



PARTNERSHIP FOR QUALITY EDUCATION - MALI (PAQE II)
THE SCHOOL FEEDING PROGRAM IN THE AREAS OF KOULIKORO AND
BOUGOUNI - EXTENSION PHASE
EVALUATION REPORT

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July 18, 2024

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ACKNOWLEDGMENTS

The authors would like to thank Mamadou Koné and Abdoulaye Konaté for their support during the fieldwork. We would also like to thank Claude Cheta (RTP International), Mariam Maiga, Oumou Sissoko and Abdoulaye Coulibaly (RTP Mali) for their support in the planning and implementation of the evaluation, and their comments on the report itself. Finally, we thank the students, teachers, school administrators, and community members who were assessed and interviewed for this evaluation for their time.

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ACRONYMS

EGRA	Early Grade Reading Assessment
GISSE	Scientific Interest Group of Economic Statisticians
NORAD	Norwegian Agency for Development Cooperation
PAQE II	Partner for Education Quality Improvement
PBL	Play-Based Learning
RTP	Right To Play

EXECUTIVE SUMMARY

Right To Play (RTP) is an international humanitarian organization that uses Play to promote the holistic development of children and young people in the most deprived regions of the world. RTP uses transformative practices of sport and play into opportunities to promote education, health, and peace. RTP was funded by the Norwegian Agency for Development Cooperation (NORAD) under the Partnership for Quality Education Project (PAQE II) in Mali, with the aim of improving students' reading comprehension and life skills and promoting a wider learning environment by working with teachers, education officers and members of communities living in and around the areas where the project is implemented.

In 2023, RTP added a new emphasis on children's nutrition and overall diet, along with the creation of 10 canteens in 10 RTP schools, following a needs assessment (baseline) study, conducted in October 2023, which established the need for a school feeding program in schools that are actively benefiting from PAQE II. The overall goal of this new program – which would provide meals to students via canteens, is to improve attendance rates, students' engagement and progression in education, and children's wellbeing.

The current evaluation aims to assess children's learning skills in RTP schools with canteens where meals were served throughout the school year [between October 2023 and May 2024] in comparison with both RTP schools without canteens and non-partner schools, with the goal of evaluating the impact of the PAQE II project in implementing – from the beginning of the project in August 2017 up until May 2024 – a child-centred learning approach in a positive learning environment while establishing and managing canteens through the school feeding program. This document presents the results of the most recent evaluation.

Main results

This section provides summary results regarding (i) students' reading skills through the lens of the EGRA tool, (ii) students' life skills, and (iii) the impact of the school feeding program on children's progression in school.

General takeaways

The assessment of students' reading, and life skills demonstrated the following:

- (i) Students in schools benefitting from both the PBL program and the school feeding program have better reading and life skills than other students, highlighting the positive impact of funding school canteens on student's learning and progression throughout the school year.
- (ii) Girls slightly outperform boys overall across all sections of the EGRA tool.
- (iii) Students living with a disability in PBL schools with canteens showed better reading and life skills than their peers in schools that are not benefiting from the school feeding program.
- (iv) Corporal punishment still exists in RTP schools – despite the implementation of the school feeding program, even though its application is more prevalent in non-partner schools, highlighting the need for new and practical solutions that specifically address the issue.

The evaluation of the school feeding program – in which the situation of reference is set to the needs assessment study of October 2023 – demonstrated the following:

- (i) The proportion of students who missed classes and the average number of days of absence have decreased in RTP schools with canteens.
- (ii) The frequency of home-school-home trips – and the average distance covered by students daily – has significantly decreased following the implementation of the school feeding program.
- (iii) Students' ability to concentrate in class and to complete their homework has greatly improved from last year's statistics, highlighting the positive impact of the program on students' learning and progression in school.
- (iv) Children's nutrition and dietary diversity has improved, as students positively rated the quantity, the quality, the hygiene, and the diversity of the food served at the canteen.
- (v) Students and school principals' opinions about the school feeding program is extremely positive, highlighting the need for sustainability and expansion to other RTP schools.

Students' reading skills

The EGRA tool – which consists of five (5) sections – was used to assess students' reading skills.

Section 1: Identifying the initial sound in a word. Students in RTP schools that benefit from the school feeding program (or PBLC schools) were able to correctly identify the initial sound of 5,85 words out of 10 on average – with only 6,43% of students failing to identify any initial sound, outperforming students in PBL only schools (4,74 – with 12,38% failing to identify at least one initial sound) and students in non-partner schools (3,69 – with 22,13% of students failing to identify any initial sound)

Section 2: Knowledge of graphemes. Students in PBLC schools were able to read 39,1 word or letter sounds per minute, showing better skills than students in PBL and NPS schools who averaged 34,6 and 28,4 words or letter sounds per minute, respectively. In Section 3, the results show that students in PBLC schools read 16,5 familiar words out of 80 per minute – with 4,95% failing to read a single word; students in PBL and NPS schools read 14,6 and 8,75 familiar words on average, respectively.

Section 3: Reading familiar words. Students in PBLC schools read 16,5 familiar words out of 80 per minute – with 4,95% failing to read a single word; students in PBL and NPS schools read 15,5 and 11,4 familiar words on average, respectively.

Section 4: Listening comprehension. Students in PBLC schools answered 3,05 out of 6 questions correctly – with 15,34% failing to provide a single correct answer; in PBL and NPS schools, students were able to provide 2,31 and 1,25 correct answers on average – with 24,76% and 50,82% failing to provide at least one correct answer, respectively.

Section 5A: Words per minute from a story. Students in PBLC schools (18,2 words read per minute on average) outperform students in PBL (17,7) and NPS (11,1) schools.

Section 5B: Reading comprehension. Students in PBLC schools provided 1,69 correct answers on average; students in PBL and NPS schools provided 0,75 and 0,53 correct answers – with 56,19% and 68,03% failing to provide a single correct answer, respectively.

Students' life skills

Three components were used to assess students' life skills: communication, teamwork, and conflict resolution.

Communication. Students in PBLC schools have a higher average score (85,64%) in the communication component than students in PBL only (73,81%) and NPS schools (59,83%), highlighting the positive impact of having functioning canteens in schools.

Teamwork. Students in PBLC schools have better teamwork skills – with an average score of 92,08% – than students in PBL only (87,62%) and NPS schools (69,67%).

Conflict resolution. Students in PBLC schools have better conflict resolution skills – with an average score of 85,15% – than students in PBL only (76,19%) and NPS schools (69,67%).

In order to provide a single score for all three components, an average life skills metric was computed. To do so, an average was computed for each component, where each question within a component was weighted from 0 to 10. The results show that students in PBLC schools have better life skills – with an average score of 9 out of 10 – than students in PBL only (8,89) and NPS schools (8,43). Girls outperform boys overall, especially in PBLC schools. Also, students living with a disability display less skills than other students across all groups.

Positive learning environment

This component of the play-based learning approach is evaluated by considering the extent to which students enjoy school (if they like school and participate in class), as well as teachers' role in creating a positive learning environment for students (use of additional support for reading, the application of play-based learning techniques, and the ability to maintain order without physically harming students), and the application of corporal punishment.

Additional support in reading. Almost half of the teachers in PBLC schools (47,56%) believe that all teachers use manuals; in PBL only schools and NPS schools, the proportions are 22,22% and 25,34%, respectively. Around half of the teachers in PBLC schools (48,78%) believe that all students in the class have reading materials; the corresponding statistics are 22,22% and 26,56% for PBL and NPS schools, respectively. Around 1 teacher out of 5 in PBLC schools run a book club, which is higher than what teachers in PBL (8,89%) and NPS schools (9,40%) declared.

Application of PBL techniques. In PBL schools benefitting from the school feeding program, around 85% of teachers use a PBL technique; the corresponding statistic are 53,33% and 32,04% in PBL and NPS schools, respectively. Regarding the number of PBL techniques used per week, the results show that teachers in PBLC schools use 3,35

techniques on average, while teachers in PBL and NPS schools apply 2,4 and 0,95 techniques on average, respectively.

Maintaining order in the classroom. The vast majority of teachers in PBL schools manage to maintain order in the classroom without recourse to corporal punishment as 91,45% in PBLC and 84,44% in PBL schools, respectively, were successful in maintaining order. In NPS schools, the vast majority of teachers (93%) were not able to maintain order without using corporal punishment.

Teachers' pedagogical approaches. teachers in PBLC schools – with a score of 42,3 out of 49 – outperform teachers from PBL schools (41,3) and NPS schools (32,8) in preparation of teachings, classroom management, assessment of student learning and achievement, personal qualities, and professional relationships.

Students' appreciation of the learning environment. Approximately 80% of students in PBLC and PBL schools like school and participate in class; around 64% of students in NPS declared enjoying school. The vast majority of students in PBLC (94%) and PBL (90%) schools enjoy playing games with friends at school; the corresponding statistic is 73% for NPS schools.

Existence of corporal punishment. Corporal punishment is prevalent in PBLC, PBL, and NPS schools according to 78%, 75%, and 88% of students. There is no significant difference in the responses provided by girls and boys regarding corporal punishment.

Application of corporal punishment. Approximately 43% of teachers in PBLC schools declared that their colleagues use corporal punishment on students; in PBL schools, 53% of teachers stated that the use of corporal punishment is prevalent among colleagues. The proportion is higher in NPS schools where, according to teachers, 60% of colleagues physically hit students. When asked directly, around 35% of teachers in PBL schools confirmed the use of corporal punishment; 2 out of 5 teachers in PBL schools stated that they use corporal punishment. The statistic is higher in NPS schools where 3 out of 5 teachers physically hit students.

Corporal punishment and gender. Around 68% of students in PBLC schools declared that girls and boys are equally treated when it comes to corporal punishment, while 31% stated that boys get hit more frequently than girls; a similar trend is noted both in PBL and NPS schools. More than 9 teachers out of 10 in PBLC and PBL schools declared that boys

and girls are equally treated when it comes to the application of corporal punishment. In NPS schools, 25% of teachers stated that boys get hit more than girls.

Corporal punishment and disability. According to students in PBLC schools – all students are equally treated when it comes to corporal punishment (24%), while 22% of students stated that those living with a disability do not get hit. Around 1 student out of 5 declared that students living with a disability do not get hit. In PBL schools, 40% of students declared that those living with a disability get hit less than others, 17% stated that they do not get hit, and 16% stated that all students get hit equally; the corresponding proportions are 31%, 21%, and 2% in NPS schools, respectively.

Assessment of the school feeding program

This section evaluates its impact on students' attendance, progression in school (concentration, homework), dietary diversity, and the community's overall impression on its long-term continuity.

Absence. The evolution of the proportion of students who missed classes in the last 30 days shows a decrease from 3,25% in 2023 to 2,45% in 2024. The average full-days of absence among students who declared having missed at least one class is 0,2 in 2024, a steady decrease from 2,7 in 2023. The average morning and afternoon absences in 2024 are 0,1 and 0,1, respectively, representing a sharp decrease from 1,1 and 1,8 in 2023.

Frequency of home-school daily trips. In 2023, 9,7% students reported that they cover the home-school-home itinerary, 72% do it four times, and 19% do it six times. In 2024, around 50% of students report now that they cover the distance between home and school twice, 35% do it four times, and 15% make the trip six times. These statistics align with projections made by students regarding the number of trips if the school feeding program were to be implemented, confirming the clear success of the program in retaining students in school between breaks.

Concentration in class. In 2023, 6% of students declared that they could not concentrate in class, citing being **hungry** and **tired** as the main reasons. The current evaluation demonstrated a clear improvement as 1,51% of girls and 1,93% of boys stated that they could not concentrate; this represents a decrease from 7,42% for girls and 4,54% for boys in 2023.

Homework. In 2023, students who reported that they could not complete their homework on a consistent basis stated the following reasons: tiredness (32%), household work (63%), and being hungry (6%). In 2024 – following the implementation of the school feeding program – only 5% of students cited tiredness, a steady decrease from 32% in 2023; no student cited being hungry as a reason, which is a great improvement from 6% in 2024. The positive results regarding the ability for students to do homework could be attributed to the school feeding program which (i) reduces the frequency of home-school-home trips – which is linked to students being tired – and (ii) offer children the opportunity to have meals in good quantity and quality while staying in school between breaks.

Evaluation of the food. Students whether or not they get their meals at the school canteen; nearly all of them (99%) answered yes. Also, 89% of children judge the quantity of food as *very good*; 90% judge the quality as *very good*; 95% appreciate the hygiene as *very good*; 86% believe that the time of service is *very good*, while 11% judge it as *good*; 80% judge the diversity of the food as *very good*, while 7% believe that some changes need to be made.

Dietary diversity. A dietary diversity index, which measures the variety of food that a household has access to, was computed. The overall mean of the diversity score for 2024 is 4,65, an increase from 4,48 in 2024; this result highlights the positive impact of the program after only one school year.

Benefits of a school feeding program

Children's opinions: The positive effects of the program, as explained by students, are summarized as follows:

- Having access to the school canteen is a great motivation to study (50%).
- The food served at the canteen helps to have better nutrition and diet (37%).
- A fully functional canteen offers students the opportunity to stay in school between breaks, thus reducing the frequency of home-school trips (36%).
- The canteen helps to improve concentration in class with less home-school trips between breaks and great food service on a consistent basis (24%).
- Following the implementation of the program, parents spend less on food, thus save more money for other school/household expenditures (14%).
- The canteen improves attendance as children are motivated to go to school and stay between breaks (10%).

School principals' opinions: All principals (100%) declared the school feeding program as Very important. When asked about why it is very important to implement the program in their schools, principals cited the following reasons:

- Increase children's motivation to attend schools regardless of the distance between home and school.
- Increase food security and dietary diversity.
- Increase students' motivation, focus, concentration, and willingness to study and be the best in the classroom.
- Reduce parents' spending on food, thus increasing the revenue of the families.

Designing the study

The study design for the current evaluation builds on the latest map of RTP schools that are currently benefiting from the PAQE-II project, with and without the school feeding program, and uses a mixed approach by collecting quantitative data from students, teachers, and school principals, and qualitative data from school principals, community leaders and local NGOs via interviews and focus groups, to better contrast and contextualize quantitative results, and to assess specific needs of children within their communities.

Selection of schools

The current evaluation considers three different groups of schools based on their status of beneficiaries of the program: the group that benefits from both the play-based learning approach and the school feeding program (PBLC), the group that only benefits from the play-based learning approach (PBL) and the control group as a non-partner school (NPS). All schools are located in the areas of Koulikoro and Bougouni.

Students in 4th grade were selected for evaluation using the EGRA tool and for question regarding like skills; students in 4th and 6th grades were selected for questions regarding the school feeding program as in the baseline study.

Quantitative data collection

We selected 26 schools for participation in the current survey, all located in the areas of Koulikoro and Bougouni: 10 schools in the PBLC group, 10 schools in the PBL group, and 6 schools in the NPS group.

In each of the selected schools belonging in the PBLC group, 40 students enrolled in grades 4 and 6 were randomly sampled and surveyed (20 students in grade 4 and 20 students in grade 6); in the PBL and NPS groups, 20 students enrolled in grade 6 were surveyed, for a total of 720 student participants – 520 in grade 4 and 200 in grade 6, evenly divided according to sex (50% were boys and 50% were girls). Note that all students with disabilities were systematically included in the sample.

Teachers and school principals were also interviewed as part of the quantitative survey; a total of 104 teachers in grades 1, 2, 3, and 4 were surveyed (40 in the PBLC school group, 40 in the PBL group, and 24 in the NPS group). Teachers in grade 4 were also observed in the classroom, for a total of 26 teachers (10 in PBLC, 10 in PBL, 6 in NPS). Finally, a total of 26 school principals (10 in PBLC, 10 in PBL, 6 in NPS) answered a checklist questionnaire.

Qualitative data collection

In-depth interviews and focus groups were conducted with school principals, members of the pedagogical animation centers, students' parents, community leaders, and NGOs operating in the areas where the Right to Play program is being implemented. The main goal is to assess specific needs of the communities living in the areas of Koulikoro and Bougouni, while giving its members the platform to voice their opinions and offer recommendations regarding the implementation of the current programs.

1. CONTEXT AND OBJECTIVES

Right To Play (RTP) is an international humanitarian organization that uses Play to promote the holistic development of children and young people in the most deprived regions of the world. RTP is committed to improving the lives of these children and strengthening their communities by transforming the best practices of sport and play into opportunities to promote education, health, and peace. Right To Play programs promote healthy child development and create safer, stronger communities.

The Partnership for Quality Education Project (PAQE II) project aims to provide quality education to approximately 69,101 children including 34,665 girls aged 6-12 years in basic education levels 1-6. RTP is implementing the PAQE II project in four regions of Mali: Koulikoro, Ségou, Sikasso (Bougouni) and the district of Bamako. The project is being implemented with the support of four (4) civil society organisations (OMAES, ALED, RARE and RED), and with the help of the Ministry of Education of Mali (DNP, DNEN, DNEF, DNEPS). The project's main goal is to enable a greater number of children (girls and boys from grade 1 to grade 6) 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, and to promote a wider learning environment by working with teachers, education officers and members of communities living around the areas where the project is implemented, and by providing them with the necessary tools to foster positive learning environments, including learning through play.

RTP implemented the initial phase of the Partnership for Quality Education Project (PAQE II) in Mali – which started in August 2017, with multiple extensions through January 2023. RTP added a new emphasis on children's nutrition and overall diet with the creation of 10 canteens in 10 RTP schools, following a needs assessment (baseline) study, conducted in October 2023, which established the need for a school feeding program in schools that are actively benefiting from PAQE II. The new school feeding program covers the period between October 2023 through May 2024; the overall goal of this new program – which would provide meals to students via canteens, is to improve attendance rates, students'

engagement and progression in education, and children's wellbeing. The initial phase of this new project targeted schools located in the areas of Koulikoro and Bougouni

The current evaluation assesses children's learning skills in RTP schools where canteens have been installed and meals served throughout the school year [between October 2023 and May 2024] in comparison with both RTP schools without canteens and non-partner schools, with the goal of evaluating the impact of the PAQE II project in implementing – from the beginning of the project in August 2017 up until May 2024 – a child-centred learning approach in a positive learning environment while establishing and managing canteens through the school feeding program. This evaluation will specifically:

- evaluate children's reading and life skills using key indicators from the current evaluation in comparison with previous evaluations;
- evaluate the positive learning environment, by assessing the extent to which students enjoy school, teachers' role in creating a positive learning environment, and the application of corporal punishment.
- assess the impact of the school feeding program on children's engagement and progression in education (reading and life skills) – and the added motivation for performing their homework.

Finally, this document provides recommendations regarding the best path towards the sustainability and the continuing success of the program.

2. STUDY DESIGN

The current evaluation aims to assess children's reading and life skills in RTP schools with canteens where meals were served throughout the school year, with the goal of evaluating the impact of the school feeding program on students' overall progression. We used a mixed approach by collecting quantitative data from students, teachers, and school principals, and qualitative data from school principals, community leaders and local NGOs via interviews and focus groups, to better contrast and contextualize quantitative results, and to assess specific needs of children within their communities.

This study considers three different groups of schools based on their status of beneficiaries of the program: the group that benefits from both the play-based learning approach and the school feeding program (PBLC), the group that only benefits from the

play-based learning approach (PBL) and the control group as a non-partner school (NPS). All schools are located in the areas of Koulikoro and Bougouni.

Students in 4th grade were selected for evaluation using the EGRA tool and for question regarding like skills; students in 4th and 6th grades were selected for questions regarding the school feeding program as in the baseline study.

2.1. Quantitative surveys

We selected 26 schools for participation in the current survey, all located in the areas of Koulikoro and Bougouni: 10 schools in the PBLC group, 10 schools in the PBL group, and 6 schools in the NPS group – see Table 1 for more details.

Table 1: List of selected schools as part of the assessment survey.

School	Grade 4	Grade 6	Area	Group
1er Cycle A	20		Koulikoro	PBL
1er Cycle D	20		Koulikoro	PBL
Almamy Timbo A	22		Sikasso	PBL
Bladjè 1er cycle	20		Koulikoro	NPS
Danou Moussa B	20		Sikasso	PBL
Dièra	21	20	Sikasso	PBLC
Dougounina B	20		Sikasso	PBL
Ecole de Kéléya	20		Sikasso	NPS
Ecole de Soulouba	21		Sikasso	NPS
EDC C	21		Koulikoro	PBL
Foulaboula	20	20	Sikasso	PBLC
Heremakono Nord	20		Sikasso	NPS
Katibougou A	23		Koulikoro	PBL
Kayo B	24		Koulikoro	PBL
Konoko-Bougoumbala	19	20	Sikasso	PBLC
Mafeya	21		Koulikoro	NPS
Manabougou 1er cycle	20	20	Koulikoro	PBLC
Massabla	21		Sikasso	PBLC
Massala Premier Cycle	20		Koulikoro	NPS
Monzon Traoré A	20	20	Koulikoro	PBLC
Monzon Traoré B	21	20	Koulikoro	PBLC
N'Golo Diarra	21	20	Koulikoro	PBLC
Sido A (Wara Doumbia)	20		Sikasso	PBL
Sido B	19	20	Sikasso	PBLC
Solo	20	20	Sikasso	PBLC
Torakabougou C	20		Sikasso	PBL

Source: PAQE II – final evaluation

In each of the selected schools belonging in the PBLC group, 40 students enrolled in grades 4 and 6 were randomly sampled and surveyed (20 students in grade 4 and 20 students in grade 6); in the PBL and NPS groups, 20 students enrolled in grade 6 were surveyed, for a total of 720 student participants – 520 in grade 4 and 200 in grade 6, evenly divided according to sex (50% were boys and 50% were girls). Note that all students with disabilities were systematically included in the sample.

Teachers and school principals were also interviewed as part of the quantitative survey; a total of 104 teachers in grades 1, 2, 3, and 4 were surveyed (40 in the PBLC school group, 40 in the PBL group, and 24 in the NPS group). Teachers in grade 4 were also observed in the classroom, for a total of 26 teachers (10 in PBLC, 10 in PBL, 6 in NPS). Finally, a total of 26 school principals (10 in PBLC, 10 in PBL, 6 in NPS) answered a checklist questionnaire – see Table 2 for more details.

Table 2: Sample size distribution.

	Grade	Sex	Sample size			Total
			PBLC	PBL	NPS	
Students	6	Girl	100	0	0	720
		Boy	100	0	0	
	4	Girl	100	100	60	
		Boy	100	100	60	
Teachers			40	40	24	104
School principals			10	10	6	26

Source: PAQE II – final evaluation

2.2. Focus groups

The collection and analysis of qualitative data in this setting are performed with the goal of exploring trends in the quantitative data. As part of the current survey, we organized focus groups with school principals, parents, mayors, and other community leaders; in-depths interviews were conducted to assess specific needs of the communities living in the areas of Koulikoro and Bougouni, while giving its members the platform to voice their opinions and offer recommendations regarding the implementation of the PAQE II project and the school feeding program.

3. DATA ANALYSIS

The structure of the data analysis is described as follows. In Section 3.0, we present an assessment of students' reading skills. Section 3.1 presents the evaluation of the progression of students' life skills. Section 3.2 evaluates the learning environment through the lens of the play-based learning approach. Section 3.3 addresses corporal punishment in schools (prevalence, application, discrimination based on gender and disability status). In Section 3.4, we address gender roles in schools. Section 3.5 evaluates the impact of the school feeding program on children's progression, concentration, and overall well-being.

3.0. Assessment of students' reading skills

The progression of students' reading skills was measured using the EGRA tool, which is divided into the following five (5) sections:

- **Section 1** (identifying the initial sound in a word): assessors read 10 words to students who were then asked to identify the initial sound in each word.
- **Section 2** (knowledge of graphemes): 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"); the exercise is timed.
- **Section 3** (reading familiar words): assessors asked students to read a text from a grid of familiar words; the exercise is timed.
- **Section 4** (hearing comprehension): assessors read a short story and students are asked six questions about the story.
- **Section 5a** (reading a short story): assessors count the number of words read by students per minute when reading a story; the exercise is timed.
- **Section 5b** (understanding the text read): assessors count the number of questions that students answered correctly.

Table 3 presents summary results across all sections of the reading skills' assessment tool. For Section 1, the results show that students in RTP schools that benefit from the school feeding program were able to correctly identify the initial sound of 5,85 words out of 10 on average – with only 6,43% of students failing to identify any initial sound,

outperforming students in PBL only schools (4,74, with 12,38% failing to identify at least one initial sound) and students in non-partner schools (3,69, with 22,13% of students failing to identify any initial sound).

The results for Section 2 show that students in PBLC schools were able to read 39,1 word or letter sounds per minute, showing better skills than students in PBL and NPS schools who averaged 34,6 and 28,4 words or letter sounds per minute, respectively.

In Section 3, the results show that students in PBLC schools read 16,5 familiar words out of 80 per minute – with 4,95% failing to read a single word; students in PBL and NPS schools read 14,6 and 8,75 familiar words on average, respectively.

Section 4 evaluates students' listening skills as assessors were tasked with reading a short story before asking students six questions about the story; their answers are graded as correct, incorrect, or no answer. Students in PBLC schools answered 3,05 out of 6 questions correctly – with 15,34% failing to provide a single correct answer; in PBL and NPS schools, students were able to provide 2,31 and 1,25 correct answers on average – with 24,76% and 50,82% failing to provide at least one correct answer, respectively.

In Section 5A, students were asked to read a story and assessors count the number of words in the story read per minute. The results show that students in PBLC schools (18,2 words read per minute on average) outperform students in PBL (17,7) and NPS (11,1) schools.

In Section 5B, assessors asked students a series of six questions following the story to evaluate their reading comprehension. The results show that students in PBLC schools provided 1,69 correct answers on average; students in PBL and NPS schools provided 0,75 and 0,53 correct answers – with 56,19% and 68,03% failing to provide a single correct answer, respectively.

Table 3: EGRA tool: assessment of students' reading skills.

	Group			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Section 1 [Range=1-10]	5,85	4,74	3,69	6,43	12,38	22,13
Section 2 [Range=1-100]	39,1	34,6	28,4	0,00	0,00	0,00
Section 3 [Range=1-80]	16,5	14,6	8,75	4,95	4,28	10,65
Section 4 [Range=1-6]	3,05	2,31	1,25	15,34	24,76	50,82

Section 5a [Range=1-50]	18,2	17,7	11,1	2,97	1,90	9,01
Section 5b [Range=1-6]	1,69	0,75	0,53	38,61	56,19	68,03

Source: PAQE II – final evaluation

The results of the EGRA tools are also disaggregated by gender and disability status. Table 4 presents the results of Section 1 (recognition of the initial sound in a word); girls slightly outperform boys, and students with no disability perform better than students living with a disability.

Table 4: EGRA Section 1: Recognition of the initial sound in a word.

	Average [Range=1-10]			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Average	5,85	4,74	3,69	6,43	12,38	22,13
Girl	5,97	4,88	3,80	5,21	13,46	15,00
Boy	5,75	4,60	3,58	7,55	11,32	29,03
Living without a disability	5,94	4,84	3,83	5,91	12,14	19,42
Living with a disability	4,81	4,30	2,89	12,50	13,51	36,84

Source: PAQE II – final evaluation

Table 5 presents the results of Section 2 (names of letters or sounds read per minute) according to gender and disability status. The results show that boys slightly outperform girls; in PBLC schools, students living with a disability perform slightly better than other students. The trend is reversed in PBL and NPS schools where students living with a disability perform less better than other students.

Table 5: EGRA Section 2: Names of letters or sounds read per minute.

	Average [Range=1-100]			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Average	39,1	34,6	28,4	0,00	0,00	0,00
Girl	38,1	34,6	27,2	0,00	0,00	0,00
Boy	40,0	34,6	29,5	0,00	0,00	0,00
Living without a disability	39,0	35,3	28,7	0,00	0,00	0,00
Living with a disability	39,9	31,3	26,2	0,00	0,00	0,00

Source: PAQE II – final evaluation

Table 6 presents the results of Section 3 (familiar words read per minute) disaggregated by gender and disability status. Overall, there is no difference between girls and boys

except in PBLC schools where boys read 17 words per minute while girls read 15,9 words per minute on average. Students with disability perform better than other students overall in PBLC and PBL schools; the trend is reversed in NPS schools.

Table 6: EGRA Section 3: Familiar words read per minute.

	Average [Range=1-80]			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Average	16,5	15,5	11,4	4,95	9,05	9,84
Girl	15,9	16,0	10,2	3,12	9,61	6,67
Boy	17,0	14,9	12,6	6,60	8,49	12,90
Living without a disability	16,3	15,5	11,6	5,37	9,25	9,71
Living with a disability	18,9	15,1	10,8	0,00	8,11	10,53

Source: PAQE II – final evaluation

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 grade 4th (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). The results are presented in Table 7. Overall, only 5,94% of students in PBLC schools read at grade level; in PBL and NPS groups, 4,76% and 0,82% of students read at grade level, respectively. The results also show that boys outperform girls; also, students living with a disability perform far better than other students in PBL schools with canteens. The 15% target is therefore not met for indicator 1.1.

Table 7: EGRA Section 3: Percentage of students reading at grade level.

	Group		
	PBLC	PBL	NPS
Average	5,94	4,76	0,82
Girl	4,17	3,85	0,00
Boy	7,55	5,66	1,61
Living without a disability	5,38	4,62	0,97
Living with a disability	12,50	5,40	0,00

Source: PAQE II – final evaluation

Table 8 presents the results of Section 4 (listening comprehension) according to gender and disability status. The results show that girls outperform boys overall. Students living

with a disability outperform other students in PBLC schools; the trend is reversed in schools with no functioning canteen, highlighting the positive effect of the school feeding program in improving students' listening comprehension.

Table 8: EGRA Section 4: Listening comprehension.

	Average [Range=1-6]			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Average	3,05	2,31	1,25	15,34	24,76	50,82
Girl	3,20	2,47	1,20	11,46	24,04	48,33
Boy	2,92	2,16	1,29	18,87	25,47	53,22
Living without a disability	2,98	2,37	1,28	16,66	22,54	49,51
Living with a disability	3,88	2,05	1,05	0,00	35,13	57,89

Source: PAQE II – final evaluation

The results for Section 5A, disaggregated by gender and disability status are presented in Table 9. Girls outperform boys in PBLC and PBL schools; also, 11,29% of boys and 6,66% of girls in NPS schools failed to read a single word. Students living with a disability outperform other students in PBLC and PBL schools; the trend is reversed in NPS schools, confirming the positive effect of having a PBL approach coupled with a school feeding program.

Table 9: EGRA Section 5A: Words read per minute from a story.

	Average [Range=1-50]			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Average	18,2	17,7	11,1	2,97	1,90	9,01
Girl	18,8	18,1	9,58	3,12	1,92	6,66
Boy	17,6	17,2	12,5	2,83	1,88	11,29
Living without a disability	17,8	17,2	11,4	3,22	1,73	7,76
Living with a disability	21,8	19,8	9,32	0,00	2,70	15,79

Source: PAQE II – final evaluation

Table 10 presents the results of Section 5B (reading comprehension) disaggregated by gender and disability status. Boys outperform girls overall in PBLC and NPS schools. Also, students living with a disability perform better than other students in PBLC schools; in PBL and NPS schools, students with no disability perform slightly better.

Table 10: EGRA Section 5B: Reading comprehension, percentage of correct answers.

	Average [Range=1-6]			Zero (%)		
	PBLC	PBL	NPS	PBLC	PBL	NPS
Average	1,69	0,75	0,53	38,61	56,19	68,03
Girl	1,60	0,82	0,45	38,54	55,77	70,00
Boy	1,77	0,68	0,61	38,68	56,60	66,13
Living without a disability	1,67	0,78	0,58	38,17	56,07	65,04
Living with a disability	1,94	0,59	0,26	43,75	56,75	84,21

Source: PAQE II – final evaluation

Overall, three main takeaways can be highlighted in the assessment of students' reading skills: (i) students in schools benefitting both from the PBL approach and the school feeding program have better skills than other students, (ii) girls slightly outperform boys overall across all sections, and (iii) students living with a disability in PBL schools with functioning canteens show better skills than their peers in schools that are not benefitting from the school feeding program.

The results from interviews with school principals demonstrated that the application of PBL methods improves students' learning by giving them the confidence in front of their teachers. This observation highlights the fact that, in PBL schools, students have made relatively better progress in terms of reading and comprehension skills. School principals also perceive the importance of this approach in accelerating children's learning.

"PBL is important because it creates trust between the student and the teacher, it makes students perform well. » School principal in Koulikoro

"PBL is important because the Right To Play method helps teachers communicate with children in the classroom in a climate conducive to learning. » School principal in Bougouni

3.1. Assessment of life skills

This section evaluates students' skills in terms of interaction with other students as well as the immediate environment in and around the school. Life skills are assessed using three main components:

- **Communication:** this component is evaluated using 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:** this component is assessed using the following four statements: "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", "I know how to work with others".

For each component, students answer a series of questions measured on a four-point Likert scale, with values ranging from 1 – indicating "strongly agree – to 4 "strongly disagree". A student is said to be competent in one component if she/he answers "strongly agree" or "agree" to all questions in the component.

Note that the life skills section assesses 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 disability status).

Overall, students in PBLC and PBL groups scored high in the teamwork components as the results show in Table 11. In PBLC schools, girls outperform boys with an average score of 92,71% versus 91,51% for boys; the trend is reversed in PBL schools where boys have an average score of 88,68% versus 86,54% for girls. Students living with a disability outperform other students in PBLC schools with an average score of 93,75% versus 91,93% for students living without a disability; the trend is reversed in PBL and NPS schools.

Table 11: Life skills, teamwork (in percentages).

	Group		
	PBLC	PBL	NPS
Average	92,08	87,62	69,67
Girl	92,71	86,54	71,66
Boy	91,51	88,68	67,74
Living without a disability	91,93	89,02	71,84
Living with a disability	93,75	81,08	57,89

Source: PAQE II – final evaluation

Students in PBLC schools have a higher average score (85,64%) in the communication component than students in PBL only (73,81%) and NPS schools (59,83%), highlighting

the positive impact of having functioning canteens in schools. Girls have better communication skills than boys in PBLC schools overall, but the trend is reversed in PBL only schools. Students living with a disability have less communication skills than other students across all groups.

Table 12: Life skills, communication (in percentages).

	Group		
	PBLC	PBL	NPS
Average	85,64	73,81	59,83
Girl	89,58	70,19	66,67
Boy	82,07	77,36	53,22
Living without a disability	86,02	75,14	63,11
Living with a disability	81,25	67,57	42,10

Source: PAQE II – final evaluation

Table 13 presents students' scores for conflict resolution according to gender and disability status. Overall, students in PBLC schools have better conflict resolution skills – with an average score of 85,15% – than students in PBL only (76,19%) and NPS schools (69,67%). Girls show better skills than boys in PBLC schools with an average score of 83,33% versus 86,79%; however, the trend is reversed in PBL only schools. Students living with a disability have less conflict resolution skills than other students across all groups.

Table 13: Life skills, conflict resolution (in percentages).

	Group		
	PBLC	PBL	NPS
Average	85,15	76,19	69,67
Girl	83,33	74,04	71,67
Boy	86,79	78,30	67,74
Living without a disability	86,02	78,03	70,87
Living with a disability	75,00	67,57	63,16

Source: PAQE II – final evaluation

In order to provide a single score for all three components, an average life skills metric was computed. To do so, an average was computed for each component, where each question within a component was weighted from 0 to 10, as described below.

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:

$$Z_{\text{average_work}} = (Q16+Q17+Q18+Q19)/4$$

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.

The results in Table 14 show that students in PBLC schools have better life skills – with an average score of 9 out of 10 – than students in PBL only (8,89) and NPS schools (8,43). Girls outperform boys overall, especially in PBLC schools. Also, students living with a disability display less skills than other students across all groups.

Table 14: Life skills, overall average.

	Group		
	PBLC	PBL	NPS
Average	9,00	8,89	8,43
Girl	9,05	8,86	8,52
Boy	8,96	8,93	8,35
Living without a disability	9,02	8,92	8,56
Living with a disability	8,88	8,76	7,74

Source: PAQE II – final evaluation

3.2. Creating a positive learning environment

This component of the play-based learning approach is evaluated by considering the extent to which students enjoy school (if they like school and participate in class), whether or not they play games with friends, the existence of corporal punishment, and the practice of positive discipline. This section also assesses teachers' role in creating a positive learning environment for students through the use of additional support for reading, the application of play-based learning techniques, and the ability to maintain order without physically harming students.

3.2.1. Teachers' pedagogical approaches

Table 15 presents the results regarding the use of additional reading support by teachers in the classroom. Almost half of the teachers in PBLC schools (47,56%) believe that all teachers use manuals; in PBL only schools and NPS schools, the proportions are 22,22% and 25,34%, respectively. Around half of the teachers in PBLC schools (48,78%) believe that all students in the class have reading materials; the corresponding statistics are 22,22% and 26,56% for PBL and NPS schools, respectively. Around 1 teacher out of 5 in PBLC schools run a book club, which is higher than what teachers in PBL (8,89%) and NPS schools (9,40%) declared.

Table 15: Additional support in reading.

	Group		
	PBLC	PBL	NPS
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	9,40

Source: PAQE II – final evaluation

Table 16 presents the results regarding the application of PBL techniques in the classroom. In PBL schools benefitting from the school feeding program, around 85% of teachers use a PBL technique; the corresponding statistic are 53,33% and 32,04% in PBL and NPS schools, respectively. Regarding the number of PBL techniques used per week, the results show that teachers in PBLC schools use 3,35 techniques on average, while teachers in PBL and NPS schools apply 2,4 and 0,95 techniques on average, respectively. Finally, the vast majority of teachers in PBL schools manage to maintain order in the classroom without recourse to corporal punishment as 91,45% in PBLC and 84,44% in PBL schools, respectively, were successful in maintaining order. In NPS schools, the vast majority of teachers (93%) were not able to maintain order without using corporal punishment.

Table 16: Application of PBL techniques.

	Group		
	PBLC	PBL	NPS
Using a PBL technique	85,37%	53,33%	32,04%
Number of PBL techniques used per week	3,35	2,4	0,95
Able to maintain order in the classroom without corporal punishment	91,46%	84,44%	7,02%

Source: PAQE II – final evaluation

3.2.2. Evaluating teachers' pedagogical approaches

This section assesses teachers' overall pedagogical approaches from the preparation of teachings, classroom management, as well as personal qualities and professional relationships. The assessment was conducted using in-class observations, which consist of observing the teacher and evaluating him/her on the basis of a question grid. The assessor observes the teacher from the beginning to the end of the class and gives a mark for each component of the evaluation grid. The classroom observation evaluates the following four sections:

- Preparation of teachings (8 questions)

- Classroom management and instructional intervention (21 questions)
- Assessment of student learning and achievement (11 questions)
- Personal qualities and professional relationships (9 questions)

A score was calculated for each section by assigning a grade of 1 if the teacher meets 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. The overall score, ranging from 0 to 49, is obtained as the sum of the scores for each section.

The results are presented in Table 17. Overall, teachers in PBLC schools – with a score of 42,3 out of 49 – outperform teachers from PBL schools (41,3) and NPS schools (32,8). A disaggregated analysis by section shows that teachers in PBLC schools perform better than other teachers in teaching preparation, and classroom management and instructional intervention; teachers from PBL schools perform better than those in PBLC schools in the evaluation of student learning and achievements.

Table 17: In-class evaluation of teachers.

	Score [Range=0-49]		
	PBLC	PBL	NPS
Average	42,3	41,3	32,8
Teaching preparation	6,67	6,43	5,17
Classroom management and instructional intervention	18,7	17,0	13,7
Evaluation of student learning and achievements	8,0	8,86	5,0
Personal qualities and professional relationships	9,0	9,0	9,0

Source: PAQE II – final evaluation

Finally, students were asked to provide their appreciation of the learning environment in and around school. The results in Table 18 show that approximately 80% of students in PBLC and PBL schools like school and participate in class; around 64% of students in NPS declared enjoying school. The vast majority of students in PBLC (94%) and PBL (90%) schools enjoy playing games with friends at school; the corresponding statistic is 73% for NPS schools. Students were also asked about corporal punishment in school; 78% in PBLC schools, 75% in PBL schools and 88% in NPS schools confirmed the existence of corporal punishment. Moreover, around 18% of students in PBLC and PBL schools confirmed the practice of positive discipline; the corresponding proportion is only 10% in NPS schools.

Table 18: Student's assessment of the learning environment.

	Group		
	PBLC	PBL	NPS
Appreciation of the school (I like the school and I participate in class)	80,19%	79,05%	64,75%
Corporal punishment (Existence of corporal punishment)	77,72%	75,24%	87,70%
Playing games with friends at school	94,06%	90,00%	72,95%
Positive discipline practiced	17,82%	18,09%	9,84%

Source: PAQE II – final evaluation

3.3. Corporal punishment in schools

This section further investigates the existence of corporal punishment, its frequency, the circumstances in which it is applied, and whether or not there is discrimination based on gender or disability status.

3.3.1. Prevalence of corporal punishment in schools

The sensitive issue of corporal punishment was measured using three different approaches, as summarized below.

Important: Corporal punishment 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.

Table 19 presents the results regarding the types of punishment applied by teachers according to students. Corporal punishment is prevalent in PBLC, PBL, and NPS schools according to 78%, 75%, and 88% of students. There is no significant difference in the responses provided by girls and boys regarding corporal punishment. Other types of physical punishment are more prevalent in NPS schools (54%), while 41% and 31% of students in PBL only and PBLC schools report the use of other variants of physical punishment.

Table 19: Types of punishment applied according to students.

	PBLC			PBL			NPS		
	ALL	Boy	Girl	ALL	Boy	Girl	ALL	Boy	Girl
Corporal punishment	77,7	78,3	77,1	75,2	74,5	75,9	87,7	93,5	81,6
Other physical punishment	31,2	25,5	37,5	40,9	46,2	35,6	54,1	56,4	51,7
No recreation	5,9	8,5	3,1	3,8	1,9	5,8	2,5	1,6	3,3
Kicking out	3,96	4,7	3,1	7,1	6,6	7,7	9,8	9,7	10,0
Insult	18,3	19,8	16,7	12,4	10,4	14,4	17,2	16,1	18,3
Positive discipline	29,2	24,5	34,4	40,9	35,8	46,1	33,6	38,7	28,3

Source: PAQE II – final evaluation

Students were also asked about whether or not they were on the receiving end of corporal punishment the day before. Around 1 out of 5 students in PBLC schools declared that they were victims of corporal punishment the day before; the proportion is 12,86% and 39,34% for PBL and NPS schools, respectively.

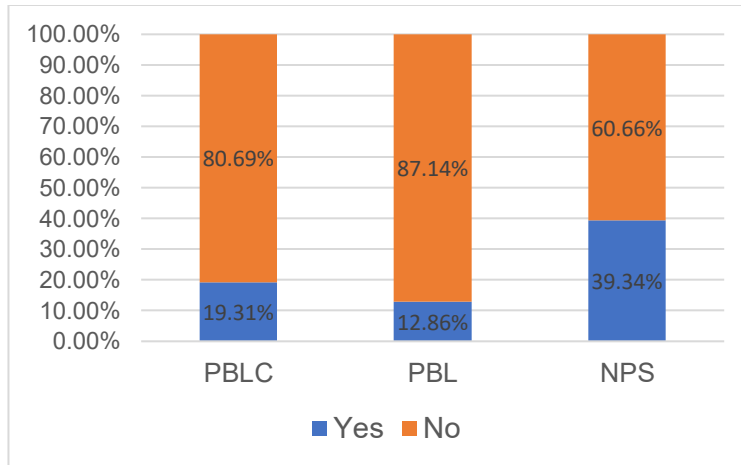


Figure 1: Application of corporal punishment the day before, according to students.

Teachers were asked to provide information regarding the application of corporal punishment by their colleagues; the results are displayed in Figure 2. Approximately 43% of teachers in PBLC schools declared that their colleagues use corporal punishment on students; in PBL schools, 53% of teachers stated that the use of corporal punishment is prevalent among colleagues. The proportion is higher in NPS schools where, according to teachers, 60% of colleagues physically hit students.

Teachers were then directly asked about the prevalence of corporal punishment in their own classroom; the results are illustrated in Figure 3. Around 35% of teachers in PBL schools confirmed the use of corporal punishment; 2 out of 5 teachers in PBL schools stated that they use corporal punishment. The statistic is higher in NPS schools where 3 out of 5 teachers physically hit students.

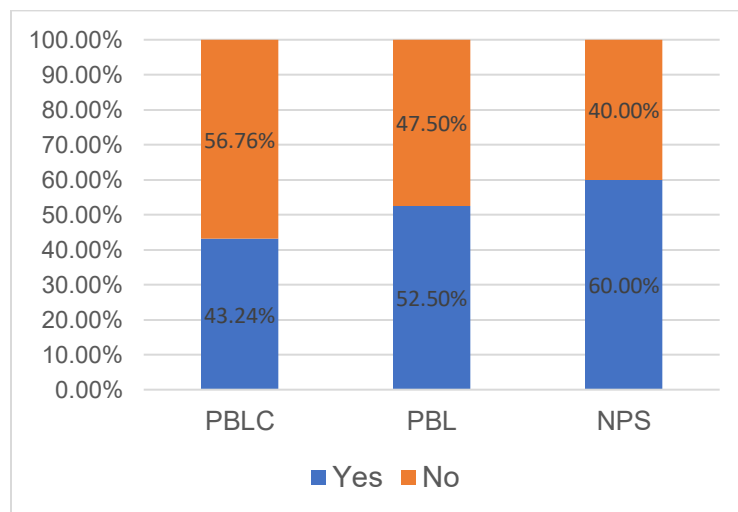


Figure 2: Application of corporal punishment by colleagues.

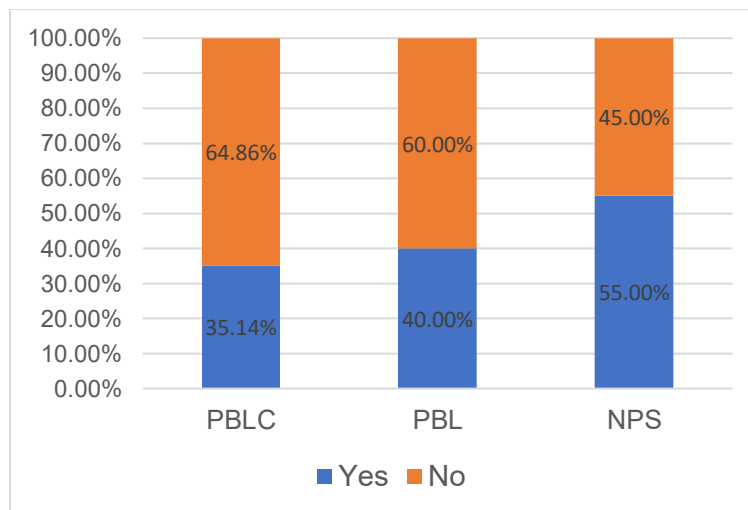


Figure 3: Application of corporal punishment by teachers themselves.

Figure 4 illustrates the results regarding the frequency of application of corporal punishment by colleagues according to teachers. In PBLC schools, 30% of teachers declared that their colleagues rarely apply corporal punishment while 14% use it sometimes. Around 33% of teachers in PBL schools rarely apply corporal punishment, and 1 out of 5 teachers physically hit students according to colleagues. Around half of teachers in NPS schools rarely hit students while 1 out of 10 use corporal punishment sometimes.

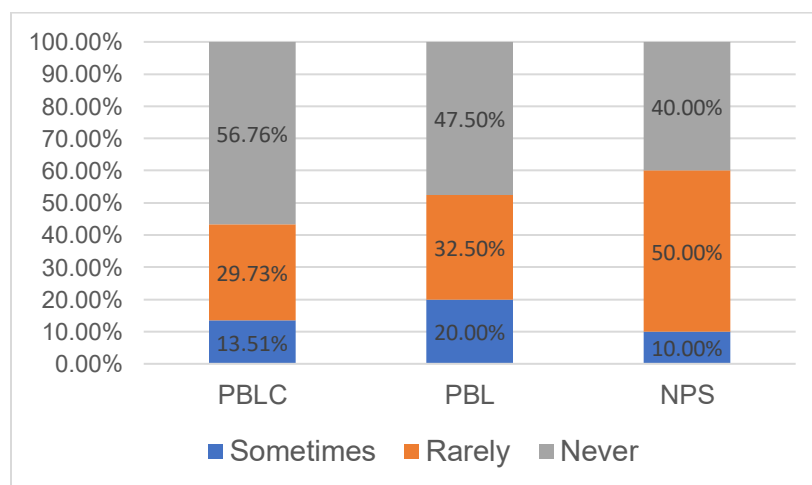


Figure 4: Frequency of corporal punishment by colleagues.

Regarding the circumstances of corporal punishment from students' point of view, the following reasons are cited: fighting between students, chattering in class, being rude, not

answering a question, using cuss words, not completing a homework, or not learning your lessons.

Parents' opinions regarding the application of corporal punishment are summarized below.

«It is corporal punishment that makes the school environment unfavorable. My sister-in-law dropped out of school because of corporal punishment. Because one day she fainted while someone was beating her. So, since that day she no longer wanted to go to school even though she always got there on time. On the other hand, I don't know if she learned normally. Eventually she was married off when she was still young. The canteen is a good initiative, and it relieves us as parents because the children are more motivated to go to school on their own. But if we could remove corporal punishment. »

«I do not entirely agree with the intervention of my dear predecessor mother. Because education at home is a bit like that at school, the child must feel that he can be punished when he does something inappropriate. Authority is needed from the person who is supposed to give a path forward otherwise he will not be respected in these decisions. But one thing is certain, education at school or at home is always based on authority. »

«The law that banned corporal punishment did more harm than good. Because in our time, you never dared to come late whatever the reason because there was authority. We learned to recite "The Plowman and His Children" no matter what. But the teacher asks a student, for example, to say the word Thursday, and he replies that he does not say it. And the teacher not to chastise him, so either he learns, or he gives up. If we continue school without punishment the damage will be even worse. Unless you take your child to a private school. Because every time children feel that there is no authority to force them to do something and that they can do whatever they want, they tend to drop everything because they don't know how. not what is good for them. »

3.3.2. Corporal punishment and gender discrimination

This section addresses potential gender discrimination in the application of corporal punishment by teachers. First, students were asked about whether they noticed a difference in the application of corporal punishment between girls and boys; the results are presented in Table 21. Around 68% of students in PBLC schools declared that girls

and boys are equally treated when it comes to corporal punishment, while 31% stated that boys get hit more frequently than girls; a similar trend is noted both in PBL and NPS schools.

Table 21: Corporal punishment and gender discrimination according to students.

	PBLC			PBL			NPS		
	ALL	Boy	Girl	ALL	Boy	Girl	ALL	Boy	Girl
Girls and boys are equally treated when it comes to corporal punishment	67,5	69,9	64,8	68,3	60,7	75,9	58,9	51,7	67,3
Boys get hit more frequently than girls	30,6	26,5	35,1	27,8	32,9	22,8	41,1	48,3	32,6
Girls get hit more frequently than boys	1,9	3,6	0,0	3,8	6,3	1,3	0,0	0,0	0,0

Source: PAQE II – final evaluation

Teachers were also asked about a potential gender discrimination in the application of corporal punishment; the results are presented in Figure 5. More than 9 teachers out of 10 in PBLC and PBL schools declared that boys and girls are equally treated when it comes to the application of corporal punishment. In NPS schools, 25% of teachers stated that boys get hit more than girls. Teachers who stated that boys get hit more than girls cited rudeness of boys (40%); the other 60% declared that girls are more favored than boys.

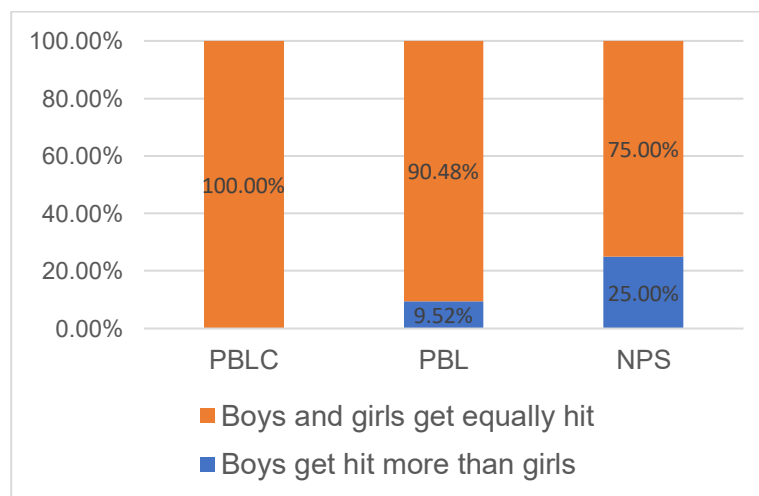


Figure 5: Corporal punishment and gender discrimination according to teachers.

3.3.3. Corporal punishment and disability

This section investigates the potential discrimination in the application of corporal punishment based on disability status. The results in Table 22 show that – according to

students in PBLC schools – all students are equally treated when it comes to corporal punishment (24%), while 22% of students stated that those living with a disability do not get hit. Around 1 student out of 5 declared that students living with a disability do not get hit. In PBL schools, 40% of students declared that those living with a disability get hit less than others, 17% stated that they do not get hit, and 16% stated that all students get hit equally; the corresponding proportions are 31%, 21%, and 2% in NPS schools, respectively. Overall, the results show that students living with a disability either get hit less than other students or do not get hit at all.

Table 22: Corporal punishment and disability status according to students.

	PBLC			PBL			NPS		
	ALL	Boy	Girl	ALL	Boy	Girl	ALL	Boy	Girl
Students living with a disability don't get hit	19,2	18,1	16,2	16,5	17,7	15,2	1,9	1,7	2,0
Students living with a disability get hit less	22,3	20,5	24,4	40,5	38,0	43,0	30,8	29,3	32,6
All students are equally treated when it comes to corporal punishment	24,2	25,3	23,0	15,8	16,5	15,2	21,5	24,1	18,4
No student living with a disability in the classroom	36,3	36,1	36,5	27,2	27,8	26,6	45,8	44,8	46,9

Source: PAQE II – final evaluation

According to teachers, students living with a disability get hit less than other students, as confirmed by 94% of teachers in PBLC schools, 43% of teachers in PBL schools, and 75% of teachers in NPS schools, showing some discrepancies between the information reported by students and the declaration of teachers. When asked to provide reasons for treating students living with a disability differently, teachers cited their disability (42%), their fragility (24%), and to help with their inclusion (17%).

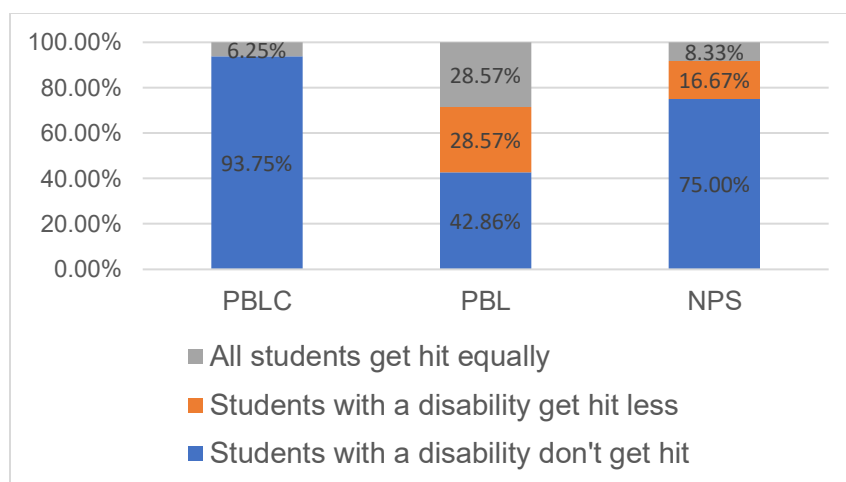


Figure 6: Corporal punishment and disability status according to teachers.

3.4. Gender roles in school

Previous evaluations highlighted the reality of gender roles in school in the areas where the PAQE II project is implemented. Around 92% of students in RTP schools (PBLC & PBL) and 93% of students in NPS schools stated that boys and girls are assigned different tasks. Students listed the following tasks as assigned mainly to girls:

- Cleaning/sweeping the school yard and/or offices (77,34%)
- Cleaning the classroom (77,34%)
- Cleaning toilets (29,59%).

Tasks assigned to boys are the following:

- Cleaning the black board (95,32%)
- Bring water (58,05%)
- Close/open doors and windows (32,58%)
- Carry luggage (18,54%).

The results show that gender discrimination in the tasks assigned to students is still prevalent and must be effectively addressed.

3.5. Assessment of the school feeding program

Following the implementation of the school feeding program through the funding of ten

(10) canteens in RTP schools, this section evaluates its impact on students’ attendance, progression in school (concentration, homework), dietary diversity, and the community’s overall impression on its long-term continuity.

3.5.1. Absence

Figure 7 displays the evolution of the proportion of students who missed classes in the last 30 days. The results show a decrease from 3,25% in 2023 to 2,45% in 2024; the decrease in the proportion of students who missed at least one class is more pronounced for boys where the statistic is down from 3% in 2023 to 1,93% in 2024.

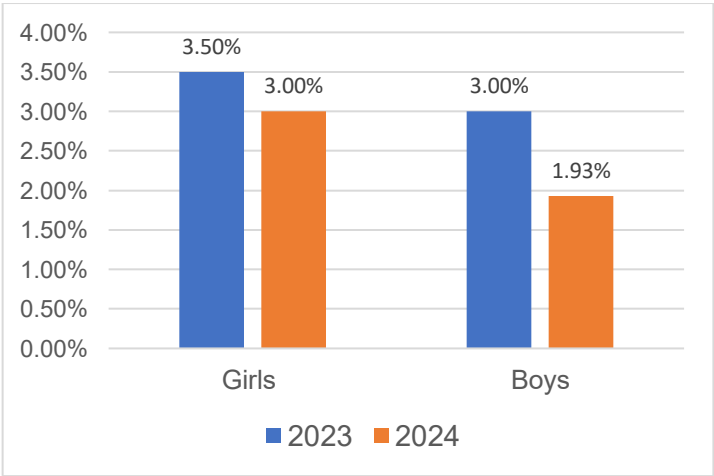


Figure 7: Proportion of students who missed classes in the last 30 days.

We collected data on the number of days of absence during the last 30 days across the target schools; the results are presented in Table 23. The average full-days of absence among students who declared having missed at least one class is 0,2 in 2024, a steady decrease from 2,7 in 2023. The average morning and afternoon absences in 2024 are 0,1 and 0,1, respectively, representing a sharp decrease from 1,1 and 1,8 in 2023.

Table 23: Average days of absences during the last 30 days, as reported by students.

2023			2024		
ALL	Boy	Girl	ALL	Boy	Girl

Full day	2,7	5,2	0,6	0,2	0,2	0,3
Morning	1,1	1,7	0,6	0,1	0,1	0,1
Afternoon	1,8	2,8	1,0	0,1	0,1	0,1

Source: PAQE II – final evaluation

Some parents' opinions about the school feeding program are summarized below.

«Because of the food at school, none of our children left school this year except for the sick. Before, it was common to see 4 to 5 students walking around the village during class hours. The opening of the canteen attracted all the students to the school. It also pleased the locals. We would like this initiative to continue. »

«Following the funding of the canteens, our children, whether girls, boys or disabled, really enjoy coming to school. The proof is that today, even if the child is a little unwell, he refuses to return home; he has difficulty agreeing to return home to take medicine. And even with this scenario he returns to school so early, the canteen has really been an essential element for the students, and for the teachers but also for us parents of students. »

3.5.2. Distance

Students were asked to evaluate the frequency with which they travel the distance from home to school and back.

Situation of reference: In 2023, 9,7% students reported that they cover the home-school-home itinerary, 72% do it four times, and 19% do it six times. *When asked about the effect of a potential school feeding program on the frequency with which they cover the home-school-home itinerary, 53% of students stated that they would only do it twice, 39% of the students would do it four times while 8% would do it six times a day.*

Table 24 presents the results about the frequency of the daily home-school-home trips in 2024 – after a full school year of functioning canteens. The results show an important improvement from 2023. In fact, 50% of students report now that they cover the distance between home and school twice, 35% do it four times, and 15% make the trip six times. These statistics align with projections made by students regarding the number of trips if the school feeding program were to be implemented, confirming the clear success of the program in retaining students in school between breaks.

Table 24: Frequency of the daily home-school-home trips.

	2023			2024		
	ALL	Boy	Girl	ALL	Boy	Girl
Twice	9,7%	11,1%	8,4%	50,1%	51,7%	48,5%
Four times	71,6%	71,2%	71,8%	35,3%	35,3%	35,3%
Six times	18,7%	17,7%	19,8%	14,6%	14,0%	16,2%
Total	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

Source: PAQE II – final evaluation

Here is a testimony from a parent: «*The canteen brings us a lot of goods. As a testimony, I have friends from a neighboring village, N'TJILA, the two N'TJILA, five to six kilometers away whose children came with meals which the women prepared for them after getting up since five in the morning. But today, these children come without waiting for the family meal to be cooked. Even our children who are here often return from school well-fed. We can only thank this project and wish it to continue, and that those who initiated it live a long time in prosperity.* »

3.5.3. Concentration and ability to complete homework

This section evaluates the impact of the school feeding program in improving the ability of students to concentrate in class and to complete their homework.

Situation of reference (concentration): In 2023, 6% of students declared that they could not concentrate in class, citing being **hungry** and **tired** as the main reasons. When asked whether a school feeding could help to improve their ability to concentrate in class and to learn their lessons, the vast majority of students (85%) acknowledges that such a program could greatly improve their engagement and progression; 14% of students believe that the program could potentially have a positive effect on their progression.

Figure 8 displays the evolution for the proportion of students who were not able to concentrate in 2024, in comparison to 2023. The results show a clear improvement as 1,51% of girls and 1,93% of boys stated that they could not concentrate; this represents a decrease from 7,42% for girls and 4,54% for boys in 2023.

A parent's testimony: «*As a final word, I would like to say a big thank you to the RPT project for everything they have done for our schools, particularly their canteen project.*

Thanks to this canteen, today children who leave elsewhere for school have no problem with their learning. They are more focused on their studies and exude a lot of serenity, which also creates social cohesion between us parents of students here and elsewhere.

»

Situation of reference (homework): In 2023, students who reported that they could not complete their homework on a consistent basis stated the following reasons: tiredness (32%), household work (63%), and being hungry (6%). We further established a relationship between the frequency of home-school-home trips and the ability to complete homework: *“the data [in 2023] showed that students who cover the distance between home and school at least four times are more likely to have difficulties completing their homework than students who cover the distance twice a day. A chi-square test of independence rejects the null hypothesis at a 10% type-1 error level (p-value of 5.7%), confirming that there exists a correlation between the frequency with which students cover the distance between home and school and their ability to properly perform their homework.”*

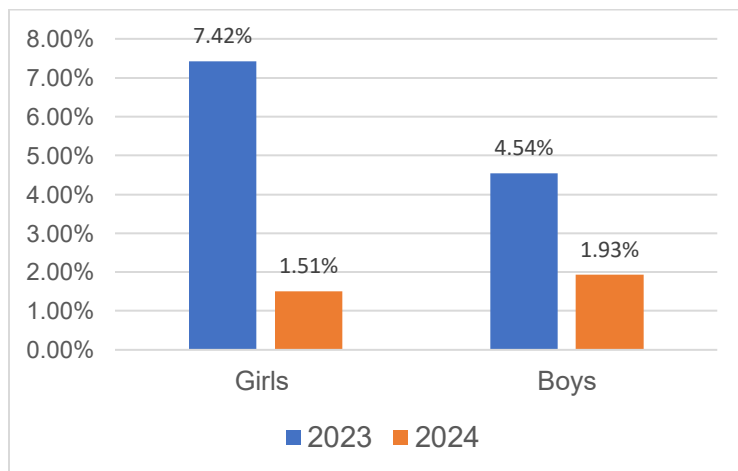


Figure 8: Proportion of students who were not able to concentrate in class.

Table 27 presents the reasons cited by students for not doing their homework. In 2024 – following the implementation of the school feeding program – only 5% of students cited tiredness, a steady decrease from 32% in 2023; no student cited being hungry as a reason, which is a great improvement from 6% in 2024. However, household work remains one of the main reasons for 65% of students in 2024, a small increase from 63% in 2023. The positive results regarding the ability for students to do homework could be attributed

to the school feeding program which (i) reduces the frequency of home-school-home trips – which is linked to students being tired – and (ii) offer children the opportunity to have meals in good quantity and quality while staying in school between breaks.

Table 26: Reasons cited by students for not doing their homework.

	2023			2024		
	ALL	Boy	Girl	ALL	Boy	Girl
Tiredness	31,8%	38,5%	26,4%	5,0%	10,0%	0,0%
Household work	62,9%	62,8%	63,7%	65,0%	50,0%	80,0%
Hungry	5,9%	6,4%	5,5%	0,0%	0,0%	0,0%

Source: PAQE II – final evaluation

A parent's testimony: « *It takes a child to study to have a full stomach with this canteen, we couldn't hope for better, it was welcomed by all layers in this village. We cannot explain all the benefits this results for these children and even for us parents.* »

3.5.3. Nutrition and dietary diversity

This section assesses the daily nutrition of students and whether the recommended level of dietary diversity is met, contrasting results between 2023 and 2024.

First, we asked students whether or not they get their meals at the school canteen; nearly all of them (99%) answered yes. We then asked children to evaluate the quality, the quality, the hygiene, the time in which meals are served, and the diversity of the food served at the school canteen. Overall, 89% of children judge the quantity of food as *very good*; 90% judge the quality as *very good*; 95% appreciate the hygiene as *very good*; 86% believe that the time of service is *very good*, while 11% judge it as *good*; 80% judge the diversity of the food as *very good*, while 7% believe that some changes need to be made.

Table 27: Evaluation of the food served at the canteen by students.

	Girl			Boy		
	Very good	Good	To change	Very good	Good	To change
Quantity	90,4%	7,1%	2,5%	87,4%	8,2%	4,4%
Quality	88,9%	9,1%	2,0%	91,3%	6,8%	1,9%
Hygiene	94,9%	5,1%	0,0%	91,3%	7,7%	1,0%

Meal time	87,4%	11,1%	1,5%	84,1%	15,5%	0,4%
Diversity	80,8%	12,6%	6,6%	80,2%	13,5%	6,3%

Source: PAQE II – final evaluation

We also asked children about the composition of their daily meals; the results are presented in Table 28. Many improvements are noticeable in the diet following the implementation of the school feeding program: nuts, beans, meat, fish, fruits and vegetables have become more accessible to children.

Table 28: Frequency of access to seven food groups.

	Girl		Boy	
	2023	2024	2023	2024
Millet, rice, corn, sorghum, cassava	99,5%	99,5%	100,0%	100,0%
Nuts, beans	51,0%	35,3%	53,5%	35,3%
Milk, yoghurt, cheese	36,6%	30,3%	36,9%	31,9%
Meat, fish	75,2%	84,3%	74,7%	87,4%
Eggs	6,5%	19,7%	9,4%	21,7%
Red palm oil, fruits, vegetables	82,8%	98,0%	80,2%	96,6%
Onion, eggplant, watermelon, orange, green pepper, cabbage, tomato, date	93,6%	95,4%	95,5%	96,1%

Source: PAQE II – final evaluation

To capture the diversity of food intake by children following the implementation of the program, a dietary diversity index, which measures the variety of food that a household has access to, was computed. The diversity score is based on seven (7) food groups¹ and ranges from 0 to 7. The overall mean of the diversity score for 2024 is 4,65, an increase from 4,48 in 2023; this result highlights the positive impact of the program after only one school year (see also Figure 9 for the distribution of the diversity index disaggregated according to the evaluation period).

¹ <https://www.fao.org/3/i1983f/i1983f.pdf>

Table 29: Dietary diversity index (ranging from 0 to 7) for students.

	Girl		Boy	
	2023	2024	2023	2024
Mean	4,46	4,61	4,50	4,69
Median	5,00	4,00	5,00	4,00
Coefficient of variation	0,22	0,27	0,21	0,27

Source: PAQE II – final evaluation

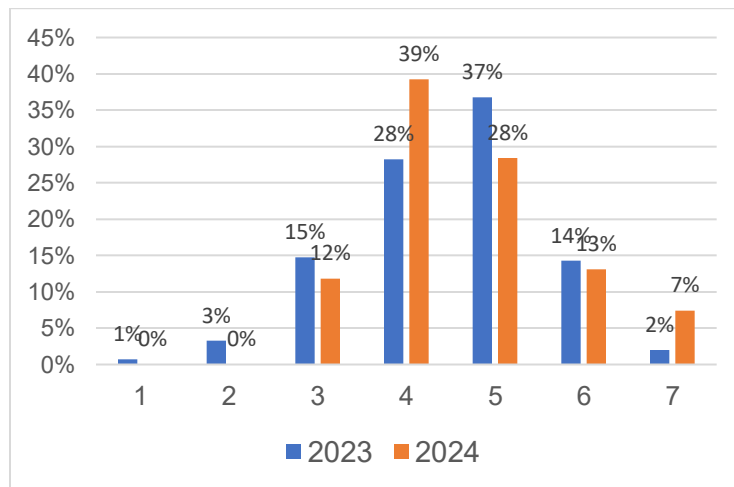


Figure 9: Distribution of the food diversity score, ranging from 0 to 7.

3.6. Importance of the school feeding program

This section reports opinions and impressions of students, school principals, parents, and community leaders at large regarding the implementation of the school feeding program.

3.6.1. Students' opinions

Students were asked to list the two most important positive effects of the school canteen on their education; the results are displayed in Figure 10. The positive effects of the program, as explained by students, are summarized as follows:

- Having access to the school canteen is a great motivation to study (50%).

- The food served at the canteen helps to have better nutrition and diet (37%).
- A fully functional canteen offers students the opportunity to stay in school between breaks, thus reducing the frequency of home-school trips (36%).
- The canteen helps to improve concentration in class with less home-school trips between breaks and great food service on a consistent basis (24%).
- Following the implementation of the program, parents spend less on food, thus save more money for other school/household expenditures (14%).
- The canteen improves attendance as children are motivated to go to school and stay between breaks (10%).

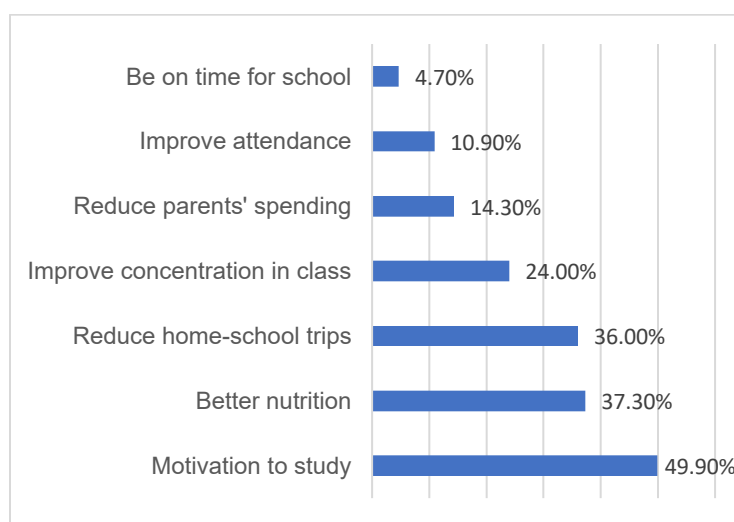


Figure 10: Positive impacts of school canteens according to students.

3.3.2. School principals' opinions

First, we asked school principals to assess as *Very important*, *Important*, *Not (so) important* the funding of school canteens. All principals (100%) declared the school feeding program as *Very important*. When asked about why it was very important to implement the program in their schools, principals cited the following reasons:

- Increase children's motivation to attend schools regardless of the distance between home and school.
- Increase food security and dietary diversity.
- Increase students' motivation, focus, concentration, and willingness to study and be the best in the classroom.

- Reduce parents' spending on food, thus increasing the revenue of the families.

To further clarify their answers about the importance of the school feeding program, we asked principals to assess its impact on the frequency of home-school trips, students' concentration and progression, and their nutrition. Their answers are presented below.

Frequency of home-school trips: By reducing the frequency of these trips during breaks, the canteen allows children to stay in school – thus get more rest – and socialize with their peers. This helps students to have more time to study with their classmates and improve their level of progression, while giving them the confidence to be successful.

A school principal's testimony: *« As has been said, our village is 2 km from here, our children worked all day or took afternoon classes. With the canteen, there were no more concerns about quality food.*

Today, after the construction of the canteen, there is a strengthening of understanding between students and teachers. Then, it reduced the number of students that were late for evening classes because students no longer have to worry about lunch. »

Concentration and progression: The program provides meals in good quantity and quality, allowing children to solely focus on school. Their attention span, their focus, and their concentration increase greatly, giving them a greater chance of success.

Nutrition: School principals declared that the program has contributed to improving children's health; less students complain about headaches and other illnesses following the funding of the canteens. They also stated that the food is of good quality, and is served in good quantity, helping children to eat healthy and improving their overall diet.

« The canteen plays a very important role in keeping students at school. The creation of the school canteen has reinforced the desire of students to come to school. They know that the food in the canteen is good and sometimes even the food they eat at home. Then, it gives the students enthusiasm. Here, many households live in food insecurity. Insufficient food puts a lot of stress on the children from these households. The arrival of the canteen alleviates this problem.

We cannot mention enough all the advantages since the creation of this canteen at home, the children eat their fill and of quality. Today we feel like we have enough food in our households even though the same quantity is prepared. Just because the children eat at school and no longer have an eye on what is at home. »

3.6. Insights from interviews and focus groups

This section presents summarized discussions from in-depth interviews and focus groups conducted with students, parents, and community leaders regarding the implementation and the sustainability of the PAQE II project and the school feeding program.

3.6.1. Discussions with students

Students gave their opinions about the PAQE II project and the school feeding program – which are summarized below.

Play-based learning

- Students gave a positive appreciation of school and teachings – which they found to be very important for their future.
- Instructional games are highly appreciated by students, even though some of them prefer a more formal learning approach.

Learning environment

- Students feel safe in school and on their way to school.
- Students appreciate the relationship that they have with their teachers.
- Clean schools and hygiene are very important to students.
- All students associate corporal punishment with negative/traumatizing experiences such as fear, stress, pain, and humiliation, making them less able to fully concentrate and participate in the classroom.

Canteens

- All students love the meals served at the canteen – which they rate as diverse and healthy. The canteens help them to eat their full and concentrate on school.
- Canteens allow students to stay in school between breaks, reducing the frequency of home-school-home trips, while reducing the financial burden on their parents. In Massabla, it was mentioned that canteens help to improve attendance.

These discussions highlighted a generally positive appreciation of school and meals at the canteen across all regions. However, some discrepancies still exist in the implementation of PBL techniques as well as the appreciation of meals served at the canteens. The

relative insecurity caused by corporal punishment is prevalent and should be specifically addressed.

3.6.2. Discussions with teachers

A teacher's testimony is summarized below.

« Attendance at school depends on the wishes of the parents. Because children don't know what's good for them. We are aware of our mistakes a little late. Some children like to come on their own but for others, if you don't hit them, they won't come. So, this is where parents need to step in. But the advent of the school canteen motivated some children to come to school. There are particularly certain villages whose children are in difficult situations. The canteen was a source of motivation. I urge the initiators to revitalize the school with other new innovations because they improve standards.

Before the arrival of the canteen, the teachers ate with people in the village. Feeding the teachers was a village responsibility, but not anymore, they eat with the students, and everyone is happy. »

4. General recommendations

In light of the results presented in this document, we provide the following recommendations.

Canteens

- Maintain and/or increase funding for the school feeding program to keep the canteens fully functional. This is crucial as providing meals for children in school seems to be a winning strategy both for capitalizing on the success of the play-based pedagogy and for offering students the opportunity to spend more time in school, socialize with their friends, and focus on their education.
- Expand the school feeding program to other RTP schools. This will improve attendance, students' overall health and well-being, and (indirectly) ensure the long-term success of the PAQE II project.
- Increase the quantity and the diversity of food served at the canteen to ensure a wider reach of the program.
- Advocacy campaign for funding with the help of other organizations

Play-based learning

- Develop a communication and advocacy campaign against corporal punishment. Government and other partners should be informed about the prevalence of corporal punishment in schools and be advised on practical solutions.
- Gender discrimination in tasks assigned to children is still prevalent. Training on gender-neutral roles could be a successful strategy in addressing this issue.
- The percentage of students reading at grade level is way below the threshold in Mali (41 words per minute in curriculum schools; 61 words per minute in classic schools). Meeting this threshold seems to be an unrealistic expectation at the moment. We advise RTP to put more effort into other literacy goals – while looking at other practical solutions to meet the threshold.

CONCLUSION

This document presented the results for the impact evaluation of the PAQE II project in implementing – from the beginning of the project in August 2017 up until May 2024 – a child-centred learning approach in a positive learning environment while establishing and managing ten (10) canteens in RTP schools located in the areas of Koulikoro and Bougouni (Mali) through the school feeding program. This document presents the results of the most recent evaluation. The results highlighted the **positive** [en gras xxx] impact of both the PAQE II project and the school feeding program on (i) students' reading skills through the lens of the EGRA tool, (ii) students' life skills, and (iii) children's progression in school and overall well-being.

The assessment of students' reading skills and life skills showed that students in schools benefitting from both the PBL program and the school feeding program have better reading and life skills than other students, highlighting the positive impact of funding school canteens on student's learning and progression throughout the school year. The results also demonstrated that girls slightly outperform boys overall across all sections of the EGRA tool. Further, students living with a disability in PBL schools with canteens showed better reading and life skills than their peers in schools that are not benefitting from the school feeding program. Finally, corporal punishment still exists in RTP schools – despite the implementation of the school feeding program, even though its application is more prevalent in non-partner schools, highlighting the need for new and practical solutions that specifically address the issue.

The evaluation of the school feeding program – in which the situation of reference is set to the needs assessment study of November 2023 – demonstrated the following that the proportion of students who missed classes and the average number of days of absence have decreased in RTP schools with canteens. The results also highlighted that the frequency of home-school-home trips – and the average distance covered by students daily – has significantly decreased following the implementation of the school feeding program. Further, students' ability to concentrate in class and to complete their homework has greatly improved from last year's statistics, highlighting the positive impact of the program on students' learning and progression in school. Also, children's nutrition and dietary diversity has improved, as students positively rated the quantity, the quality, the hygiene, and the diversity of the food served at the canteen. Finally, students and school principals' opinions about the school feeding program is extremely positive, highlighting the need for sustainability and expansion to other RTP schools.

Students, teachers, parents, and community leaders gave a very positive appreciation of both the PAQE II project and the school feeding program. Nearly 90% of students said that they would love for their young brothers and sisters to benefit from the PBL techniques. Further, 8 teachers out of 10 plan to continue using PBL techniques in their classrooms. Nearly all students, teachers, and parents appreciate the school feeding program; students in particular appreciate the quantity, the quality, and the diversity of the food, and declared that having a canteen make it easy to stay between breaks, get more rest, socialize with their peers, get more time to learn, concentrate, and participate in class – thus increasing their chances of success in school while improving their overall health and well-being.

To reduce and eliminate corporal punishment, we recommend involving parents, teachers, school principals and students throughout the process for finding long-term solutions. We also recommend the creation of a National Day against corporal punishment in Mali.

Regarding the school feeding program, it may be important to have the canteens funded by school alumni; creating a WhatsApp group can make that process easier. Also, creating a system of sponsorship can facilitate a sustainable funding strategy of the canteens. Finally, cultivating a collective field by people from the same village could also be a long-term strategy for sustaining the canteens.

APPENDIX A – EVOLUTION OF KEY EGRA INDICATORS OVER THE PROJECT PERIOD

Indicators	Disaggregation	Baseline	Midline	Endline	Extension 1	Extension 2	Canteen
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%	4,00	4,17
	Male	0%	7,8%	6,6%	7,2%	6,60	7,55
	Disability	0%	0%	8,2%	5,8%	7,55	12,50
	Total	0%	7,2%	6,4%	7,2%	5,34	5,94
2000.1: % and # of children in target schools who demonstrate improved life skills (communication, teamwork and problem solving) in grade 4 th	Female	23,00%	80%	87, 2%	90,9%	89.50	92,71
	Male	20%	82%	85,4%	89,2%	90,09	91,51
	Disability	0%	75%	81, 6%	88,4%	84.91	93,75
	Total (Team Work)	22%	82%	86,3%	90,5%	89,81	92,08
	Female	15%	76 %	74,0%	87,0%	79.50	89,58
	Male	16,5%	77%	83,1%	84,1%	79.72	82,08
	Disability	0%	75%	92,5%	76,7%	71,70	81,25
	Total (Communication)	16%	76%	78,5%	85,5%	79,61	85,64
	Female	42,5%	78	75,1%	83,4%	78,50	83,33
	Male	40,7%	76	76,6%	85,3%	82.55	86,79
	Disability	0%	75%	81,7%	82,6%	69,81	75,00
	Total (Conflict Resolution)	41,7%	77%	75,8%	84,4%	80,58	85,15

	Disaggregation	Baseline	Midline	Endline	Extension 1	Extension 2	Canteen
% and number of MFI teachers who are able to integrate the child-centred, play-based, inclusive and gender-	Woman			73,3%	87,0%	83,33	83,33
	Male			85,7%	66,7%	89,47	100,00
	Total			79,5%	79,0%	86,49	92,86

sensitive learning technique (PBL) into their teaching practice (disaggregated into 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.	Woman					72,73	81,82
	Male					72,73	86,67
	Total				76,83%	72,73	83,78
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%	86,36	95,45
	Male	9%	82%	92,9%	72,2%	75,76	86,67
	Total	15,04%	84%	88,7%	81,7%	81,82	91,89
Percentage and number of technical staff who report being better equipped (informed) about PBL	Woman		24%	73,3%	89,1%	93,18	100,00
	Male		35%	85,7%	80,6%	78,79	80,00
	Total		32%	79,5%	85,4%	87,01	91,89
3.2: % and # of children who have a positive association with school	Female	35%	75%	74,7%	81,8%	80,50	80,21
	Male	30,00%	66%	73,1%	76,1%	78,77	80,19
	Disability	13%	00%	73,74%	73,3%	60,38	68,75
	Total	24,50%	71%	73,9%	78,78%	78,40	80,20

APPENDIX B – EVOLUTION OF KEY CANTEEN INDICATORS OVER THE PROJECT PERIOD

Outcomes & Outputs	Indicators	Disaggregation	Baseline November 2023	Endline May 2024
INTERMEDIATE OUTCOME 1600				
1600: Improved attendance of boys and girls in WFP-assisted schools	1600.1: % Attendance rate during the last academic year	Female	83,36%	83,36%
		Male	81,53%	81,53%
		Impairment		
		Total	82,45%	82,45%
	1600.2: % of students who missed classes during the last 30 days	Female	3,47%	3,03%
		Male	3,03%	1,92%
		Impairment		
		Total	3,25%	2,47%
IMMEDIATE OUTCOME 1610				
1610: Increased access to healthy sustainable food in school	1610.1: % of children who stay in school between breaks	Female	8,42%	48,48%
		Male	11,11%	51,69%
		Impairment		
		Total	9,75%	50,12%
	1610.2: Average number of home-school trips during the day	Female	4,19	3,35
		Male	4,13	3,23
		Impairment		
		Total	4,16	3,29
	1610.3: Average distance (Km) covered for a full school day	Female	4,36	3,59
		Male	4,76	3,57
		Impairment		
		Total	4,55	3,58
	1610.4: Diversity index score	Female	4,46	4,61
		Male	4,50	4,69
		Impairment		
		Total	4,48	4,65

