boys and girls with identified children with disabilities purposively selected. For Mozambique, the target sample size was 400 Grade 1 Learner Assessments in each intervention and comparison schools, for a total of 800 students.

The optimum sample required to achieve a minimum detectable effect of 0.25 standard deviations between two independent groups (power of 0.8, alpha of .05, two-tailed) is 250 in each group. The sample achieved, of nearly 1,100 students, allows Right to Play to account for a design effect of 1.6 or achieve a smaller minimum detectable effect.

4.4 Cohort tracking

Student IDs were recorded for students in Mozambique, along with identifying information including name, village, and teacher's name. 75% of parent interviews were linked to Learner Assessments; however, it was unclear how Learner Assessments could be linked to teachers through classrooms, as multiple teachers per school were interviewed.

4.5 Data quality and Security Assurance

Data validation was done initially through SurveyCTO, then cleaned and reviewed using SPSS. Where summary indices were created, steps were taken to ensure that the constituent pieces of each index were placed on a comparable scale before combining.

Summary statistics are used to describe the data. In some cases, the average may not summarize the data well if, for example, outcome variables are not normally distributed as is often the case for reading skills. This report highlights those cases and presents a histogram to represent the abnormal distribution more accurately.

For disaggregations, comparisons, and relationships that generalize from a sample to a larger population, statistical inference is used. Unless otherwise noted, this report only presents findings disaggregations, comparisons, and relationships that were found to be statistically significant at the 95% confidence level ($p < .05$) or greater. By convention, statistical significance at $p < .05$ is marked with *, $p < .01$ with **, and $p < .001$ with *** throughout the report.

Exceptions include Programming Area Sample Characteristics, indicator reporting for the Project Management Framework (PMF, Annex B), and children with disabilities (CWD) – for which disaggregations are shown regardless of their statistical significance. In most cases, t-tests and regressions are used to evaluate statistical significance and the average relationship between variables. For student-level data, clustered t-tests and multilevel regression models are used to adjust standard errors for the fact that students are grouped in schools and are likely to share some variation for being in the same learning environment.

4.6 Challenges and limitations

4.6.1 COVID-19

Enumerators experienced difficulties in accessing children in a few schools due to erroneous community perceptions around national COVID-19 vaccination program that started couple of

days prior to data collection. Despite prior sensitization and awareness raising about the baseline evaluation data collection, children in schools perceived enumerators as members of the vaccination teams and refused and in some cases the whole class ran away from enumerators and from schools and not returning for the next two days. The RTP team alongside the school directors with support of community leaders had to provide additional explanation to parents and caregivers in order to gain trust of the community members to allow their children to return to school and to be part of the exercise. This delayed data collection for a couple of days however the teams were able to catch up in the following days.

Data quality and Security Assurance

During the first day of real surveying, 4 May, enumerators did not correctly administer or record results on the first EGRA task, letter identification, in 31 out of 43 cases, and did not correctly administer the reading task in 41 out of 43 cases. It is not clear from the data whether these tasks were simply skipped, or enumerators proceeded without completing the task and recording the data. The Country Office M&E lead mentioned that this was due to enumerators' confusion over the error message that had been popping up in the training and piloting on the task. The error was identified after the first day of surveying and the team sought to remedy the situation. During the second day this only happened with 15 out of 47 cases for the letter identification task and 26 out of 47 cases for the reading task, and by the third day it affected only 5 out of 57 cases for the reading task. Together these account for the 72 cases missing between the socio-emotional index and the EGRA final results. We believe that there was no consistent pattern to the EGRA cases excluded from the final analysis and so this did not affect the final results.

The evaluators note that Right to Play had difficulties with another open-source EGRA tool, the KoBo literacy widget, in the first round of country baselines. We recommend that Right to Play choose and develop the tool of their choice for EGRA administration well in advance of the midline and that enumerators spend a few more days familiarizing themselves with the tool. We further recommend making most questions mandatory on the survey so enumerators cannot skip over them.

4.6.2 Selective administration of EGRA tasks

Country offices made the decision to administer only certain EGRA tasks to Grade 1 in line with MoE curriculum under the belief that some tasks, such as reading comprehension, were inappropriate for Grade 1. This meant it was not possible to establish the 'normal' course of improvement from Grade 1 to Grade 4 on these tasks and set baselines which the program could use to set targets.

4.6.3 Imperfect recall and self-reported data

Many of the tools rely on the honest and accurate memory of the respondent. Although response periods were recent and limited (i.e., ‘in the last week...’), self-reported data is still subject to recall bias and positive response bias, including self-promotion. The InformEd baseline for Palestine noted that in at least one case – self-reported teacher practices – the data largely did not seem to be of value, and slides from the first baseline countries suggested that perceptions from four groups of respondents on physical and environmental safety did not triangulate well.

In the Mozambique baseline, we note that self-reported teacher PBL practices are not correlated either with classroom observation nor with student-reported teacher practices (though classroom observation and student-reported teacher practices are correlated with each other). Furthermore, there is no correlation between teacher self-reported practices and student reading and life skill outcomes. Thus, the classroom observation was used as a more valid method to calculate Indicator 1100.1.

4.6.4 Quasi-experimental nature of research design

Because it was not possible to assign beneficiaries randomly to intervention and control groups, we followed a quasi-experimental method. This means that a comparison group of schools was chosen from an adjacent district. At baseline, we hypothesized that results from this district would not be significantly different from the intervention district, especially in terms of student reading and life skills. However, an analysis of the baseline data showed significant differences even at baseline, and the baseline exercise itself revealed policy differences between the two districts, for instance in terms of teacher tenure and permanence. We therefore suggest a difference-in-differences approach with the comparison group for midline and endline, which will account for some of the differences present at baseline.

5. Key characteristic subgroups and barriers at baseline

5.1 Respondent demographics

5.1.1 Students

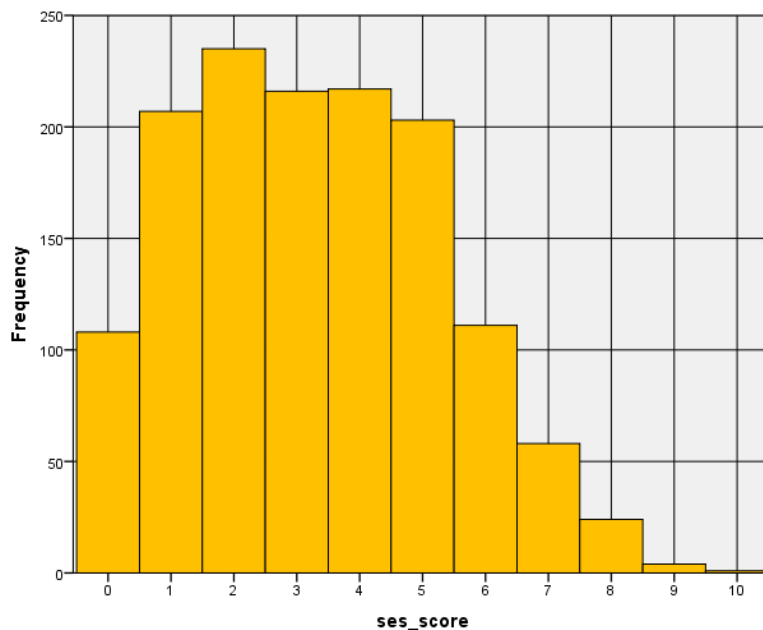
The sample of students from Namacurra district is comprised of 838 students. 49.5% are male, 50.5% are female and 36 are children who either self-identify or were identified by their teacher as having a disability. All children are from the region or the country, and one only is a refugee. Children's average age is slightly over 8 years old, with the youngest being 5 and the oldest being 16.

Students in Grade 1 are slightly over 6 years old on average, with 89% of the sample being between 5 and 8 years old. 30% of them are repeat students.

They are slightly over 10 years old in Grade 4, with 81% of the sample being aged 9- 12, with 17% of them having repeated Grade 2.

Most of children live in houses made of bricks (49%) or sticks and mud (30%), roofs made of grass or iron sheets (94%), and floors made of hard sand or cement (96%). On average, 5.4 people live in the same household. The most common languages spoken at home are Echuabo (59%) and Portuguese (37%) as reported by students.

Figure 1. SES score distribution (out of 10)



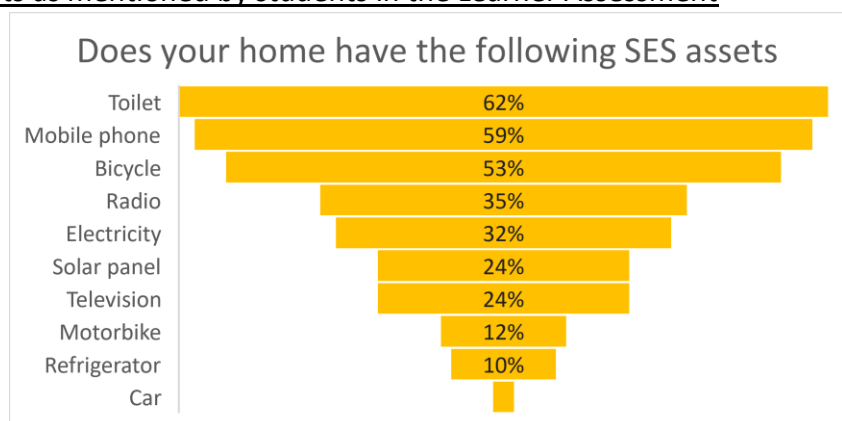
The survey includes 10 questions which answers are coded 1 for Yes and 0 for No, allowing to calculate an average score out of 10.

Socio-economic scale as a proxy of poverty levels

The learner assessment included questions on household asset ownership designed to be used as a socio-economic scale (SES). These were presumably designed to proxy the level of poverty of their household. The distribution of SES scores is shown in the chart to the left.

Figure 2. Frequency of SES assets as mentioned by students in the Learner Assessment

The figure on the right shows the percentage of positive answers from children when asked about which items are present in their house.



The *Progress out of Poverty Index (PPI)* publishes 10 proxy indicators of household poverty for selected countries validated against the most recent household survey or census data of that country. The Mozambique PPI scorecard lists 10 proxy indicators, of which four are in common

with the data gathered in the baseline survey. These include district, household size, television set, and floor material. We recommend that at midline the program adopt the PPI indicators as proxies for household poverty.

We used SES score and ownership of individual assets to test outcome variations by levels of equity. The presence of most of these items correlate with significantly better scores at Life Skills overall, while they overall do not correlate with EGRA scores, even at Grade 4.

Some of these assets are directly linked to provision of power (solar panels, electricity) or tools which can help access entertainment or educational resources (mobile phone, television) and correlate with provision of supplemental reading or reading support from the household as these likely allow children to study, read or enjoy family activities later than for children whose families do not access such sources of energy.

5.1.2 Teachers

Teacher respondents (n=35) mostly teach in Namacurra district (n=34). 86% of them are women, with an average age of 34. The teacher population is experienced, with an average 9.9 years of being a teacher, and have been working in their current role for 5.5 years of their career on average.

Teachers report giving classes for 5.6 hours daily on average. However, teachers report spending only 1.7 hours (30%) teaching in Portuguese. As we know, students who speak Portuguese at home with their families represent only 37% of the learners' sample, which means that with 1.7 hours of Portuguese per day, it seems unlikely these students would achieve a satisfactory level of Portuguese language comprehension without additional support.

Despite language being a potential barrier to reaching fluency in Portuguese for some students, 74% of teachers report that they are able to make themselves understood by the students using languages they understand, and 20% report a few problems communicating with students who don't use the main language of the classroom, while these are not the majority of students.

About 60% of teachers have Vocational School Level 2 education, and 30% stopped at secondary school. Specifically, out of 16 Grade 1 teachers: 7 have a secondary school level, 7 have a vocational school level, 2 are university graduates. Out of 18 Grade 4 teachers: 4 have a secondary school level and 13 a vocational school level, and 1 is a university graduate.

5.1.3 Principals

Principal respondents are based in Namacurra (42.5%) and Mocuba (57.5%). 68% work in rural areas, and 32% work in urban or peri-urban areas and mostly in state schools. On average, schools are located 15 kilometers away from the district center.

Principals (n=41) are 45% female, and older than teachers on average (41 years old). Their average career length as Principals is slightly above 6 years, with 4.5 years on average spent in their current role. They oversee around 20 teachers on average for the academic year.

Unlike teachers, most principals in our sample are University graduates (48%) or have gone through some university-level training (14%). 22% have only completed secondary school.

5.1.3 Parents

Parents (n=91) are all located in the intervention district of Namacurra. 51% of respondents are female. Parents interviewed are 36 years old on average and have 4.4 children. Echuabo is the main language spoken at home (50%), followed by Portuguese (25%).

In terms of education, 41% of them have completed Primary school and 37.5% have completed secondary school. 20.5% of them have had no formal education, 1% only have reached tertiary education. 72.7% of them are farmers, and slightly less than 6% are workers or small business owners, while 8% are employed in government-funded jobs. 4% have jobs classified as “other”.

30% of parents interviewed are either members of the School Management Committee (SMC) or of the Parent Teacher Association (PTA). The remaining 70% were not.

5.2 Demographics by marginalized group

5.2.1 Girls

Girls represent 48% of Grade 1 students and 47% of Grade 4 students in Namacurra district. 16% of the overall sample (n=836) attended pre-school, 30% repeated Grade 1 and 16% repeated Grade 2; these numbers are not significantly different from boys.

5.2.2 Girls’ daily patterns of activities

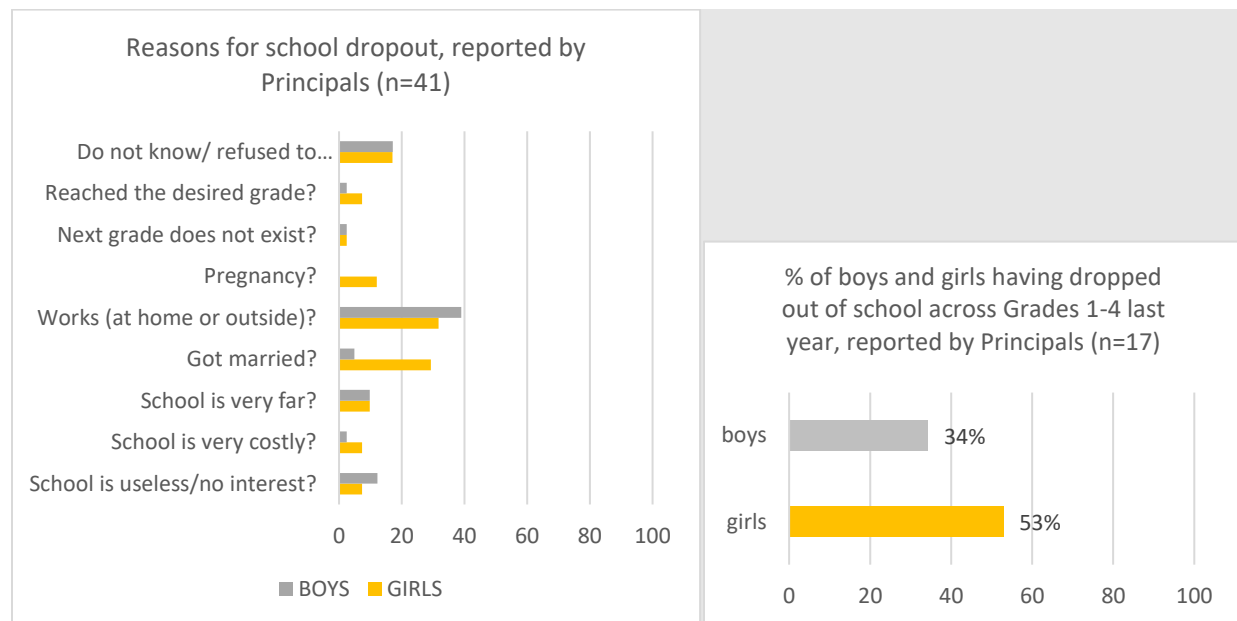
At Grade 1, where the overall average age is 6.7 years, girls’ daily patterns are significantly different from boys’ on some aspects, as they do more chores in the afternoon (48%* ($p < .05$) of girls versus 36% of boys) and in the evening (15%* ($p < .05$) of girls versus 8% of boys). Other than these, there are no significant differences between boys and girls reporting activities such as playing with friends and family, studying and doing homework.

At Grade 4, where the overall average age is 10.8 years, both boys and girls are requested to do chores in the afternoon more than they were four years ago, with girls mentioning it more frequently (78%** ($p \leq 0.01$) of girls versus 59% of boys). After dinner, 2%* ($p < .05$) of girls mention doing homework, versus 8% of boys. Otherwise, the frequency of response for activities such as playing with their family and friends does not significantly differ between boys and girls.

5.2.3 Girls' dropout rates

73% of Principals mentioned no dropout in the past year (n=19). For the remaining seven classes surveyed, Principals mentioned widely different dropout numbers, ranging from 2 to 18.

Figure 3 and 4. Reasons for school dropout and % of boys and girls having dropped out in the past year, reported by Principals



Girls are more numerous to drop out of school than boys (Figure 4 above), and they do so for reasons different from boys'. Although the main reason for both sexes to drop out of school is to work at home or outside, girls are the only ones to drop out of school in case of pregnancy and disproportionately bear the brunt of getting married on their education (29% versus 4% of boys).

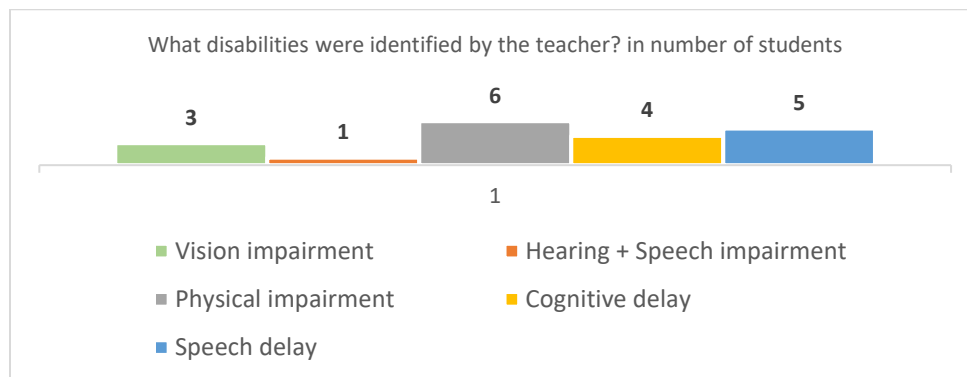
5.2.4 Children with disabilities

The subsample of children with disabilities was very small across both districts. For this reason, and as children with disabilities had similar demographics, analysis was performed using cases from both intervention and comparison districts.

We tested two different definitions of disability. We first asked teachers to identify children with a disability in their classrooms that would prevent them from sitting the learner assessment without additional provisions. Teachers identified 16 Grade 1 students with disabilities across both intervention and comparison schools, or around one per class. In Grade 4, only three students with disabilities were identified.

Teachers mostly identified physical, cognitive and speech-related disabilities. No teacher identified a child with multiple disabilities, except for one with both hearing and speech-related disabilities.

Figure 5. Disabilities identified by the teachers in their classrooms, in number of students

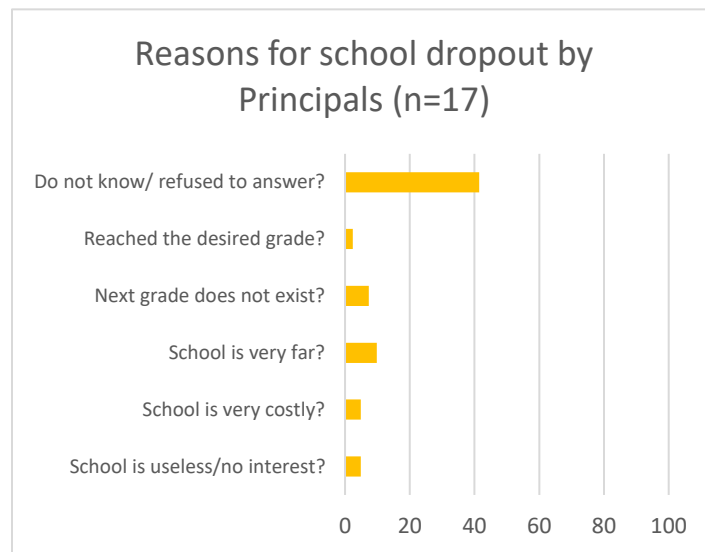


We then looked at students’ self-reported disability using a modified version of the Washington Group Short Set. Using this definition, a child was considered disabled if s/he answered “Yes, a lot of difficulty” or “Cannot do at all” to one or more of the six Washington Group questions (see section 4.1.3 of the report). Following this method, 62 Grade 1 students (41 boys and 21 girls) self-identified as having a disability across both districts, compared with 8 Grade 4 students (4 boys and 4 girls).

Both definitions show that the percentage of students with disabilities decreases significantly from Grade 1 to Grade 4. We interpret this as evidence of dropout or non-attendance by students as a result of their disabilities.

Children with disabilities in intervention district do not live in family and socio-economic contexts any different from the other children of the sample; they attend pre-school in similar proportions, do not repeat grades more than other children. Risk indicators do not differ for them, and their daily patterns are also similar.

Figure 6. Reasons for school dropout (boys and girls) as reported by Principals



The high proportion of respondents who could not or would not answer the question hints at the proposed reasons not being relevant to why children with disabilities might drop out of school or at a lack of awareness around the issue of school retention for children with disabilities. No respondent mentioned early marriage, working at home or outside or failure in school as a credible reason for children with disabilities to drop out of school.

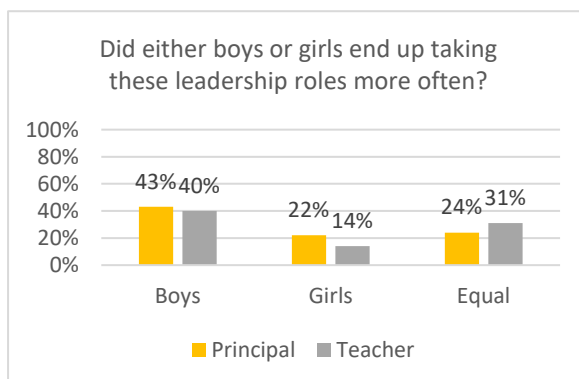
5.3 Barriers to participation

5.3.1 Barriers for girls

Principals and teachers (n=42) were asked to expand on barriers affecting girls' participation and performance relative to boys. Several examples encompassing cultural norms, internalized prejudice, attitudes from community or the girls themselves were discussed.

When asked about performance at school, teachers and principals report similar performance for girls and boys, or report that girls do better than boys (23%) or boys do better than girls (26%) in similar proportions. However, when it comes to leadership, both agree that boys take leadership roles spontaneously more than girls.

Figure 7. Frequency of boys and girls taking up leadership roles, as reported by Principals and teachers



When asked about it, teachers and principals mention different reasons which are mostly cultural and gender norms which influence girls and their beliefs around what is expected from them.

Amongst 42 detailed answers, six mentioned that girls were “shy”, three mention a degree of “internalized inferiority”, and adjectives such as “quiet”, “afraid”, “weak in class”, “closed” are

used to describe girls. “Active”, “lazy”, “intimidated by girls” and “tired of work” are expressions coming up to describe boys. 7 answers mention a degree of cultural expectations for girls who are expected to marry early, to access less activities than boys, and for whom it is seen as desirable to be quiet and separated from boys.

Six answers refer to girls’ burden of chores at home, looking after younger siblings, having responsibilities at home. More positively, some teachers mention that girls volunteer to all activities and despite being quieter, they participate a lot in class. Other barriers mentioned are common to both sexes, including poor class infrastructure, school supplies, economic and social issues impacting their schooling, including lack of motivation and parents not very eager to let their children go to school.

5.3.2 Barriers for children with disabilities

80% of teachers interviewed (n=36) who answered the questions about children with disabilities (n=15) mentioned that 80% of children with disabilities always participate actively in the classroom, and 60% of them always attend remedial classes. 86% of Principals mention that teachers in their schools manage to adjust their approach to better accommodate them.

Principals and teachers were asked which the barriers were to equal participation of children with disabilities in the classroom, and in which ways they were currently struggling to participate, and how they would adapt to the special needs of children with disabilities. A majority of principals and teachers mention that they have not identified any barriers to participation and that children with disabilities are able to participate in the same way as other students. For the respondents who did mention barriers, they put forward that physical disability was particularly complicated due to a lack of infrastructure and material, and limitations for physical activities. When the disability identified is cognitive, respondents mentioned a challenging behavior from the child that could disrupt the class.

Lack of support with classroom of school material and teacher’s training is also frequently mentioned, with three additional answers stating that teachers are left at a loss with how to adapt even if they are willing to, which in one mentioned instance led to classes for a child with disabilities being changed 5 times between Grade 1 and 4. Children with disabilities are often described as being shy due to fears of bullying, feeling of rejection and lack of self-esteem, which have been internalized by children and are very difficult to work on.

In terms of adaptation, most respondents mentioned that children with disabilities were kept close to the teachers during class and placed on the front row to see and hear better, and that teachers would be “gesturing” and speaking louder, which seems to refer to hearing impairment. A few respondents quote that they would call the children to the blackboard to ensure their frequent participation and create replacement activities for the physically impaired. Two respondents mentioned creating a formal adaptation plan which would be discussed by the school pedagogical section or discuss with the parents to motivate the children

to participate equally. Several comments refer to the need to look at all children the same way and not to look for disabilities as a way of ensuring equality in the classroom.

6. BASELINE FINDINGS AND ANALYSIS

6.2 Learning outcomes

Learning outcomes for the EQIE Mozambique program are measured through EGRA scores.

6.2.1 How similar are intervention and comparison schools?

Figure 8. Differences between intervention and comparison schools on headline indicators

Variable	Treatment schools (Namacurra District)				Comparison schools (Mocuba District)		
	Grade 1	N	Grade 4	N	Grade 1	N	Sig (G1)
% Female	48%	545	47%	284	52%	548	NS
Age (years)	6.7	443	10.8	282	6.4	535	***
Attended ECD or preschool	8%		15%	281	13%	538	***
# of household members (including student)	5.4	537	5.4	284	5.6	542	NS
Child identified or self-identified as having a disability	6.2%	540	3%	276	5.2%	545	NS

NS $P > 0.05$

* $P \leq 0.05$

** $P \leq 0.01$

*** $P \leq 0.001$

Grade 1 students were significantly older in the treatment district (Namacurra) than the intervention district (6.7 years vs. 6.4 years). Grade 1 students in the treatment district were also about half as likely to have attended early childhood development (ECD) or preschool as in the comparison district. Age is significantly correlated with higher EGRA and life skills scores, while attendance at ECD or pre-school is correlated to higher collaboration, conflict management, stress, empathy, self-concept, and perseverance Life Skills scores when analyzing the intervention district scores for Grade 1 to 4.

Figure 9. Differences on EGRA scores for intervention and comparison schools

		Treatment schools (Namacurra District)				Comparison schools (Mocuba District)		
	Variable	Grade 1 Mean (sd)	N	Grade 4 Mean (sd)	N	Grade 1 Mean (sd)	N	Sig.
Task 1: Letter recognition	Average # correct letters /min	2.0 (9.6)	426	17.7 (20.4)	239	0.2 (1.1)	472	***
	Average % letters correct	7% (22%)	426	59% (38%)	239	1% (8%)	472	***
Task 2: Phonemes	Average % PA correct	8% (20%)	540	40% (38%)	283	1% (5%)	546	***
Task 3: Most Used Words	Average # MUW correct			7.2 (7.7)	230			
	Average % MUW correct			52% (31%)	230			
Task 4a: Reading	% of students qualifying as readers			25% (43%)	201			
	Average % reading passage correct (accuracy)			27% (55%)	208			
	Average words correct per minute (fluency)			10.7 (23.4)	208			
Task 4b: Reading Comprehension	Average % reading comprehension			9% (20%)	208			
	% of students qualifying as readers with comprehension (RWC) ^B			4% (19%)	208			
Task 5: Listening Comprehension	Average % listening comprehension	21% (31%)	462	44% (38%)	260	26% (35%)	511	***

Ns $P > 0.05$
 * $P \leq 0.05$
 ** $P \leq 0.01$
 *** $P \leq 0.001$

Figure 10. Differences on Life Skills scores between intervention and comparison schools

Variable	Treatment schools (Namacurra)		Comparison schools (Mocuba District)		
	Grade 1	N	Grade 1	N	Sig (G1)
Conflict resolution	27%	504	34%	543	***
Empathy	37%	524	42%	545	*
Perseverance	44%	496	59%	537	***
Stress management	42%	514	48%	545	**

Ns $P > 0.05$

* $P \leq 0.05$

** $P \leq 0.01$

*** $P \leq 0.001$

Treatment district (Namacurra) is significantly better than comparison district (Mocuba) on most EGRA measures, and significantly worse on Life Skills scores measures, which makes the comparison group more different at baseline than expected.

6.2.2 EGRA - What can the baseline assessment tell us about students' reading skills, and how do these reading skills differ by equity indicator?

6.2.2.1 EGRA scores disaggregated by Grade (1 to 4) and sex

Girls and boys have about the same performance across tasks in Grade 1. By Grade 4, boys outperform girls in most tasks, with difference in scores ranging from 4% to 19% in favor of boys. "Task 4a: Reading" is the test item for which the gap between boys and girls is the widest.

Overall and across the two grades, very low levels of Portuguese language ability at all levels hinder uptake of reading and understanding of Portuguese, in classrooms where on average, teachers spend 1.7 hours teaching this language that only 37% of their students already speak at home. Analysis on the EGRA scores shows that:

- Two-thirds of Grade 1s got no letters correct on the letter identification exercise
- Nearly the same amount of Grade 4s got no words correct on the familiar words exercise
- 75-78% of Grade 4s classified as non-readers. Of those who read, boys had an average of 60% accuracy while girls had only 40%

Figure 11. Differences in EGRA scores between boys and girls at Grade 1.

Treatment schools (Namacurra District)								
	Variable	Girls	N	Boys	N	Total	N	Sig.
Task 1: Letter recognition	Average # correct letters /min	2.8	214	1.1	211	2	426	-
	Average % letters correct	8%	214	6%	211	7%	426	-
Task 2: Phonemes	Average % PA correct	6%	279	10%	260	8%	539	*
Task 5: Listening Comprehension	Average % listening comprehension	23%	247	18%	237	21%	484	-

Ns $P > 0.05$
 * $P \leq 0.05$
 ** $P \leq 0.01$
 *** $P \leq 0.001$

Figure 12. Differences in EGRA scores between boys and girls at Grade 4.

Treatment schools (Namacurra District)								
	Variable	Girls	N	Boys	N	Total	N	Sig.
Task 1: Letter recognition	Average # correct letters /min	13.2	113	22	125	17.7	239	***
	Average % letters correct	48%	113	62%	125	55%	239	**
Task 2: Phonemes	Average % PA correct	35%	134	42%	148	40%	283	-
Task 3: Most Used Words	Average # MUW correct	3.9	106	7.1	123	5.6	230	**
	Average % MUW correct	27%	106	39%	123	33%	230	-
Task 4a: Reading	% of students qualifying as readers ^A	16%	96	35%	104	25%	201	**
	Average % reading passage correct (accuracy)	17%	99	36%	108	27%	208	*

	Average words correct per minute (fluency)	7.7	99	13.4	108	10.7	208	*
Task 4b: Reading Comprehension	Average % reading comprehension	7%	100	11%	108	9%	208	-
	% of students qualifying as readers with comprehension (RWC) ^B	4%	100	4%	108	4%	208	-
Task 5: Listening Comprehension	Average % listening comprehension	47%	125	52%	135	44%	260	-

Ns $P > 0.05$
*** $P \leq 0.05$
**** $P \leq 0.01$
***** $P \leq 0.001$

6.2.2.2 EGRA Task 1: Letter Identification

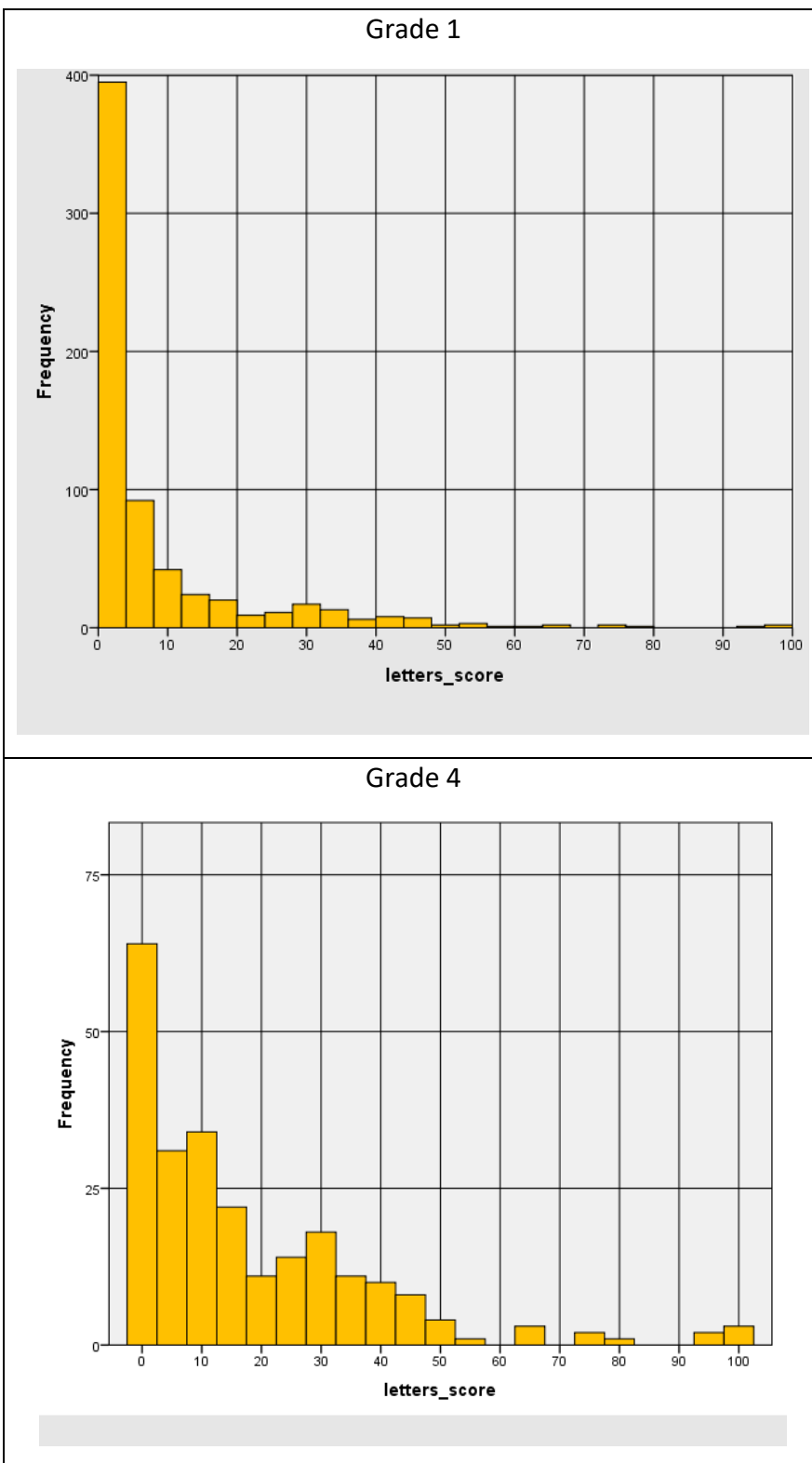
The figure below shows the distribution of EGRA scores for Task 1: Letter Identification. This was a timed task (1 minute) administered with a stimulus to Grade 1 and Grade 4 students. Scores were not adjusted for time remaining.

For Grade 1 students, the average number of letters is 2, with 7% accuracy. 87% of Grade 1 students got zero letters correct. 95% of students got 10 or fewer letters correct, and only 1% of students got more than 34 letters in a minute.

For Grade 4 students, the average number of letters is 18, with 55% accuracy. However, this masks that 25% of Grade 4 students got zero letters correct and 50% of students got 10 or fewer letters correct. Only 10% of students got more than 40 letters correct in a minute.



Figure 13: EGRA Task 1 Letter Identification scores (Grade 1 and 4)



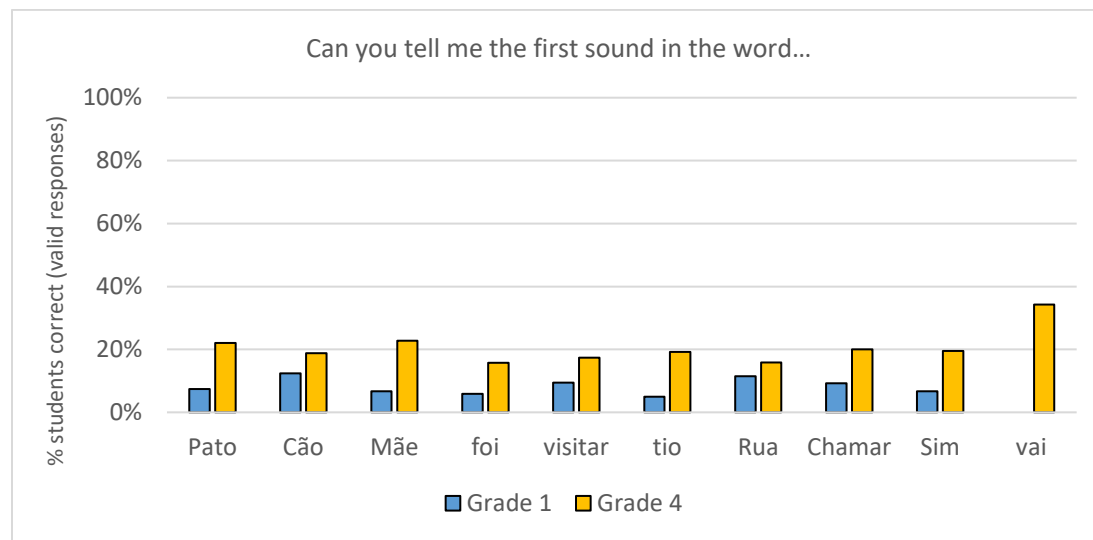
6.2.2.3 EGRA Task 2: Phonemic Awareness

The figure below shows the distribution of EGRA scores for Task 2: Phonemic Awareness. This task was untimed and administered without stimulus to Grade 1 and Grade 4.

In the first figure, the items are presented in the order they were asked.

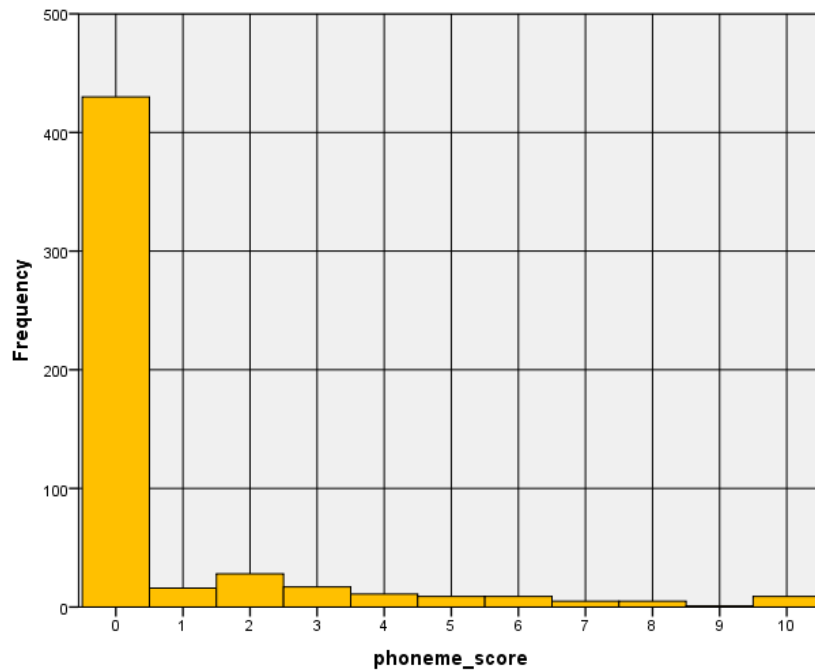
For Grade 1, accuracy is 8% across all the items, and there are signs of respondent fatigue with no learner getting the last item right. For Grade 4, accuracy is 40%.

Figure 13: Task 2: Phonemic Awareness (Grade 1 and 4)

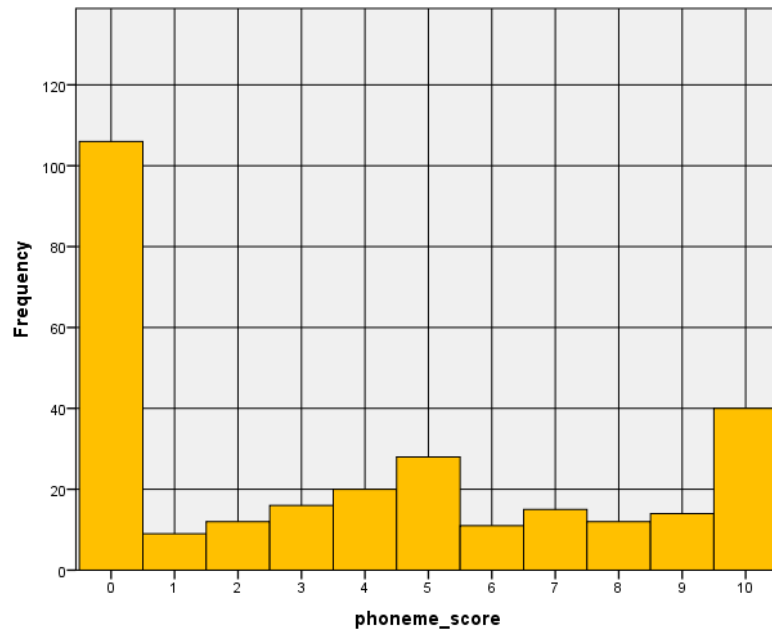


In the next set of figures, Grade 1 intervention learners got less than one phoneme sound correct on average, and 80% of learners got zero points. By Grade 4, learners got on average 3.9 phoneme sounds correct, and 38% of learners got zero points. Scores were clustered around the average of 4-5 correct and 14% of learners got all 10 correct.

Grade 1



Grade 4

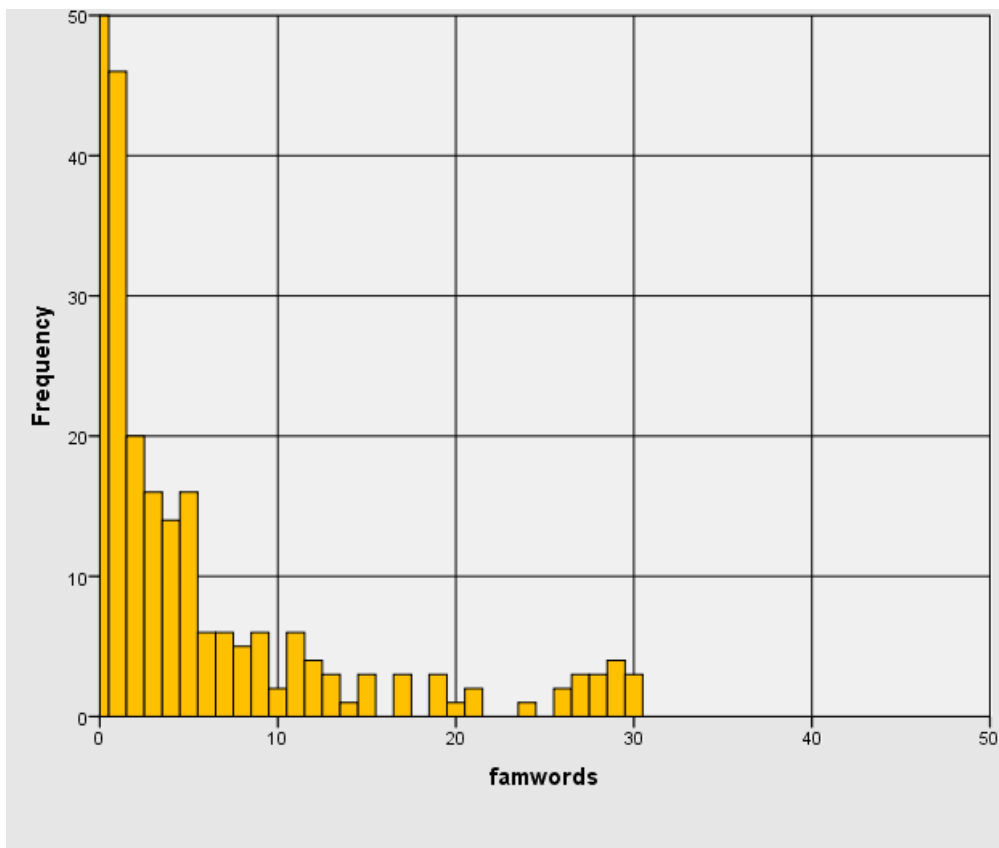


6.2.2.4 EGRA Task 3: Familiar Words

The graph/figure below shows the distribution of EGRA scores for Task 3: Familiar Words, or Most Used Words, for Grade 4. This was a timed task (1 minute) administered with stimulus. Scores were not adjusted for time remaining.

For Grade 4 learners, results are skewed towards the low end. Half of learners got two or fewer words correct, and 22% got zero words correct.

Figure 14: EGRA Task 3 Most Used Words scores, Grade 4

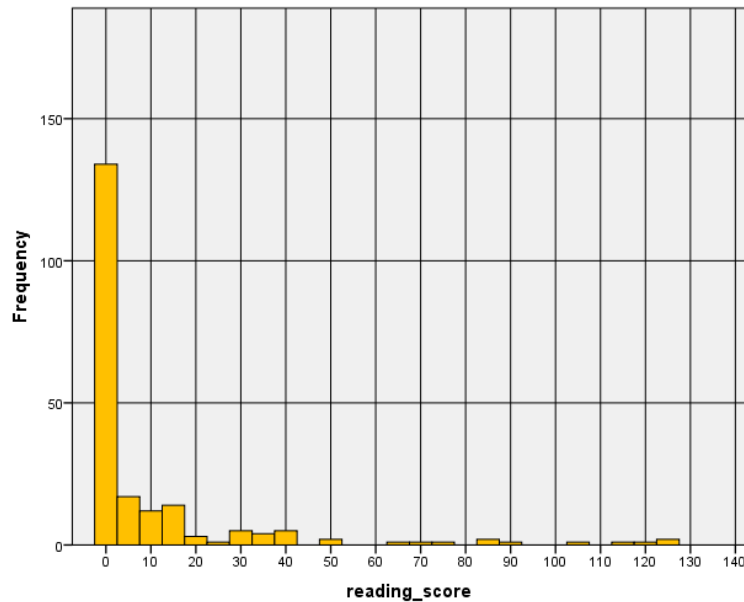


6.2.2.5 EGRA Task 4: Reading Passage and Reading Comprehension

This task was composed of a reading passage of 135 words and four reading comprehension questions, administered to Grade 4 learners only. The reading passage was timed (1 minute) but the questions were not. The survey was scripted so that each reading comprehension question was only asked if the student had reached the appropriate point in the passage. Questions which were not asked or skipped were counted as incorrect.

Although the average score is 10.7 words read correctly in a minute, closer examination shows this is skewed towards zero. Of those learners who attempted the reading passage, 33% could not read a single word, and 70% could read fewer than five words.

Figure 15: Distribution of reading scores (readers only)



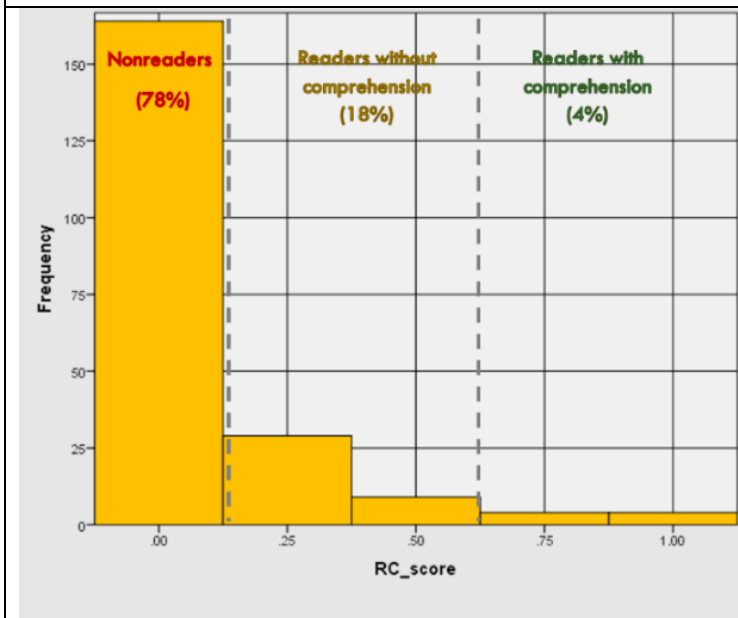
Using a multiple linear regression model, the significant predictors of high reading scores are household floor material, attendance at in-person and virtual extracurricular literacy activities, doing chores in the evening, and living in a community where the child does not feel safe. Grade was not significant as the task was only administered to Grade 4 students. Household floor material is a proxy for household wealth. The positive relationship between unsafe communities and reading scores is unclear; perhaps this builds resilience or else these communities were targeted for additional support.

Figure 15a: Multiple regression model for reading scores

	<i>b</i>	SE B	β	<i>p</i>
Constant	.07	2.39		.975
Household floor material	8.65	3.87	.158	.027
Do you attend after-school reading activities, like reading camps, reading centers, or reading days out?	16.8	3.76	.324	.000
Do you participate in out-of-school reading activities, like those available through radio, TV, or mail?	23.94	7.41	.230	.002
What do you usually do in the evening? Chores	7.61	3.65	.149	.039
Have you ever lived in a community where you do not feel safe?	17.31	5.29	.229	.001

Adjusted R-square value = .231.

Figure 16: Distribution of Reading Comprehension percentages (Grade 4 only)



6.2.2.6 EGRA Task 5: Listening Comprehension

Enumerators read a short passage twice out loud to Grade 1 and Grade 4 learners and then asked them a series of comprehension questions. Questions were mostly factual but the last was inferential i.e. the answer was not directly present in the passage. Learners' responses were not timed.

The differences between Grade 1 and Grade 4 may illustrate exposure to Portuguese language of instruction. Grade 1 learners on average got less than one out of four listening comprehension questions correct, and 60% got no questions correct. Over half of Grade 4 learners got at least two questions correct, but 36% still got no questions correct.



Figure 17: Distribution of Grade 1 Listening Comprehension scores

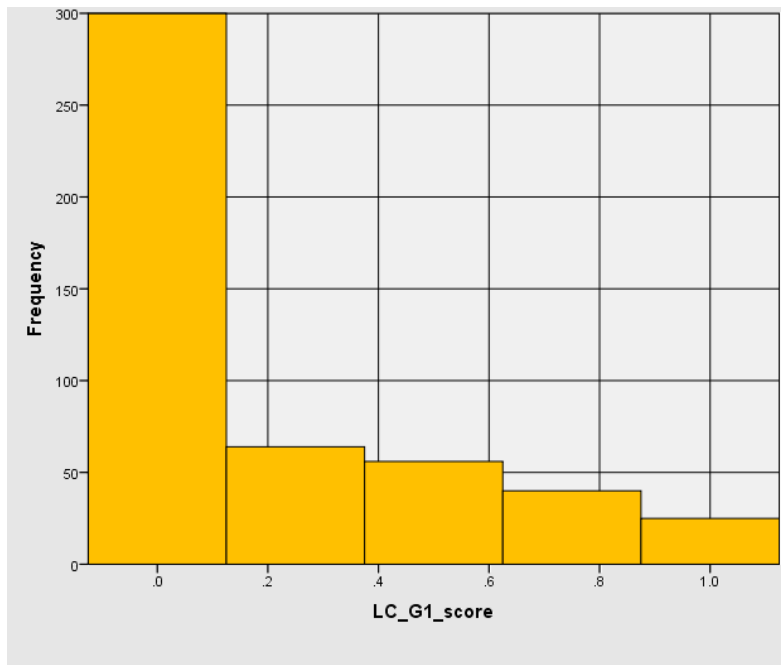
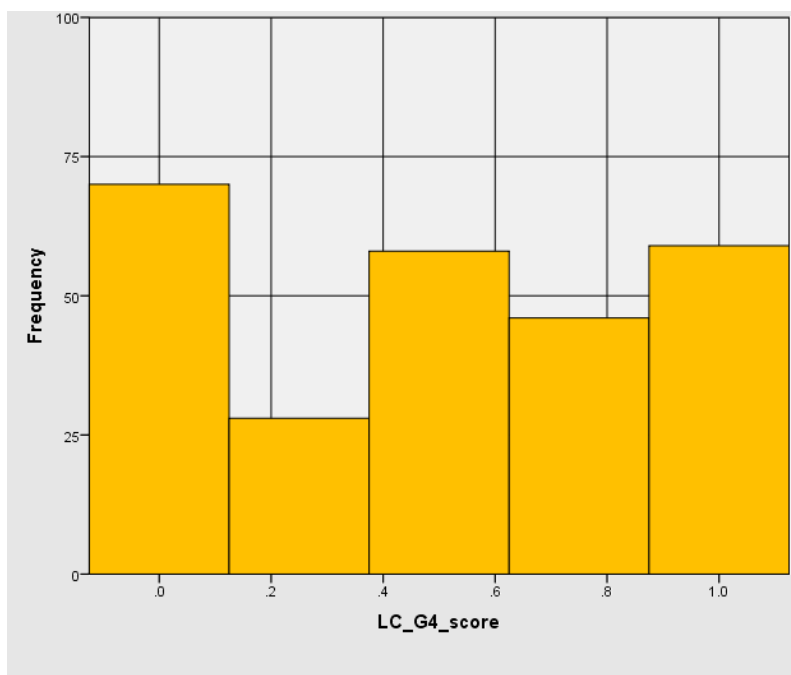


Figure 18: Distribution of Grade 4 Listening Comprehension scores



6.2.4 Differences in EGRA task scores by marginalized group

6.2.4.1 Girls

In the intervention group, in Grade 1 students boys scored marginally higher* (0.4 points, $p \leq 0.05$) than girls on Task 2 Phonemes. In Grade 4 this difference was more pronounced, with boys having a higher score on Task 1 letter recognition*** (21.9 letters compared to girls' 13.2, $p \leq 0.001$), Task 1 % letters correct** (62% compared with girls' 48%,), Task 3 Most Used Words (7.1 words compared to girls' 3.9), percentage qualifying as readers** (35% qualifying vs. 16% of girls, $p \leq 0.01$), average % correct words read* (36% vs. 17% of girls, $p \leq 0.05$) and reading fluency* (13.4 words per minute vs. 7.7 for girls, $p \leq 0.05$). This suggests that a narrow or non-existent gender performance gap in reading at Grade 1 widens substantially by Grade 4, with girls recording around half the scores of boys across most EGRA tasks. There was no significant difference in the number of girls or boys getting zero points on any EGRA task.

6.2.4.2 Children with disabilities

In the intervention group, only one difference was statistically significant* ($p \leq 0.05$), and Grade 4 children with disabilities showed no significant differences across any task. This may be an anomaly as there is no clear pattern here and statistical analysis is limited by very small numbers of valid EGRA tasks for Grade 4 children with disabilities ($n=5$).

6.2.4.3 ECD attendance

In the intervention group, only one difference was statistically significant* ($p \leq 0.05$). As there is no clear pattern, this is likely due to chance rather than underlying differences between groups.

6.2.4.4 SES score

There was some evidence of higher SES scores being associated with higher Task 1 EGRA scores. In the intervention group, assuming a one-tailed hypothesis, for Grade 1 students Task 1 letter scores were over twice as high for students in the top quartile of SES scores compared to the bottom quartile (1.9 letters vs. 0.9). For Grade 4 students Task 1 letter accuracy was 20% higher* ($p \leq 0.05$) and Task 2 phoneme scores were 17% higher* ($p \leq 0.05$) for students in the top quartile compared to the bottom quartile.

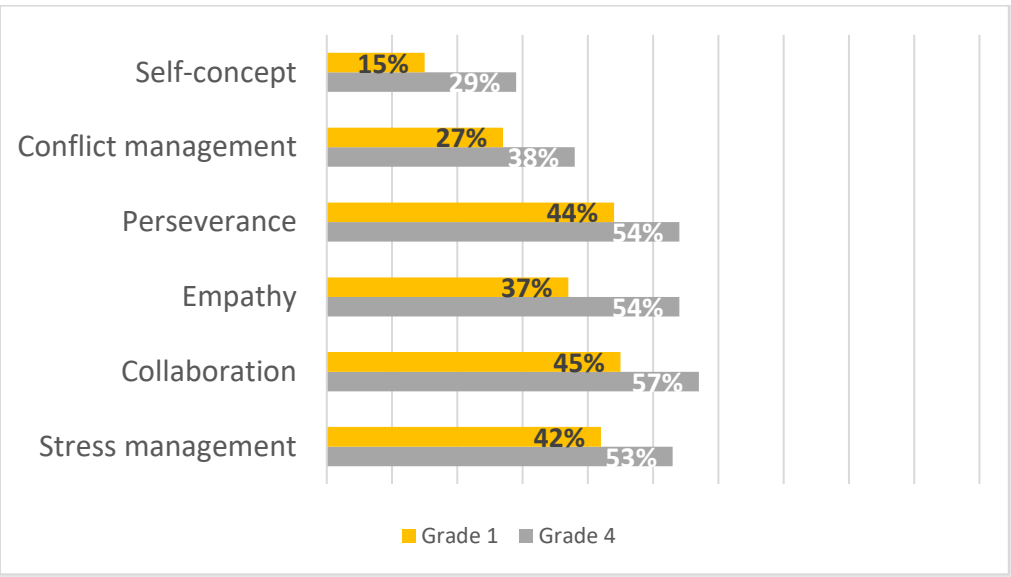
6.3 Life skills scores in intervention schools, and their determinants

6.3.1 What can the baseline assessment tell us about students' life skills, and how do these life skills differ by equity indicators?

Life skills scores are built following guidance from the official ISELA guidance note and methodology. RTP has selected self-concept, conflict management, perseverance, empathy, collaboration, and stress management as measures of Life Skills development to follow for Grade 1 and Grade 4 students. These were the indices validated in the D’s and Krupal (2019) study on Syrian refugees in Kurdistan. However, the in-country team should consider whether any other indices or measures, such as the 4 Cs used by Lebanon and Palestine teams, may be relevant for tracking progress.

These life skills progression between the Grade 1 students’ sub-sample and the Grade 4 students’ sub-sample is as follows in Figure 19 below.

Figure 19. Change in Life Skills between Grade 1 and Grade 4



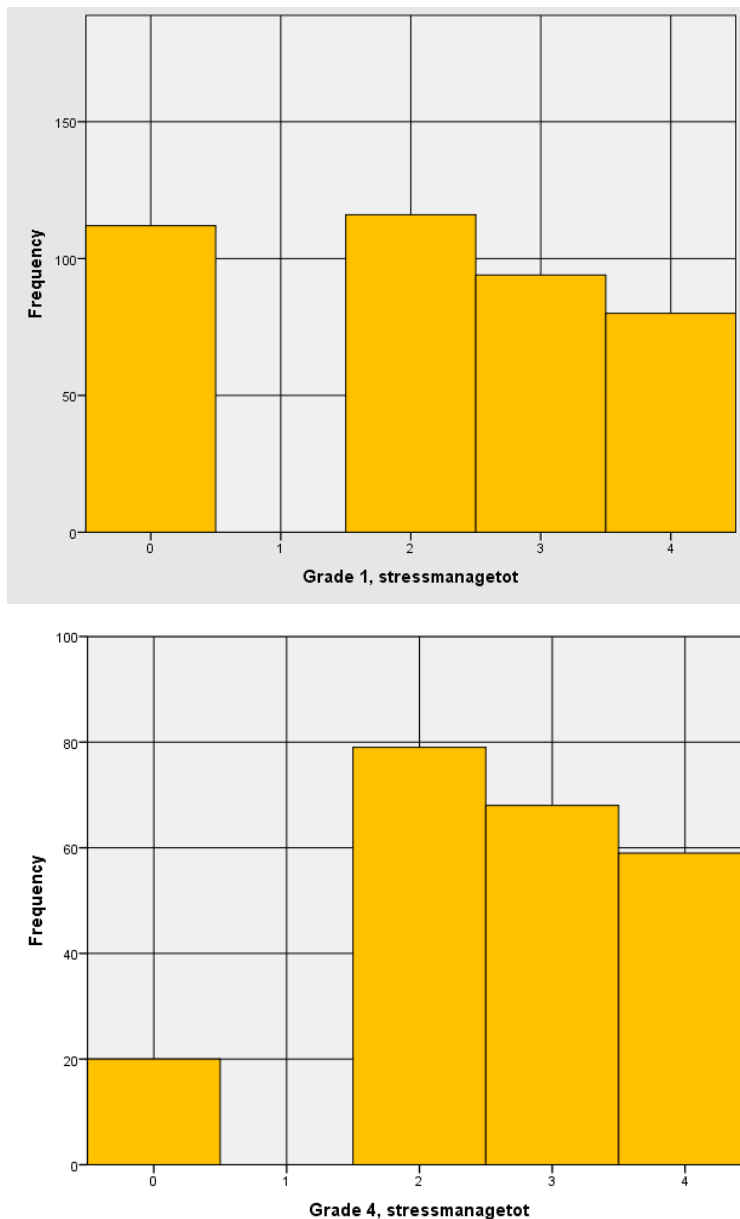
The baseline survey suggests that life skills increase naturally as children grow older and progress from Grade 1 to Grade 4, even in the absence of Right to Play programming. In Mozambique, the life skill that naturally increases the most over time is self-concept, which almost doubles (+96%) from 15% to 29%. The life skill that naturally increases the least is stress management, which increases by almost a quarter (23%) from Grade 1 to Grade 4.

Grade 4 Life Skills scores are mostly above 50%, and it is hence expected that making a difference on these scores for the students already scoring above the average, or in the fourth quartile of the scores’ repartition will be more difficult than supporting higher scores for the lowest quartiles. This evolution of scores, provided that no intervention aimed at developing life skills has been provided to Grade 4 students in the past years, is a good proxy to show what the normal learning curve of students will look like without RTP support.

Disaggregated results for each Life Skill score, for Grade 1 and Grade 4 are presented below.

6.3.1.1 Stress management

Figure 20: Stress Management scores (out of 4), Grade 1 and Grade 4



Using a multiple linear regression model, the significant predictors of high stress management scores are student correctly answering the child protection question, student reporting television in the home, their teacher reading to them, learning songs or games in class, doing chores in the evenings, and playing games with their family in the evenings. Student reports of teachers asking questions about what they read were significantly negatively correlated with stress management scores. Grade was not correlated with higher stress management scores.

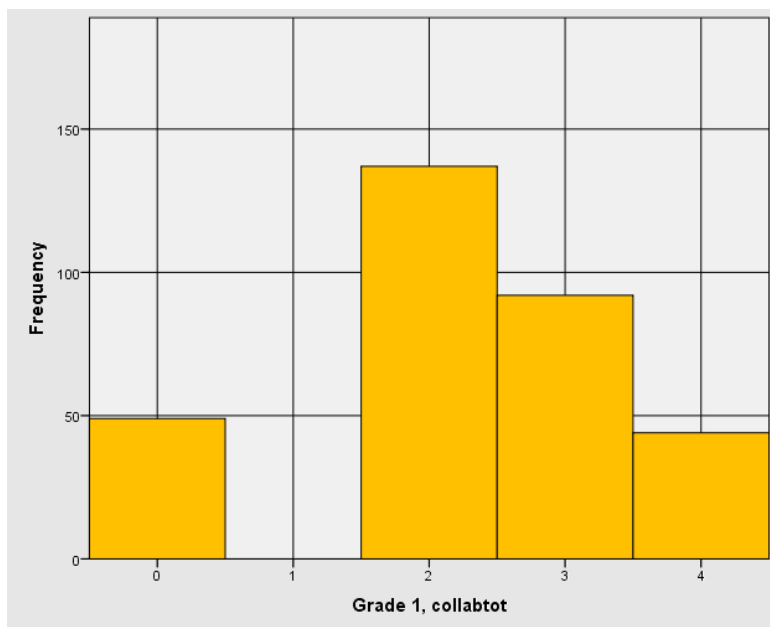
Figure 21: Multiple regression model for stress management scores

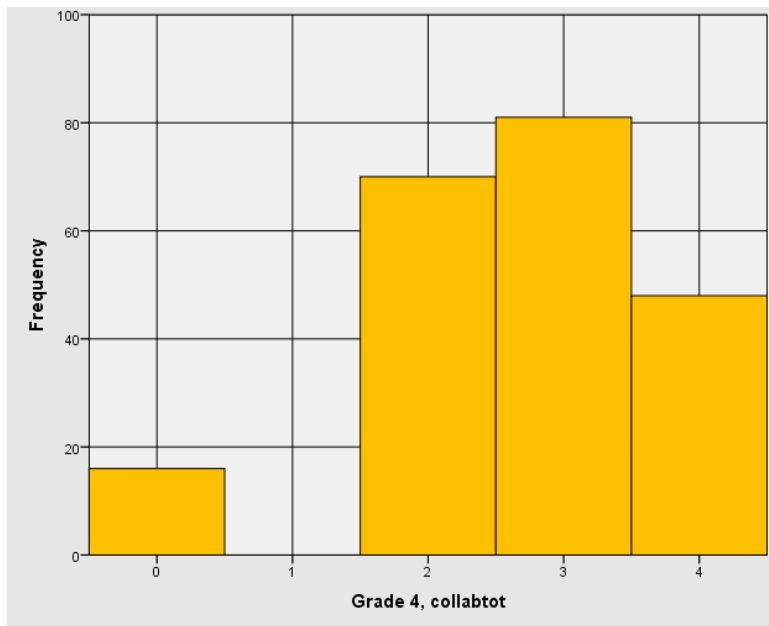
	<i>b</i>	SE B	β	<i>p</i>
Constant	.169	.020		.000
If you or a friend were being harmed by someone else, what would you do? Student answered correctly	.226	.017	.345	.000
Does your home have: Television	.100	.018	.135	.000
Over the past week, did your teacher read to you?	.178	.021	.229	.000
Over the past week, did your teacher ask you questions about what you read?	-.045	.018	-.068	.011
Over the past week, did you learn songs or games in class?	.065	.017	.096	.000
What do you usually do in the evening/after school? Do chores	.078	.022	.089	.000
What do you usually do in the evening/after school? Play games with my family	.125	.019	.164	.000

Adjusted r-squared = .281

6.3.1.2 Collaboration

Figure 22: Collaboration scores (out of 4)





Using a multiple linear regression model, the significant predictors of high collaboration scores are student correctly answering the child protection question, student reporting their teacher reading to them, reading with a classmate in school, and learning songs or games in class. Student reports of playing with friends in the morning were significantly negatively correlated with collaboration scores.

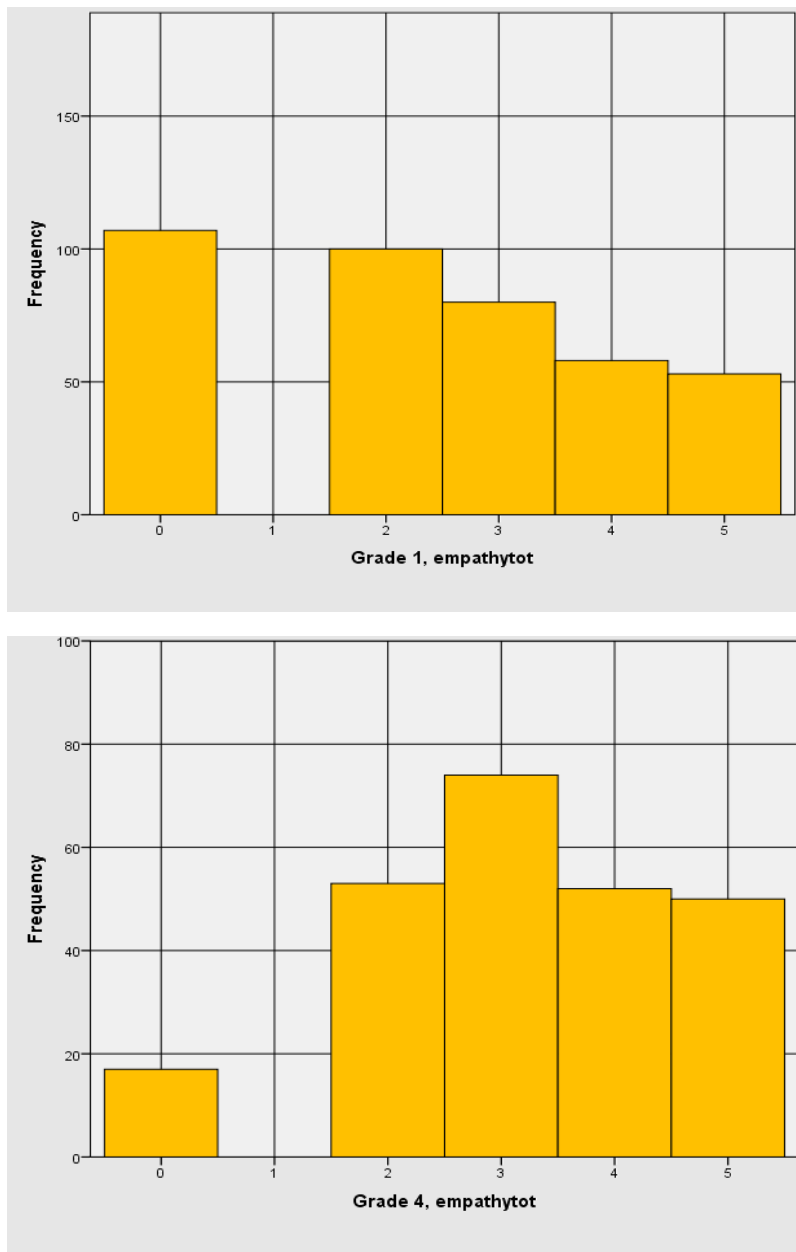
Figure 23: Multiple regression model for collaboration scores

	<i>b</i>	SE B	<i>β</i>	<i>p</i>
Constant	.336	.018		.000
If you or a friend were being harmed by someone else, what would you do? Student answered correctly	.095	.016	.165	.000
Over the past week, did your teacher read to you?	.065	.019	.096	.001
Over the past week, did you read with a classmate in school?	.127	.018	.197	.000
Over the past week, did you learn songs or games in class?	.063	.017	.106	.000
What do you usually do in the morning? Play games with my friends	-.057	.016	-.098	.000

Adjusted r-squared = .111

6.3.1.3 Empathy

Figure 24: Empathy scores (out of 5)



Using a multiple linear regression model, the significant predictors of high empathy scores are student correctly answering the child protection question, student being in Grade 4, student reporting having a television in the home, reporting their teacher reading to them, doing chores in the evening, and playing with their family in the evening. Student reports of teachers asking

them questions about what they read were significantly negatively correlated with empathy scores.

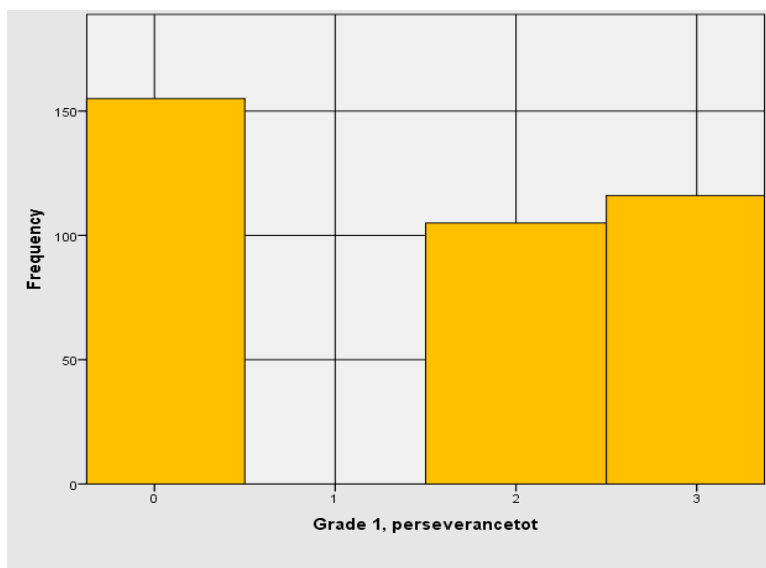
Figure 25: Multiple regression model for empathy scores

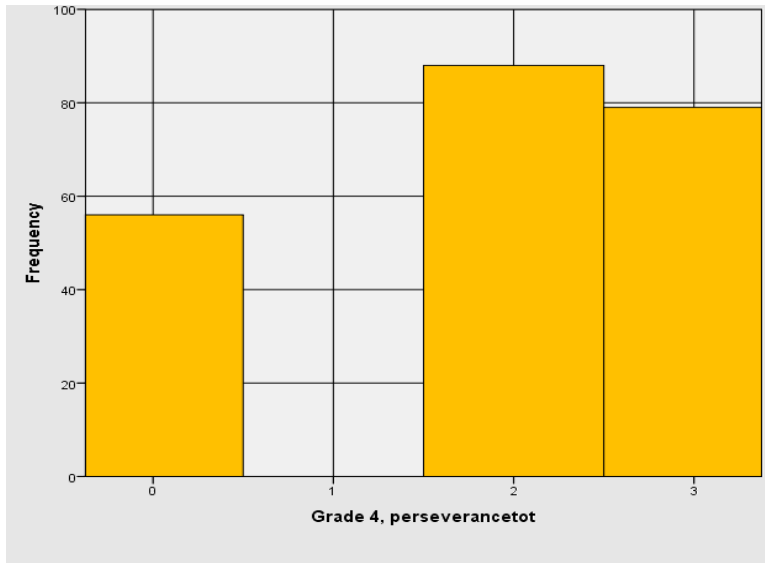
	<i>b</i>	SE B	β	<i>p</i>
Constant	.082	.020		.000
Grade	.049	.006	.194	.000
If you or a friend were being harmed by someone else, what would you do? Student answered correctly	.175	.016	.272	.000
Does your home have: Television	.096	.017	.132	.000
Over the past week, did your teacher read to you?	.205	.019	.270	.000
Over the past week, did your teacher ask you questions about what you read?	-.080	.017	-.125	.000
What do you usually do in the evening? Chores	.087	.020	.101	.000
What do you usually do in the evening? Play with my family	.201	.018	.270	.000

Adjusted r-squared = .319

6.3.1.4 Perseverance

Figure 26: Perseverance scores (out of 3)





Using a multiple linear regression model, the significant predictors of high perseverance scores are student correctly answering the child protection question, student reporting attending a face-to-face extracurricular literary event, reporting their teacher reading to them, learning songs or games in class, and reporting anyone being away from home for more than six months. Student reports of teachers asking them questions about what they read were significantly negatively correlated with perseverance scores.

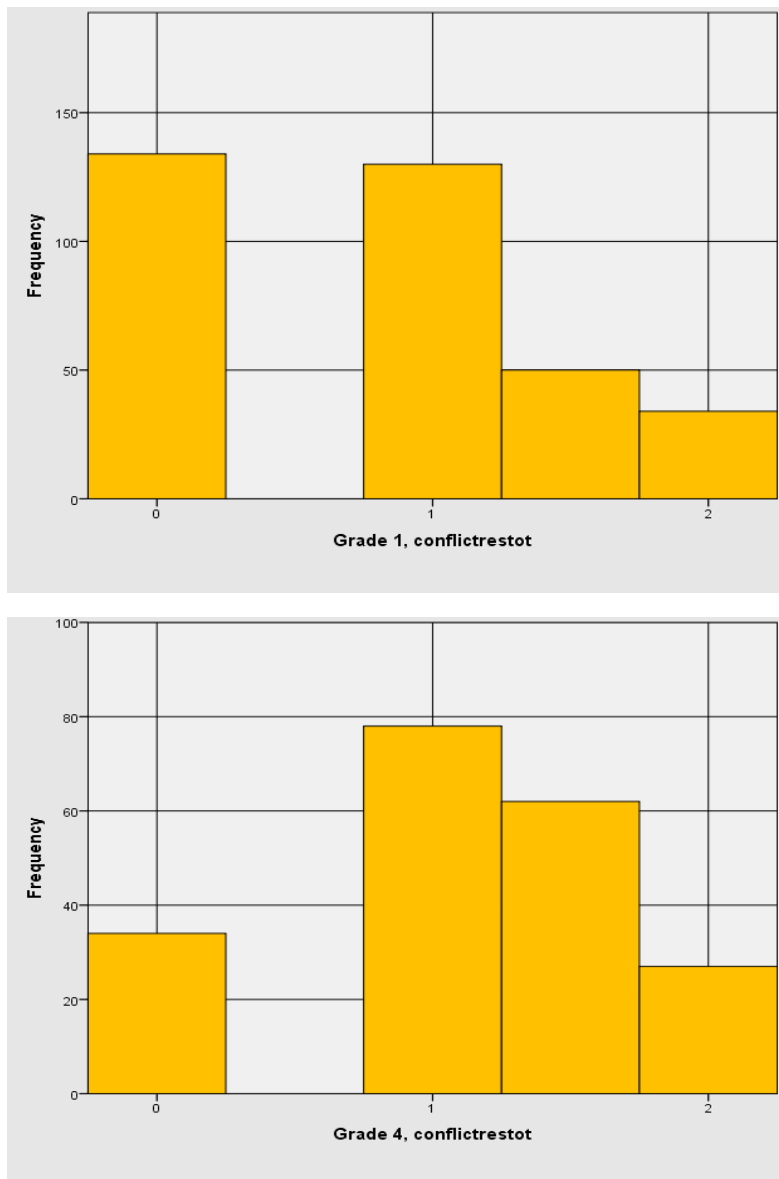
Figure 27: Multiple regression model for perseverance scores

	<i>b</i>	SE B	β	<i>p</i>
Constant	.191	.027		.000
If you or a friend were being harmed by someone else, what would you do? Student answered correctly	.230	.022	.293	.000
Do you attend after-school reading activities, like reading camps, reading centers, or reading days out?	.105	.030	.099	.000
Over the past week, did your teacher read to you?	.256	.029	.267	.000
Over the past week, did your teacher ask you questions about what you read?	-.112	.024	-.141	.000
Over the past week, did you learn songs or games in class?	.112	.024	.135	.000
Has anyone in your family been away from home for more than six months?	.079	.023	.094	.001

Adjusted r-squared = .234

6.3.1.5 Conflict resolution

Figure 28: Conflict resolution scores (out of 4)



Using a multiple linear regression model, the significant predictors of high conflict management scores are student correctly answering the child protection question, student reporting attending a face-to-face extracurricular literary event, reporting their teacher reading to them, reading quietly by themselves, and reporting anyone being away from home for more than six months. Student reports of teachers asking them questions about what they read were significantly negatively correlated with conflict management scores.

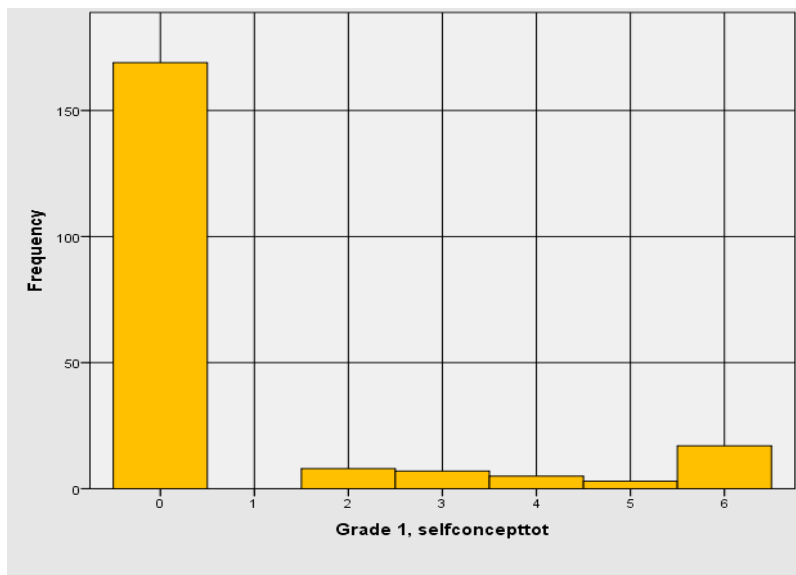
Figure 29: Multiple regression model for conflict management scores

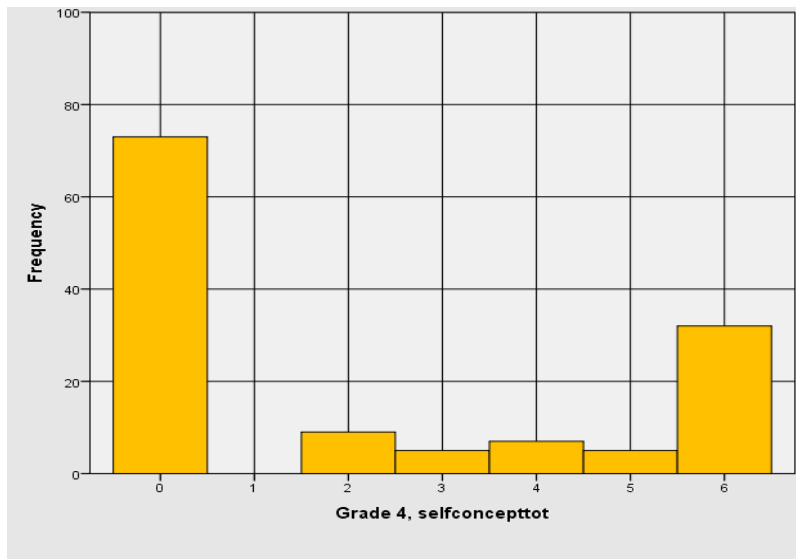
	<i>b</i>	SE B	β	<i>p</i>
Constant	.097	.017		.000
If you or a friend were being harmed by someone else, what would you do? Student answered correctly	.196	.015	.348	.000
Do you attend after-school reading activities, like reading camps, reading centers, or reading days out?	.083	.022	.108	.000
Over the past week, did your teacher read to you?	.154	.019	.226	.000
Over the past week, did your teacher ask you questions about what you read?	-.080	.017	-.140	.000
Over the past week in school, did you read quietly by yourself without help?	.101	.022	.132	.000
What do you usually do in the evening? Play with my family	.142	.017	.221	.000
Has anyone in your family been away from home for more than six months?	.081	.016	.132	.000

Adjusted r-squared = .337

6.3.1.6 Self-concept

Figure 30: Self-concept scores (out of 6)





Using a multiple linear regression model, the significant predictors of high self-concept scores are student correctly answering the child protection question, student reporting attending a face-to-face extracurricular literary event, and reporting no reading materials at home. Student reports of teachers reading to them were negatively correlated with self-concept scores. Several of these correlations, including the negative correlation with students reporting teachers reading to them, and positive correlation with having no reading materials, run counter to the findings in the previous models and should be treated with caution.

Figure 31: Multiple regression model for self-concept scores

	<i>b</i>	SE B	β	<i>p</i>
Constant	.120	.025		.000
If you or a friend were being harmed by someone else, what would you do? Student answered correctly	.109	.021	.175	.000
Over the past week, did your teacher read to you?	-.077	.025	-.102	.003
Do you attend after-school reading activities, like reading camps, reading centers, or reading days out?	.205	.028	.248	.000
At home, do you have [no] reading materials?	.158	.026	.210	.000

Adjusted r-squared = .168

6.3.1.7 Summary of findings

The six sets of figures above show the distribution of Life Skills scores; the progression differs substantially among individual life skills from Grade 1 to Grade 4. While differences in life skills scores are statistically significant by grade, multiple regression analysis shows that in most cases these differences are better explained by different variables. The child protection question, in particular, is significantly positively correlated with all life skills indexes and has the strongest correlation of all significantly correlated variables in five out of six of the life skills. We recommend that RTP consider using this variable as a proxy for child development and a predictor for children with stronger life skills scores. The multiple regression analysis also shows correlations with multiple playful teacher practices. Most commonly, children who reported teachers reading to them over the past week, and who learned songs or games in class, had higher life skills than those who did not report this. One note of caution is that students reporting that teachers asked questions about what they had read had lower life skills scores than those who did not; RTP may wish to investigate how teachers are asking these questions and whether it contributes to a stressful or negative classroom environment. Several reported home activities, including doing chores and playing with friends and family, are also usually positively correlated with life skills scores.

The distribution shows that scores are polarized, with the most students getting either 0 or 6 scores. Perseverance, empathy, and collaboration scores have a more even distribution, however the pattern of scores stay rather fixed through time. For example, there are six times more 0 scores in stress management in Grade 1 than in Grade 4, which means that without intervention, the students' scores are naturally evolving widely from Grade 1 to Grade 4. However, the relative distribution of 4, 5, and 6 scores remain broadly the same.

Although an average score is reported in the PMF and used to set objectives for the upcoming programming year, we would advise using the distribution of scores to set objectives in increasing life skills scores; this would already give a first idea of how much can the scores increase above their natural evolution, but also allow RTP to target the sub-groups of students who need the most support. Instead of looking at increasing scores for children already scoring high in the last quartile, RTP could set more ambitious goals to lift 0 to 2 scores than for 5 to 6 scores.

6.3.2 Life Skills and gender

The figure below presents scores across the six Life Skills for Grade 1 and Grade 4 for boys and girls. There are no significant differences between boys and girls on Life Skills scores when both grades are taken together (n=700) or disaggregated per grades for the intervention district.

Figure 32. Life Skills scores as recorded in the PMF, according to PMF definition

	n	Score	% max				
Grade 1 Stress management: Overall	514	1.67	42%	Grade 4 Stress management 4: Overall	280	2.12	53%
Grade 1 Stress management : Female	269	1.67	42%	Grade 4 Stress management : Female	131	2.02	51%
Grade 1 Stress management: Male	244	1.67	42%	Grade 4 Stress management: Male	148	2.2	55%
Grade 1 Collaboration: Overall	516	1.78	45%	Grade 4 Collaboration: Overall	281	2.28	57%
Grade 1 Collaboration: Female	270	1.77	44%	Grade 4 Collaboration: Female	132	2.24	56%
Grade 1 Collaboration: Male	251	1.8	45%	Grade 4 Collaboration: Male	148	2.31	58%
Grade 1 Empathy: Overall	524	1.84	37%	Grade 4 Empathy: Overall	283	2.7	54%
Grade 1 Empathy: Female	272	1.92	38%	Grade 4 Empathy: Female	133	2.63	53%
Grade 1 Empathy: Male	251	1.76	35%	Grade 4 Empathy: Male	149	2.76	55%
Grade 1 Perseverance: Overall	496	1.33	44%	Grade 4 Perseverance: Overall	281	1.63	54%
Grade 1 Perseverance: Female	232	1.34	45%	Grade 4 Perseverance: Female	132	1.6	53%
Grade 1 Perseverance: Male	263	1.33	44%	Grade 4 Perseverance: Male	148	1.67	56%
Grade 1 Conflict: Overall	504	0.54	27%	Grade 4 Conflict: Overall	282	0.76	38%
Grade 1 Conflict: Female	263	0.56	28%	Grade 4 Conflict: Female	133	0.74	37%
Grade 1 Conflict: Male	240	0.53	26%	Grade 4 Conflict: Male	148	0.76	38%
Grade 1 Conflict: Children with Disability	20	0.54	27%	Grade 4 Conflict: Children with Disability	8	0.94	47%
Grade 1 Conflict: Children without Disability	266	0.54	27%	Grade 4 Conflict: Children without Disability	273	0.75	38%
Grade 1 Self-concept: Overall	287	0.88	15%	Grade 4 Self-concept: Overall	201	1.73	29%
Grade 1 Life Skill 6: Female	148	0.95	16%	Grade 4 Life Skill 6: Female	92	1.67	28%
Grade 1 Life Skill 6: Male	138	0.8	13%	Grade 4 Life Skill 6: Male	109	1.78	30%

6.3.3 Life Skills and disability

The figure below presents Life Skills scores for the intervention district as recorded in the PMF.

Grade 1				Grade 4			
Grade 1 Stress management: Overall	514	1.67	42%	Grade 4 Stress management 4: Overall	280	2.12	53%
Grade 1 Stress management: Children with Disability	27	1.59	40%	Grade 4 Stress management: Children with Disability	8	2.06	52%
Grade 1 Stress management: Children without Disability	484	1.67	42%	Grade 4 Stress management: Children without Disability	271	2.12	53%
Grade 1 Collaboration: Overall	516	1.78	45%	Grade 4 Collaboration: Overall	281	2.28	57%
Grade 1 Collaboration: Children with Disability	26	1.88	47%	Grade 4 Collaboration: Children with Disability	8	2.88	72%
Grade 1 Collaboration: Children without Disability	487	1.78	44%	Grade 4 Collaboration: Children without Disability	272	2.27	57%
Grade 1 Empathy: Overall	524	1.84	37%	Grade 4 Empathy: Overall	283	2.7	54%
Grade 1 Empathy: Children with Disability	27	2.17	43%	Grade 4 Empathy: Children with Disability	8	3.42	68%
Grade 1 Empathy: Children without Disability	494	1.82	36%	Grade 4 Empathy: Children without Disability	274	2.68	54%
Grade 1 Perseverance: Overall	496	1.33	44%	Grade 4 Perseverance: Overall	281	1.63	54%
Grade 1 Perseverance: Children with Disability	25	1.72	57%	Grade 4 Perseverance: Children with Disability	8	1.63	54%
Grade 1 Perseverance: Children without Disability	468	1.31	44%	Grade 4 Perseverance: Children without Disability	272	1.64	55%
Grade 1 Conflict: Overall	504	0.54	27%	Grade 4 Conflict: Overall	282	0.76	38%
Grade 1 Conflict: Children with Disability	20	0.54	27%	Grade 4 Conflict: Children with Disability	8	0.94	47%
Grade 1 Conflict: Children without Disability	266	0.54	27%	Grade 4 Conflict: Children without Disability	273	0.75	38%
Grade 1 Self-concept: Overall	287	0.88	15%	Grade 4 Self-concept: Overall	201	1.73	29%
Grade 1 Life Skill 6: Children with Disability	20	0.5	8%	Grade 4 Life Skill 6: Children with Disability	8	2.33	39%
Grade 1 Life Skill 6: Children without Disability	266	0.91	15%	Grade 4 Life Skill 6: Children without Disability	194	1.72	29%

To strengthen the analysis, parametric tests (T-tests) were performed on the sample as a whole (including intervention and comparison districts) as to increase likelihood of detecting significant differences.

When using the full sample of student respondents, the difference in scores between children with and without disability are not significant for the six Life Skills above, neither at Grade 1 nor at Grade 4.

When disaggregating by grades, Grade 1 children with disabilities have 65%** ($p \leq 0.01$) perseverance score while children without disabilities have an average score of 51%.

By the time they reach Grade 4, the gap between scores on these two dimensions has closed to 10% difference or less for our sample, and this difference is not significant anymore.

It thus means that children with disabilities somehow lose their significant advantage on the perseverance score as they progress through classes, and it would be interesting to see if levels of self-confidence or motivation slowly decrease throughout the four grades, and whether this could be an area where RTP could provide support.

6.3.4 Life Skills and poverty levels

Socio economic scale (SES) items were selected as questions for the students and parents' interview, as to proxy the level of poverty of the household and measure whether it is correlated to lower achievement scores for Life Skills and EGRA. Questions asked to the parents reported

similar answers to the students', which allows to use the students' answers in the Learner Assessment to check correlations between poverty proxy measures and scores obtained by students.

We cross-referenced SES questions on the baseline survey with the indicators derived from the Progress out of Poverty Index (PPI) for Mozambique, as these questions were validated as proxies for household poverty. The questions in common were:

1. *How many members are in the household? NH hold, groupings: 3 or less, 4 to 6, 7 or more*
2. *Does the household have a freezer? (Similar to: Ses_5 (refrigerator))*
3. *Does the household have a television set? (Similar to: Ses_7 (television))*
4. *What is the main material used in the floor of the house? (RTP survey includes a question on floor, however it used different groupings than the PPI)*
5. *What is the main source of energy used for lighting by the household? (Similar to: Ses_4 (electricity))*

Analysis shows that in our case, the presence of electricity, a refrigerator, television significantly correlates with most Life Skills scores.

Figure 33. Correlation of main poverty indicators with Life Skills scores

	Collaboration	Conflict	Empathy	Perseverance	Stress management	Self-concept
Television						
Yes	56%***	40%***	55%***	58%***	58%***	X
No	46%	25%	38%	45%	41%	X
Refrigerator						
Yes	59%**	41%**	60%***	60%**	63%***	33%**
No	47%	27%	41%	46%	43%	18%
Electricity						
Yes	54%***	36%***	52%***	54%**	55%***	X
No	46%	24%	38%	45%	41%	X

Ns $P > 0.05$

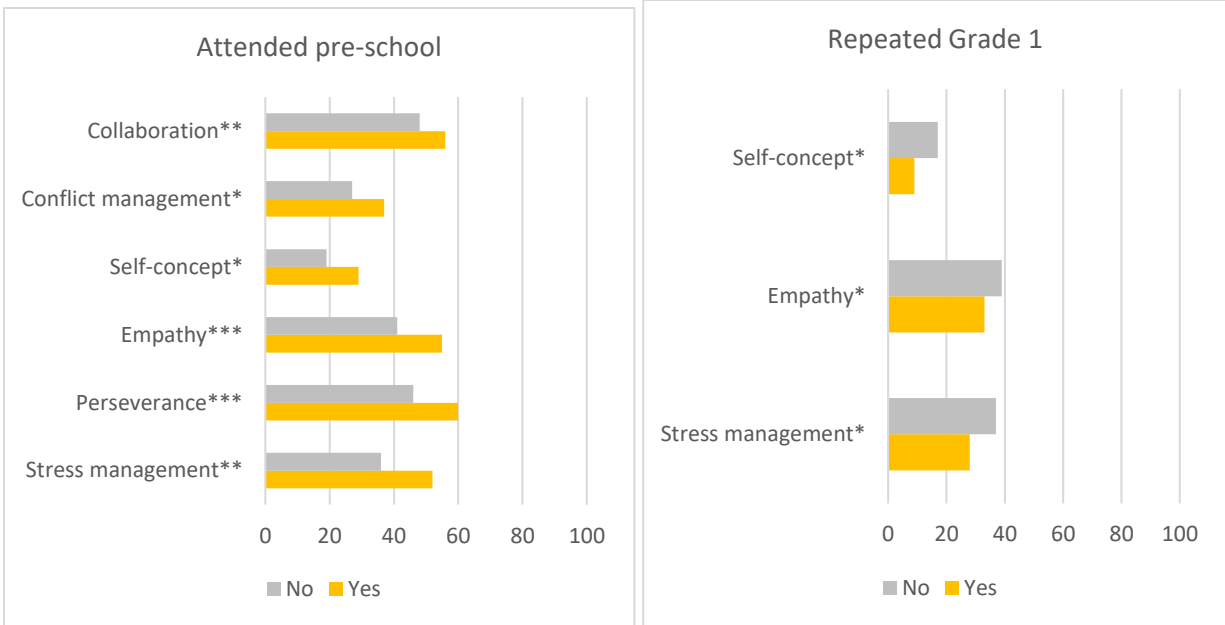
* $P \leq 0.05$

** $P \leq 0.01$

*** $P \leq 0.001$

6.3.5 Life skills and daily activity patterns

Figure 34 and 35. Early school indicators with significant correlation to Life Skills scores



Ns $P > 0.05$

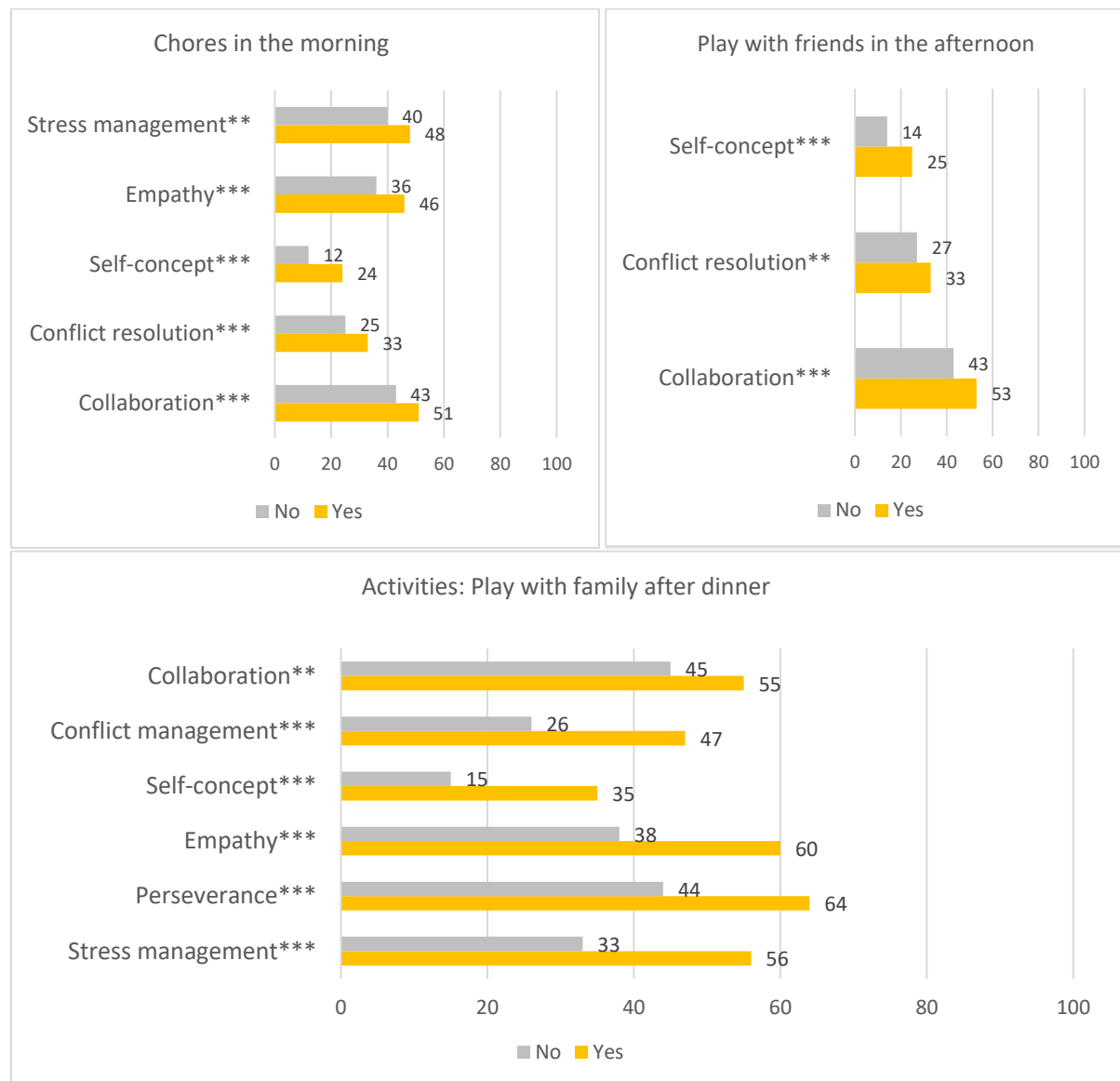
*** $P \leq 0.05$

**** $P \leq 0.01$

***** $P \leq 0.001$

Attending pre-school makes a significant difference on Life Skills scores, especially for Grade 1 students. However, only 14% of children attend it, which is a lost opportunity for the majority of children and gives only a small portion of the students' population a head-start on life skills development. ECD attendance is also positively correlated with 4/6 SES scores (which were used to proxy household levels of poverty), but the effect is small (average around .09).

Figure 36, 37 and 38. Daily activity patterns with significant correlation to Life Skills scores



Ns $P > 0.05$

* $P \leq 0.05$

** $P \leq 0.01$

*** $P \leq 0.001$

The following activity patterns are correlated to higher Life Skills scores for the overall sample (n=700). Girls and boys have significantly different daily activities patterns (57% of girls do chores in the afternoon versus 44% of boys*** $p \leq 0.001$).

Playing with friends and relatives has a significant effect on most life skills, however playing with family seems to have an even greater effect on these, with at least 20% higher scores for children who benefit from this activity. Effect is relatively strong (.15-.30). Although this might be linked to the content of the activity itself, there might also be explanations to investigate further. Parents with more time, less difficult jobs might be more inclined or available to play with their children, and to do so more regularly. It might thus mean that these households are wealthier, have more time to participate in their children's development.

When looking at socio-economic scores (SES), children who report playing with their family after dinner have an average score of 3.5/10, versus children who do not report doing so and have an average SES score of 3/10* ($p \leq 0.05$). Children who report playing with their families after dinner are also 13%** ($p \leq 0.01$) more likely to have a radio at home and 11%** ($p \leq 0.01$) more likely to have solar panels as a source of energy. Pending further research, this finding seems to hint at wealth being a moderating factor of parents playing or not with their children after dinner.

Figure 39 and 40. Reading activities with significant correlation to Life Skills scores

The two following figures present the correlations between Life Skills scores and two of the PMF indicators, Supplemental reading (index variable comprised of variables "virtual_camp" and "read_camp") and home reading activities, which is an index variable built upon the following questions:

In the past week, have you seen anyone in your home reading?

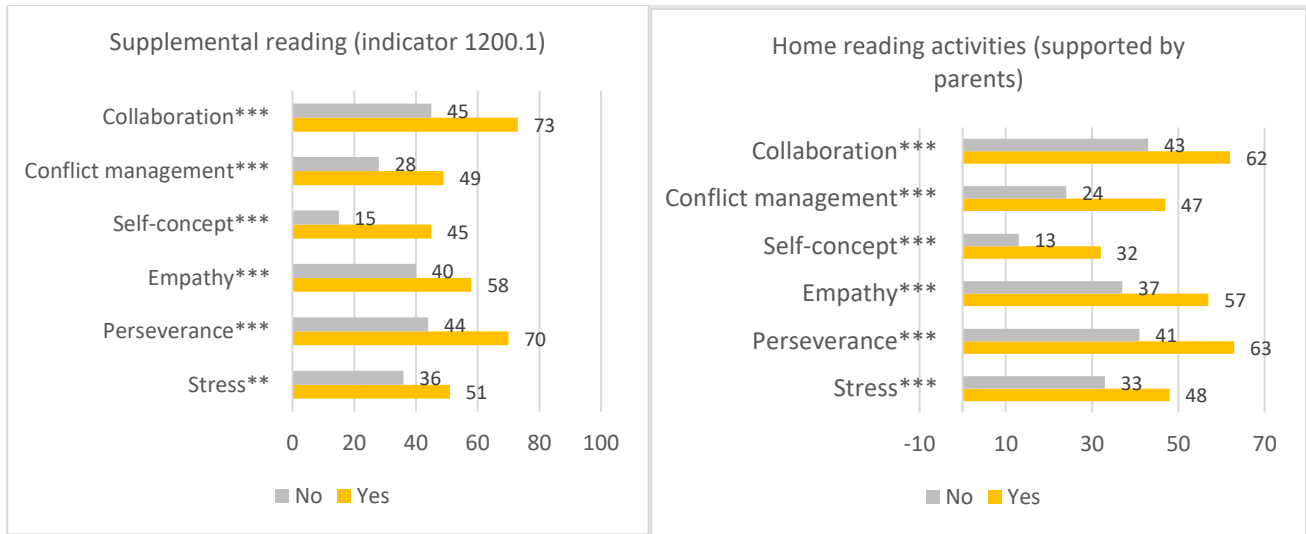
In the past week, has someone in your family helped you with your homework?

In the past week, has a family member read to you?

In the past week, has a family member told you a story?

In the past week, has a family member played literacy games with you?

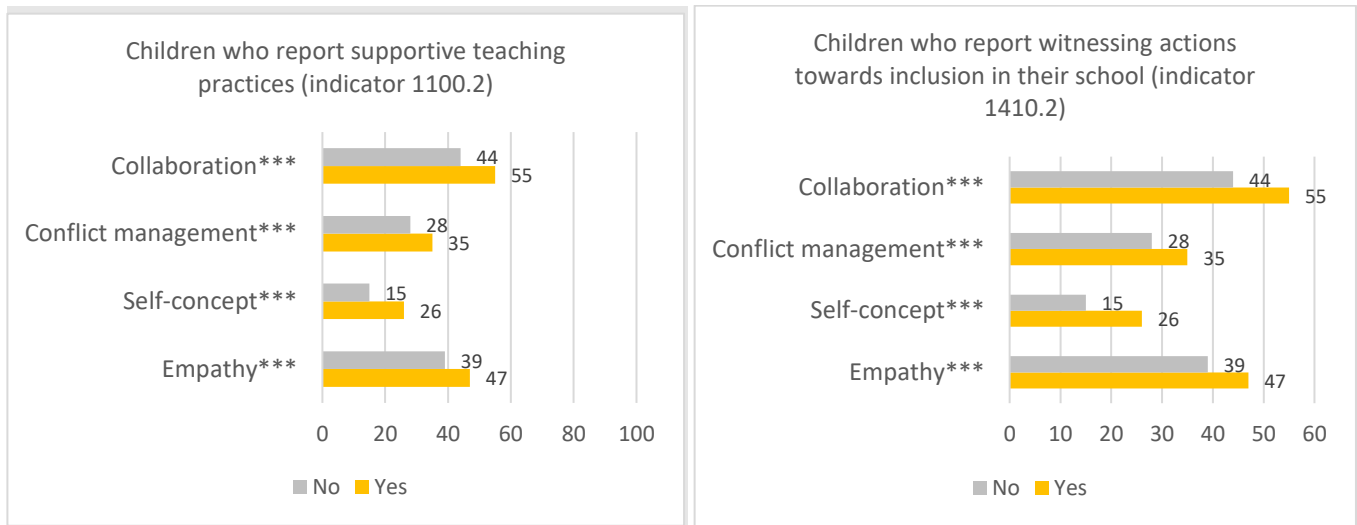
Correlations in the figures below confirm that these indicators are relevant to follow for RTP as there is a big and significant difference between students benefitting from these support reading activities and others.



Ns $P > 0.05$ $*P \leq 0.05$ $**P \leq 0.01$ $***P \leq 0.001$

However, there are no significant differences between boys and girls for these two variables. At Grade 4, a significant difference which did not exist at Grade 1 appears between boys and girls in terms of benefitting from supplemental reading activities (virtual and reading camps); while 28% of boys attend, only 17% of girls do so* ($p \leq 0.05$). This may disadvantage girls at Grade 4 as supplemental reading has a strong correlation with several Life Skills scores.

Figure 41 and 42. School context variables with significant correlation to Life Skills scores



Ns $P > 0.05$ $*P \leq 0.05$ $**P \leq 0.01$ $***P \leq 0.001$

Supportive teaching practices are an index variable corresponding to indicator 1100.2 of the PMF, namely “% of children who report feeling that the PBL practices used by their teacher had a positive effect on their reading and life skills”. Positive answers to this variable (showed as “Yes” in the left side graph) are correlated with higher life skills scores compared to “No” answers. Again, this validates the choice from RTP to track progress on these variables for the programming year. Given that only 42% of students report supportive teaching practices as defined per the PMF at baseline, there is a room for RTP to support better teaching practices further.

6.3.6 Life skills and EGRA

For Grade 1 students, there were no statistically significant correlations between any of the life skills and EGRA tasks.

For Grade 4 students, using linear regression we found there are statistically significant correlations ($p < .05$) between:

- The Stress Management index and the Stress sub-index (Stress1-Stress 3) scores on Task 1 letters
- between the Stress Management Index and Task 4b Reading Comprehension
- between the sub-index about asking anyone at home for help when the student has a problem with a friend (relate4 and relate5) and Task 3 Most Used Words and Task 1 Letters.

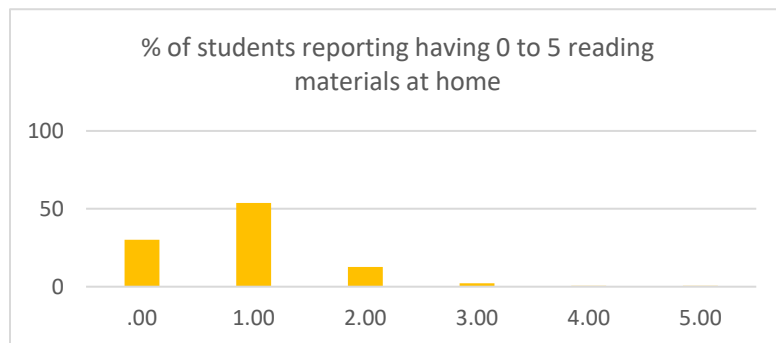
However, in the absence of a conceptual explanation tying these life skills to the EGRA tasks we would be inclined to interpret this as statistical ‘noise’.

6.4 Reading activities in the community: Parent survey

6.4.2 What supplemental reading activities are available to children (in homes and communities)? Of those activities, which do children take part in? How frequently?

Children were asked which reading materials were present in their house, which supplemental activities they were attending (“reading camp” and “virtual reading camp”) and a range of questions about reading support and activities provided by their parents at home.

Figure 43. Percentage of students reporting having 0 to 5 reading materials at home

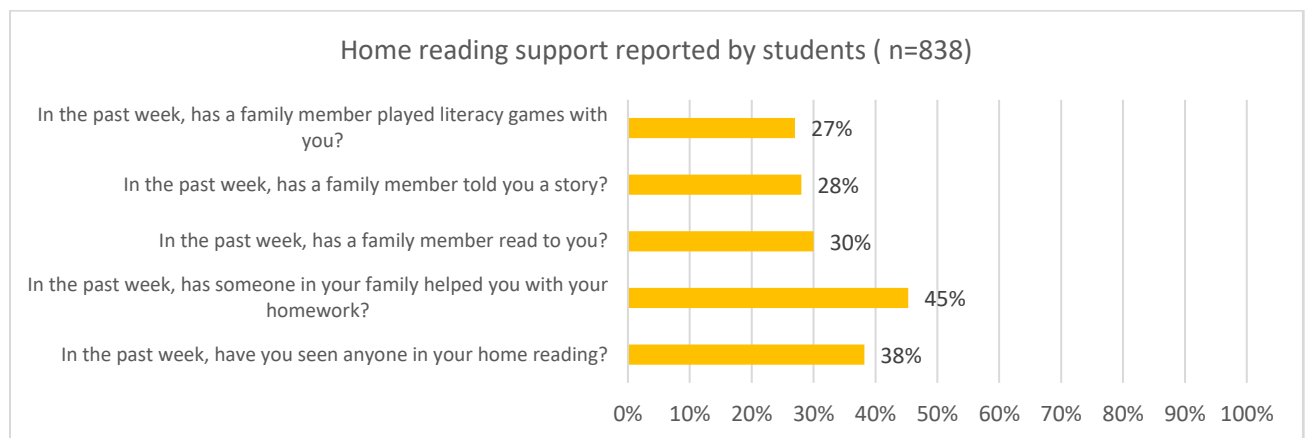


Very few children answer positively to having more than two of the list of reading materials suggested. Given the numbers, there is a significant difference between students having access to either 0 or 1 reading material on most life skills and home reading activities,

but above 1 any added material does not make a significant difference.

Amongst the children mentioning having reading materials at home, 63% report having textbooks, 19% religious books, 0.5% magazines, 1.3% newspapers, 2.4% storybooks, 1.4% coloring books, 2.9% comic books. 20% of children mention having none of these at home.

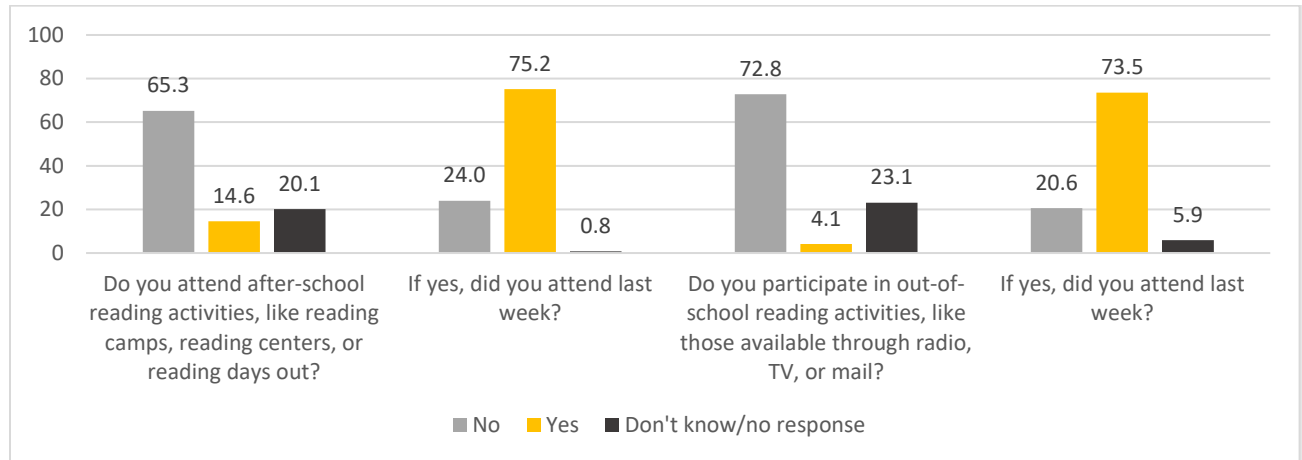
Figure 44. Home reading support provided by family members, as reported by students



As presented in the previous section, home reading support makes a significant and important difference on Life Skills (see Figure 43).

Students were also asked whether they were attending reading camps and how frequently. These two questions are used to build indicator 1200.1 as presented in the previous section and have a significant correlation with most Life Skills scores.

Figure 45. % of students reporting attending supplemental activities and at which frequency for Namacurra (overall Grade 1 and Grade 4)

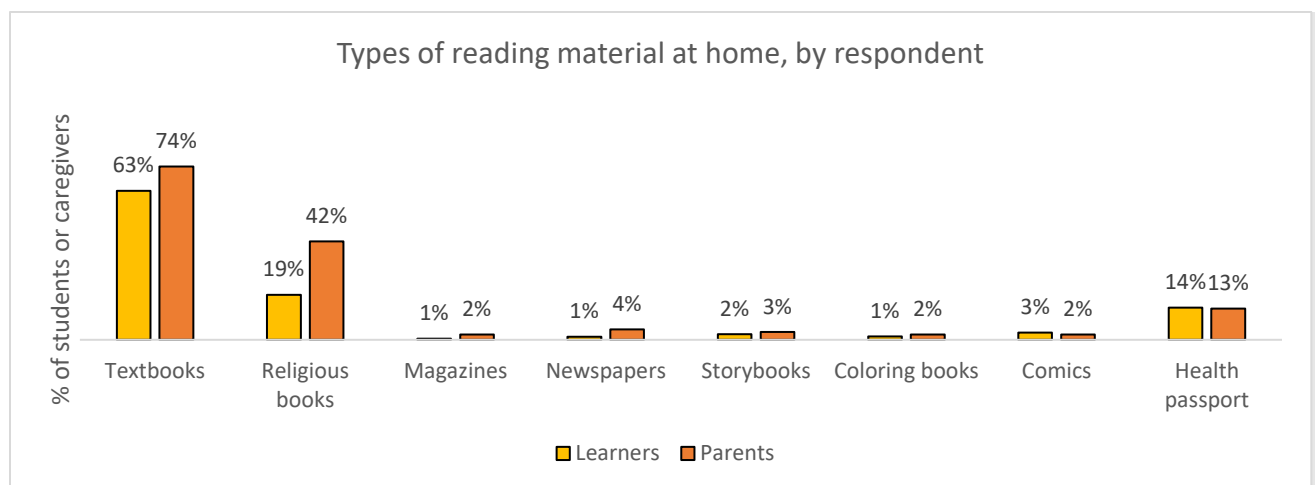


The graph above shows very little attendance to supplemental reading activities, despite these having a significant effect on Life Skills scores. However, the students who attend seem to be frequently doing so, with over 70% of them saying to have attended the previous week.

6.4.3 How do reported reading activities differ by parents and children?

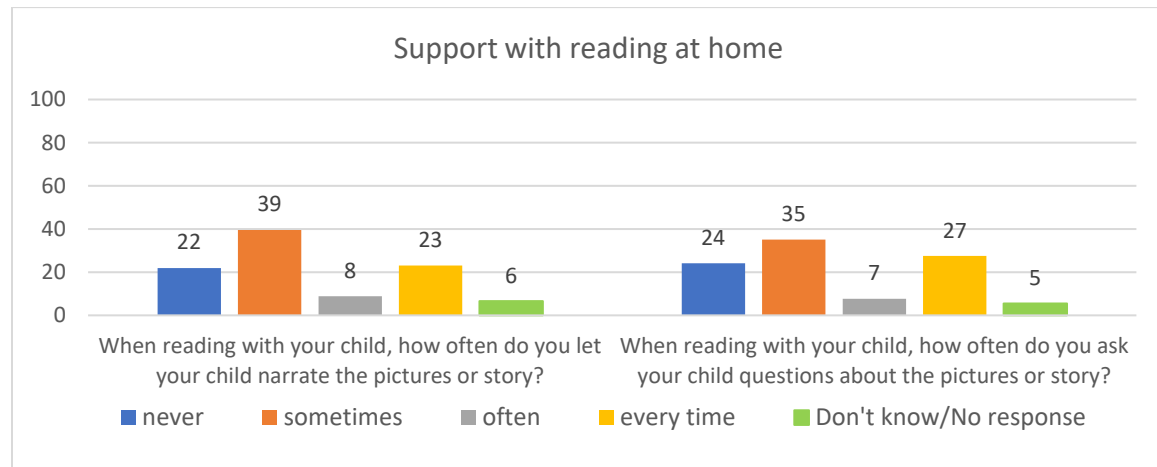
Parents were asked the same questions as students for the home reading activities and additional questions on the way they let children participate in the reading activity. There was generally good correspondence between both sources, but parents reported more textbooks in households than learners (74% vs. 63%) and twice as many parents reported having religious books in the house than children (42% vs. 19%).

Figure 46. Types of reading material at home, by respondent



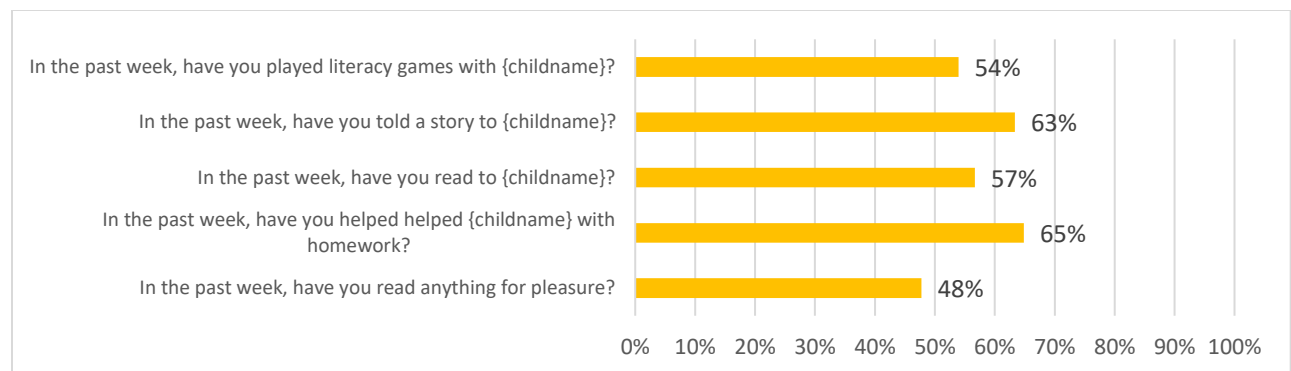
It is clear from these figures that both children and parents report almost no households having any newspapers, magazines, storybooks, coloring books, or comics.

Figure 47. Support with reading at home reported by caregivers



Allowing the children to co-build the reading activity is not a practice that is yet well grounded in parents' reading activities. However, 62% of parents mention doing it at least sometimes already. This could be further encouraged by the project through its interventions targeting caregivers.

Figure 48. % positive answers to questions on reading support reported by parents



The percentage of reported positive answers does not match what children reported. As a reminder, they were 27% positive answers for the first statement, 28% for the second, 30% for the third, 45% for the fourth question. These different reports coming from children and parents hint at some biased answers, either that children have a recall bias even though the chosen time span was in the immediate past, or that parents are over reporting participation in such activities thinking these might be desirable answers to the statements.

6.4.3.1 How does participation differ by equity indicators?

There are no significant differences between either boys and girls, or children with disabilities and children without disabilities on participation to supplemental reading or home reading activities.

However, degrees of participation to these activities are significantly different for Grade 1 or Grade 4 children. When asked if they had seen anyone reading in their household in the past week, Grade 4 children are 43% to answer positively versus 35% of Grade 1 children.

The same pattern of higher positive answers from Grade 4 students applies to whether they have been told a story, been read to, or helped with homework. The difference is around 8% more positive answers reported across the range of questions.

Moreover, Grade 1 students are over two times less likely to report attending outside reading camps and virtual reading camps than Grade 4 students.

4.3 How does participation in at-home reading activities differ by presence of reading materials in the home?

Independent samples t-tests were used to test whether the reported presence of any reading materials, namely textbooks, religious books, magazines, newspapers, storybooks, coloring books, comic books, were significantly correlated with outcome variables including using Life Skills scores, EGRA scores and home reading activities.

EGRA scores

- Students who reported having textbooks in the home had higher EGRA reading comprehension scores than those who did not. Grade 1 students who reported having textbooks in the home had three times*** ($p \leq 0.001$) the listening comprehension score of those who did not, while Grade 1 students who reported having no reading materials at home had two-thirds* ($p \leq 0.05$) the listening comprehension score as those who reported at least one kind of reading material. Grade 4 students who reported having textbooks in the home had 25% higher* ($p \leq 0.05$) reading comprehension scores than those who did not.
- Grade 4 students who reported having storybooks in the home had higher scores on EGRA letters* ($p \leq 0.05$), phonemes** ($p \leq 0.01$), and familiar words scores*** ($p \leq 0.001$) than those who did not.
- Students who reported having a health passport in the home had lower EGRA listening comprehension scores than those who did not. Grade 4 students with a health passport had 75% the listening comprehension score of Grade 4 students without. This might not mean anything as a health passport (vaccination card) is common for all children to have after birth irrespective of household's SES status.

- Students who reported having religious materials in the home were less than half as likely* ($p \leq 0.05$) to have attended after-school reading activities during the last week (15% attended) than those who did not (34%). They were almost twice as likely* ($p \leq 0.05$) to report participating in media-based literary activities (41%) as those who did not (24%).
- Students who reported having no types of reading materials at home were over twice as likely*** ($p \leq 0.001$) to attend after-school reading activities (44% attended) than those who reported at least one kind of reading material (19%).

Life skills

For Grade 1 intervention students:

- student reported presence of coloring books in the house was significantly positively correlated with individual life skills questions measuring relationship skills and self-awareness (Relate2* ($p \leq 0.05$), relate6* ($p \leq 0.05$), relate12* ($p \leq 0.05$), selsad4** ($p \leq 0.01$)).
- Self-reported presence of textbooks in the household was mostly positively correlated with self-awareness variables, as well as for conflict resolution and relationship skills (Selangry3* ($p \leq 0.05$), relate12* ($p \leq 0.05$), conflict3* ($p \leq 0.05$), selsad4** ($p \leq 0.01$), selsad5** ($p \leq 0.01$), selangry4** ($p \leq 0.01$)).
- Self-reported absence of any reading materials was positively correlated with several self-awareness items as well as for conflict resolution and relationship skills (Relate11** ($p \leq 0.01$), Selangry1* ($p \leq 0.05$), Selangry2* ($p \leq 0.05$), Conflict3** ($p \leq 0.01$), Selsad4** ($p \leq 0.01$), Selsad5*** ($p \leq 0.001$), Selangry4*** ($p \leq 0.001$), Sel3* ($p \leq 0.05$), Sel4*** ($p \leq 0.001$)).
- Self-reported presence of a health passport was negatively correlated with several self-management, relationship skills, and responsible decision-making skills (Stress1* ($p \leq 0.05$), Stress2* ($p \leq 0.05$), relate3* ($p \leq 0.05$), relate5* ($p \leq 0.05$), relate11* ($p \leq 0.05$), selsad2** ($p \leq 0.01$), relate13* ($p \leq 0.05$), conflict2* ($p \leq 0.05$), conflict3** ($p \leq 0.01$)).

For Grade 4 intervention students:

- Self-reported presence of textbooks was positively correlated with several self-awareness items and a relationship skills item (Selangry1* ($p \leq 0.05$), relate6* ($p \leq 0.05$), selangry4* ($p \leq 0.05$)).
- Self-reported presence of coloring books was positively correlated with several relationship skills items (Relate6* ($p \leq 0.05$), Relate8* ($p \leq 0.05$)).
- Self-reported presence of a health passport was negatively correlated with several self-awareness items, a self-management item, and a relationship skills item (Stress2* ($p \leq$

0.05), selangry1* ($p \leq 0.05$) selangry2** ($p \leq 0.01$) selangry3** ($p \leq 0.01$) relate12* ($p \leq 0.05$)).

- Self-reported absence of any reading materials was positively correlated with several self-awareness items, a responsible decision-making item, and a relationship skills item (Relate16* ($p \leq 0.05$) selangry1* ($p \leq 0.05$) conflict2* ($p \leq 0.05$) selsad4* ($p \leq 0.05$) selangry4*** ($p \leq 0.001$)).

6.5 TEACHER PROFESSIONAL DEVELOPMENT

For this section, classroom observation data were gathered by the Ministry of Education from the same schools and teachers who were interviewed by enumerators for self-reported data.

6.5.1 How does teaching practice correlate with teacher well-being?

Teachers and principals were asked a set of questions to proxy their level of well-being and satisfaction with their work, and the access to psychosocial support when required. Very few teachers and principals alike have considered leaving the profession in the past year, in spite of a complicated schooling year due to the Covid pandemic. Indeed, 92% of Principals and 97% of teachers have not considered leaving their roles. When looking at additional well-being questions asked to teachers, 82% consider their work to be rewarding (as percentage of teachers answering “agree” to “fully agree” to the question).

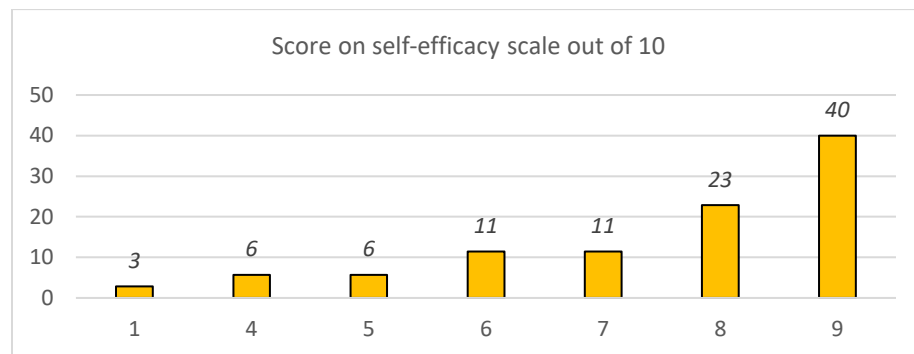
When comparing with the 17% who disagree or strongly disagree, there is no significant difference in the importance they give to play-based learning, five reading skills, or the frequency to which they apply best teaching practices as defined by variables “specific games” to “leader”. Whether this is a result of the sub-sample of dissatisfied teachers being too small to show any significant difference, or evidence that lack of perceived reward from the profession not being a factor affecting motivation to apply best practices and positive attitudes to play-based learning, is to be investigated further. What appears through initial analysis is a strong basis of teachers and principals in the intervention district believing in the importance of their work and willing to remain in their careers.

6.5.2 How does teachers’ perception of their self-efficacy affect their ability to adapt to new teaching practices?

Self-efficacy is an influencing factor of motivation and willingness to engage in further effort to reach a given goal, such as changing practices. Questions were asked to teachers about their sense of self-efficacy, as a proxy to control whether their beliefs and attitudes about their power to act and influence aspects of students’ and classroom experience were at adequate levels to be well positioned to welcome new ideas and initiatives.

Ten questions about self-efficacy were asked to teachers and gathered into an index variable, giving a score out of ten for each teacher.

Figure 49. Index scores on self-efficacy questions self-reported by Teachers



73% of the teachers score over 8/10, and only 9% score below 5/10. The lowest scores are still above 70% positive answers and are observed for questions referring to controlling disruptive behavior in the classroom, using a variety of assessment strategies, assisting families in helping their children to do well at school, and implementing alternative teaching strategies in the classroom.

6.5.3 What teaching knowledge, attitudes, & practices regarding inclusive PBL/literacy instruction are common among teachers at baseline?

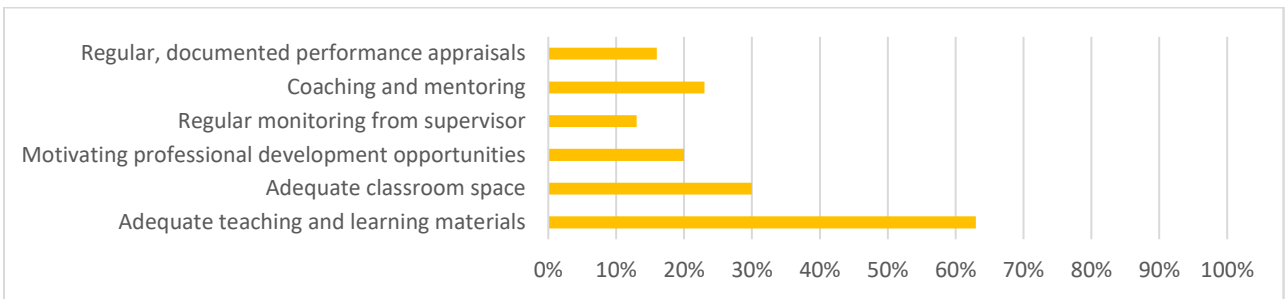
The teacher survey, principal survey and classroom observation tools were used in this section to populate and analyze the following figures. When possible, self-reported measures were compared to classroom observation reported measures to assess reliability, however for several variables, only self-reported measures are available. Some results lead us to believe that desirability bias might interfere with some given answers.

6.5.3.1 Educational and recreational material observed in classrooms

In 88% of observed classrooms, there were no prints on display and no recreational resources available. In 5% of cases, a reading corner was observed. However, in 73% of observed classrooms, three quarters to all of students had textbooks and in 85% of observed classrooms, the same proportion had pencils and pens.

In a separate interview, teachers were asked about supports available to enhance their knowledge and practice of PBL approaches to enhance reading skills.

Figure 50. Available support to enhance knowledge of PBL approaches



6.5.3.2 Knowledge and techniques accessible to teachers

Figure 51. Knowledge of techniques and activities for PBL

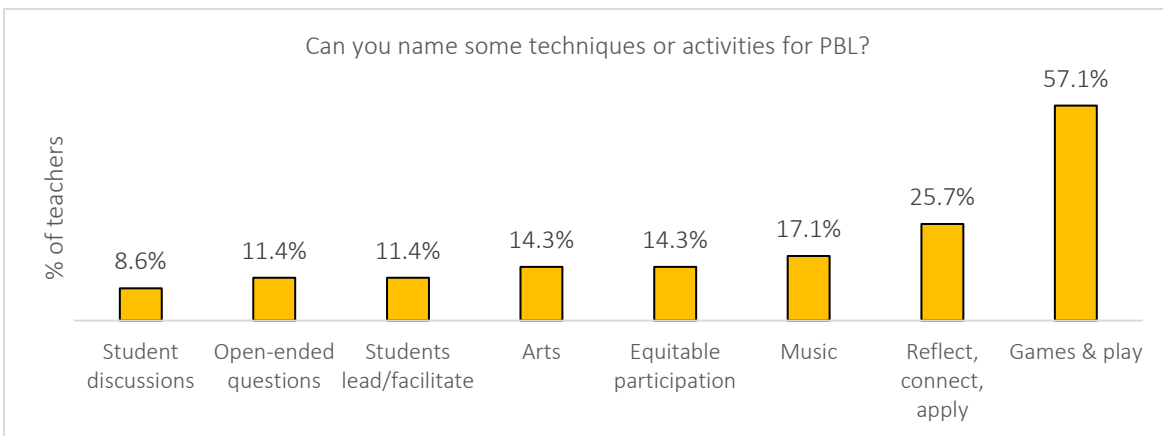


Figure 52. Techniques used to read to students as reported by Teachers (Grade 1 and 4)

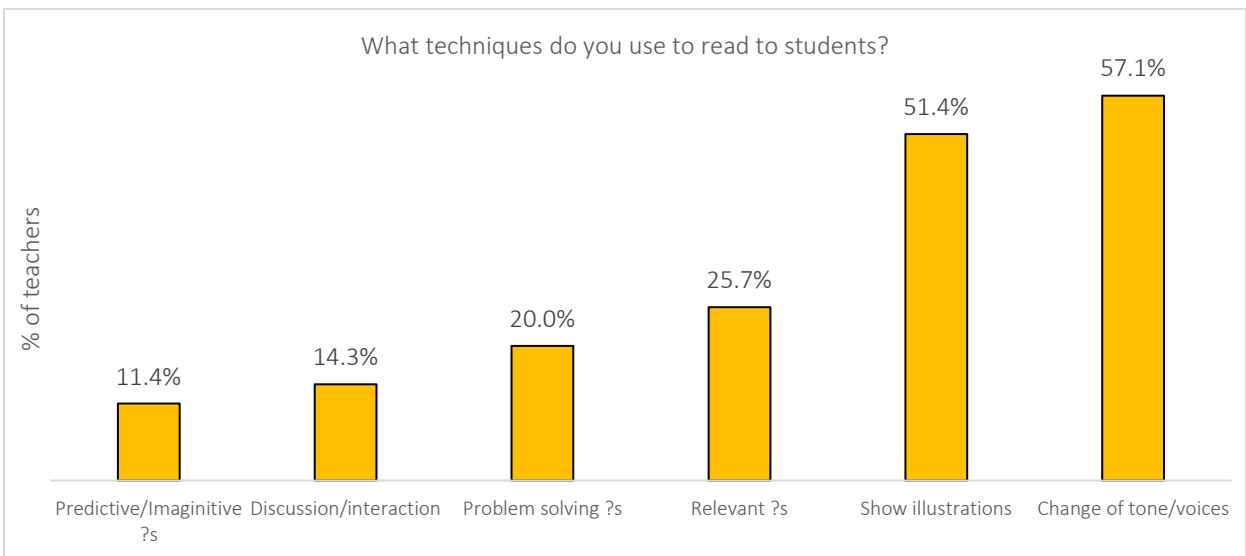
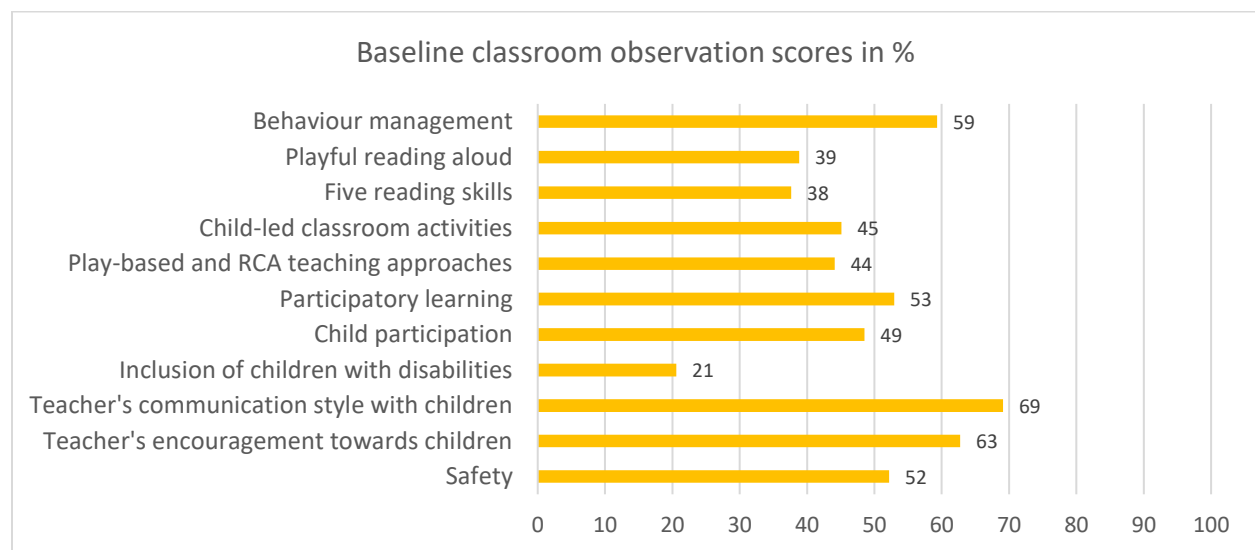


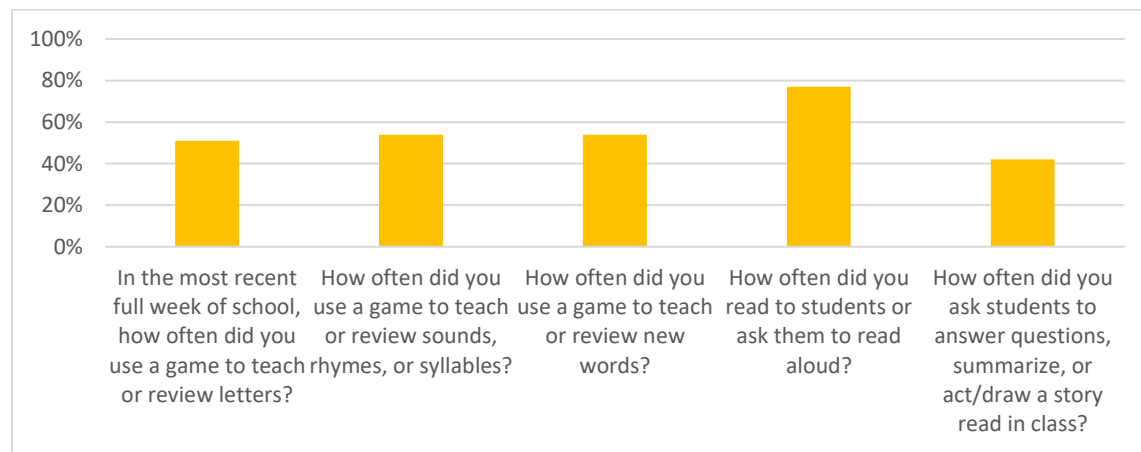
Figure 53. Classroom observation index scores



Classroom observation scores are index scores, created by aggregating the presence (1) or absence (0) scores for behaviors and attitudes observed by the enumerator. It is based on a tool created by InformEd and RTP and used for other baseline evaluations of EQIE program countries. However, in this instance, the use of a different classroom observation tool required adjusting the definition of each index indicator in collaboration with RTP team. For this reason, classroom observation scores are not comparable to other countries', although the questions used to compute the new index scores are as close as possible to the ones used in other countries.

The scores presented above are particularly interesting when compared to what teachers reported of their own behavior and practices, as there are gaps between what is self-reported or externally observed; indeed, if teachers and principals mention adapting their learning to ensure participation and inclusion of children with disabilities, observers gave them on average 21% of the total score achievable, and the lowest of all index scores for classroom observation. Approaches supported by RTI, such as playful reading, five reading skills, child-led activities, play-based learning are scored between 38 and 53% of total score, showing that there is some room for RTP to develop the use of these approaches and be able to show their contribution by midline.

Figure 54. % of teachers reporting using the following practices all days/almost all days of the week



Self-reported measures show that on average, over 50% of teachers report using the techniques above every day or almost every day in classrooms. Classroom observation average scores for playful reading aloud, play-based techniques are 39% and 44%. As was previously noticed by InformEd, the percentage of teachers’ self-reported good practices seems to be inflated and not the most reliable source of data. When possible, classroom observation should be preferred to draw conclusions on behaviors and practices in the classroom.

As classrooms to be observed are generally big and the time to perform the observation of several behavioral patterns, often happening simultaneously, we would recommend using a “Stalling snapshot” approach⁸ in future observations, in order to help the enumerator better organize and go through the list of statements in a more structured way.

Teachers mention spending on average 4.5 hours a week facilitating extra-curricular activities, these mostly being reading clubs (32%), resources rooms for children with disabilities or low-performers at school (40%), or other activities (40%) which are not detailed further.

6.5.3.3 Attitudes influencing the uptake of best teaching and PBL practices

Between 93% and 100% of teachers answer that play-based learning and the five reading skills methods are very useful and important to teach students. However, when asked to give examples of techniques related to these methodologies, only 25% mention the Reflect-Connect-Apply technique, 57% mention games and play, 14% mention arts, 17% mention songs, rhymes and chants, 11% mention open-ended questions, 8% discussions amongst students and 11% mention giving students leadership opportunities, while 14% mention ensuring equal

⁸ As described by the World Bank TEACH methodology for classroom observations available here: [Teach - World Bank's Classroom Observation Tool](#)

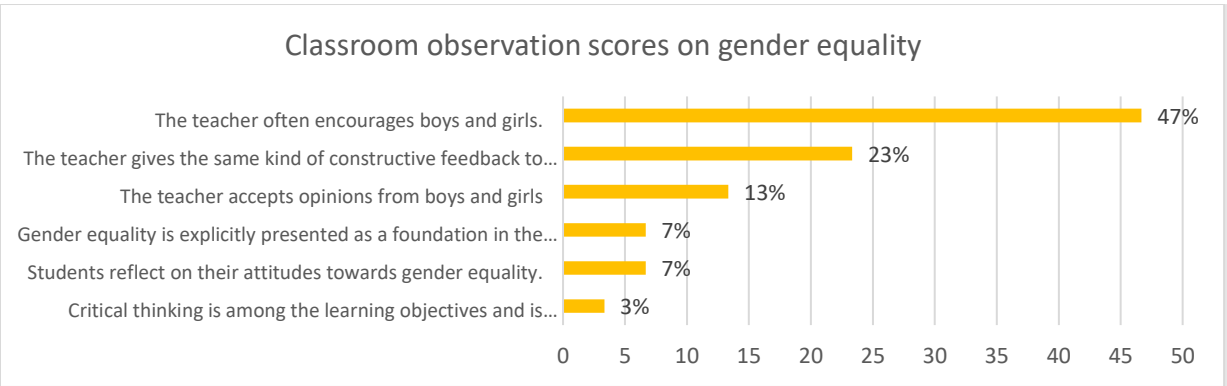
participation across gender and disability. As for the five reading skills, only two respondents out of thirty-five could quote them all and five respondents could quote four out of five. It thus seems that there is openness to the idea of Play-based learning, but that training would be welcome across all these areas to equip teachers with the right tools.

There however seems to be a discrepancy between the percentage of teachers to report using RCA techniques almost every day to every day of the week (60%) and the ones who mention this technique when asked about play-based techniques they know (25%). The same pattern applies to open-ended questions, which 11% mention knowing of as a technique and yet 60% mention applying frequently, and to most of the play-based options mentioning in the list of answers. It can either be because teachers are asked for examples of play-based techniques in the previous question, and some of them do not think of the above-mentioned practices as being linked to play-based learning. However, when asked whether they apply it, they recognize doing so. Another explanation would be that teachers feel it is a desirable answer to mention applying these techniques frequently. This is something to investigate further at midline, when more teachers would have been trained and would know what PBL entails, which should translate in the examples above being given more frequently by trained teachers.

6.5.3.4 How do teachers adapt teaching practices for CWD and gender-responsiveness?

100% of classroom observations report that “teachers give boys and girls equal opportunities to participate in classroom activities”. When asked, 83% of teachers report being able to adjust their practice to ensure such equal participation and 93% report being able to ensure equal participation of children with disabilities. However, moving forward mere “opportunity for participation” in the classroom, reported behaviors ensuring inclusive and equal treatment of boys and girls during the classroom paint a different picture, as visible in the graph below:

Figure 55. Classroom observation scores on gender equality variable

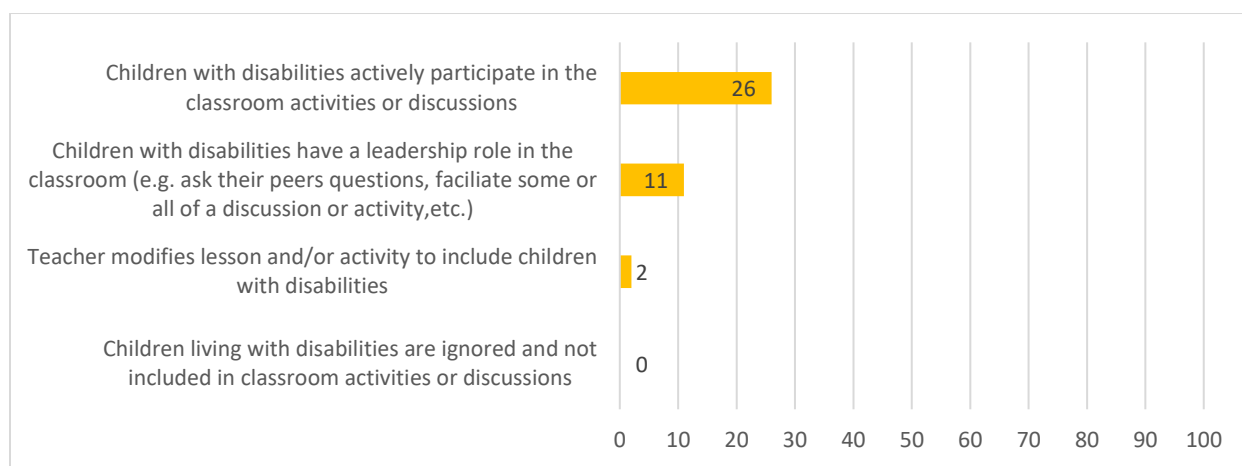


When asked about which solutions they use, teachers report calling upon girls and boys equally for reading or speaking aloud, creating heterogeneous groups with boys and girls, volunteering

the boys when the girls participate more, assigning activities and tasks equally and speaking the local language when it helps ensuring equal participation.

When it comes to children with disabilities, they mostly mention bringing them to the front of the classroom, keeping them close, adapting the sound or speed of their voices including repeating sentences, creating activities they can perform, ensuring they feel included. Classroom observation scores for inclusion of children with disabilities however paint a slightly different picture; indeed, level of active participation is below 30% and only 2% of teachers are seen to modify the activity to include children with disabilities. Given the wide discrepancy between self-reported measures and observed behaviors, we suggest discussing with enumerators whether they did not observe adaptation because no activity needed to be adapted in the observed classroom or whether this low score resulted exclusively from a failure from the teacher to adapt an activity that was excluding for children with disabilities.

Figure 56. Classroom observation “Yes” scores in %, for observed inclusive behaviors



6.5.3.5 How do these knowledge, attitudes, and practices differ by teacher background (sex, # of teaching years, teacher qualification, and grade)?

Linear regression was performed on the classroom observation and teacher interview datasets to identify correlations between age, sex, number of teaching years, teacher qualification and grade on the knowledge, attitudes, and practices of interest to RTP.

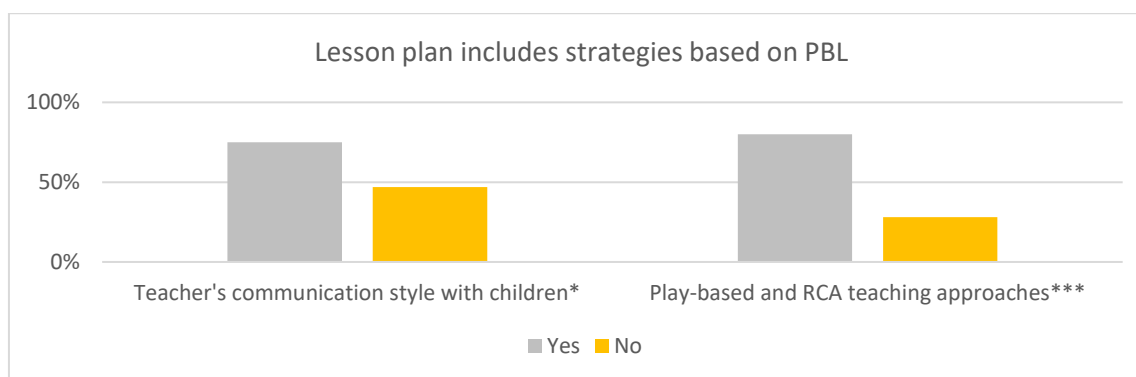
As 33 out of 34 interviewees were female, no meaningful comparative analysis could be performed on sex as a differentiating factor.

Years of experience as a teacher do not significantly correlate with any of the knowledge and attitudes assessed in the interview or observation, and neither does age or teacher certification. However, teachers in charge of Grade 4 have significantly different average scores on the Gender inclusion and equality observation scale than the ones who don't teach Grade 4. The

scale represents practices or behaviors which are increasingly inclusive, starting with practices which are ensuring basic equal participation and ending with practices which show a will to structurally work towards gender inclusion as an objective for education. Teachers in Grade 4 have an average score of 4.07 versus 1.53 for those who do not teach Grade 4. It would be interesting to investigate further whether this awareness is in reaction of stereotypical gender attitudes and roles becoming more prevalent in Grade 4 or whether teachers have been sensitized a different way than the ones teaching Grade 1 students.

6.5.3.6 To what extent does RTP training influence teacher knowledge, attitudes, and practices regarding inclusive PBL/literacy instruction?

Figure 57. Impact of training on classroom observation scores



At baseline, teachers who mention having received training from RTP have a 53% score on the Child-led activities dimension of the classroom observation, versus 27%** ($p \leq 0.01$) for the ones who did not receive training. This score is a percentage of the total points for the index.

When it comes to teachers having received training from other organizations, the increase in score is visible on the five reading skills dimension; these scored 50% on the five reading skills dimension of the classroom observation tool, versus 30%* ($p \leq 0.05$) for the ones who did not receive training from other organizations.

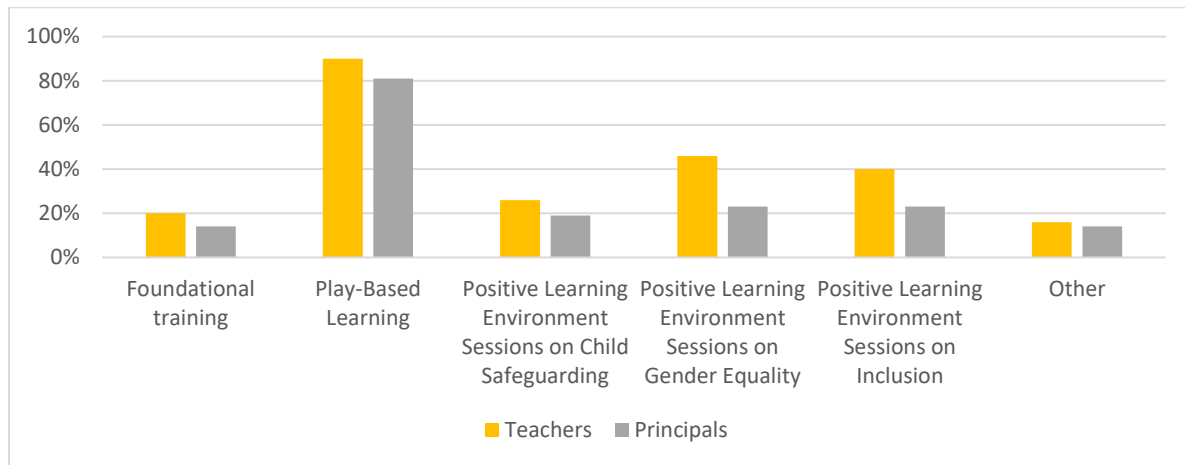
Classroom observation scores are also impacted by whether the lesson plan includes some strategies using play-based learning.

So far, 68% of teachers declared having received RTP training at baseline against 51% of supervisors saying that teachers in their school have received such training, and 34% mentioning having been trained themselves. Training sessions took place on average 2 months before the time of the interview. Significant differences appear on some practices, but also and mostly on attitudes, between teachers who mentioned receiving training from RTP versus the ones who did not, as presented below.

In terms of attitudes towards play-based learning, it is interesting to note that 55% of Principals considered that supervisors were supporting teachers in implementing PBL “to a

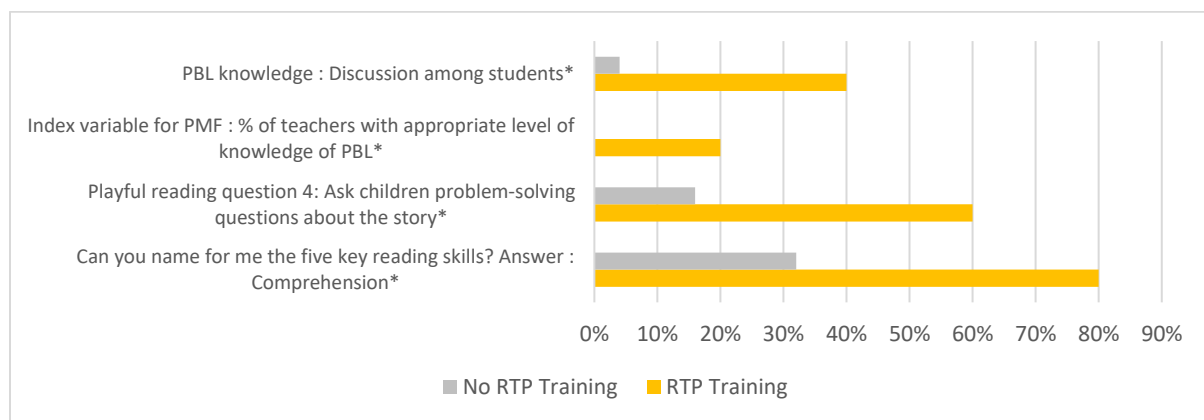
great extent”, however 44% considered supervisors to support this implementation only “somewhat”.

Figure 58. % of teachers and principals reporting having received each type of training from RTP



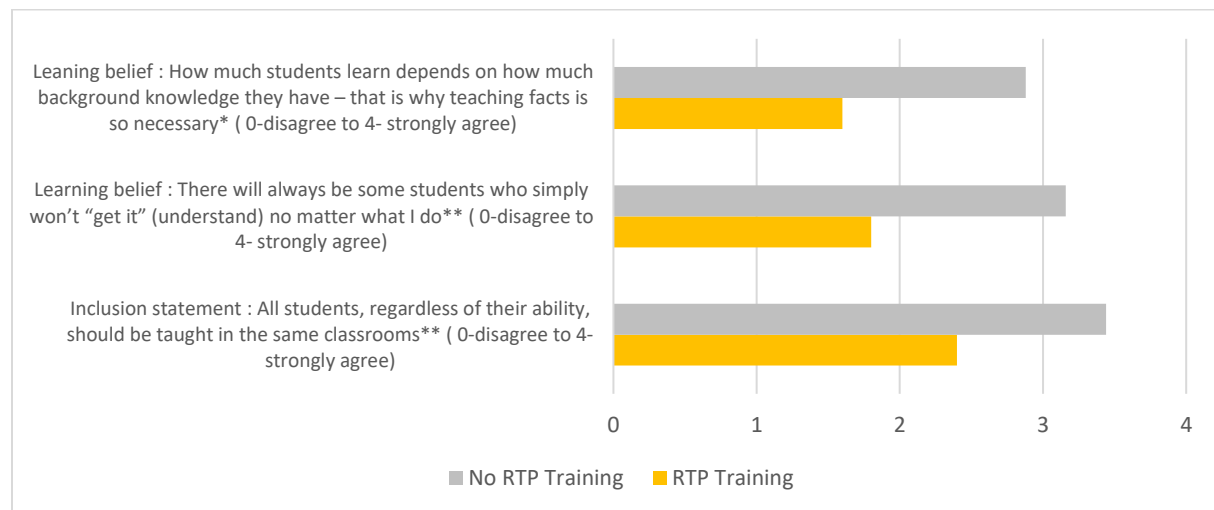
Principals in schools where teachers have received Foundational training are three times more likely to work in a school which provides access to psychosocial support for teachers** ($p \leq 0.01$), and schools in which teachers received training on Positive Learning environment for Gender Equality have significantly higher scores on variables “Safety issues” (i.e. reporting almost twice as many infrastructure features or practices conducive of high safety levels** ($p \leq 0.01$)), report on average 4.8** ($p \leq 0.01$) topics of inclusion in their school plan versus 2 for schools where this training did not take place, and are 40% to satisfy the PMF standard definition of a school “conductive of wellbeing” when schools where this training did not happen score 0%** ($p \leq 0.01$). Having received training on Positive learning environment for inclusion has the same correlation with the score of being conducive of wellbeing.

Figure 59. % of positive or right answers from teachers to the following questions on practice



Ns $P > 0.05$ $*P \leq 0.05$ $**P \leq 0.01$ $***P \leq 0.001$

Figure 60. Level of agreement to inclusivity and learning belief statements from teachers



Ns *P > 0.05* **P ≤ 0.05* ***P ≤ 0.01* ****P ≤ 0.001*

6.5.3.7 Further need for RTP training and support

Figure 61. Areas in which teachers mention requiring further support

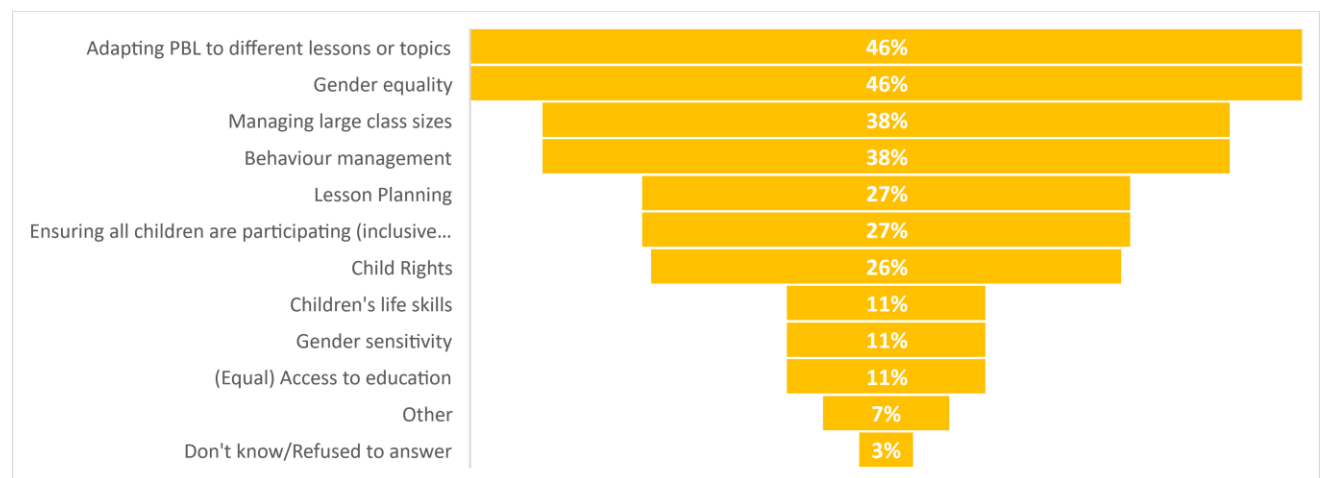
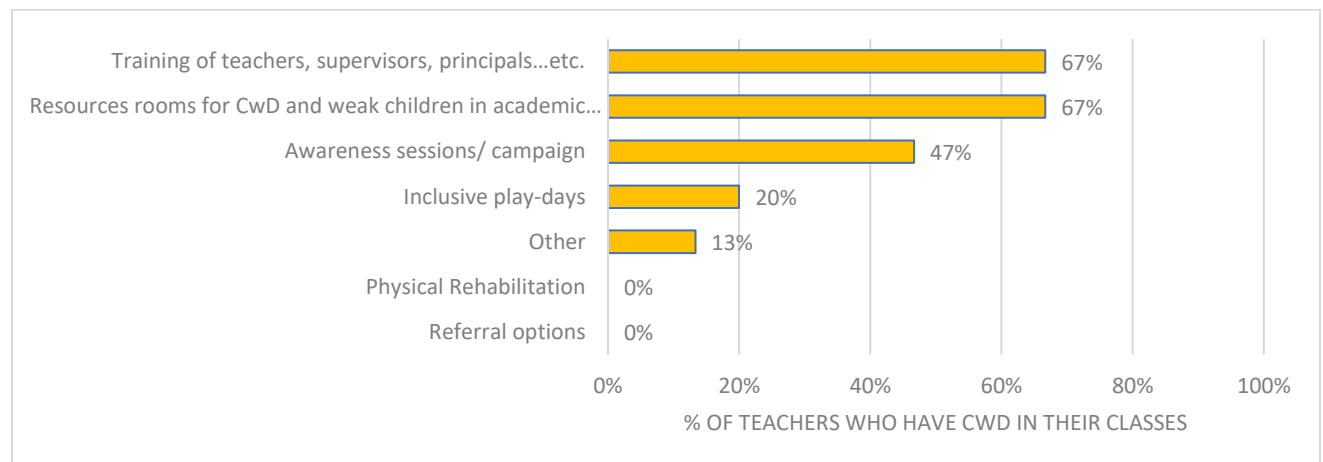


Figure 62. What type of support from RTP would best help you better accommodate CWD? By percentage of teachers having cwd in their classes



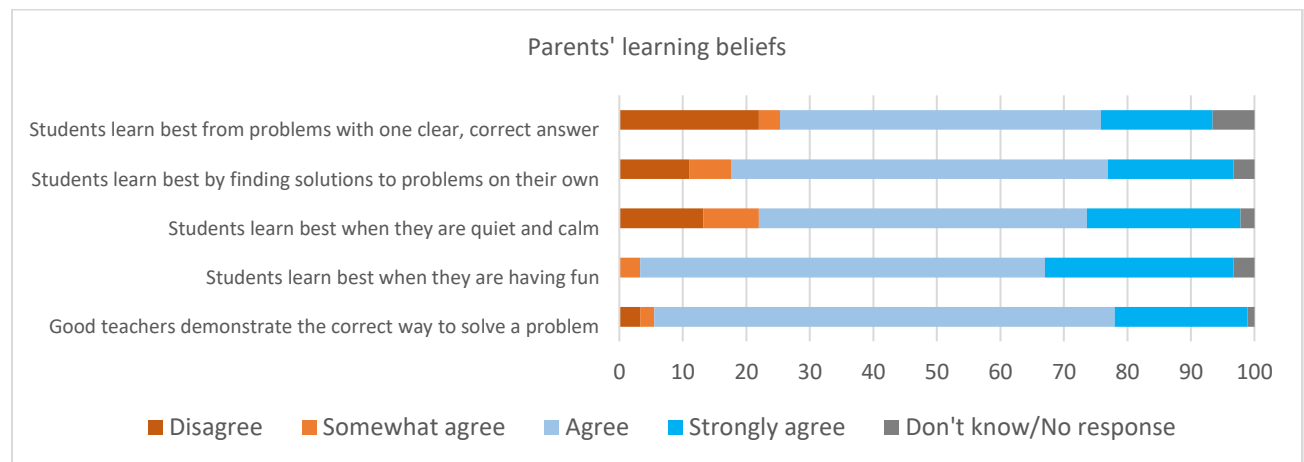
It is worth noting that 31 Principals out of 41 mention having no material adapted to children with disabilities at all. The two only instances where some exist, principals mention “very big picture cards” or access ramps. When asked what support would be needed, their answers mostly focus on material such as wheelchairs, hearing aids, glasses, adapted seats and books, followed by medical and psychological assistance, and finally by teacher’s training.

6.6 BUILDING A CULTURE OF READING IN THE COMMUNITY: CAREGIVER SURVEY

6.6.1 Knowledge and practice of PBL and inclusive education amongst parents

Parents were asked questions on their attitudes to learning, as to map out how much openness to traditional or more modern education techniques were present in the parents’ population, as parents are ultimately the ones who decide whether to keep their children in school and their involvement in shifting teaching practices towards an approach including play-based learning is key to facilitating change.

Figure 63. Parents' level of agreement to learning concepts and beliefs



Statements 3 and 5 are typical of a “direct instruction” type of approach to teaching, as opposed to statements 1, 2 and 4 which are considered “constructivist”. Opinions for statements 3 and 5 should be read as the “ideal” answer being to disagree with the statement.

Figure 64. Frequency of using collaborative techniques when reading to children, as reported by parents

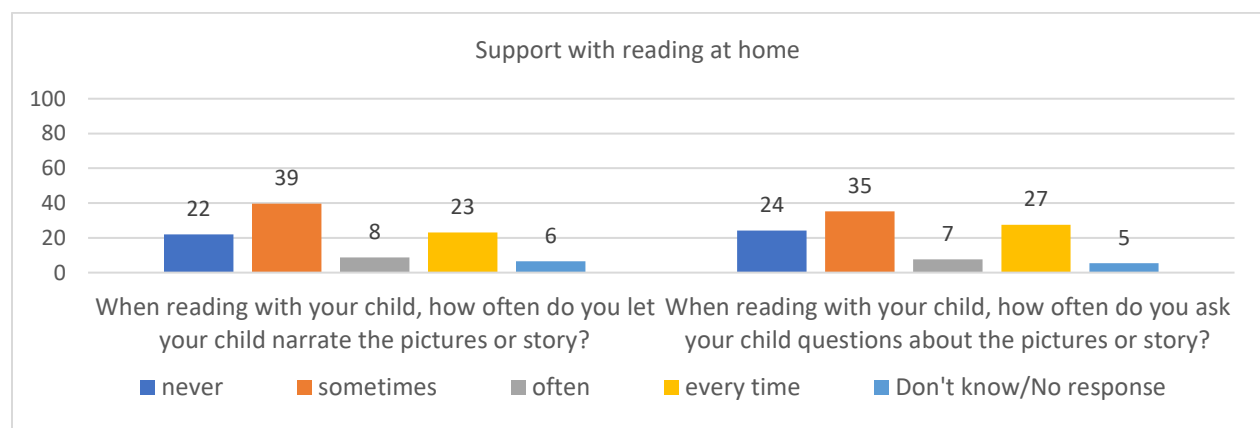
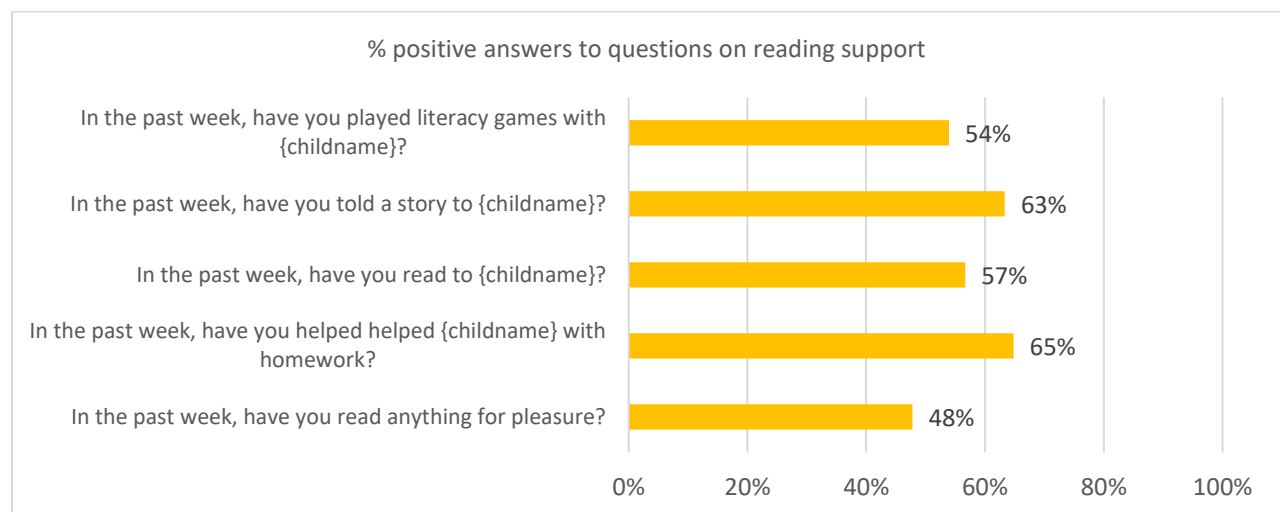


Figure 65. Percentage of positive answers to questions on reading support asked to parents



6.6.2 How do parents' beliefs about teaching support or conflict with RTP's approach and teacher's approach to learning?

The figures above paint a mixed picture of parents' approach to learning, that is both traditional and open to new concepts of education; a good majority agrees to strongly agrees to statements typical of direct, more traditional type of instruction where a teacher provides structured, right-or-wrong type of answer and knowledge but also agree that students are learning better when trying to find answers on their own. Moreover, their openness to the idea that students are learning best if they are having fun (86%) bodes well for the type of approach RTP is advocating for. Over 50% of parents report getting involved in reading activities with their children at home in the last week, and 23-27% mention using a collaborative approach to reading with their children by letting them narrate the story and asking them questions about it. It is worth repeating here that these accounts do not match the children's, who are half less to report having played literacy games, over a third less to have gotten help with their homework and almost half less having been read a story. It is highly likely that parents were trying to give "desirable" answers to the enumerator, and it would probably be more accurate to use the children's report as a tracked indicator for midline evaluation.

Giving desirable answers does not automatically mean that parents are not open to the concept of play-based learning and in conflict with RTP approach. They might have schedules, workloads and household chores which do not allow them to support their children with reading activities. They might also not know how to use games to enhance their children's learning. We suggest re-assessing the way this question is asked to parents, as to know what is the main difficulty that gets in the way of them consistently supporting their children with reading and keeping it as it is in the learner's assessment.

6.7 SAFE AND INCLUSIVE LEARNING ENVIRONMENTS

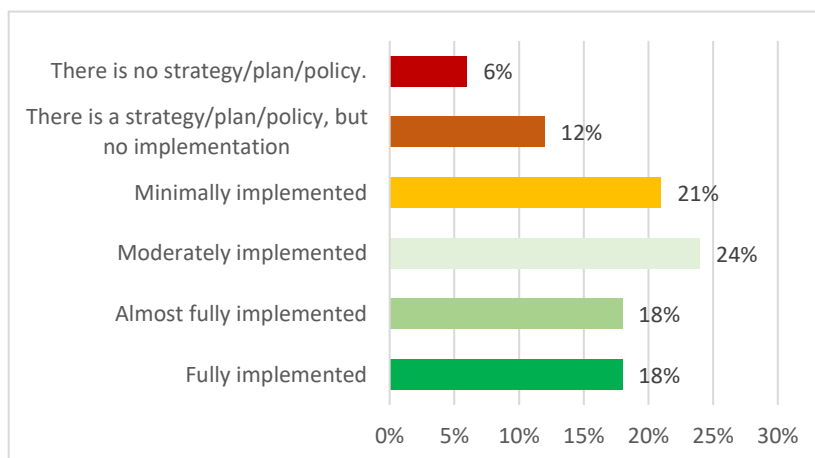
6.7.1 Emotional and physical safety in the learning spaces

This section investigates the current state of intervention schools (considered for CWD and without) in terms of physical and Emotional safety, and emotional well-being.

6.7.1.1 Do children and teachers know how to report and get support with safety issues?

Teachers interviewed (n=35) are 60% to report that children rarely or never come to see them regarding challenges they face at home, and 28% to report they do so sometimes or always. It might be that reporting challenges faced at home is more dependent on the individual relationship to the teacher than on the overall school strategy. Answers to the question asking whether children come and report safety concerns within the school are quite polarized with most teachers answering never (22%), sometimes (31%) or always (25%). With regards to the last safety concern reported to them, 66% of teachers interviewed either went straight to their supervisors or sorted it themselves, with only 2 teachers having done “nothing” and 3 refusing to answer. They are also 91% to report knowing what to do, and where to go, in case of concern affecting the children’s security. It is worth nothing again that the sample of teachers and principals alike is rather experienced, and most have been in the school they are currently posted in for a fair share of their career, which suggests they are likely used to their working environment and the school’s ways of doing things.

Figure 66. Level of implementation of the school safety plan as reported by teachers



The most frequent answers are minimally implemented to moderately implemented. There is thus a rationale for RTP to support efforts in moving from theory to practice and identify which barriers to fully implementing the safety plans get in the way of Principals and teachers.

Figure 67. Topics included in the safety plan as reported per Principals (n=41) and Teachers (n=34).

	Principals	Teachers
Gender	52.9%	54.8%
Inclusion of children with disabilities	64.7%	41.9%
Hygiene	29.4%	32.3%
Gender-based violence	47.1%	29.0%
Other	23.5%	22.6%
Bullying	35.3%	19.4%
Violence (general)	29.4%	19.4%
Teacher behavior	23.5%	16.1%
Exploitation	5.9%	3.2%

The disparity in percentages regarding the contents of school safety plan as reported by teachers and principals may suggest one of them is either not fully aware of the contents or do not have full access to such plan. Project team may need to check this further through monitoring and inspection of school safety plans across implementing schools.

Figure 68. Safety concerns as reported by students

The following events are reported by students as having happened or not in the previous week, at school.

Variable	Boys	Girls	Sig.	Non-CWD	CWD	Sig.
Felt afraid in school	15%	17%	-	15.9%	14.7%	-
Felt afraid on way to school	13%	11%	-	12.0%	11.4%	-
A child was teased	24%	25%	-	24.6%	25.0%	-
A child was left out	24%	23%	-	23.6%	18.2%	-
A child said something mean	20%	21%	-	20.7%	15.6%	-
Any of above happened to me	14%	14%	-	14.0%	18.2%	-
A child got in a fight	20%	23%	-	21.4%	21.9%	-
I got in a fight	7%	12%	-	7.4%	6.3%	-

A child threw something	15%	15%	-	9.3%	14.7%	-
I threw something	6%	5%	-	5.3%	5.9%	-
An adult screamed at a child	15%	15%	-	15.4%	17.6%	-
An adult hit a child	10%	11%		11.1%	5.9%	-
An adult threatened a child				13.1%	6.1%	-
Any of above happened to me				7.7%	3.0%	-

Ns *P > 0.05* **P ≤ 0.05* ***P ≤ 0.01* ****P ≤ 0.001*

Overall, students are 36% to say they would report being them or a friend being harmed to a trusted adult. They are 21% to give no response, and 41% not to know what to do. There is no significant difference between Grade 1 and Grade 4 students in answering this question, which makes it unlikely to be related to the young age of children.

This is a finding of interest as this variable correlates significantly with all six Life Skills scores*** ($p \leq 0.001$), with Letter comprehension** ($p \leq 0.01$) and Phoneme* ($p \leq 0.05$) scores, and Reading* ($p \leq 0.05$) score. It also significantly correlates with all the “Relate” variables. Children who would tell a trusted adult have average reading scores twice as high as children who would not know what to do. Average phoneme scores are also higher (15% versus 11%) and Letter comprehension scores are higher for Grade 1 (37% versus 17%) and Grade 4 (53% versus 40%).

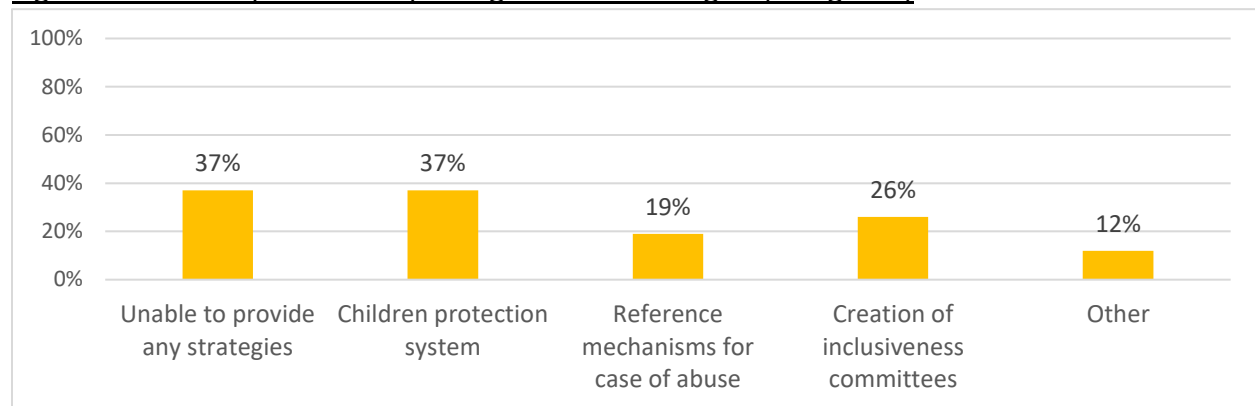
Children who would not know what to do if harmed are 16 to 22% less likely to identify sadness in others, 30% less likely to name several friends, 17 to 19% less likely to ask for help when needed. At school, they are 27-30% less likely to ask an adult for help overall, whether it is for school activities or support with an issue involving other children. They have lower collaboration (-10%), conflict (-24%), self-concept (-10%), empathy (-24%), perseverance (-27%) and stress management (-27%) scores.

It is interesting to note that one or both risk factors 7 (having gone hungry) and 8 (having had a family member away for over 6 months) are positively correlated with all life skill areas, but with a relatively low effect (beta around 0.06-0.09). This could hint at some form of resilience being developed in children which in turns feeds back into Life Skills building, although some more research would be needed to draw this conclusion more clearly.

6.7.1.2 What is the baseline capacity (measured by knowledge, attitudes, and practice) of parents in creation and maintenance of safe learning environments?

At baseline, parents were asked to report on strategies they knew in creating and maintaining safe learning environments, and the barriers they can identify.

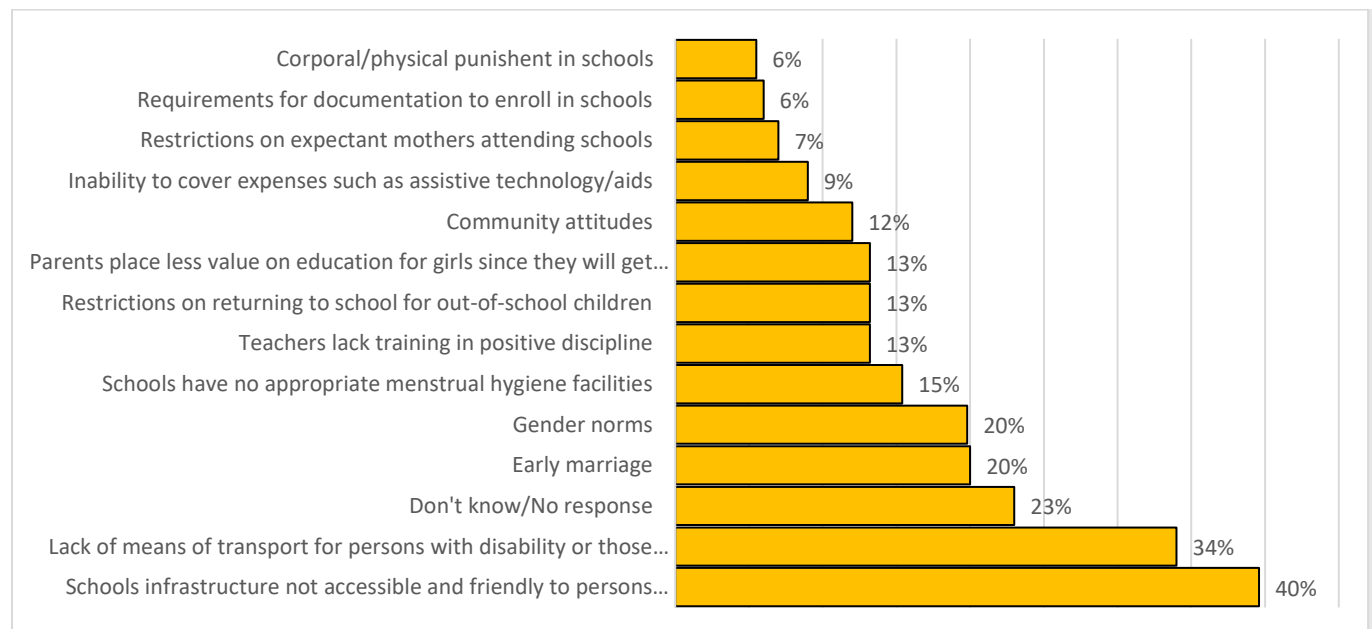
Figure 69. % of respondents reporting selected strategies (caregivers)



6.7.1.3 What barriers do community members face in creation and maintenance of safe learning environments, despite knowledge and attitudes, according to parents?

Parents were asked what barriers they and Right to Play faced; enumerators recorded responses but did not prompt for certain categories. The most frequent barriers mentioned were lack of accessible infrastructure for persons with (physical) disabilities (mentioned by 40% of respondents), and lack of means of transport to school for persons with disabilities (mentioned by 37% of respondents). Next were several barriers faced by girls – early marriage (20%), gender norms (20%), and lack of hygiene facilities (15%).

Figure 70. Percentage of caregiver respondents reporting certain barriers



6.8 LEAVING NO ONE BEHIND

6.8.1 What are the beliefs held by parents, teachers and principals regarding gender and disability and access to education, and how much do all the actors support inclusive teaching versus differentiated teaching for CWD?

6.8.1.1 Parents

Parents show overwhelming support for the notion of inclusive classrooms, with nearly 90% agreeing or strongly agreeing that all students can learn and should be taught in inclusive classrooms. Although over 80% of parents said that it was equally important for girls and boys to have good reading skills, around 50% of parents also agreed with statements confirming traditional attitudes towards gender roles in the classroom, as per the figures below.

Figure 71. Frequency of parents' beliefs on inclusive learning, as reported by parents

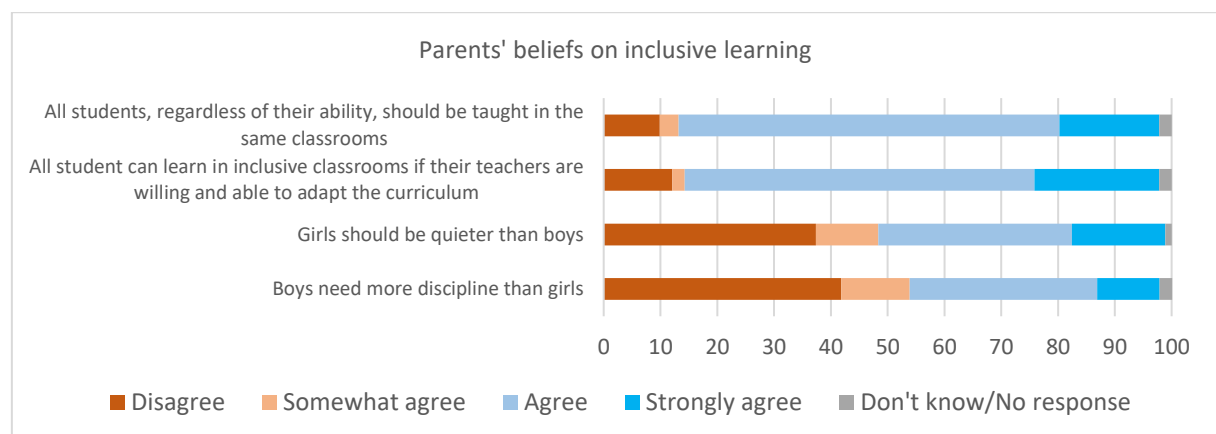


Figure 72. Frequency of parents' beliefs on gender, as reported by parents

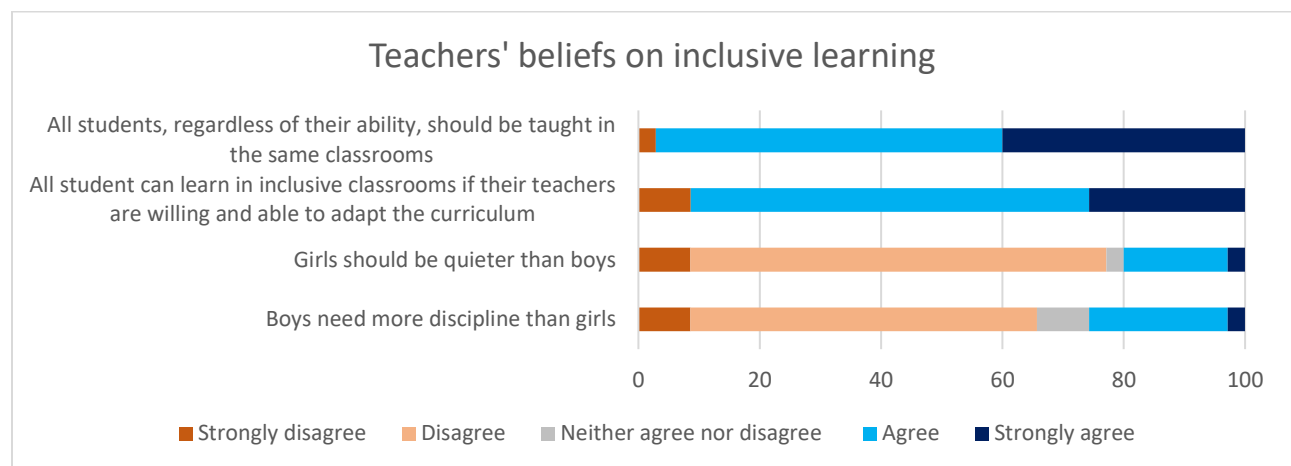


6.8.1.2 Teachers

Teachers were asked the same questions as parents about inclusive education (see figure 73 below) and a specific set of questions about their views on learning abilities, best ways of learning and teaching, and asked whether they agreed to statements promoting a direct instruction-type of approach, or a more constructivist approach to teaching and learning.

Establishing a baseline of teachers' attitudes is important as they are the recipient of most RTP training and expected to be the vehicle of most concepts and change management within the classroom. Given the strong influence of school context on building Life Skills, and the finding that stereotypical roles have started settling with boys and girls by Grade 4, it is important that teachers' opinions are well known to evaluate the level of effort of RTP intervention and whether attitudinal change management actions are required.

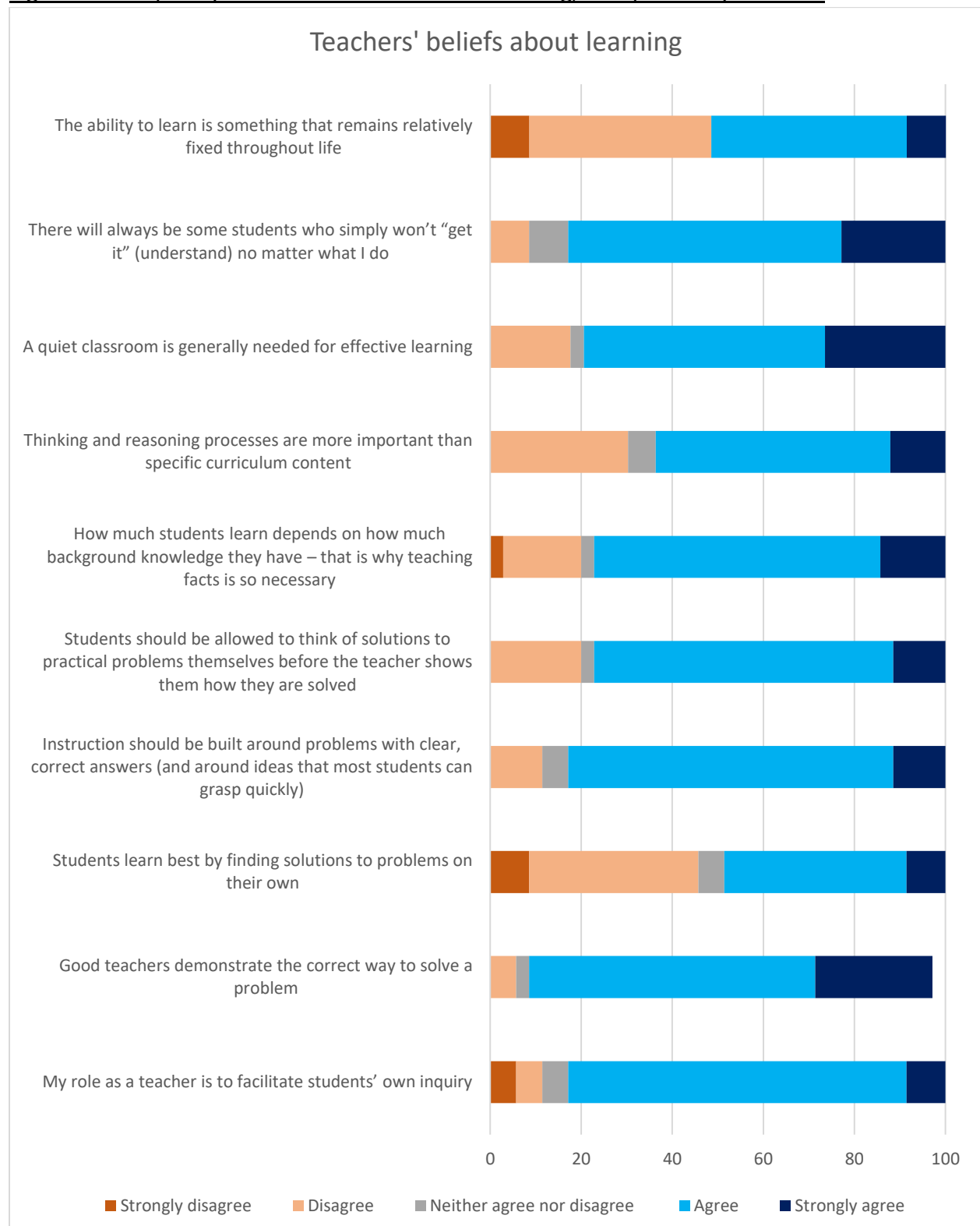
Figure 73. Frequency of teachers' beliefs on inclusive learning, as reported by teachers



As for parents, teachers' views are strongly supportive of inclusive classrooms and inclusive education regardless of perceived abilities, which is welcoming of not separating children with disabilities from the rest of the students. They are however 20% to believe that girls should be quieter than boys and 26% to believe that boys need more discipline than girls.

Given the weight of stereotypical gender norms on girls' behaviors between Grade 1 and Grade 4, as expressed by teachers, principals and parents, and the fact that by Grade 4, a significant gap has appeared between boys and girls on EGRA scores, having a fifth to a fourth of teachers holding stereotypical views on students can be problematic, and an issue RTP could contribute to tackle through training and change management programs.

Figure 74. Frequency of teachers' beliefs about learning, as reported by teachers



Attitudes which are likely to facilitate RTP's intervention are around teacher's opinion of their roles - 83% agree to strongly agree that they are meant to facilitate students' own inquiry. As for other statements, teachers alternate between firm belief in top-down, direct instruction, with right or wrong answers, and openness to exploration and flexible learning. Indeed, 78% believe that learning abilities depend on learning background, and that teaching facts is necessary; 88% also believe that good teachers demonstrate the correct way to solve a problem. This is then not surprising that 83% believe that instruction should be built around clear, correct answers.

However, they are also 49% to believe that students learn best by finding solutions to problems on their own, and 64% to agree that thinking and reasoning processes are more important than specific curriculum content.

The two questions about learning abilities (first and second statement of the graph) show more rigid understanding of how learning works, with 52% of teachers believing that the ability to learn is relatively fixed through time and more worryingly, 83% believing that there will always be students who don't understand, no matter what they do to help. Although willingness to ensure participation and "physical" inclusion of children with disability is clearly stated by 97% of teachers, adaptation efforts, especially targeted at children with cognitive disabilities or even only at low-performing students, could be hindered by the fatalistic view that their ability to learn is low and cannot be enhanced.

There thus seems to be room for RTP to work on beliefs and attitudes, and we would suggest prioritizing this work as part of the theory of change, in order to maximize the potential benefits of training afterwards. Monitoring of attitudinal change should occur at reasonable intervals, as some can be long to influence and see evolve ; however, midline should include an M&E strategy aimed at recording and comparing stakeholders' attitudes before and post-training. For instance, RTP could look at champions within the community who would be agents of change in parallel to training sessions designed for a larger audience of teachers, parents, and officials.

7. Key findings and recommendations

7.1 Low levels of Portuguese language are a bottleneck to better learning outcomes

Overall and across the two grades (1 and 4), very low levels of Portuguese language ability of students at all levels hinder uptake of reading and understanding of Portuguese. Teachers report giving classes for 5.6 hours daily on average. However, teachers report spending only 1.7 hours (30%) teaching in Portuguese. As we know, students who speak Portuguese at home with their families represent only 37% of the learners' sample, which means that with 1.7 hours of Portuguese per day, it seems unlikely these students would achieve a satisfactory level of Portuguese language comprehension. We believe that RTP will not see significant progress on EGRA tasks, particularly in reading and reading comprehension, at midline or endline without addressing underlying low levels of Portuguese language by both teachers and students now.

We would therefore recommend that RTP consider providing additional Portuguese language training for teachers, parents, and/or students. Recent research has shown native language education, specifically home language literacy, makes a huge difference in learning gains. Though education and public affairs are conducted in Portuguese, native language pride and empowerment movements are on the rise – as is the case globally. Bilingual programming is becoming a government focus, with the CapED program and others that look to offer youth and adult education in Portuguese and Mozambiquan native Languages. These have been shown to increase retention, engagement, achievement, and confidence⁹. Instead of focusing on a narrow measure of literacy success (Portuguese), we would recommend that RTP consider supporting inter-language skills transfer. This would mean including home language skill development, in combination with parent engagement in literacy and other activities. This could rely on partnerships linked to CapED, to try to get parents to develop literacy abilities in multiple languages to support kids' learning. This is based on the idea that parent capacity, support, attitudes matter, and aligns with our further recommendations for involving parents as much as possible in change management activities.

Additionally, the national focus on the bilingual CapED programs could prove a good opportunity for teacher education and get them trained via the same bilingual education model.

7.2 Life Skills levels can benefit from specific approaches for high and low-scoring students

At baseline, before the intervention has started, Grade 4 Life Skills scores are already mostly above 50%. Although the PMF has set a target of an average score, this focus masks different needs of high and low scoring students. We recommend that RTP look to target the sub-groups of students who have below-average Life Skills scores and need the most support. We have

⁹ <https://en.unesco.org/news/breaking-educational-language-barriers-mozambique>

found that amongst Grade 1 students, three socio-economic status (SES) home assets are consistently correlated with higher life skills: Households with a motorbike or a television have a weak positive correlation with life skills, while households with solar panels have a weak negative correlation¹⁰. Attendance at early childhood development centers or schools (ECD) is weakly positively correlated with higher life skills scores on four out of six measures. Finally, three activity markers – doing chores, playing with friends and, playing with family – whether this is before or after school are highly significant and relatively strongly positively correlated with higher life skills scores. From an identification perspective, children in households where they are given room to play with friends, parents who take time to play with them, who have a reasonable number of chores to do (not across morning, afternoon and evening), have attended ECD and whose household possesses a television and/or a motorbike are the most likely to have high Life Skills scores by Grade 1. In contrast, the children whose households have the lowest SES scores, do not possess these appliances, and did not attend ECD, and whose daily schedules do not allow for playing time are the most likely to have poor Life Skills scores. Poverty and lack of possibility to play thus seem to be the main risk factors to track for RTP in terms of holistic skills development.

Instead of looking at increasing scores for children already scoring in the upper quartile, RTP could target students scoring 0 to 2 points on the life skills indices. More research is needed to identify main markers for low-performing students. Additionally, central to play-based learning is the idea of cooperation; such a wide divergence in student scores could lead to investigating whether more peer work and “mentorship” could be organized. For example, RTP could specifically identify and rely on high-scoring students to model and support peers’ development.

7.3 Children who do not correctly report harmful behavior have the lowest Life Skills scores

When asked the question “If you or a friend were harmed, what would you do?”, the answer “Nothing/ No reply” (instead of “tell a trusted adult”) is significantly correlated with much lower scores across most relationship variables and Life skills scores for children compared to children who answered, “tell a trusted adult”.

Over half of the children in our sample would not report being harmed or witnessing a friend being harmed to an adult (73% of Grade 1 and 59% of Grade 4), and these children are lower performers across all Life Skills scores (up to 27% lower scores). The answer to this question allows to quickly proxy which students are the most likely to have the lowest Life Skills scores. It is not clear whether this is a marker of overall childhood development or there is a causal connection, but we suggest using it as part of ongoing monitoring efforts and whenever some discussions are led with students to automatically flag and target the lowest performing half of the students with specific interventions.

¹⁰ We would posit that motorbikes and/or televisions may proxy households with higher wealth, while solar panels may have been provided to more needy or deprived households.

Students who reported teachers asking questions about what they read in class also scored lower on three life skills indexes. Right to Play should observe or supervise these sessions to confirm that this practice is not contributing to a stressful or negative classroom environment.

7.4 By Grade 4, differences on learning outcomes between girls and boys, and between children with and without disability have become significant

By Grade 4, children with disabilities have significantly lower perseverance score than average, girls' access to supplemental reading is significantly less than boys' access, and boys outperform girls on most EGRA tasks. In Grade 1 there are no significant differences in any of these areas. Gaps in performance may in part be due to self-perpetuating stereotypes – for instance, teachers and principals both characterized girls as 'shy' and participating less in class. Broader research on stereotypes suggests that stereotypes and gender roles start getting entrenched between 5-6 years old. However, evidence also suggests that slightly older children may be able to override these stereotypes. We would recommend that RTP better understand the drivers for performance gaps between girls and boys, and children with and without disabilities, post-Grade 1 and consider whether this may in part be due to pre-conceived gender roles and stereotypes. If so, RTP could consider leading a smaller piece of research around stereotype flexibility (self-awareness about stereotyping) or including questions on this topic in the research instruments for midline.

7.5 Teachers' attitudes, beliefs and practices represent an opportunity for RTP

The intervention district, Namacurra, benefits from a strong base of experienced teachers, with stability in their current roles, high self-efficacy scores, and encouraging attitudes to inclusiveness and new education practices alongside some more traditional views about learning. However, self-reported knowledge of play-based learning (PBL) concepts and techniques is low and would benefit from further training, which is one of the most important type of support they report needing.

7.6 Potential early effects of RTP training around teachers' attitudes and practices

Teachers having received RTP training have significantly more inclusive attitudes towards learning abilities, increased awareness of gender equality, more observed child-led activities, and higher scores on the five skills reading dimension. These could be early signs that RTP training is having a positive effect. However, to identify these improvements as attributable to RTP training only and not to external causes, RTP team should keep on closely monitoring their training effectiveness to be able to confirm these results further at midline and investigate this correlation further.

7.7 Significant effects of having reading material at home on EGRA and Life Skills scores

There is a significant difference on most EGRA and Life Skills scores depending on whether children have reading material available at home and depending on the type of reading material. A significant difference is observed between 0 and 1 reading material available, and the proportion of children with access to no materials is around 20%. We recommend that RTP explore whether there is a causal relationship between providing child-friendly reading materials in the home and increased life skills and EGRA outcomes. If shown, targeting students with no reading materials may have a significant impact on their life skills and reading scores.

7.8 Participation of children with disabilities is low, and should be prioritized for intervention

Classroom observations reveal low level of participation of children with disabilities and insufficient efforts to ensure this participation, despite teachers reporting using several strategies to include them. They report needing more training, medical devices, and support as well as adapted educational material as a priority for support. This may be one factor in the proportion of children with disabilities halving from Grade 1 to Grade 4.

7.9 Parents' attitudes are key to decreasing dropout, and an opportunity to seize for RTP

Parents mostly display inclusive attitudes towards gender and disability, and a mixture of traditional and more modern attitudes towards ability to learn and constructivist education approaches. We recommend involving them as much as possible when advocating for change, as they are ultimate decision makers when it comes to children dropout and inclusive access to education. The main reason for dropping out for both boys and girls, as reported by Principals, is household or outside work. For girls, second and third most quoted reasons are getting married and getting pregnant. We recommended centering parents' intervention on developing reading at home and advocacy to hold schools accountable.

Indeed, research shows that reading to children 1) makes them feel safer and more secure (which ties in with the previous finding on child protection), 2) improves future reading skills, given listening is a precursor for reading, developmentally, and 3) improves interaction, which, like cognitive priming techniques (asking what will happen next, etc.) are great predictors of ability scores.

Annex 1 – PMF Baseline indicators – Mozambique



Annex 1 - EQIE
Baseline PMF_Final - N

Annex 2 – Terms of Reference



Annex 2 - Terms of
Reference.pdf

Annex 3 – Analysis framework



Annex 3 - Analysis
framework.docx

Annex 4 – ISELA competencies map

Competencies mapped by the International Social and Emotional Learning Assessment (ISELA), developed by Save the Children.

Collaborative for Academic, Social, and Emotional Learning (CASEL), 2017		Skill included in ISELA (name of ISELA task)
SEL Competency Area	SEL Skill	
Self-Awareness	- Identifying emotions - Accurate self-perception - Recognizing strengths - Self-confidence - Self-efficacy	- Accurate self-perception (Self-concept) - Self-efficacy (Self-concept)
Self-Management	- Impulse control - Stress management - Self-discipline - Self-motivation - Goal setting - Organizational skills	- Stress management (Stress management) - Self-motivation (Perseverance)
Social Awareness	- Perspective-taking - Empathy - Appreciating diversity - Respect for others - Communication	- Perspective-taking (Empathy) - Empathy (Empathy)
Relationship Skills	- Social engagement - Relationship building - Teamwork	Relationship building (Relationships)
Responsible Decision-Making	- Identifying problems - Analyzing situations - Solving problems - Evaluating - Reflecting - Ethical responsibility	Solving problems (Solving conflict)

Annex 5 – Baseline survey research instruments



Annex 5a - EQIE

Mozambique Learner



Annex 5b - EQIE

Mozambique Teacher



Annex 5c - EQIE

Mozambique Teacher



Annex 5d - EQIE

Mozambique Classroom



Annex 5e - EQIE

Mozambique Parent



Annex 5f - EQIE

Mozambique Principals

Annex 6 – Inception Report



Annex 6 - EQIE
5-country baseline inc