

Partnership for Quality Education Project – Mali (PAQE II)



EXTENSION PHASE EVALUATION REPORT

Scientific Interest Group of Economic Statisticians
(GISSE)

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Table of contents

ACKNOWLEDGEMENTS.....	3
LIST OF TABLES.....	4
LIST OF GRAPHICS.....	5
ACRONYMS.....	6
EXECUTIVE SUMMARY	7
1. CONTEXT AND OBJECTIVES.....	12
2. RESEARCH METHOD.....	14
2.1. Sampling method for schools and students	14
2.2. Sampling method for teachers and head teachers	16
2.3. Sampling method for qualitative data collection	17
3. TRAINING OF ENUMERATORS AND FIELDWORK.....	17
4. ANALYSIS OF THE MAIN RESULTS AT THE END OF PAQE II	18
4.1 Evolution of key indicators.....	18
4.2. Assessment of students' reading skills	18
4.2. Life skills.....	27
4.3. Positive learning environment: positive association with school.....	32
4.4. Main results for teachers.....	33
4.4.1. Teachers' and students' material possession	33
4.4.2. Classroom observation	34
4.5. Application and understanding of corporal punishment in schools.....	35
4.5.1. Existence of corporal punishment in schools.....	35
4.5.2. Discrimination and corporal punishment	38
4.5.3. Corporal punishment and disability.....	39
4.6. Consequences of corporal punishment on students.....	40
4.7. Roles assigned to students by gender	41
4.8. Evolution of key indicators over the project period 2018-2022.....	42
4.9. Assessment of the continuity of project activities	44
5. Some lessons learned from the qualitative data	45
5.1. Putting positive discipline into practice.....	45
5.2 Sustainability of PAQE II practices and achievements	47
5.3. Commissioning and use of reading centres.....	50
6. SOME DIFFICULTIES ENCOUNTERED.....	53
CONCLUSION AND RECOMMENDATIONS.....	55
APPENDIX.....	57
APPENDIX 1: Evidence for Theory of Change.....	57
APPENDIX 2: Evolution of key indicators over the project period.....	60

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LIST OF TABLES

Table 1 : Distribution of the sample between RTP and control schools.....	16
Table 2 : Distribution of focus groups and individual interviews	17
Table 3 : EGRA Section 1: Recognition of the initial sound in a word	19
Table 4 : EGRA Section 2: Names of letters or sounds read per minute.....	20
Table 5 : EGRA Section 3: Familiar words read per minute.....	20
Table 6 : EGRA Section 3: Percentage of students reading at grade level.....	22
Table 7 : EGRA Section 4: Listening comprehension.....	22
Table 8 : EGRA Section 5A: Words read per minute from a story	23
Table 9 : EGRA Section 5B: Reading Comprehension, percentage of correct answers.....	23
Table 10: Recognition of the initial sound in a word by region.....	24
Table 11 : Names of letters or sounds read per minute by region.....	24
Table 12 : Familiar words read per minute by region	25
Table 13 : Percentage of Students Reading at Grade Level by Region.....	25
Table 14 : Oral Proficiency by Region	26
Table 15 : Words read per minute from a story by region.....	26
Table 16 : Reading Comprehension by Region.....	27
Table 17: Life skills, teamwork.....	28
Table 18 : Life skills, communication.....	28
Table 19 : Life skills, conflict resolution	29
Table 20 : Average Life Skills by Region	30
Table 21 :Table 21 Life skills, teamwork by region	31
Table 22 :Table 22 Life skills, communication by region.....	31
Table 23 : Life skills, conflict resolution by region	32
Table 24 : Positive learning environment according to students	33
Table 25 : Additional support in reading, teachers.....	34
Table 26 : Creating a positive learning environment	34
Table 27 : Types of punishment applied	36
Table 28 : Circumstances of corporal punishment.....	38
Table 29 : Physical punishment and disability among students.....	40
Table 30 : Consequences of Corporal Punishment for Learners	41

LIST OF GRAPHICS

Chart 1 : Application of corporal punishment by colleagues.....	36
Chart 2 : Application of corporal punishment by teachers themselves.....	37
Chart 3 : Application of corporal punishment and gender.....	39
Chart 4 : Tasks performed by students by gender.....	42
Chart 5 : Enrolment of new students in a class using a PBL approach.....	44
Chart 6 : Reasons for continuing the play-based approach	45

ACRONYMS

ALED	Association for Reading, Education and Development in Mali
APE	Students' parents association,
CAP	Pedagogical Animation Centre
EGRA	Early Grade Reading Assessment
GISSE	Scientific Interest Group of Economic Statisticians
NORAD	Norwegian Agency for Development Cooperation
OMAES	Œuvre Malienne d'Aide à l'Enfance du Sahel
PAQE II	Partner for Education Quality Improvement
PBL	Play-Based Learning
RARE	Actors' Network for the Renewal of Education
RED	Experts' Network for Development
RTP	Right To Play

EXECUTIVE SUMMARY

The Norwegian Agency for Development Cooperation (NORAD) has funded Right To Play under the Partnership for Quality Education Project (PAQE II). This five-year project (2017-2021) was extended for one year after the final evaluation in December 2021. The PAQE II project aimed to improve the teaching environment by using play-based learning to facilitate students' reading comprehension and life skills. The program focused on supporting marginalized students: girls and students living with disabilities.

This evaluation follows the extension of the project for an additional year. However, three other studies were conducted, a baseline in 2018 (Macina et al, 2018), a mid-line in 2020 and a final evaluation in December 2021. The baseline aims to measure the baseline situation of the project's key indicators while the mid-line and final studies aim to assess the key indicators and the impact of the project in the intervention area and on direct and indirect beneficiaries.

This evaluation, like the previous ones, uses both quantitative and qualitative methods.

Research method

Selection of comparison schools

This study uses the same methodology as the final evaluation in order to make the results comparable. Thus, comparison or control schools were identified to measure the differences in achievement between beneficiary and non-beneficiary students.

In all, 15 schools were selected with the help of RTP Mali staff as comparison schools because of their presence in the same area, use of the same curriculum (mother tongue or French) and their status as government or community-run schools to mirror the treatment schools. Students from these schools are used as a comparison group with the results of students enrolled in schools participating in the program.

Student sampling method

Twenty (20) RTP (treatment) schools and 15 control schools were sampled; in each school (treatment and control), 30 students from grade 4 were interviewed. The selected students were drawn randomly from a systematic sampling design. It should be noted that towards the end of the fieldwork, the education system experienced some disruptions and strikes. Thus, some questionnaires were sampled by looking for students. Only one day of fieldwork was lost due to this strike.

Sampling method for teachers and principals

In each school, teachers from grades 1 to 4 were surveyed. Thus, a total of 80 teachers from RTP schools and 60 teachers from comparison schools participated in the evaluation. Also, teachers in grade 4 were observed in the classroom. Thus, 35 teachers were observed in the classroom, 20 in the RTP schools and 15 in the comparison schools). The 35 principals or head teachers (20 in the RTP schools and 15 in the control schools) answered a questionnaire which is a checklist for the school.

Sampling method for qualitative data collection

Two main approaches were used to collect qualitative data: interviews with key informants (Students' parents association, Pedagogical animation centres, school principals, community leaders, NGOs) (purposive sample), and focus groups with parents and community members in the areas where the Right to Play program is being implemented.

Main results

Students' reading skills: The EGRA tool was used to assess students' reading skills. It consists of five sections.

Section 1: Identifying the initial sound in a word. Results show that, on average, students in RTP schools were able to identify the initial sound of 6.3 out of 10 words compared to 5.7 in control schools. Also, 11% of students in the treatment schools could not identify the initial sound of any word compared to 12% of students in the control schools.

Section 2: Recognising the initial sound in a word. On average in RTP schools, students are able to read 37 words or letter sounds per minute compared to 29 in non-RTP schools, a significant difference of 8 more words or letter sounds. The same difference was observed by gender and in the group of students living with disabilities.

Section 3: Familiar words read per minute. The results show that students in RTP schools read better than their counterparts in non-RTP schools. Students in RTP schools read an average of 20 words per minute. Less than 6% of them failed to read a single word. In the control schools, students got an average of 14 familiar words read per minute and 9% could not read any words. However, it is worth noting that less than 10% of the students managed to read at the required threshold in both

RTP and comparison schools, with 7.18% of students in RTP schools managing to read at the required threshold compared to only 2.88% in non-RTP schools.

Section 4: Listening comprehension. On average, students answered three out of six questions correctly in both RTP and control schools. There were no significant differences by gender or disability status.

Section 5A: Words read per minute from a story. RTP schools performed better than non-RTP schools: 19 words from the story read per minute for RTP schools compared to 11 for control schools, a significant difference of 8 more words for RTP schools.

Section 5B: Reading comprehension. On average, students answered one out of six questions correctly, and there were no differences between RTP and non-RTP schools, nor were there differences in the analysis variables. The results also show that more than half of the students did not answer any questions.

Students' life skills

Students' life skills are assessed through three components: communication, teamwork and conflict resolution. In general, students in both RTP and control schools show good life skills.

For the **teamwork** component, students in RTP schools scored higher than those in non-RTP schools. There was a significant difference of 19 percentage points between the average score of students in RTP schools (90.48%) and students in control schools (71.73%).

For the **communication** component, there was a significant difference of 18 percentage points between students in RTP schools and those in control schools (85.49% vs. 68.06%).

Finally, for the **conflict resolution** component, there was a significant difference of 10 percentage points between RTP schools (84.4%) and control schools (74.61%).

Also, average life skill scores were computed for each of the three components. To calculate the average scores, a weighting approach was implemented such that minimum and maximum values for the averages equal 0 and 10, respectively.

Overall, students in RTP schools perform better than their peers in non-RTP schools on life skills. Indeed, students in RTP schools have an overall average of 8.69 out of 10 on life skills

compared to 8.25 out of 10 for students in control schools, a significant difference of 0.44 points.

Positive learning environment

Majority of students surveyed in both RTP and non-RTP schools reported positive feelings and high satisfaction with their classes and schools. More than 7 out of 10 students like school and participate in class. As for playing games with friends at school, there was a significant difference of 13 percentage points between RTP (94.7%) and non-RTP schools (85.86%). More than nine out of ten students in both RTP and non-RTP schools stated that corporal punishment exists in their schools. While 14.98% of students in RTP schools and 9.95% in non-RTP schools felt that positive discipline was applied.

However, there was a significant difference of 13 percentage points between RTP (97.4%) and non-RTP (85.86%) schools in playing games with friends at school.

Creating a positive learning environment

Teachers in RTP schools show more capacity to create a positive learning environment in their classrooms. More than four out of five teachers in RTP schools and one out of two (51.11%) teachers in control schools use a PBL technique, a significant difference of 31 percentage points. Also, 91.46% of teachers in RTP schools were able to maintain order in their classrooms without resorting to corporal punishment, compared to 87.7% of teachers in non-RTP schools.

Existence of corporal punishment

In both RTP and comparison schools, more than nine out of ten students felt that teachers used corporal punishment. Also, more than seven out of ten teachers (70.87% in RTP schools and 77.78%) say that their fellow teachers use corporal punishment; when the question is asked for the teacher himself, 61% of teachers in partner schools and 76% in control schools admit to using corporal punishment.

Circumstances of application of corporal punishment

There are three main reasons for using corporal punishment from the point of view of both students and teachers. These are chatter in class, fights between students or when students do not learn their lessons.

Corporal punishment and gender discrimination

For almost nine out of ten teachers, girls and boys are treated equally in the application of corporal punishment taking into account the equality between boys and girls. Whereas for 10% of teachers, boys are hit more than girls because the latter are more unruly. It is important to note that no teacher stated that girls are hit more.

Corporal punishment and discrimination according to disability status

It was found that more than half of the students do not have peers with disabilities. However, students with disabilities are hit as much as their peers for 20% of students in RTP schools and 25% in non-RTP schools. On the other hand, 15% of students in RTP schools thought that children with disabilities students were not hit or were hit less than others; 11% of students in control schools shared this opinion.

Role allocation and gender

The results show that boys and girls do not play the same roles in the tasks assigned to them. Girls are mainly involved in cleaning or sweeping, cited by more than nine out of ten students, or in washing toilets, cited by a quarter of the students, while boys are expected to clear the blackboard (90%), fetch water (50%) or help carry luggage (30%).

Sustainability of knowledge and skills

Project participants at various levels say they continue with the techniques and lessons learned with the PAQE II project. Indeed, more than nine out of ten (96%) teachers in RTP schools are willing to continue with the practices learned with the PAQE project in their classrooms even if the project ends, as according to them, games facilitate students' learning (91.14%), motivate students (83.54%), facilitate teaching (83.54%) or de-stress students (64.86%).

The evaluation found that students in RTP schools receive more play in their curriculum and develop more reading and life skills than their peers in non-RTP schools. The creation of a positive learning environment is effective in both RTP and non-RTP schools. In addition, trained RTP school teachers are able to pass on the knowledge they have gained to their peers who have not received RTP training and PBL techniques.

Also, corporal punishment remains a reality in schools. More than seven out of ten teachers admit to using corporal punishment. Both students and teachers confirmed the use of corporal punishment for chattering in class, fighting between students, or when

students do not learn their lessons.

At the end of this evaluation, we make the following recommendations:

Methodologically: (i) Establish control and learning schools at the outset and have an agreement in principle with these schools, (ii) Ensure that the students who will be evaluated have always remained in the same type of school (learning school vs. control school), (iii) Track the movement of teachers between the two types of schools, (iv) Write down the methods for calculating the indicators to make the results fully comparable between the different evaluations.

From an operational point of view: (i) Communicate about the existence of corporal punishment. The project has come to an end, but it is important to inform the government and other partners about the existence of corporal punishment. Finding an effective solution is of paramount importance. (ii) We note that it is still very common for boys and girls to have particular roles in the classroom. Future projects can address this problem by providing training on gender-neutral roles and responsibilities in the classroom. (iii) The school-level reading threshold in Mali seems to be an unattainable goal for many Malian students at present. If possible, we advise RTP to focus on other literacy goals.

1. CONTEXT AND OBJECTIVES

The Partnership for Quality Education Project (PAQE II), implemented by Right To Play Mali, is funded by the Norwegian Agency for Development Cooperation (NORAD). This intervention uses play-based learning as a child-centred learning approach. The project initially planned for five years supports 476 pre-service teachers, 238 of whom are women. The project aimed to provide quality education to approximately 69,101 children including 34,665 girls aged 6-12 years in Basic Education Levels 1-6. The project started in August 2017 and was scheduled to end in June 2021. After the final evaluation in December 2021, the project was extended by one year, allowing the project to run until December 2022.

The PAQE II project is being implemented in four regions of Mali, namely Koulikoro, Ségou, Sikasso (Bougouni) and the district of Bamako. The project was implemented by 4 civil society organisations (OMAES, ALED, RARE and RED) with the support of the Ministry of Education of Mali (DNP, DNEN, DNEF, DNEPS). The project aims to enable a greater number of children (girls and boys from grade 1st to grade 6th) in the targeted schools, to acquire basic skills and be equipped to face the challenges of adult life. It has four (04) central axes: (i) Development of children's reading skills, (ii) Development of children's life skills, (iii) Play-based and gender-sensitive teaching method and (iv) Creation of a positive learning environment.

PAQE II aims to improve students' reading comprehension and life skills, but also to improve the wider learning environment by equipping teachers, education officers and community members with the tools to foster positive learning environments, including through learning through play. The program highlights the additional help that maybe needed to support girls and students living with disabilities.

Since the beginning of the project (in August 2017), three evaluations have been carried out: a Baseline study was conducted in May 2018; a Midline study in May 2020; and an Endline study in September 2021.

All of these studies used qualitative and quantitative methods to assess key indicators for students in a sample of schools in the intervention areas and/or in control areas. As such, each of the three evaluations has varying degrees of limitations. In 2021, PAQE II was extended by one year. This evaluation takes place at the end of this extension phase.

The baseline and intermediate studies used different schools and study body populations at each wave and did not use control schools to measure the impact of

the program intervention. Indeed, the lack of control schools means that the level of indicators can only be compared against a set threshold. For example, for reading skills, the number of words read per minute can only be compared at a threshold of 61 (words read per minute). In fact, we can have the situation where no student could read the 61 words per minute (thus the zero score), While the average number of words read per minute at the learning school level was 45 against 35 for the control schools. Thus, even though no student reached the threshold of 61 words read per minute, it can be seen that on average the beneficiary schools performed better than the control schools.

The final evaluation in September 2021 also has the following limitations: schools were closed for the holidays, so students and teachers were already quite disconnected from the classroom and the "teacher observation in the classroom" component could not be carried out. Some restrictions due to COVID-19 were still in place.

In addition to highlighting the shortcomings of past evaluations, this evaluation will not only address the shortcomings observed in the December 2021 evaluation, but will also deepen the analysis on corporal punishment and assess the sustainability of the project.

2. RESEARCH METHOD

The current evaluation, in addition to informing the full set of project indicators, also aims to address the shortcomings of past evaluations. As in the final evaluation, this evaluation of the extension phase of the PAQE II project considers two types of schools in its sampling, learning schools (RTP school) and control schools. This allows for a comparison of indicators in these two groups of schools.

It has two components, as did previous evaluations: a quantitative component and a qualitative component. The populations involved are: students, teachers, school principals for the quantitative component, and parents, community leaders, implementing partners, Right To Play staff for the qualitative component.

2.1. Sampling method for schools and students

The sampling parameters are set to have sufficient statistical power to detect statistically significant differences. *In general, research designs aim to achieve a power of 0.8 for the study to be considered sufficiently powerful. This can be*

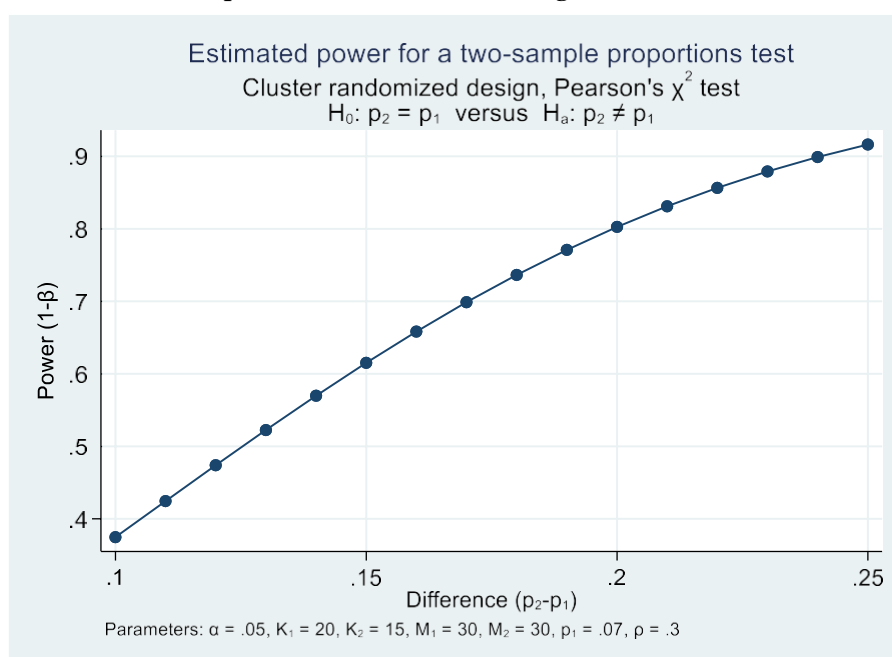
interpreted as the probability of not detecting a false negative.

The parameters set are:

- ✓ Treatment: 20 schools, 30 4th graders per school (600 students)
- ✓ Comparison: 15 schools, 30 4th graders per school (450 students)
- ✓ Significance level (standard): 0.05
- ✓ Sub-class correlation for reading in grade 4: 0.3
- ✓ Comparison score (% of students reading at grade level in comparison schools): 7%.

Given the above assumptions, the power to detect a minimum difference (treatment-comparison) is 20.0 percentage points. Setting the power at 0.8 gives a significance level for the difference ($p_2 - p_1$) of 20.0 points. This would imply that 20.0% of students in the treated schools are reading at grade level. If the actual difference is less than 20.0 percentage points, the study will not have sufficient power to detect the difference, as shown in the graph below:

Graph 1: Determination of the significance level



This study involved the same schools as the previous study. A total of 20 RTP schools and 15 control schools (compared to 10 control schools in the previous evaluation) were sampled. The number of control schools was increased from 10 to 15. Also, 30 students in 4th grade were interviewed in each of the treatment and control schools (compared to 20 students in the RTP schools and 15 in the control schools in the previous study).

This increase in the sample compared to the previous evaluation is intended to

improve the parameters and ensure greater stability in the indicators and in the comparison of learning and control schools.

The quasi-experimental approach used in the previous final evaluation was re-used in this evaluation. It allows for the identification of comparison schools in order to assess the differences between learners participating in the program and those who do not. Fifteen schools were selected by RTP staff as being comparable because of their location in the same area, use of the same curriculum (mother tongue or French), and their status as government or community-run schools to mirror the treatment schools. Students from these schools are used as a comparison group with the results of students enrolled in schools participating in the program.

According to the data collection plan, the students surveyed were drawn at random from a systematic draw. However, towards the end of the data collection, the education system experienced some disruptions or strikes. Thus, some questionnaires were sampled by searching for students. Only one day of fieldwork was lost due to this strike. The table below shows the actual sample surveyed:

Table 1 : Distribution of the sample between RTP and control schools

		RTP School	School NON-RTP	Total
Gender				
	Boy	334	197	531
	Girl	307	185	492
	Total	641	382	1023
HANDICAP				
	Yes	86	51	137
	No	555	331	886
	Total	641	382	1023

Source: Endline PAQE II survey, extension phase

2.2. Sampling method for teachers and head teachers

In each school, four teachers were interviewed, from grades 1 to 4. That is, a total of 80 teachers in the RTP schools and 60 teachers in the control schools. As for classroom observation, it concerned only teachers in 4th grade. Thus, 35 teachers were observed in the classroom, 20 in the RTP schools and 15 in the control schools.)

Also, the principals/head teachers answered a questionnaire which is a checklist about the school. A total of 35 principals were interviewed (20 in the RTP schools and 15 in the control schools).

2.3. Sampling method for qualitative data collection

The main purpose of the qualitative data was to explore the trends observed in the quantitative data as well as to understand the particular situation of the students (boys, girls, and students living with disabilities). The qualitative data consisted of individual interviews with key informants (AEs, CAPs, school principals, community leaders) and focus groups with students' parents and community members in the regions where the program was implemented.

The interviews and focus groups focused on perceptions of the program, experiences of school disruption and corporal punishment in schools. The sample for the qualitative component was drawn in collaboration with RTP staff to select a representative sample of parents of boys and girls. The qualitative study also included relevant sub-communities (ethnic groups, religious groups, economic groups), and obtained information on community-level interventions (e.g. book clubs) that were put into place in response to school disruptions.

In total, 22 focus group discussions were conducted with parents whose children attend the schools concerned by the program and 43 individual interviews with actors at various levels (Head of projects in the intervention zones, coordinators, AEs, CAPs, CGS, Mayors, etc.). The table below summarises the number of focus groups and individual interviews carried out in relation to the profile of the respondents:

Table 2 : Distribution of focus groups and individual interviews

Individual interviews & Focus Group	All	RTP SCHOOLS		NON-RTP SCHOOLS	
		Number of interviews	Number of participants	Number of interviews	Number of participants
Interviews with key informants, directors	35	22	22	13	13
Interviews with key informants, Mayor Leader	7	7	7	0	0
Key informant interviews, CAP	10	10	10	0	0
Key informant interviews, NGOs	4	4	4	0	0
Group discussion, PTA	22	22	199	0	0

Source: Endline PAQE II survey, extension phase

3. TRAINING OF ENUMERATORS AND FIELDWORK

For the data collection operation, 18 enumerators were recruited and trained for five

days, from 3 to 7 November 2022. The aspects covered during the training were

- ✓ Presentation of the PAQE II project, its objectives and implementation;
- ✓ The importance of the survey methodology for the relevance of the results;
- ✓ Method of drawing the sample (systematic drawing);
- ✓ The different types of questionnaires, assessments and discussion guides;
- ✓ Structure and understanding of the questionnaires;
- ✓ Practice of the investigation in pairs (role play);
- ✓ Correction of the questionnaires programmed on the tablet.

The fourth day of the training was reserved to pilot data collection tools in the Sogoniko B public school. The pilot survey was debriefed on the last day of the training in order to identify shortcomings, difficulties and areas for improvement before the actual launch of data collection.

Data collection in the field took place from November 10th to December 6th 2022. Towards the end, data collection was slightly disrupted by a strike in the education system.

4. ANALYSIS OF THE MAIN RESULTS AT THE END OF PAQE II

4.1 Evolution of key indicators

The key indicators used to answer the evaluation questions are defined below and organised by evaluation question (see Theory of Change Section in the Appendix).

The indicators measured include:

- ✓ Students' reading skills; students' life skills; positive learning environment;
- ✓ Community capacity to address the challenges of access to learning for girls and students with disabilities, as well as the resilience of students to achieve their educational goals to face the multiple disruptions, including school strikes and the COVID-19 pandemic.

4.2. Assessment of students' reading skills

To measure students' reading skills, the EGRA tool was developed. This is EGRA 2009, which was also used in the mid-term and final assessments, so that the results could be compared. The EGRA tool is divided into five sections and each section deals with a particular aspect:

- Section 1: identifying the initial sound in a word,
- Section 2: knowledge of graphemes (letters and letter groups),
- Section 3: reading familiar words,
- Section 4: Hearing comprehension,
- Section 5 (5a): Reading a short story;
- Section 5 (5b): understanding the text read

In the first section, assessors read 10 words to the students and the students were asked to identify the initial sound in each word. The results show that in RTP schools, students were able to correctly identify the initial sounds of 6.3 of the 10 words on average. And, 11% of the students could not identify any initial sound of the 10 words read. These results are slightly higher than those obtained in the control schools. In the control schools, students were able to correctly identify the initial sound of 5.7 out of ten words on average. And 12% of the students in the control schools could not identify the initial sound of any of the 10 words. The results by gender show no significant difference between girls in RTP and non-RTP schools: they were able to correctly identify the initial sound of 6 out of 10 words. In the boys' group, there was a difference of 1.02 points; 6.39 initial sounds were recognised by boys in RTP schools compared to an average of 5.37 in non-RTP schools. However, no statistically significant difference was observed according to disability status.

Table 3 : EGRA Section 1: Recognition of the initial sound in a word

TABLE: EGRA SECTION 1: INITIAL SOUND RECOGNITION						
	AVERAGE [RANGE=1-10]			ZERO PER CENT		
	RTP School	NON-RTP SCHOOL	DIFFERENCE	RTP School	NON-RTP SCHOOL	DIFFERENCE
Average	<u>6,31</u>	<u>5,7</u>	0,61	<u>10,76</u>	<u>12,3</u>	1,54
Girl	6,21	6,05	0,16	11,73	10,81	-0,92
Boy	6,39	5,37	1,02	9,88	13,71	3,83
Without disability	6,28	5,54	0,74	11,53	14,2	2,67
Living with a disability	6,48	6,73	-0,25	5,81	0	-5,87

Source: Endline PAQE II survey, extension phase

In Section 2 of the EGRA tool, students are asked to identify letters or phonemes, which are groups of letters that produce a sound (e.g., "or" or "on"). Assessors considered the student's response to be correct if the student said the name of the letter (e.g., "T") or made the sound that the letter made (e.g., "ttttt"). This section is timed, so the results

are presented in terms of the number of correct answers given per minute.

On average in RTP schools, students are able to read 37 words or letter sounds per minute compared to 29 in non-RTP schools, a significant difference of 8 more words or letter sounds. The same difference is observed by gender and in the group of students with disabilities. However, the difference was smaller and not significant, with 5 more words or letter sounds read by students living without disabilities in RTP schools compared to their counterparts in non-RTP schools.

Table 4 : EGRA Section 2: Names of letters or sounds read per minute

	Average			ZERO PER CENT		
	RTP SCHOOLS	NON- RTP SCHOOLS	DIFFERENCE	RTP SCHOOLS	NON- RTP SCHOOL S	DIFFERENCE
Average	<u>36,8</u>	<u>29,29</u>	<u>7,51*</u>	<u>0,62</u>	<u>1,57</u>	<u>0,95</u>
Girl	37,3	29,04	8,26*	0,33	2,7	2,37
Boy	36,34	29,53	6,81*	0,9	0,51	-0,39
Without disability	36,69	28,84	7,85*	0,72	1,81	1,09
Living with a disability	37,52	32,24	5,28	0	0	0

Source: Endline PAQE II survey, extension phase

Section 3 of the EGRA tool is devoted to reading familiar words. It asks you to read a text from a grid of familiar words and it is timed. Students in RTP schools read an average of 20 words per minute. Less than 6% failed to read a single word. In the control schools, students got an average of 14 familiar words read per minute and 9% could not read any words.

There was a significant difference of 5 more words read per minute by students in RTP schools. This difference is observed regardless of gender and in the group of students without disabilities. In the group of students with disabilities, however, there was no difference between RTP and control schools, with an average of 19 familiar words read per minute in both groups.

Table 5 : EGRA Section 3: Familiar words read per minute

	Average	ZERO PER CENT
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	RTP SCHOOLS	NON-RTP SCHOOLS	DIFFERENCE	RTP SCHOOLS	NON-RTP SCHOOLS	DIFFERENCE
Average	19,53	14,30	5,23*	5,77	8,9	3,13
Girls	20,13	14,63	5,50*	3,91	6,49	2,58
Boys	18,97	14	4,97*	7,49	11,17	3,68
Without disability	19,58	13,64	5,94*	5,59	9,37	3,78
Living with a disability	19,2	18,61	0,59	6,98	5,88	-1,1

Source: Endline PAQE II survey, extension phase

Section 3 of the EGRA tool measures Key Indicator 1.1 (% and number of children in target schools who have achieved the minimum reading score for 4th grade (disaggregated by gender and physical disability). The national norm for reading in Mali is 61 words per minute for classic schools (French as the language of instruction since grade 1), and 41 words per minute for curriculum schools (100% mother tongue in grade 1; then integration of French gradually). Results show that very few students were able to reach the required threshold.

Overall, few students read at grade level, regardless of the type of school. In both classic and curriculum schools, more than 90% of students read below grade level. However, RTP schools perform better than non-RTP schools: 7.18% of students in RTP schools can read at grade level compared to only 2.88% in non-RTP schools, a significant difference of 4.30 percentage points.

Also, there is a significant difference of 5.16 percentage points in the boys' group: 7.19% of boys in RTP schools who read at the required threshold compared to 2.03% of boys in non-RTP schools who can read at the required threshold. However, there was no significant difference in the girls' group or by disability status.

In classic schools, only 2% of the students were able to reach 61 words per minute and in curriculum schools 9% of the students managed to read 41 words per minute.

Compared to last year's results, in RTP schools, there is an increase in the proportion of students reaching the 41 words per minute threshold in curriculum schools (from 7.04% in 2021 to 10.9% in 2022). While the proportion of students reaching 61 words per minute has decreased (4.23% in 2021 and 2.19% in 2022). In RTP schools, 7% of students were able to read at grade level and 3% in non-RTP schools, a significant difference of 4 percentage points. Also, a significant difference of 5 percentage points

among boys and students without disabilities.

In conclusion, the 15% target set by the program for indicator 1.1 is therefore not met. However, in the non-RTP schools, there is a slight decrease in the proportion of students in the curriculum cycle who have reached the threshold of 41 words per minute (6.49% in 2021 compared to 5.03% in 2022). There is no difference in the proportion of students in the regular cycle in non-RTP schools.

Table 6 : EGRA Section 3: Percentage of students reading at grade level

	Average		
	RTP School	NON-RTP SCHOOL	DIFFERENCE
Average	7,18	2,88	4,30*
Girls	7,17	3,78	3,39
Boys	7,19	2,03	5,16*
Without disability	7,39	2,11	5,28*
Living with a disability	5,81	7,84	-2,03

Source: Endline PAQE II survey, extension phase

Section 4 of the EGRA tool assesses students' listening skills. Assessors read a short story and students are asked six questions about the story. Students' answers are assessed as correct, incorrect or no answer. On average, students answered three out of six questions correctly in both RTP and control schools. No significant differences were observed by gender or disability status. These results are consistent with those obtained in the final and mid-term evaluations. There were no significant differences between the proportions of students who had not read any words in the story in RTP schools (22.78%) and control schools (23.82%).

Table 7 : EGRA Section 4: Listening comprehension

	AVERAGE [range 1-6]			ZERO PER CENT		
	RTP SCHOOLS	NON-RTP SCHOOLS	DIFFERENCE	RTP SCHOOLS	NON-RTP SCHOOLS	DIFFERENCE
Average	3,27	2,78	0,49	22,78	23,82	1,04
Girls	3,36	2,86	0,5	22,48	22,16	-0,32
Boys	3,19	2,71	0,48	23,05	25,38	2,33
Without disability	3,27	2,74	0,53	23,6	24,77	1,17
Living with a disability	3,26	3,06	0,2	17,44	17,65	0,21

Source: Endline PAQE II survey, extension phase

Section 5 of the EGRA tool is divided into two parts. The first part (section 5A) assesses the number of words read per minute when reading a story and the second part (section 5B) assesses the student's reading comprehension.

For section 5A, students read a short story that is timed. The results are therefore presented in terms of the number of words in the story read per minute. The result is similar for girls and boys as well as for students without disabilities. The gap is smaller for students with disabilities, 4 more words per minute in RTP schools.

Table 8 : EGRA Section 5A: Words read per minute from a story

	Average			ZERO PER CENT		
	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE	RTP School	NON- RTP SCHOOL	DIFFERENCE
Average	19,11	11,37	7,74	5,46	9,95	4,49
Girls	19,55	12,23	7,32	4,56	10,27	5,71
Boys	18,7	10,57	8,13	6,29	9,64	3,35
Without disability	19,31	10,95	8,36	6,13	10,57	4,44
Living with a disability	17,78	14,12	3,66	1,16	5,88	4,72

Source: Endline PAQE II survey, extension phase

Following the reading of the story, the assessors ask the students a series of 6 questions to evaluate their reading comprehension. The results are therefore assessed in terms of the average number of questions answered correctly by the students. On average, students answered one out of six questions correctly, and there were no differences between RTP and non-RTP schools, nor were there any differences in the analysis variables. The results also show that more than half of the students did not answer any questions. There were no significant differences by gender or disability status.

Table 9 : EGRA Section 5B: Reading Comprehension, percentage of correct answers

	Average			ZERO PER CENT		
	RTP School	NON-RTP SCHOOL	DIFFERENCE	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
Average	1,39	1,04	0,35	50,7	51,05	0,35
Girls	1,39	1,09	0,3	51,47	49,19	-2,28
Boy	1,4	0,99	0,41	50	52,79	2,79

Without disability	1,41	1,00	0,41	50,27	51,06	0,79
Living with a disability	1,28	1,27	0,01	53,49	50,98	-2,51

Source: Endline PAQE II survey, extension phase

Unlike past evaluations, statistics have been produced by region for the different sections of the EGRA tool. It is important to note that these results are not representative of the entire region but of the zones or PTR schools surveyed in the region concerned. For example, in the Sikasso region, only the Bougouni circle was surveyed. Thus, the results are representative of the Bougouni district and not of the entire Sikasso region.

Thus, for section 1 of EGRA, which deals with the recognition of the initial sound in a word, there are significant differences between RTP and non-RTP schools in the regions of Sikasso (1.39 points) and Segou (1.78 points).

Table 10: Recognition of the initial sound in a word by region

AVERAGE [RANGE=1-10]			
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	<u>6,31</u>	<u>5,7</u>	0,61
Bamako	5,32	5,65	-0,33
Koulikoro	6,29	4,87	1,42
Sikasso	7,32	5,93	1,39*
Segou	8,07	6,29	1,78*

Source: Endline PAQE II survey, extension phase

As for the names of letters or sounds read per minute, students in RTP schools in the regions of Koulikoro, Sikasso and Ségou are different from those in non-RTP schools. There are significant differences of 10.54 points and 9.3 points between RTP and non-RTP schools in the Koulikoro and Ségou regions. This difference is 6.79 points between RTP schools (31.93) and non-RTP schools (25.14) in the Sikasso region.

However, no significant difference between RTP schools (35.82) and non-RTP schools (31.96) is observed in the Bamako region.

Table 11 : Names of letters or sounds read per minute by region

AVERAGE [RANGE=1-100]

	RTP SCHOOL	NON-RTPSCHOOL	DIFFERENCE
Average	<u>36,80</u>	<u>29,29</u>	<u>7,51*</u>
Bamako	35,82	31,96	3,86
Koulikoro	37,15	26,61	10,54*
Sikasso	31,93	25,14	6,79*
Segou	43,32	34,02	9,3*

Source: Endline PAQE II survey, extension phase

The results by region in section 3 of the EGRA tool show a significant difference only in the Segou region. In the Segou region, students in RTP schools read an average of 23 words per minute compared to 16 words per minute for students in non-RTP schools, a significant difference of 7 additional words read per minute.

Table 12 : Familiar words read per minute by region

AVERAGE [RANGE=1-80]			
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	19,53	14,30	5,23*
Bamako	20,72	18,37	2,35
Koulikoro	21,56	17,44	4,12
Sikasso	10,11	6,88	3,23
Segou	23,05	15,82	7,23*

Source: Endline PAQE II survey, extension phase

Furthermore, the results do not show a significant difference in the percentages of students who read at the required level in the regions of Bamako, Koulikoro and Sikasso. However, in the Segou region, 14.52% of students in RTP schools read at the required level compared to only 1.06% of students in non-RTP schools, equivalent to a significant difference of 13.46 percentage points.

Table 13 : Percentage of Students Reading at Grade Level by Region

AVERAGE [RANGE=1-80]			
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	7,18	2,88	4,30*
Bamako	6,99	6,59	0,40
Koulikoro	4,88	2,22	2,66

Sikasso	0,94	1,87	-0,93
Segou	14,52	1,06	13,46*

Source: Endline PAQE II survey, extension phase

Analysis by region shows a significant difference between RTP and non-RTP schools in the Sikasso region. In this region, students in RTP schools had an average of 4.40 in listening comprehension compared to an average of 3.05 for students in non-RTP schools, a significant difference of 1.35 points.

Table 14 : Oral Proficiency by Region

AVERAGE [RANGE=1-6]			
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	3,27	2,78	0,49*
Bamako	2,54	1,88	0,66
Koulikoro	4,11	3,32	0,79
Sikasso	4,40	3,05	1,35*
Segou	3,70	2,84	0,86

Source: Endline PAQE II survey, extension phase

When reading a story (section 5A of the EGRA tool), students in RTP schools perform better than their counterparts in non-RTP schools in all regions. Significant differences of 11.52 points and 7.47 points are noted in the regions of Koulikoro (20.61 vs. 9.09) and Sikasso (15.49 vs. 8.02) respectively. This significant difference is 6.12 points in the Segou region (21.52 vs. 15.40) and 5.57 in the Bamako region (18.99 vs. 13.42).

Table 15 : Words read per minute from a story by region

AVERAGE [RANGE=1-50]			
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	19,11	11,37	7,74*
Bamako	18,99	13,42	5,57*
Koulikoro	20,61	9,09	11,52*
Sikasso	15,49	8,02	7,47*
Segou	21,52	15,40	6,12*

Source: Endline PAQE II survey, extension phase

Finally, on reading comprehension, no significant difference was observed between RTP and non-RTP schools, regardless of the region considered.

Table 16 : Reading Comprehension by Region

AVERAGE [RANGE=1-6]			
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	1,39	1,04	0,35*
Bamako	1,34	0,87	0,47
Koulikoro	1,24	0,90	0,34
Sikasso	0,98	0,94	0,04
Segou	1,99	1,45	0,54

Source: Endline PAQE II survey, extension phase

4.2. Life skills

The life skills section assesses students' ability to integrate easily into daily life at school and interact with the school environment. Students' life skills are assessed through three components:

- **Communication:** Communication is assessed by means of four statements ("I ask a lot of questions in class", "I listen well to others", "Other students listen while I speak", "I do not participate much in class (reverse coding)" and "I think that others listen to me when I speak").")
- **Teamwork:** Teamwork is assessed by means of four statements on the subject: I work well together in a group, It is difficult to work together in a group (reverse code), I share roles and responsibilities with my colleagues, I learn well with others.
- **Conflict resolution:** three statements determine conflict resolution: "I do not respond to provocation from others. I work cooperatively and compassionately, and I know how to work with others.

Each component is assessed from several questions and the answers to all questions in this section are on a four-point Likert scale, with values ranging from 1, which indicates "strongly agree" to 4 "strongly disagree". For each component, the student demonstrates competence if he/she answers "Strongly agree" or "Agree" to all the questions of the component.

The results of the life skills section assess Key Indicator 2.2 (*% and number of children in grade 4th in the target schools who demonstrate specific life skills: teamwork, communication and conflict resolution (disaggregated by life skills, gender and*

children living with a disability).

Students scored high on average on life skills. For the teamwork component, students of RTP schools had an average score of 90.48%. By gender, boys scored slightly higher than girls: 90.86% versus 89.22%. Similarly, by disability status, students without disabilities in RTP schools scored 90.81% compared to 88.37% for students living with disabilities.

There was a significant difference of 19 points between the average score of students in RTP schools (90.48%) and students in control schools (71.73%). This difference is lower in the group of students living with disabilities (88.37% in RTP schools vs. 72.55% in non-RTP schools).

Table 17: Life skills, teamwork

	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
Teamwork, Average	90,48	71,73	18,75*
Girls	90,86	70,81	20,05*
Boys	89,22	72,59	16,63*
Without disability	90,81	71,6	19,21*
Living with a disability	88,37	72,55	15,82

Source: Endline PAQE II survey, extension phase

For the **communication** component, there was a significant difference of 18 percentage points between students in RTP schools and those in control schools (85.49% vs. 68.06%). This difference is higher in the subgroups of girls (86.97% vs. 66.49%) and students living with disabilities (86.85% vs. 64.71%). On the other hand, the difference, although significant, is lower by 15 percentage points in the subgroup of boys in RTP schools (84.13%) and those in control schools (69.54%).

Table 18 : Life skills, communication

TABLE: LIFE SKILLS, COMMUNICATION			
	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
Communication, Average	85,49	68,06	17,43*
Girls	86,97	66,49	20,48*
Boys	84,13	69,54	14,59*
Without disability	86,85	68,58	18,27*
Living with a disability	76,74	64,71	20,03

Source: Endline PAQE II survey, extension phase

In terms of conflict resolution, Table 12, there is a significant difference of 10 percentage points between RTP schools (84.4%) and control schools (74.61%). The difference is higher in the girls' subgroup: 83.39% for girls in RTP schools and 68.65% for girls in control schools. This is a significant difference of 10 percentage points. However, this difference is lower in the boys' subgroup and is not significant.

Table 19 : Life skills, conflict resolution

	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
Conflict resolution, Average	84,40	74,61	9,79*
Girls	83,39	68,65	14,74*
Boys	85,33	80,2	5,13
Without disability	84,68	74,62	10,06*
Living with a disability	82,56	74,51	8,05

Source: Endline PAQE II survey, extension phase

Similarly, in this assessment, we calculated an average life skill for students. Thus, for each component of life skills, a mean value was determined. To calculate the averages the modalities were weighted so that the minimum and maximum values of the averages were 0 and 10.

Method of calculating average life skills

To calculate the average life skill, we have:

1. For each component of life skills, teamwork, communication and conflict resolution, an average score was calculated.
2. The average life skill is then the average of the average scores calculated for each component.

Calculation of the average score for the "Teamwork" component

"Teamwork" is assessed through 4 questions:

Q16. You enjoy working in a group;

Q17. You find it difficult to work in a group;

Q18. you share roles and responsibilities with your classmates

Q19. you learn a lot from working with others.

For each question, the terms are: **Strongly Agree; Somewhat Agree; Somewhat Disagree; Strongly Disagree.**

A weighting system was defined for the different modalities as follows:

- Strongly Agree (10);
- Somewhat Agree (7.5);
- Somewhat Disagree (2.5);
- Strongly Disagree (0.0).

If a question is asked in the negative direction, the weighting is reversed. For example, for question Q17. You find it difficult to work in a group, the weighting will be reversed:

- Strongly Agree (0.0);
- Somewhat Agree (2.5);
- Somewhat Disagree (7.5);
- Strongly Disagree (10.0).

For a student i the average score for the Teamwork component is:

$$Z_average_work = (Q16+Q17+Q18+Q19)/4$$

The same method is applied to calculate the average score for the other two components, before determining the average life skills score, which is defined as the average of the average scores for the three components.

Overall, students in RTP schools perform better than their peers in non-RTP schools on life skills. Indeed, students in RTP schools have an overall average of 8.69 out of 10 on life skills compared to 8.25 out of 10 for students in control schools, a significant difference of 0.44 points. Also, there is a significant difference of 0.63 points between girls in RTP schools (8.75 out of 10) and their counterparts in non-RTP schools (8.12 out of 10). The same is true in the rank of students living without disabilities, an average of 8.73 out of 10 in RTP schools versus 8.24 out of 10 in non-RTP schools, resulting in a significant difference of 0.49 points. However, there is no significant difference in the group of boys or students living with disabilities. While in the Bamako and Sikasso regions, there are significant differences of 0.87 points and 0.53 points respectively between RTP and non-RTP schools in terms of life skills. This significant difference is 0.36 points between RTP schools and control schools in the Segou region.

Table 20 : Average Life Skills by Region

ENSEMBLE			
	Average		
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	8,69	8,25	0,44*
Girls	8,75	8,12	0,63*
Boys	8,63	8,36	0,27
Without disability	8,73	8,24	0,49*
Living with a disability	8,4	8,28	0,12
Bamako	8,49	7,62	0,87*
Koulikoro	7,5	7,27	0,23
Sikasso	9,47	8,94	0,53*
Segou	9,34	8,98	0,36*

Source: Endline PAQE II survey, extension phase

For the teamwork component, there was a slight significant difference of 0.49 points between RTP and non-RTP schools. In fact, RTP schools obtained an average of 8.99 out of 10 compared to an average of 8.5 out of 10 for non-RTP schools.

For the teamwork component, significant differences were observed in the group of girls and students without disabilities. Similarly, significant differences are observed in the Bamako and Sikasso regions.

Table 21 :Table 21 Life skills, teamwork by region

	Average		
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	8,99	8,5	0,49*
Girls	9,10	8,44	0,66*
Boys	8,88	8,55	0,33
Without disability	9,00	8,51	0,49*
Living with a disability	8,56	8,39	0,17
Bamako	8,83	7,8	1,03*
Koulikoro	8,00	7,86	0,14
Sikasso	9,45	8,76	0,69*
Segou	9,67	9,49	0,18

Source: Endline PAQE II survey, extension phase

The average for the communication component is 8.61 out of 10 in RTP schools and 8.05 out of 10 in non-RTP schools, a significant difference of 0.56 points. There is a significant difference of 0.78 points between girls in RTP schools and girls in non-RTP schools. Similarly, a significant difference of 0.63 points is noted in the group of students without disabilities in RTP schools and those in non-RTP schools (8.68 versus 8.05 out of 10).

In contrast, no significant differences were found between RTP and non-RTP schools, in the boys' group or in the group of students living with disabilities.

Nevertheless, significant differences of 1.15 points and 0.55 points were noted in the Bamako and Sikasso regions respectively. This significant difference is 0.41 points in the Segou region.

Table 22 :Table 22 Life skills, communication by region

COMMUNICATION			
	Average		
	RTP SCHOOL	NON RTP	DIFFERENC

		SCHOOL	E
Average	8,61	8,05	0,56*
Girls	8,7	7,92	0,78*
Boys	8,53	8,17	0,36
Without disability	8,68	8,05	0,63*
Living with a disability	8,15	8,01	0,14
Bamako	8,47	7,32	1,15*
Koulikoro	7,32	7,1	0,22
Sikasso	9,43	8,88	0,55*
Segou	9,12	8,71	0,41

Source: Endline PAQE II survey, extension phase

In particular, there was no significant difference between RTP and non-RTP schools for the conflict resolution component, regardless of the group of students considered (girls, boys, living with disabilities or without disabilities). Similarly, there were no significant differences by region.

Table 23 : Life skills, conflict resolution by region

CONFLICT RESOLUTION			
	Average		
	RTP SCHOOL	NON RTP SCHOOL	DIFFERENCE
Average	8,47	8,19	0,28
Girls	8,46	8	0,46
Boys	8,47	8,36	0,11
Without disability	8,51	8,15	0,36
Living with a disability	8,19	8,43	-0,24
Bamako	8,15	7,74	0,41
Koulikoro	7,18	6,85	0,33
Sikasso	9,54	9,2	0,34
Segou	9,24	8,76	0,48

Source: Endline PAQE II survey, extension phase

4.3. Positive learning environment: positive association with school

The positive learning environment is assessed by looking at the extent to which students report enjoying school, whether students report playing games at school, and the rates of corporal punishment and positive discipline methods in schools. The results of this module inform Key Indicator 3.2 (Percentage and number of girls and boys who have positive associations with school).

The results show high proportions of students who like school and participate in class, 78.78% in RTP schools and 78.53% in non-RTP schools. As for the existence of corporal punishment, more than nine out of ten students in both RTP schools (97.97%) and non-RTP schools (96.07%) stated that corporal punishment is used. As for playing games with friends at school, there was a significant difference of 13 percentage points between RTP (94.7%) and non-RTP schools (85.86%).

A small proportion of students report that their teachers use positive discipline techniques. This statistic is 14.98% in RTP schools and 9.95% in non-RTP schools.

Table 24 : Positive learning environment according to students

TABLE: POSITIVE LEARNING ENVIRONMENT			
	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
Appreciation of the school (I like the school and I participate in class)	78,78	78,53	1,6
Corporal punishment (Existence of corporal punishment)	97,97	96,07	-1,9
Playing games with friends at school	94,7	85,86	13.2*
Positive discipline practiced	14,98	9,95	7.5

Source: Endline PAQE II survey, extension phase

4.4. Main results for teachers

4.4.1. Teachers' and students' material possession

In RTP schools, almost half of the teachers in RTP schools believe that all teachers have teacher guides (47,56%). This statistic is 22.22% in non-RTP schools. This gives a significant difference of 25 percentage points.

Also, for 48.78% of teachers in RTP schools, all students have reading materials. While in

non-RTP schools, 22.22% felt that all students had reading materials, a significant difference of 26 percentage points between RTP and non-RTP schools.

In RTP schools, 18.29% of teachers lead or have led book clubs compared to 8.89% of their counterparts in non-PTR schools who also do so.

Table 25 : Additional support in reading, teachers

	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
All teachers in the school have a guide (%)	47,56	22,22	25,34*
All students in the class have reading materials (%)	48,78	22,22	26,56*
Runs a book club (%)	18,29	8,89	9,4

Source: Endline PAQE II survey, extension phase

The results show that 4 out of 5 teachers in RTP schools and 1 out of 2 teachers (51.11%) in control schools use a PBL technique, a significant difference of 31 percentage points. These PBL techniques are used on average 3 times a week by teachers in RTP schools and 2 times a week in non-RTP schools.

In addition, 91.46% of teachers in RTP schools manage to maintain order in their classrooms without resorting to corporal punishment. And, 87.7% of teachers in non-RTP schools are also successful.

Table 26 : Creating a positive learning environment

	RTP SCHOOL	NON-RTP SCHOOL	DIFFERENCE
Using a PBL technique (%)	81,7	51,11	30,6*
Number of PBL techniques used per week	3,18	2,31	0,87
Able to maintain order in the classroom without corporal punishment	91,46	84,44	7,02

Source: Endline PAQE II survey, extension phase

4.4.2. Classroom observation

The in-class evaluation part consists of observing the teacher teaching and evaluating him/her on the basis of a question grid. The evaluator observes the teacher from the

beginning to the end of the class and gives the teacher a mark for each aspect to be evaluated. The classroom observation consists of four sections:

1. Preparation of the teaching (composed of 8 questions)
2. Classroom Management and Instructional Intervention (consisting of 21 questions)
3. Assessment of student learning and achievement (composed of 11 questions)
4. Personal qualities and professional relationships (composed of 9 questions)

For each section, a score was calculated by assigning a mark of 1 if the teacher met the criterion assessed in the section. Section 1 is scored out of 8, Section 2 out of 21, Section 3 out of 11 and Section 4 out of 9. So, the overall score is scored out of 49. The overall score is obtained as the sum of the scores for each section. The results do not show any fundamental difference between RTP and non- RTP schools.

In general, out of a total of 49, the overall score obtained by teachers in RTP schools is 44.68. This overall score is 43.23 in non-RTP schools, a difference of 1.45 points. The overall score for non-RTP schools was 43.23, a difference of 1.45 points. Analysis by section shows that teachers in non-RTP schools slightly outperformed those in RTP schools in teaching preparation, with scores of 7.15 and 7.09 respectively. On the other hand, in sections 2 to 4, teachers in RTP schools slightly outperformed their non-RTP counterparts. On the assessment of classroom management and pedagogical intervention, teachers in RTP schools scored 19.27 compared to 18.08 in non-RTP schools. On the assessment of student learning and achievement, teachers in RTP and control schools scored 9.68 and 9.00 respectively.

4.5. Application and understanding of corporal punishment in schools

One of the specific aims of this study is to further investigate the existence of corporal punishment in schools as identified in the final evaluation. The aim is to confirm the existence of corporal punishment, its frequency and the circumstances in which corporal punishment is applied.

4.5.1. Existence of corporal punishment in schools

Important: Corporal punishment which is a sensitive aspect was measured in three ways:

- ✓ At the student level, we asked the question: **what punishments does the teacher apply to punish a student ?** This way of estimating may overestimate the reality, as it is reported by students who are subject to corporal punishment.

- ✓ At the level of the teachers themselves, we asked the following question: **Let's take your class, do you ever use the whip very often, sometimes, rarely, or do you never use the whip ?** This may underestimate the reality because it is measured on teachers who are actors in corporal punishment.
- ✓ At the level of the average teacher's entourage (i.e., referring to their colleagues). **To address the shortcomings of the previous two measures, we asked the following question: In this school, do some teachers ever use a riding crop?** Statistically, this is the closest to reality.

There was no significant difference between RTP and non-RTP schools following the types of punishment applied by teachers. In RTP schools, for 97.97% of the students teachers apply corporal punishment (97.90% of boys and 98.05% of girls). This statistic is 96.07% in non- RTP schools, with 95.43% of boys and 96.76% of girls believing that teachers use corporal punishment.

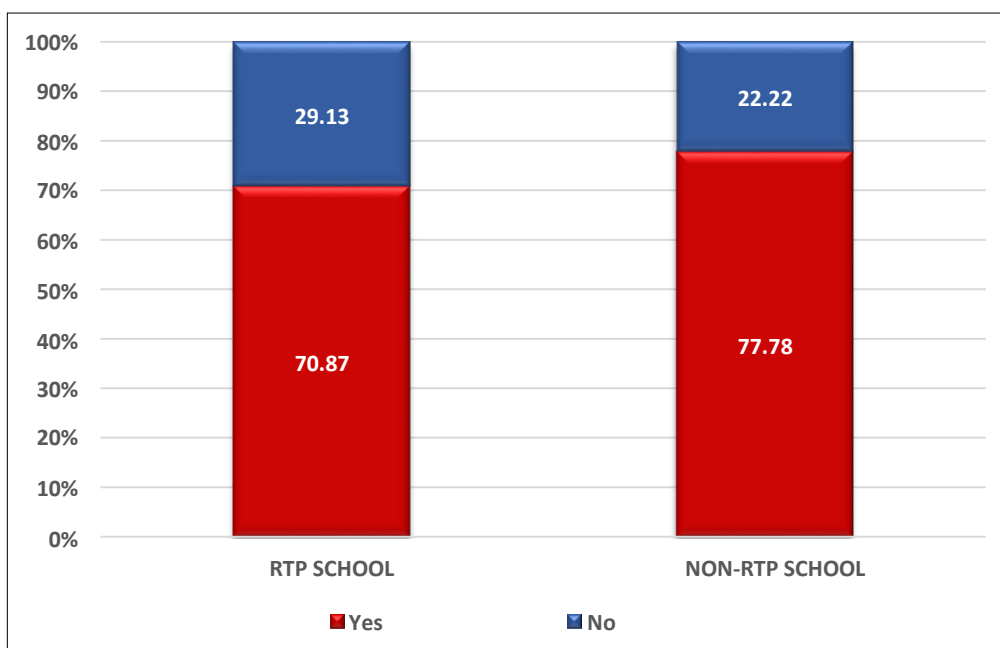
Table 27 : Types of punishment applied

RTP SCHOOL	NON-RTP SCHOOL					
	ALL	Boys	Girls	TOTAL	Boys	Girls
Corporal punishment	97,97	97,9	98,05	96,07	95,43	96,76
Other physical punishment	63,65	64,67	62,54	48,95	48,73	49,19
Public utility work	2,81	2,1	3,58	3,93	3,55	4,32
Copy once	0,47	0,9	0	0,52	0,51	0,54
Copy a thousand times	1,56	1,8	1,3	0,26	0,51	0
No recreation	6,86	6,29	7,49	15,97	13,71	18,38
Send home	4,52	5,39	3,58	2,63	3,55	1,08
Kicking out	7,33	9,58	4,89	9,42	11,68	7,03
Insult	27,3	26,95	27,69	23,82	21,83	25,95
Positive discipline	13,42	14,97	11,73	6,28	7,11	5,41

Source: Endline PAQE II survey, extension phase

Still on the issue of corporal punishment, more than seven out of ten teachers (70.87% in RTP schools and 77.78% in schools) say that their fellow teachers use corporal punishment.

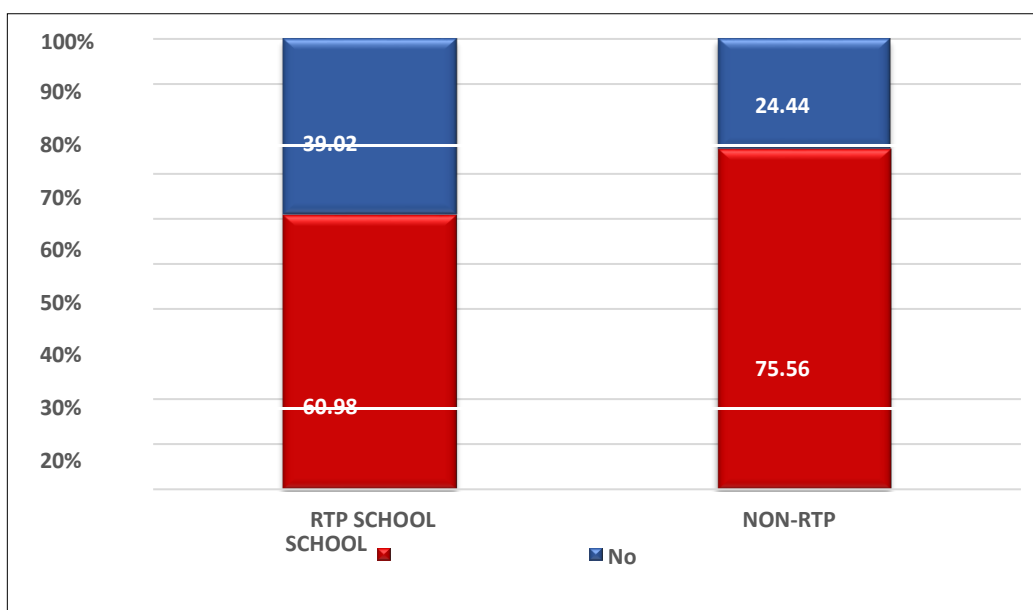
Chart 1 : Application of corporal punishment by colleagues



Source: Endline PAQE II survey, extension phase

This statistic is lower when the question is directly addressed to the teacher. For example, 61% of teachers in RTP schools admit to using corporal punishment themselves and 76% of teachers in non-RTP schools.

Chart 2 : Application of corporal punishment by teachers themselves



Source: Endline PAQE II survey, extension phase

For 38% of students in RTP schools and 55% in non-PTR schools, their teachers used corporal punishment during the day yesterday. Also, for 4% of teachers in RTP schools and 11% in control schools, their colleagues use corporal punishment very often. This compares with 4% in both RTP and non RTP schools when the question is asked about the teaching

itself.

The main reasons why teachers apply corporal punishment from the students' point of view are chatting in class, fighting between students or when you don't learn your lessons. Chatting in class is cited by more than 4 out of 5 students. Fighting between students is cited by 67% of students in PTR schools and 74% in non-PTR schools. And, more than half of the students cited not learning lessons.

There was no difference between RTP and control schools and across gender and disability status variables.

Table 28 : Circumstances of corporal punishment

	RTP SCHOOL			NON-RTP SCHOOL		
	Set	Boys	Girls	Set	Boys	Girls
Chatting in class	89,01	87,77	90,37	85,01	88,3	81,56
In the event of a fight between students	67,04	68,2	65,78	73,84	75	72,63
When you don't learn the lessons	56,69	59,94	53,16	51,5	47,34	55,87
Exercise not done	31,53	33,94	28,9	32,43	35,64	29,05
When a question is not answered	14,33	15,9	12,62	17,44	15,96	18,99
Insult in the classroom	7,8	8,87	6,64	2,45	3,19	1,68

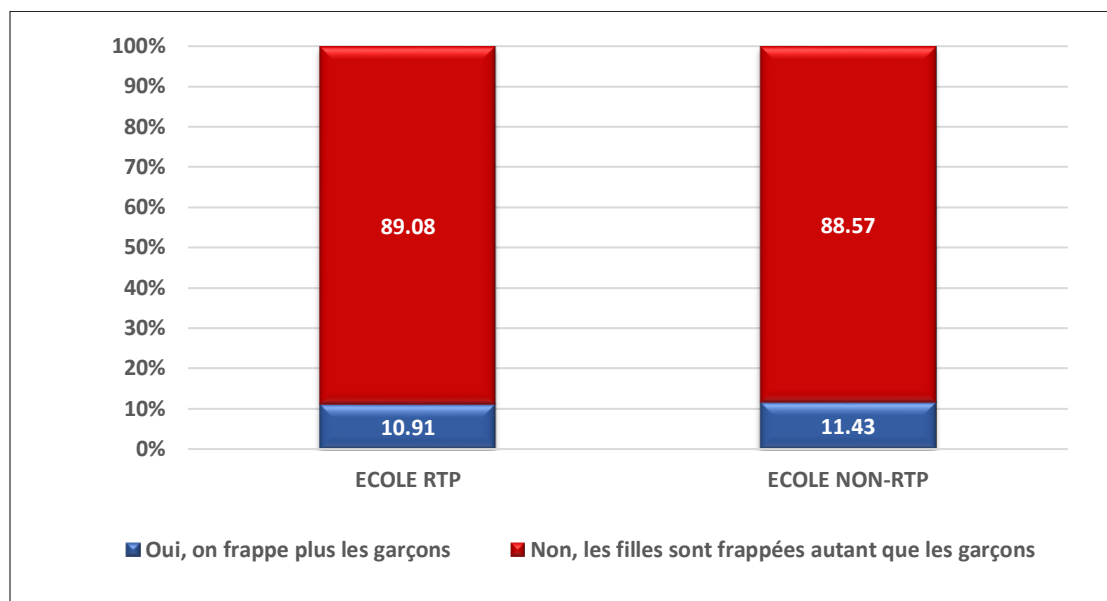
Source: Endline PAQE II survey, extension phase

The same results can be observed from the teachers' point of view. Chattering in class, fighting between students and lessons not learnt were the main reasons for using corporal punishment. More than four out of five teachers in RTP and control schools used corporal punishment for fighting in class. Chattering in class was cited by 86% of teachers in RTP schools and 71% of teachers in control schools. And the use of corporal punishment for unlearned lessons was reported by 36% of teachers in RTP schools and 30% of teachers in non-RTP schools.

4.5.2. Discrimination and corporal punishment

This section looks at whether there is a gender difference in the treatment of corporal punishment.

Chart 3 : Application of corporal punishment and gender



Source: Endline PAQE II survey, extension phase

More than 4 out of 5 teachers in both RTP and non-RTP schools treat girls and boys equally when it comes to corporal punishment. While almost 11% of teachers in RTP and non-RTP schools hit boys more often than girls.

However, it is important to note that no teacher stated that girls are hit more. The main reason given by teachers for hitting girls as much as boys is gender equality once the act is done (i.e. chatting, fighting, etc.). In contrast, other teachers who hit boys more cited the fact that boys are more unruly.

4.5.3. Corporal punishment and disability

More than half of the students have no peers with disabilities, 51% in RTP schools and 55% in control schools. While for 20% of students in RTP schools and 25% in non-RTP schools, the disabled students are hit in the same way as other students. For 15% of students in RTP schools, the disabled are not hit or are hit to a lesser extent than other students. This compares to 11% in non-RTP schools.

Table 29 : Physical punishment and disability among students

	RTP SCHOOL			NON-RTP SCHOOL		
	ENSEMBLE	Boys	Girls	ENSEMBLE	Boys	Girls
No, we don't hit the disabled	14,81	15,6	13,95	9,81	11,17	8,38
No, we hit the disabled less	14,49	13,15	15,95	10,63	11,17	10,06
Yes, disabled people are beaten in the students way as other students	20,06	20,18	19,93	25,07	23,94	26,26
No disabled in the class	50,64	51,07	50,17	54,5	53,72	55,31

Source: Endline PAQE II survey, extension phase

Three out of five teachers in RTP schools (58%) and 43% in non-RTP schools said that students living with disabilities do not receive corporal punishment. The main reasons given were their disability (38.18% of RTP teachers and 31.43% of teachers in control schools) or pity or compassion for students with disabilities (18.18% of RTP teachers and 22.86% of teachers in control schools).

However, 25% of teachers in RTP schools and 42.86% of those in control schools said that the disabled were hit less than other students. While 16% of teachers in RTP schools and 14% in non-RTP schools felt that disabled students were treated in the same way as other students. Indeed, for the latter, all students should be treated in the same way (92% of them).

4.6. Consequences of corporal punishment on students

Since corporal punishment is a reality in schools, it is worth asking what the consequences of this practice might be for learners? The consequences of corporal punishment for learners can range from refusing to participate in class to dropping out of school altogether. Table 19 below shows the modalities cited by teachers in RTP and non-RTP schools as consequences of corporal punishment.

Table 30 : Consequences of Corporal Punishment for Learners

	RTP School	NON RTP SCHOOL
No longer participating in class	63,41	57,78
Fear of giving the wrong answer	46,34	51,11
Fear of the teacher	85,37	84,44
Lack of desire to come to school	74,39	62,22
Running away from classes	52,44	48,89
Dropping out of school	48,78	48,89

Source: Endline PAQE II survey, extension phase

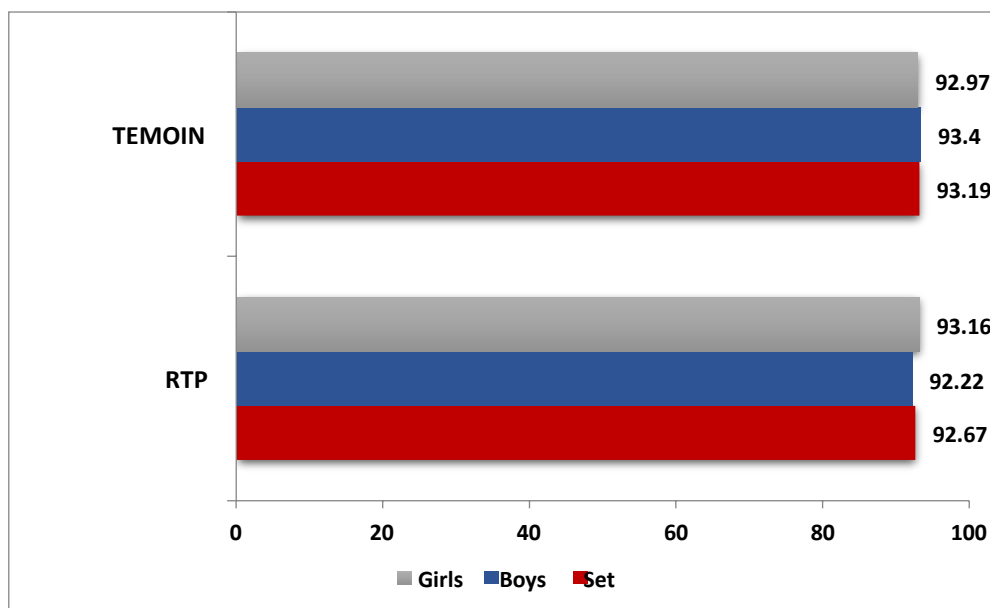
Fear of giving a wrong answer was the first consequence of corporal punishment mentioned by more than 4 out of 5 teachers in RTP schools (85.37%) and non-RTP schools (84.44%). This was followed by lack of desire to come to school, cited by 74.39% of teachers in RTP schools and 62.22% of teachers in control schools. In third place comes non-participation in class. This was cited by 63.41% and 57.78% of teachers in RTP and non-RTP schools respectively.

Also, almost half of the teachers mention dropping out of classes as a consequence of corporal punishment.

4.7. Roles assigned to students by gender

In general, students acknowledge that boys and girls play different roles in their assigned tasks. There was no significant difference between RTP and non-RTP schools, with more than nine out of ten students (92% of boys, 93% of girls) saying that girls and boys play different roles in class. Also, 93% of students in RTP schools (92.22% of boys and 93.16% of girls) and non-RTP schools (93.40% of boys and 92.97% of girls) believe that girls and boys share different roles.

Chart 4 : Tasks performed by students by gender



Source: Endline PAQE II survey, extension phase

Girls are mainly involved in cleaning or sweeping, cited by more than nine out of ten students, or washing toilets, cited by a quarter of the students. While boys are asked to erase the blackboard (90%), bring water (50%) or help carry luggage (30%).

4.8. Evolution of key indicators over the project period 2018-2022

As part of the evaluation of the PAQE II project, six main indicators have been defined. The measurement of these indicators makes it possible to quantify the efforts made during the implementation of the project and to check whether the objectives or targets set, have been achieved. Table A1 in the annex shows the evolution of the different indicators over the project period.

Indicator 1000.1: % and # of children in targeted schools who have achieved the minimum level of reading proficiency by Grade 4.

Over the project period, very few students were able to reach the minimum reading threshold of 41 words per minute for curriculum students and 61 words per minute for mainstream students. Indeed, for the mid-term and extension assessments, 7.2% of students were able to reach this threshold. This figure is 6.4% in the final assessment in September 2021. There is no significant difference between boys and girls or by disability status. The 15% target set by the project is therefore not met.

Indicator 2000.1: % and # of children in target schools who demonstrate improved life

skills (communication, teamwork and problem solving) in the 4th grade. Life competence is assessed in three areas: teamwork, communication and conflict resolution.

The proportion of students showing **teamwork** skills increased from 22% in the baseline study to 90.5% in the extension phase, an increase of 68.5 percentage points. It is 82% at the mid-term evaluation and 86.3% at the final evaluation.

In terms of **communication** skills, there was a 69.5 percentage points increase from 16% at baseline to 85.5% at the extension phase. The proportion of students demonstrating communication skills was 76% at mid-term and 78.5% at the final assessment.

With regard to **conflict resolution**, a change of 43 percentage points is recorded over the project period. Indeed, the proportion of students willing to resolve conflicts rose from 41.7% to 84.4%. This proportion was 77% at the mid-term evaluation and decreased slightly to 75.8% at the final evaluation. There were no significant differences according to gender or disability status.

Indicator 2000.2: % and number of MFI teachers who are able to integrate the child-centred, play-based, inclusive and gender-sensitive learning technique (PBL) into their teaching practices (disaggregated into M and F).

This indicator could not be measured in the baseline and mid-term evaluations. It was 79% in the final and extension evaluations.

Indicator 2100.1: # of pre-service teachers trained in a play-based, inclusive and gender-sensitive method of learning in order to qualify as a teacher according to the standard set by the government.

Between the beginning of the project and the mid-term evaluation, the PAQE II project trained 537 teachers, 316 of whom were male and 221 female. At the end of the project, 1261 teachers were trained (640 men and 621 women) in game-based learning methods.

Indicator 2200.1: Percentage and number of teachers who apply a gender-sensitive and inclusive play-based learning methodology in their teaching practices.

Before the project intervention, 15% of teachers (20% of women and 9% of men) used a game-based learning approach. This proportion had risen to 82% by the end of the project (89% of women and 72% of men), an increase of 67 percentage points.

Indicator 2200.2: Percentage and number of technical staff who report being better equipped (informed) about PBL.

The percentage of technical staff who feel they are better equipped for the PBL increased from 32% to 85% between the baseline and extension phase assessments. This represents a change of 53 percentage points. This statistic is estimated at 79.5% at the final evaluation.

Indicator 1310.2: Percentage of teachers who meet Right To Play principles for a positive learning environment.

Note that this indicator has not been measured in past evaluations. However, it stands at 76.83% in this evaluation.

Indicator 3.2: % and # of children who have a positive association with school

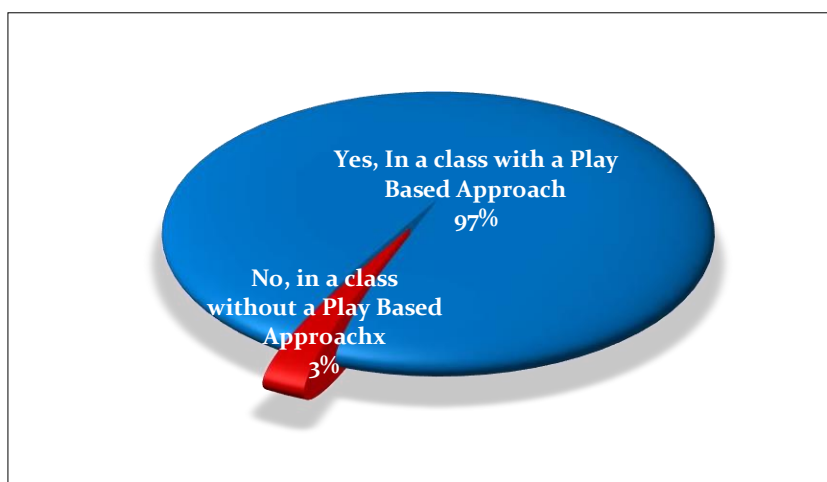
There was a 54 percentage point change in the proportion of students who showed a positive association with the school, from 25% at baseline to 79% at the extension phase evaluation. It is 71% at the mid-term evaluation and 74% at the final evaluation. Girls show more aptitude for a positive association with school than boys.

4.9. Assessment of the continuity of project activities

The PAQE II project started in 2018 and will end in 2022. To this end, the continuity of activities or the continuation of practices and knowledge has been assessed with implementing actors, i.e. local NGOs and the partners, i.e. teachers, principals, town halls etc. This section is addressed only to the actors of the RTP schools (students, teachers, directors, local NGOs etc.).

From the students' point of view: nine out of ten students in RTP schools (97%) would like to see their younger brothers attend classes where a play-based approach is used.

Chart 5 : Enrolment of new students in a class using a PBL approach

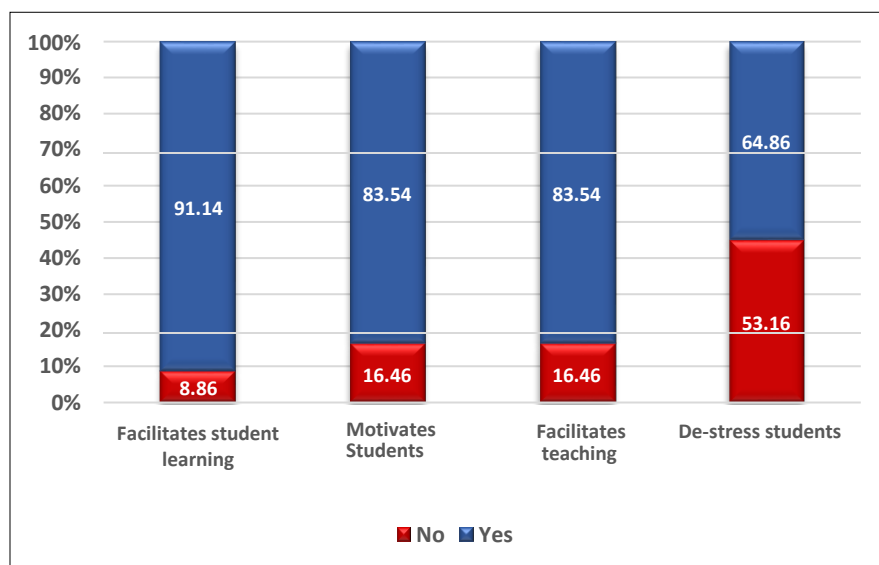


Source: Endline PAQE II survey, extension phase

Similarly, more than nine out of ten (96%) teachers in RTP schools are willing to continue

the practices learned with the PAQE project in their classrooms even if the project ends. Indeed, for teachers, games facilitate student learning (91.14%), motivate students (83.54%), facilitate teaching (83.54%) or de-stress students (64.86%). One teacher said: "I **plan to benefit others by doing game production, which is where we come in**". And a head teacher also said: "It would be important to pass on the new skills to the teachers in the new school. It is an obligation for a principal to pass on his skills to the teachers in his school.

Chart 6 : Reasons for continuing the play-based approach



Source: Endline PAQE II survey, extension phase

5. Some lessons learned from the qualitative data

5.1. Putting positive discipline into practice

The practice of positive discipline by teachers is not yet complete, as some principals point out in their interviews.

Director's Guide/Interview

24 Can you explain to us to what extent positive discipline is taken into account in teaching practice?

- Well, by some teachers. Because there are people who have not had any training in curriculum or in Right to Play, and we are in a curriculum school. So, we still have difficulties with that.
- Positive discipline is taken into account by the majority of teachers.

Indeed, the practice of positive discipline is hampered by deficits in teacher training in positive discipline.

25- What difficulties do teachers face?

- Positive discipline, well it's always linked to training if you don't have training in a discipline and you're asked to teach it you'll always have difficulties.
- The teachers have a lot of difficulties because there are many failures. There are problems with disabled children, but also the performance of the children is not the same in class.

Thus, to improve the practice of positive discipline in the classroom, the directors ask for more training for teachers. Through these trainings, they will learn how to deal with children living with disabilities, to make them participate in classes so that they do not feel marginalized.

26. What are the proposals for improvement in taking account of positive discipline?

- The proposal for improvement that I have to say to you is that you multiply the training that the CAP multiplies the training at all levels, starting with the directors, the deputies, and so on.
- We would like to have support because the situation is complex. When children with disabilities and ordinary children are put together, there are always problems.

Often children with disabilities feel a bit marginalized and the teacher needs to be better trained (somewhat specialized training) to meet their demands and do their job well.

27 What factors positively influence teachers to apply the child-centred, play-based, inclusive and gender-sensitive learning technique?

- Well, we have the Right to Play brochures on play. Often they take these booklets and they read them and try to practice with the children and it's through the booklets that they make the games.

28 What factors negatively influence teachers to apply the child-centred, play-based, inclusive and gender-sensitive learning technique?

It is the lack of teacher training that negatively influences teachers to apply the child-

centred, play-based, inclusive and gender-sensitive learning technique.

5.2. Sustainability of PAQE II practices and achievements

The implementation of the PAQE II programme by RTP in Mali is salutary. However, even if some people recognise the benefits of the PAQE II programme, they feel that without the programme Malian education would still be making progress, as the following two interventions show:

39 Imagine if Right To Play had not come to Mali. How would the experience of the students and teachers be different without Right To Play's interventions

- Frankly, without the intervention of Right to Play in certain schools, we can say that some schools will be closed. Frankly though, because Right to Play is very involved in the development of education in Mali. Without Right to Play's intervention, many schools would close.
- There has been an improvement but even if RTP had not intervened, we were going to get by with the old way of teaching. RTP's intervention has greatly improved the level of knowledge of students and teachers.

With regard to sustainability, school principals state that the continuity of PBL activities and practice are the responsibility of the PBLs.

40 The RTP project is coming to an end. Do you intend to continue with the practice of the play-based approach (PBL) in the different classes? Why do you want to do this?

- If the RTP project comes to an end, I would like the CAP to take over by training teachers who have not received training and to retrain those who have been trained so that it continues.

41 If in the future you are assigned to be a head teacher in another school where the PBL approach does not exist, will you introduce it (train teachers on the PBL approach and apply it in the classroom)? Why would you do this?

It depends on the CAP, because it is the CAP that chooses the schools for training. In any case, if I've been transferred to a school that doesn't do RTP, I ask the CAP to come and train the teachers in RTP. That's it!

Interviews with the PLCs show that they plan to continue with the PBL approach. Indeed, the CAPs all recognise the novelties brought by RTP to the education system through games (compared to SIRA or other NGOs), which is why they support the continuity of practices and achievements even if the project comes to an end. Nevertheless, they ask the government to integrate this game-based approach into the Malian education system.

CAP / Interview Guide

4.1 Imagine that the Right To Play programme had not come to Mali. How would the experience of students and teachers be different without Right To Play's interventions?

- When we look at the themes of RIGHT TO PLAY, compared to the NGOs that are present in education, they really don't have many points. Especially the PBL, since we have received training from NGOs, we have not seen any NGO that has the PBL themes like Right To Play. It's this theme that I really liked. A child, even if he comes to school without having breakfast or being hit by one of his parents, as soon as the teacher starts teaching PBL, the child quickly forgets his stress. I really enjoyed this theme. It was going to be difficult for teachers to cope without the arrival of RIGHT TO PLAY in Mali.

4.2 The RTP project is coming to an end. Do you intend to continue or promote the practice of the play-based approach (PBL) in the future? Justify your answer

- Yes.
- Yes, this game is so important that I think teachers should continue to incorporate it into their lessons. In fact, I'm going to talk to them about it. Right now, with the departure of CIRA, we haven't yet received any correspondence to say that CIRA is continuing. Everyone knows that without continuing with CIRA, without the 1st and 2nd year, we will perhaps stop. People have not been trained in the syllabic method. We have moved to the schools. With CIRA, the teacher continues with students from grade 1 to 2, then you go back to grade 1. The teachers were fed up. We said it would continue, that there would be training. So, we started to take. The government is going to continue with the CIRA approach which it has renamed the ELAN approach. Really, we want to continue because everything that is good for children, we can only hope that these actions will continue. Anything that helps the child in the learning process, that's all we want.
- Yes, we intend to continue the practice because we have seen its impact. That it even at the level of teachers, it contributes a lot to the pedagogical improvement of teachers. And the impact is visible on the children's learning. The children are interested in the game and they understand easily, the message passes easily, they are interested and they do it without realising it. So they really enjoy working through play.
- Yes, Right to Play expires in 2022 with a one-year extension. In fact, I strongly

hope that Right to Play will continue its programme. This will allow for the improvement of the quality of education.

4.3 If so, how do you intend to do this?

- All I know is that there are a lot of our teachers who are not going to leave the RIGHT TO PLAY practices because they have enjoyed them. They have been successful in doing this with the children. Even those who are not in our programme, they are looking for it. Because a lot of them have told me that what we do in the classes is very good. It facilitates integration, it facilitates understanding.
- We are counting on the government for this. It is the government that can help with this.
- In our situation, for the perpetuation, at the CAP level, what we ask during the Board of Directors is to introduce the integration of the game in the learning system, to also continue with the sensitisation for the taking into account of inclusive education, of the schooling of girls.

So, you think that this will make it permanent?

- Yes, it's the beginning of sustainability. What the CAP can do, what the teachers can do and with the support of the school authorities. With this, in any case, it can go.
- Only as I have always said. You know, each time you come, there should be protocols of collaboration that set out the tasks to be accomplished and that allows each of us to be clear about the activities to be undertaken during a year and that we programme ourselves according to that. Because the CAPs, which are technical structures, have regalian activities that should be accomplished at all costs. These include the organisation of examinations, the organisation of evaluations, teacher training, and the monitoring of teachers' activities in the field. It is also about the final evaluation of children, of teachers, it is about professional exams to move from one grade to another. These are the regalian activities of the CAPs in reality, we need to do this, so this means that the timetables must be adapted, the protocols become a document, an essential tool designed in a consensual way on which we can work.

In addition, the local implementing NGOs ensure that the training received through the PAQE II project is passed on to their families, other schools, teachers and principals.

Local NGO Guide/Interview

How do you intend to share the skills you have acquired during the implementation of the PAQE II project with others (community/ entourage/ other learners/ other projects)?

- I say we were using it even before we were partners in RTP and we will continue to use it. A teacher, when you give him something that is accessible, he does it. If it's complicated for him as soon as you turn your back, he doesn't do it. So everything that is accessible for teachers and for ourselves, we will continue to do even if the PAQEII stops.

We are going to use it in our trainings because we do a lot of trainings and we are going to use it in all the trainings that we do.

- The opportunity is always in education. The experience gained will be proven through education.

In my own family, I have a new approach with my children, and I have brothers who have schools and I talk to them very often. I often give useful guidance to teachers and principals in the framework of what I have learned in this programme. That's how I make other people benefit from my experience.

5.3. Commissioning and use of reading centres

With regard to the reading centres, several town hall leaders confirmed the effectiveness of reading activities in the centres. However, it should be noted that the town hall leaders are not very involved in the management of the centres. The centres have managers and in some cases the centres are co-managed by the CAP, RTP and the town halls.

In general, the centres are used for educational activities and are attended by students (from RTP and non-RTP schools, living with or without disabilities) at weekends or during holidays.

Guide Leader Mairie/Entretien

10. Have you started using the centre? YES/NO If YES, please list all the uses you have made of the centre If YES, what other uses do you plan to make of the centre in the future If NO, how do you plan to use the reading centre in the future

- Yes, the centre is functional in our country.

Ah, there is a problem because it is managed at another level. I am the mayor, I am hidden in my office and the manager is in the centre there. I haven't started receiving

reports on the different uses of the centre from the manager. At the risk of lying, otherwise I can't answer this question.

Of course, there is a reading centre for children, but it is on a very large space. That's why, together with the RTP representative who is here, we have designed a project to create a platform for children. This project is being studied with RTP and its partners, and although the project is finished, we hope that they will give us a follow-up.

- Yes, we use these centres. Really the implementation of these centres has been beneficial for the community and we thank RTP for that. The children come from time to time to these reading centres to take the books to read them. I told you about the competition organised recently by the NGO ALED. Following this competition, we knew that the children had started to read well. We asked where this strength came from and they told us that the children go to the library

At the end of the project, we will take over these reading centres ourselves. We intend to look for other books and games to bring back in this direction so that it will be much more operational than at present.

- Our centre is located in Socoura and is functional.
Children read in this centre.

I don't know of any other use for the centre and there are no plans for the future either.

- Yes, we have started using these centres.

In the afternoons, usually for the children who want to come, we open them up and put them in. We provide them with books to read.

It's usually cultural activities and the games they play in class that are also found in these centres.

- Indeed, we have started to use them. I've found the name now, it's CLAE. They are reading centres made available to communities to be able to supervise children. Since their arrival in our commune, we have been using them to supervise our children and to make them a playground because they are centres that are adapted and equipped for the education of children.

We use this centre to educate children; there are classrooms. It is a recreation area for our children. June 16 is the date of the African child and we celebrate this great date in this centre. When it comes to education issues concerning the child, these big meetings with the notabilities, we get together to communicate, to exchange on the

issue of the child. These are some of the major activities that we do in these centres. In the future, we will not change the vocation of these centres. We will keep them and continue to improve them for the well-being of our children. We will continue to expand in order to be a more beneficial place. Why not create large projection rooms for children's games, where we have films on cartoons; computer rooms. As you know today, new technologies are an integral part of human life. For me, it's really about extending these few areas to our children but always keeping the vocation that it remains a centre of education, a training centre for children.

11. Interviewer: if the use made and planned is not in the educational field; ask What are the obstacles for educational use?

- The centre is only used for educational purposes. I think we only do reading in this centre.
- These are educational activities in accordance with the terms of reference.
- We have a body that has come out of the training school. This body is chosen on the basis of their own training acquired to educate, to train children in turn. This is why, even if we recruit, we recruit people who have this basic training. Often when we have a shortage of people in these centres, we always refer to the academy, the CAP. These are our state partners who can help us a lot in this respect.

12. Investigator: If the use made or planned is in the educational field ask : Will the buildings continue to be used for educational purposes? If so, what type of educational objectives and who will direct the activities?

- Yes, the buildings will continue to be used for educational purposes, even the new ones that are coming up, it's always in the framework of education.
The library is co-managed by CAP, RTP and the town hall. It's true that RTP handed over the library to us, but we manage it with the CAP. It was a teacher who managed it but she died last week (may she rest in peace). It was the CAP that gave us this one to manage with another young person who is now taking over. There were two of them there. So, it is the CAP that does the pedagogical follow-up of the centre.
- Yes, the buildings will continue to be used for educational purposes. Other uses of the centre will be decided by the local council. In all centres there is at least one manager to guide the children.
It's weekends, and holidays and even holidays.
Generally, this is on Thursday afternoons and Saturday mornings.

We use them 12 out of 12; that is to say, the 12 months of the year, but only during the winter season when it is very difficult to carry out activities in the schools. We ourselves do not encourage children to go out in August; for example, in August, there are heavy rains to come and do anything in the schools. Often, it's periods when we plant trees to green the courtyard or to redo the paintwork, very often it's the town hall that takes charge of these things, to repair certain furniture that is out of date. Apart from that, any time is good for us. We also have calendars so that the place can remain active every time. We have little calendars that we put together with the faculty. These are centres that have a management, its management staff, its faculty and together we imagine a calendar of recreation, of activities for the children during the extra-curricular periods.

13 When is the centre used for educational purposes: weekends; school holidays; other.

- It's the manager who can tell us about it because I haven't started a report.
- It's weekends, holidays and short breaks.
- These are first cycle students, girls, boys and even the disabled.
- These are children who are in school. Their parents drop them off and come back for them afterwards.

14 What types of people use the centre: school-age children/other; girls/boys; disabled/non-disabled.

- These are school-age children and the disabled
- No, the disabled don't come, but we'll have to raise awareness about this. Perhaps they are a bit blocked by their disability. We'll have to get them to come to the centre.
- It's school-age children, disabled people, girls and boys. There is no discrimination at this level to say that disabled people don't have access, or that girls don't have access, or that it's a boys-only centre, no, it's really gendered.

6. SOME DIFFICULTIES ENCOUNTERED

This extension phase, although it addressed the shortcomings of the final phase, did experience some difficulties related to the closure of classes for a few days and the measurement of the impact of the project over its entire implementation period.

The data collection phase experienced some disruption due to a strike. This coincided with the last few days of fieldwork.

It is important to adopt the same methodology to facilitate comparison between the baseline, mid-term, endline and possibly the evaluation of an extension phase. To this end, RTP could identify an external consultant or evaluation firm that could commit to conducting all three rounds of data collection from the outset. This can allow this evaluator to play a proactive role in determining a rigorous study design, and contribute to the consistency of analysis and reporting for RTP.

The inclusion of comparison schools allows us to understand how RTP schools compare to other schools in the region, but without pre-intervention data we cannot say with certainty that the differences observed are the impact of the intervention. RTP should seek an external evaluator for future projects who can design an experimental or quasi-experimental study at the beginning of the project. This can help RTP to quantify the impact of its programs on the targets and to identify where improvements are needed.

The school reading threshold in Mali seems to be an unattainable goal for many Malian students at present. The results show that less than 10% of students manage to read at the required threshold. This could be due to frequent interruptions in the education system or to the fact that the threshold is quite high.

CONCLUSION AND RECOMMENDATIONS

At the end of this evaluation, the PAQE II program achieved positive results in the reading and life skills of the learners. Students in the RTP schools had increased exposure to play-based learning.

Although teachers demonstrate skills in creating a positive environment, the use of positive discipline techniques should be encouraged. Teachers in RTP schools have received RTP training, can explain it, can train another teacher in RTP pedagogy than their peers in control schools. Teachers in RTP schools used more of a play-based learning technique in their classrooms (82% versus 51%).

Even though corporal punishment measured in three different ways gives different results, the phenomenon remains relevant. Indeed, 70% of teachers themselves report using corporal punishment. Also, students and teachers confirming the use of corporal punishment in cases of chattering in class, fighting between students or when students do not learn their lessons. Moreover, girls and boys are treated equally with regard to corporal punishment because of gender equality. While students with disabilities are not hit or are hit less than their peers.

In addition, actors assured of continuing with the techniques learned through the PAQE II project even though the project was coming to an end. Almost all of the teachers, principals and teachers' representatives stated that they would continue to apply PBL in their facility. The majority said that they will apply PBL even if they are posted to another facility.

Based on the results of the evaluation of the extension phase, we make the following recommendations:

Methodological recommendations:

- Establish control and learning schools at the outset and have an agreement in principle with these schools. This is necessary to implement the quasi-experimental evaluation in its full rigor.
- Ensure that the students who will be evaluated have always remained in the same type of school (learning school vs. control school). Currently, a student being evaluated in grade 4 in an RTP school may have spent his or her first three years in a non-RTP school.

- Track the movement of teachers between the two types of schools (a light-weight questionnaire can be dropped off at schools during evaluations).
- Write down the methods for calculating the indicators to make the results fully comparable between the different evaluations.

Recommendations from the results:

- Communicating the existence of corporal punishment. The project has come to an end, but it is important to inform the government and other partners about the existence of corporal punishment. Finding an effective solution is of paramount importance.
- We find that it is still very common for boys and girls to have particular roles in the classroom. Future projects can address this issue by providing training on gender-neutral roles and responsibilities in the classroom.
- The qualitative data also indicate a strong desire for in-service training for teachers. One way to achieve this is to organize coaching visits or train-the-trainer workshops or refresher courses in future projects.
- We also recommend that the authorities provide an incentive (certification of performance in the application of PBL) for the best performing teachers. This motivates teachers to stick to this game-based pedagogy.
- The school reading threshold in Mali seems to be an unattainable goal for many Malian students at present. If possible, we advise RTP to focus on other literacy goals.
- RTP could adopt three literacy goals: (1) phonemic awareness (identifying letter sounds per minute), (2) fluency (correct words read per minute), and (3) high-level reading skills (reading comprehension). The objectives could be developed from a baseline study.

APPENDIX

APPENDIX 1: Evidence for Theory of Change

In collecting qualitative data, we sought to identify respondents' causal claims about the impact of the program, in line with new causal approaches that attempt to trace cause and effect mechanisms through respondents' testimony (Goertz 2017). In addition to asking direct questions about the effects of the program, we used counterfactual questions to understand how respondents thought things would be different in the absence of the program. Analysis of their accounts of the program reveals that they consistently confirmed that, in line with the theory of change; Right to Play's game-based program was effective in making students more motivated at school, creating a more welcoming school environment and ultimately increasing student performance.

KEY INDICATORS

The key indicators used to answer the evaluation questions are defined below, and are organised by evaluation question (EQ).

EQ 1: THE RIGHT TO PLAY PROGRAM HAS CONTRIBUTED OR NOT TO INCREASING STUDENTS' READING SKILLS, EQUIVALENT TO A MINIMUM 4- YEAR LEVEL, AND LIFE SKILLS.

Literacy rate of students

Students' reading was assessed using the Early Grade Reading Assessment (EGRA). For the sake of consistency, the research team used the same version of EGRA as the one used in the midline assessment (EGRA 2009). This version of the assessment contains 5 sections: initial sound recognition, letter name or sound recognition per minute, familiar word reading per minute, listening comprehension, story word reading and reading comprehension. This assessment was programmed using Tangerine software and conducted by an assessor with each student individually. Most sections had an automatic stop or timed component. See Appendix 4 for the EGRA assessment, including instructions and notes on automatic stops.

Life skills High

Students' life skills are assessed through a self-reported survey. Responses to all questions in this section are on a four-point Likert scale, with values ranging from 1, indicating "strongly agree" to 4 "strongly disagree". For all of the sub-modules below, we consider a student to be demonstrating a life skill if he or she answers "Agree" or "Strongly Agree" to all questions.

We assessed four components of students' life skills:

Communication: Communication is assessed by four statements ("I ask a lot of questions in class", "I listen well to others", "Other students listen to me while I talk", "I don't participate much in class (reverse code)" and "I think others listen to me when I talk"). "

Teamwork: Teamwork is assessed by means of four statements on the topic: I work well together in a group, It is difficult to work together in a group (reverse code), I share roles and responsibilities with my peers I learn well with others.

Conflict resolution: Conflict resolution is determined by three statements: "I do not respond to provocation from others. I work cooperatively and compassionately, and I know how to work with others.

Participation: Participation is defined by four statements: "I ask a lot of questions in class", "I don't participate much in class" (reverse-coded), "I participate more or less than my classmates"and "I actively participate in class".

EQ 2: WHETHER THE PROGRAM WAS ABLE TO IMPROVE THE LEARNING ENVIRONMENT IN SCHOOLS

To assess the positive learning environment, we assess the extent to which students report enjoying school, whether students report playing games at school. We also assess teachers' use of positive discipline methods and the rate of corporal punishment in schools. We also assess additional reading support and equal participation in schools.

Students' appreciation of the school

For this indicator, we created a summary statistic if students responded positively (agree or strongly agree) to all of the following statements:

How much do you like school?

Are you satisfied with the state of you're
your school? Are you satisfied with the state
of class?

Are you happy to go to school; are your friends happy to go to school; and coded response to the open-ended question: why are you happy to go to school (if the response was coded as 'I like school' as opposed to other factors).

EQ 3: HAS THE PROGRAM INCREASED ENROLMENT, INCLUDING FOR GIRLS AND STUDENTS WITH DISABILITIES?

Given the scope of this evaluation, it was not possible to calculate enrolment rates for these subgroups. We provide data on the distribution of our sample according to these subgroups in the section on the balancing test; however, due to the non-probability sampling method used, these data should not be considered as enrolment rates. Therefore, to analyse the impact of RTP on increasing enrolment of girls and students with disabilities, the evaluation conducted interviews and focus groups. These qualitative methods provide insight into the effectiveness of the program in improving the enrolment of these marginalised groups.

Beyond enrolment, we want to know whether students are able to assume equal roles in the classroom. Therefore, we also include in this section the answers to the students' questions about roles in the classroom.

EQ 4: IS THE COMMUNITY ABLE TO ADDRESS THE CHALLENGES OF ACCESS AND LEARNING FOR GIRLS AND STUDENTS WITH DISABILITIES?

Once again, to report this result, we rely on the qualitative responses of community members. These qualitative findings provide insight into the factors that influence the schooling of girls and students with disabilities. Where relevant, we also highlight differences in the qualitative data related to educational support for these subgroups.

EQ 5: WHETHER THE PROGRAM WAS ABLE TO HELP STUDENTS BUILD RESILIENCE TO ACHIEVE THEIR EDUCATIONAL GOALS IN THE FACE OF MULTIPLE DISRUPTIONS, INCLUDING SCHOOL STRIKES AND COVID-19.

We present the results of this evaluation question from both the teacher surveys and the qualitative data. This allows us to build a rich picture of the challenges students face as a result of multiple disruptions to instruction, and the tactics teachers have identified to help students overcome these challenges.

RESPONSE BIAS

There is a strong potential for recall bias, particularly for questions that determine dosage (how often students experienced game-based learning in the classroom). To understand dosage, we asked students to recall how often their teachers played games four years ago. Even adults would have difficulty remembering something so long ago, but children in particular are likely to have problems with the reliability of responses over such a long recall period. Our field team attempted to validate these issues by conducting focus groups during the piloting of the survey. They specifically asked students to provide examples of games their teacher played, and then cross-checked these games with teachers who knew the types of games played by students in each class. They confirmed that the students did indeed recognise the games

that would have been played during the reference period. Despite these tests, it is still possible that students faced recall bias problems on these questions with long recall periods.

APPENDIX 2: Evolution of key indicators over the project period

The table below shows the evolution of key indicators over the project period.

Table A1: Evolution of project indicators

Indicators	Disaggregation	Baseline	Midline	Endline	Extension
1000.1: % and # of children in targeted schools who have achieved the minimum level of reading literacy in grade 4 th	Female	0%	6,6%	6,2%	7,2%
	Male	0%	7,8%	6,6%	7,2%
	Disability	0%	0%	8,2%	5,8%
	Total	0%	7,2%	6,4%	7,2%
2000.1: % and # of children in target schools who demonstrate improved life skills (communication, teamwork and problem solving) in 4 th grade .	Female	23,00%	80%	87, 2%	90,9%
	Male	20%	82%	85,4%	89,2%
	Disability	0%	75%	81, 6%	88,4%
	Total (Team Work)	22%	82%	86,3%	90,5%
	Female	15%	76 %	74,0%	87,0%
	Male	16,5%	77%	83,1%	84,1%
	Disability	0%	75%	92,5%	76,7%
	Total (Communication)	16%	76%	78,5%	85,5%
	Female	42,5%	78	75,1%	83,4%
	Male	40,7%	76	76,6%	85,3%
	Disability	0%	75%	81,7%	82,6%
	Total (Conflict Resolution)	41,7%	77%	75,8%	84,4%
	Woman			73,3%	87,0%
% and number of MFI teachers who are able to integrate the child-centred, play-based, inclusive and gender-sensitive learning technique (PBL) into their teaching practice (disaggregated into	Male			85,7%	66,7%
	Total			79,5%	79,0%

Mand F)					
2100.1 # of pre-service teachers trained in a play-based, inclusive and gender-sensitive method of learning in order to qualify as teachers according to the standard set by the government	Woman	0	221	621	
	Male	0	316	640	
	Total	0	537	1261	
1310.2/# of teachers who meet Right To Play principles for a positive learning environment.					76,83%
2200.1 Percentage and number of teachers who apply inclusive and gender-sensitive play-based learning methodology in their teaching practices	Woman	20%	86%	84,4%	89,1%
	Male	9%	82%	92,9%	72,2%
	Total	15,04%	84%	88,7%	81,7%
Percentage and number of technical staff who report being better equipped (informed) about PBL	Woman		24%	73,3%	89,1%
	Male		35%	85,7%	80,6%
	Total		32%	79,5%	85,4%
3.2: % and # of children who have a positive association with school	Female	35%	75%	74,7%	81,8%
	Male	30,00%	66%	73,1%	76,1%
	Disability	13%	00%	73,74%	73,3%
	Total	24,50%	71%	73,9%	78,78%