

FOOD FOR EDUCATION

MIDTERM EVALUATION

Prepared for
Catholic Relief Services – Honduras

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List of Abbreviations

AECO	Asociaciones Educativas Comunitarias
APF	Asociación de Padres de Familia
CARITAS	Social Ministry of the Dioceses of Santa Rosa de Copán
CCEPREB	Community Center of Preprimary Education
COCEPRADII	Comité Central pro Agua y Desarrollo Integral de Intibucá
CEB	Centro Educativo Básico
CRS	Catholic Relief Services
CSB	Corn Soy Blend
DCNEB	Diseño Curricular Nacional de Educación Básica. National Curriculum design for basic education.
EFA	Education For All (Educación para todos)
EGMA	Early Grade Math Assessment (Prueba de Matemáticas para grado básico)
EGRA	Early Grade Reading Assessment (Prueba de Lectura para grado básico)
EPRED	Dropout Prevention Team
FFE	Food for Education (Programa para la Alimentación)
ICC	Intra-Class Correlation
NGO	Non-Governmental Organizations
PASE	Safety Patrol
PEC	School Educational Project
POA	Annual Operational Plan
PROHECO	Honduran Community Education Programs
SACE	School Administration System
USDA	US. Department of Agriculture

Executive Summary

Catholic Relief Services (CRS), the Social Ministry of the Diocese of Santa Rosa de Copán (CARITAS) and the Comité Central Pro Agua y Desarrollo Integral en Intibucá (COCEPRADII), in coordination with the Ministry of Education, Ministry of Agriculture and Livestock, and the Ministry for Social Development are implementing a school feeding program, or "Food for Education" (FFE) project, with funding from the Department of Agriculture of the United States of America (USDA). The project provides complementary food supplies for school meals, as well as the funding resources required to implement the technical components of the project. The strategic objective of the project is to improve the level of literacy in school-aged children in the 17 municipalities of Intibucá over a period of 3 years (2013-2015). The project officially started in September 2012, though implementation at the school level began in March 2013.

The baseline evaluation was conducted between January and March 2013 and the midterm evaluation (MTE) was conducted 22 months after the project started in July 2014 during the middle of the school year. The midterm evaluation used both quantitative and qualitative methods. The quantitative data collection consisted of two main components: surveys of school principals, teachers, and parents; and the implementation of the EGRA reading test (Early Grade Reading Assessment). The qualitative tools included in-depth interviews and focus groups with key informants. Probabilistic representative samples of principals and teachers were conducted, while a convenience sample of parents was used.

Results

Overall, the project is progressing satisfactorily towards the completion of its anticipated targets and in accomplishing its overall goal.

- **Strategic Objective: Improved Literacy of School Aged Children. *Target surpassed.*** MTE results indicated a more than 10 percent increase in students that have developed 100% reading competency (as prescribed by grade). The increase in second grade was almost 20 percentage points (19% to 38%), in third grade, the increase was 23 percentage points (20% to 43%), and in fourth grade, this increase was 16 percentage points (27% to 43%).
- **Result Stream 2: Improved student attendance. *Target surpassed.*** The target is for more than 80 percent of the students to attend classes regularly. At baseline 89 percent of boys and 90 percent of girls attended classes regularly. In the midterm, these percentages increased to 96 and 95 percent respectively.

Within the intermediate results indicators, MTE results show good progress. Only two of the project's indicators are not progressing satisfactorily. However, this evaluation has concluded that the problem arises from the definition of both of the indicators and not due to the project's lack of impact or implementation.

Results Stream 1: Improved quality of literacy instruction

Intermediate Results:

- **Result: More consistent teacher assistance. *Good progress.*** The target is a 5 percent increase in regular teacher attendance by year. The percentage of teachers present at school increased 4 percent between the baseline and midterm evaluation.

- **Result: better access to school supplies. Good progress.** The target is for 1,047 schools to receive school supplies and materials as a result of USDA assistance. At the midterm 660 schools acknowledged that they had received these supplies.
- **Result: Increased skills and knowledge of teachers. Lack of progress.** The target is that 70 percent of teachers use 5 new/or improved teaching techniques in the classroom. The percentage change between baseline and midterm was from 2.38 to 2 percent.
- **Result: increased skills and knowledge of school administrators. Good progress.** The target is that 70 percent of the administrators have better skills and knowledge. At baseline, 20 percent of principals mentioned at least 3 improved tools for management, while at the midterm evaluation, 56 percent of principals mentioned the use of such tools.

Results Stream 2: Improved student attendance

Intermediate Results:

- **Result: Increased economic and cultural incentives (or decreased disincentives). Target achieved.** In total, 53,863 students received educational incentives to encourage enrollment in schools. There are 54,097 students enrolled in for the 2014 school year.
- **Result: Reduced health related absences. Target achieved.** The target is a 10 percent decrease of students who miss more than 10 school days due to illness. The school absences decreased by 65 percent between the baseline and midterm evaluation.
- **Result: Improved school infrastructure. Good progress.** The target is to accomplish improvements and/or finish construction projects for 94 educational centers. By the midterm 84 improvement and construction projects had been completed, which included both restroom units and classroom construction or rehabilitation.
- **Result: Increased student enrollment. Lack of progress.** The target aims to achieve a 10 percent and 25 percent increase in boys and girls enrolled in school as a result of USDA assistance. The increase in enrollment between baseline and midterm is 2.8 percent for both sexes.
- **Result: Increased community understanding of benefits of education. Lack of progress.** The target is that 75 percent of parents are able to mention at least three valid reasons for why attending school is important. This percentage increased from 2 percent to 12 percent between baseline and midterm.

The presence of CARITAS and COCEPRADII is very important to the municipalities and teaching centers. Overall, these organizations and their hard work in the implementation of the project are held in high esteem. This success is based on the trust, transparency, and fulfillment of the project's components.

This midterm evaluation includes a separate analysis comparing *critical and non-critical* schools.¹ In general, there are very few differences between the two types of schools. In the cases where differences can be noted, the results are mixed. Principals' training, access to educational materials, and the presence of an Annual Operative Plan (AOP) are generally higher in critical schools, but some reading comprehension results were lower for students in critical schools.

¹ Critical or vulnerable schools are those that do not meet at least one of the Education For All targets (drop-out, grade repetition, coverage, academic performance in Spanish and Math)

Sustainability

As project sustainability is a concern for CRS and its partners, the qualitative investigation included questions about the sustainability of the project. In general, the implementing agencies need to work harder to educate teachers, schools, and parents on how they can continue their activities after the project ends. In particular, there was a general consensus that school meals could not continue without external help from organizations such as CARITAS, COCEPRADII, CRS, and USDA.

The knowledge acquired during the training workshops for teachers and principals will last but for increased sustainability, the project should create a system where trained teachers become trainers too. Furthermore, behaviors learned and adopted by the community in areas such as the importance of proper hygiene and balanced nutrition through the school's garden project can continue even after the project ends. In terms of materials and infrastructure, there are examples where the community can work with the teachers to obtain resources to improve education. Though it might not be possible for all communities, it could be considered as a sustainability component that would help the community continue improving the quality of education.

Parents are generally concerned that if school meals were to stop, everything could stop working properly, which points to the need to increase efforts to raise awareness in the community so that they can see which components of the project are indeed sustainable.

Recommendations

This report makes the following recommendations.

- To better capture the measurement of the indicator *“percent of teachers using five new/or improved teaching techniques in the classroom,”* the recommendation is to ensure that the distinction between teaching methodologies and techniques is clearly articulated. The difference between these two aspects of teaching quality should be separated into two indicators and therefore separate questions for teachers. It also should be divided for administrators for consistency. Since teaching methodologies include many teaching techniques, teachers who responded with a methodology were at a disadvantage compared to teachers who mentioned specific teaching techniques. Though the methodology encompassed many techniques, it was only counted as one “improved teaching technique” during the survey. By making this change the project would better capture the knowledge of teachers. Furthermore, it would be possible to meet the project’s goal. Otherwise, the project will fail to show any improvements in this intermediate result.
- Ensuring that schools have an Educational School Project (PEC- Proyecto Educativo de Centro) is very important, not only to assure better planning in terms of activities, but also to contribute to community ownership as PEC’s ensure that communities feel part of and invested in the quality of the school’s education. The PEC is developed with the help of teachers, administrators, parents, and students, and is an important tool for community participation and school quality. Not having a PEC can negatively affect community ownership to improve the quality of education and thus, implementing organizations should continue promoting the creation and use of the PEC.

- The indicator for intermediate result 2.5 (*75 percent of parents that can provide at least three valid reasons why education is important*) should be adapted to better capture community's understanding of the benefits of education. The project can either change the indicator to reflect "any reason" that parents give as a benefit of education for their son or daughter, or, the number could be lowered to two valid reasons. The first option would ensure that the indicator better takes into account the socio-cultural context of the region, while the second option would require a revised communication plan to ensure its effectiveness.
- Implementing organizations must work on increase the awareness of how different activities in the project can be sustainable or can continue after the project ends to achieve greater success in this area. The project should include information in their training to teachers, principals, and parents on how to ensure the sustainability of the project's components. Nevertheless, the main component of the project—school meals—cannot be a sustainable component. The ingredients used to prepare the school meals are not locally sourced, and thus must be imported to the area. Furthermore, the costs and complications of receiving food and resources from the United States pose a major obstacle to sustainability for the impoverished and under resourced Honduran communities.
- To improve the reliability of data from parents during the final evaluation, a list of parents for each school can be created and used to randomly select parents for the survey. Alternatively, students could be randomly selected and parents of those students could then be interviewed. However, while this improvement in data collection will give a representative sample of parents for the final evaluation, the data will not be technically comparable with the baseline or midterm evaluation data due to the change in methodology.
- Finally, the gross or net enrollment ratios cannot be calculated with the data that has been collected so far. The impact of the project in reducing the number of children out of school cannot be measured by comparing the number of student enrolled each academic year. The student population is affected by external changes in the general population due to migration and internal changes due to graduation and the size of incoming freshmen cohorts. A quick household survey at the department level could be conducted to assist in determining enrollment rates. Alternatively, CRS could work with demographers in the government to create population estimations by age, sex and municipality, if this is possible then an approximation could be done to the enrollment ratio. Alternatively, the community groups formed to prevent school dropout could carry out a census in their communities. Given that increasing enrollment is a key goal of the FFE project, obtaining this indicator would be a better measure of the impact of the project.

1. Introduction

Catholic Relief Services (CRS), the Social Ministry of the Diocese of Santa Rosa de Copán (CARITAS) and the Comité Central Pro Agua y Desarrollo Integral en Intibucá (COCEPRADII), in coordination with the Ministry of Education, Ministry of Agriculture and Livestock, and the Ministry for Social Development are implementing a school feeding program, or "Food for Education" (FFE) project, with funding from the Department of Agriculture of the United States of America (USDA). The project provides complementary food supplies for school meals, as well as the funding resources required to implement the technical components of the project. The strategic objective of the project is to improve the level of literacy in school-aged children in the 17 municipalities of Intibucá over a period of 3 years (2013-2015). The project officially started in September 2012, though implementation at the school level began in March 2013.

Improving literacy includes various components that aim to strengthen capacity in key areas such as, student's reading ability, teacher education, and school administrator's management skills and techniques. Increased enrollment of students, decreased teacher absences, and decreased student absence due to illness are other critical components, as are the provision of supplies and materials to students and schools; improved infrastructure of select schools to create or reinforce incentives promoting student enrollment; and increased parental understanding on the benefits of education.

The FFE project in Honduras benefits 53,863 children and 2,000 teachers throughout the 17 municipalities of Intibucá. It also provides school meals to students enrolled in 1,047 schools (509 primary centers and schools, 308 kindergartens, and 230 pre-school centers and CCEPREB).

This report presents the comparative results of data collection that was performed before during a baseline evaluation, completed before the project began, and during a midterm evaluation in July 2014. The methodology used included both quantitative and qualitative methods. In addition, the report outlines a comparison of results from the EGRA (Early Grade Reading Assessment) test, which was collected as part of the baseline and midterm evaluations mentioned above. This test is designed to measure students' reading abilities in second, third, and fourth grade.

Overall results show an improvement in most of the indicators. Under the Intermediate Result aimed at improved teaching, there is an increase in student's reading ability. The increase in second grade was almost 20 percentage points (19% to 38%), in third grade, the increase was 23 percentage points (20% to 43%), and in fourth grade, this increase was 16 percentage points (27% to 43%).

Another key indicator under Intermediate Results, aimed at improved student attendance, shows more consistent student attendance. The midterm evaluation found that 95 percent of the students attend more than 80 percent of their classes during the school year. This is a significant increase from the original 89 percent of students who reported attending more than 80 percent of their classes.

2. Methodology

The design of the midterm evaluation was done using both quantitative and qualitative tools. The quantitative part has two main components: surveys of school principals, teachers, and parents; and the implementation of the EGRA reading test (Early Grade Reading Assessment). In the qualitative part, in-depth surveys were conducted and focus groups were held with different key players and key groups. This section explains how sampling methods for the evaluation were chosen and how the analysis was completed.

2.1. Sample design to survey principals, teachers, and parents

School sampling was stratified and proportional to the number of students in each school. Stratification was done by dividing schools by regions where CARITAS and COCEPRADII operate. Critical and non-critical schools were divided equally and the complete list of schools included 100 critical schools and 904 non-critical schools. Critical or vulnerable schools are the 100 schools in the department of Intibucá that have the lowest performance as measured by not meeting at least one of the Education For All targets (drop-out, grade repetition, coverage, academic performance in Spanish and Math).

For school director sampling, a statistical power analysis was performed to determine sample size. At baseline, an effect size of 0.4, a statistical power of 80 percent, and a significance of 10 percent were all taken into account to determine the sample size. Thus, it was decided that the final sample should have 180 schools, including 60 critical schools and 120 non-critical schools. In this way, each region would have the same number of schools (i.e. a total of 90 schools with 60 critical and 30 non-critical schools, respectively). Within each stratum, schools were randomly selected with a probability proportional to the size of each school. The `gsample` command² was used for this purpose. Since there were some schools too large in which the probability of selection was greater than the available selection probability, these probabilities were limited to 1/50 for critical schools and to 1/80 and for non-critical schools.

For the teacher sample, up to 4 teachers per school were chosen. If the schools had fewer than four teachers, all teachers of the school were interviewed. If the schools had more than 4 teachers, then 4 teachers were randomly selected by the interviewers.

The number of parents interviewed was and 9 parents for critical schools and 5 parents per school for non-critical schools. Because the selection of parents was made at the invitation of each educational establishment's director, this sample is not random, and is therefore not representative of parents in schools in the department of Intibucá. The same happened in the baseline where parents were chosen by convenience. Therefore, it is important to note that data from parents should be interpreted with caution.

2.2. Sample design to survey the results of the EGRA test

The sample size for the project's midterm evaluation was calculated based on the results obtained during the baseline, and with the goal of increasing the level of literacy by 10 percent.

² Jann, B. (2006). `gsample`: Stata module to draw a random sample. Available from <http://ideas.repec.org/c/boc/bocode/s456716.html>.

The sample size's calculation took into account that students are grouped by grade and school. This creates a hierarchical structure which affects the statistical power and therefore the ability to detect at the statistical level any change between the baseline results and the midterm evaluation. Similarly, the number of students in each class is not the same for each school and this variation in grade size also affects statistical power.

Thus, additional factors for several indicators obtained from the baseline were considered. On the one hand, to measure the effect in which students are grouped into grades, ICC interclass correlation was used. To account for the variation in size of each sample, the variance in the number of students to whom the test was administered at baseline was used. Finally, the total number of schools visited at baseline was 129, and the number of schools visited during the midterm evaluation was 149.

One of the main indicators of the FFE project is based on EGRA and its aim to increase reading comprehension. Therefore, this indicator was taken to calculate the size of the sample. Also, grade level differences were taken into account.

Finally, calculations of the sample size were made in order to have a level of statistical power of at least 80 percent and a significance level of 5 percent.

Table 1. Sample size and entered values for the grade level calculations.

Grade	Students with at least the minimum reading comprehension proficiency level on EGRA in 2013	Interclass correlation ICC	Grade level variation by school	Sample size by school and grade
Second	18.6%	0.265	80.128	15
Third	20.3%	0.217	61.9711	13
Fourth	27.1%	0.135	85.249	10

These sample sizes reach a statistical power of 80, 81, and 82 percent for second, third, and fourth grades, respectively. However, to minimize potential errors during data collection, enumerators were instructed to sample 15 students from each grade for each elementary school sampled.

It is important to note that this sample size does not ensure that changes can be detected when the data is disaggregated by gender and/or municipality. Given the time and resources available, the size required to obtain the same quality of statistical power would not be practical or affordable for the midterm evaluation.

During data collection for EGRA, a tablet was lost during field work before its information was downloaded and all tests from second grade students and some from third and fourth grade student from four schools were lost. A statistical power analysis was done to determine whether or not to replace the data. The analysis showed that the statistical power was still above 80% in the third and fourth grades, whereas for the second, there was a theoretical drop of 0.5 percent in the statistical power, now at 79.6 percent. Since the benefits of replacing the data would not outweigh the costs involved, data collection continued without replacing the lost surveys (see section 0 for additional details).

The program, Tangerine® was used to test EGRA for the midterm evaluation. Tangerine® was developed by RTI International and is available under a General Public License (GNU). For more information on this program, please visit tangerinecentral.org.

Table 2 shows the final sampling obtained during data collection. The response was over 95 percent for each level and group.

Table 2. Final sampling by survey type and critical schools: 2014

	Non-critical schools	Critical schools	Total
Principals	114	58	172
Teachers	304	167	471
Parents	618	517	1135
EGRA	91	58	149
Second	88	57	145
Third	90	57	147
Fourth	89	56	145

1.2.3. Sample design for the qualitative assessment

For the qualitative evaluation, the number of in-depth surveys and focus groups used during baseline was taken as a reference. COCEPRADII and CARITAS selected directors, teachers, mayors, and district directors to participate in the qualitative study. Focus groups were created with parents, elementary school teachers of the two regions, preschool teachers, CCEPREB and PROHECO teachers, principals, and program staff. The in-depth interviews with key figures included district directors, mayors, technical assistants, and USDA personnel.

The selection of parents for the focus groups in each municipality used the following criteria:

- Parents from schools that demonstrate a high level of involvement with the project.
- Parents from schools that are the least involved with the project.

Focus group discussions were transcribed and classified according to midterm indicators.

CCEPREB: Preschool community education centers

These are community centers where trained community volunteers prepare 5 and 6-year old children to success in primary school. The district education office manages this program. The centers operate out of various places including, schools, churches, community centers, and homes and typically serve groups of 10-20 children. They offer a quality educational service at a cost (6) six times lower than that of a kindergarten. To ensure children who attend their centers have a better future, CCEPREBs seek to increase their knowledge, and to develop their skills, self-esteem and values.

PROHECO: Honduran program of community education

This is a Honduran government program that serves as an alternative model for providing educational services to poor, isolated rural areas through the direct participation of parents in the administration of educational services. PROHECO centers are managed by the community education associations (AECO).

2.4. Information analysis

This report uses both quantitative and qualitative information. The average obtained from the baseline and midterm evaluation is presented in the quantitative evaluation, which comes from surveys. The sample design has been taken into account to calculate the standard errors and therefore considers robust statistical test values. A separate analysis for schools identified as critical was also completed.

Averages for critical and non-critical schools could not be obtained in the baseline because the information in the baseline database was not enough to identify a school. In the baseline dataset, the name of the school was not recorded and there was not enough information to allow for the identification of individual respondents by school. For this reason, the analysis comparing critical and non-critical schools focuses only on data obtained in the midterm evaluation.

The EGRA test received the same treatment as described above and was weighted by the inverse probability of being selected. The weight assigned to each student by grade depended on how many students took the test, divided by the total number of students in the grade. Although schools were identified in the EGRA baseline test, the number of critical schools was only 7, which is too low to present statistically sound results.

All baseline indicators were recalculated to conduct statistical tests between the baseline and midterm evaluation. However, it was not possible with some indicators to replicate exactly the same value reported during baseline. In such cases, a statistical test was conducted in which the null hypothesis was that the recalculated value was equal to the reported value. This helps in the identification of how statistically different the numbers are, as the differences are mostly qualitatively small. Any discrepancy between the recalculated and reported value in baseline is noted in the tables.

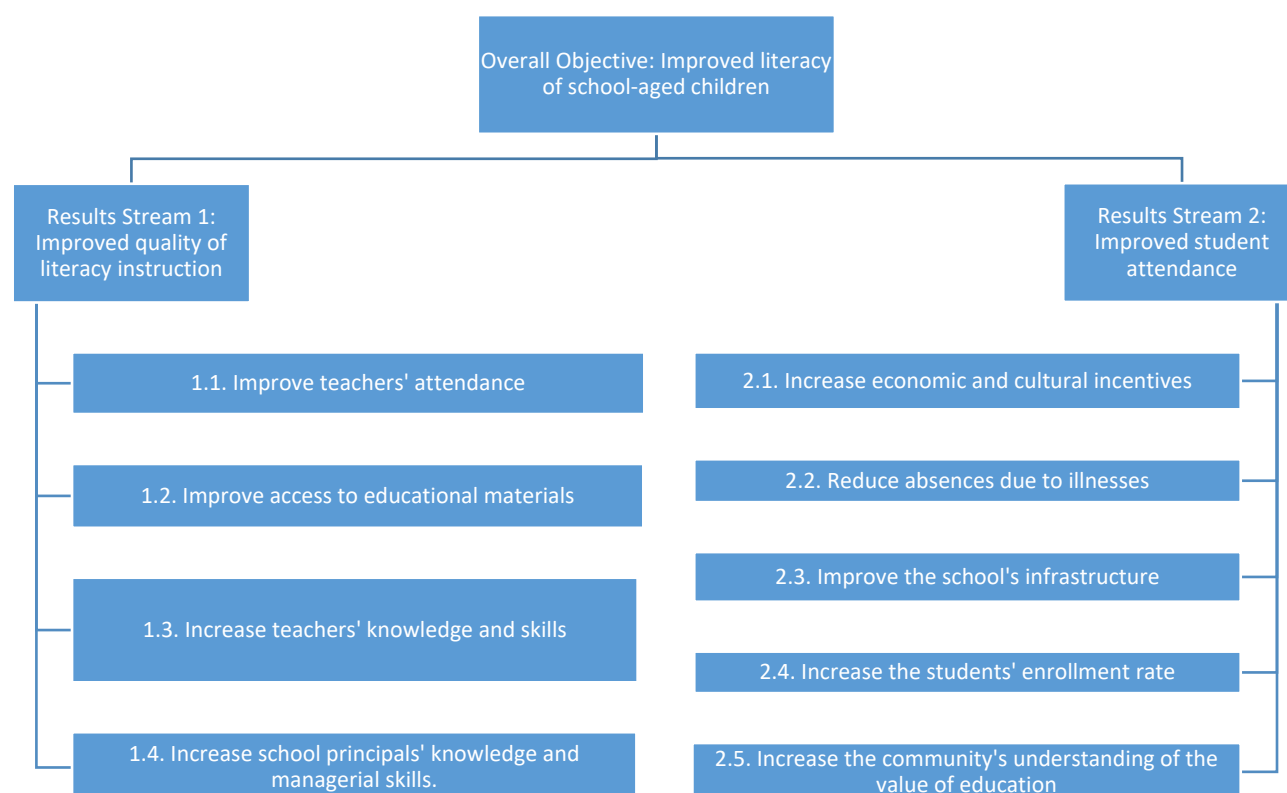
Based on the 7.2 Midterm evaluation key questions, sections of transcripts from all 16 focus groups and 8 interviews which were deemed relevant in answering the key questions were classified and grouped using Atlas.ti. In this manner, the analysis identified common themes and summarized the ideas brought under each key question. As normal speech is usually not linear or logical, the most articulated quotes among the ones grouped are presented in this document to give an idea of what was stated by participants.

3. Analysis of the Result's Framework Indicators

3.1. Goal: Improved Literacy of School-Age Children

The indicators analyzed in this section follow the FFE project's results framework. The overarching goal of the project is to improve the literacy of school-age children in 17 municipalities in the department of Intibucá and is reflected in the results framework's objective (see figure 1), "*improved literacy of school-aged children*". This key objective is supported by two results streams: improved quality of literacy instruction and improved student attendance in 1,047 educational centers. The quality of literacy instruction has been measured by using the percentage of children that achieved the standard in reading in EGRA, while student attendance was measured based on both the increase in student enrollment and the decrease in the number of days students miss class for any reason. The results were divided between critical and non-critical schools for the midterm evaluation. However, the baseline lacked sufficient information to identify and classify each school in the sampling. Based on the results obtained under these two streams, one can conclude that the project is improving literacy of school-age children.

Figure 1. Food for Education Project's results framework



3.2. Results Stream 1: Improved quality of literacy instruction

The main indicator under this results stream is to improve the literacy of school-aged children in the department of Intibucá. To this end, the EGRA test was administered to 15 students per grade per school chosen at random from the second, third, and fourth grades of sampled elementary schools.

The proportion of students who reached or exceeded the target reading level has increased significantly between the baseline and midterm evaluation. (See Table 3 for detailed results.) Second graders improved 20 percentage points between the baseline and midterm evaluation. Additionally, reading competency increased by 23 percent and 16 percent in the third and fourth grades respectively.

An increase in reading ability among boys reduced the disparity between boys and girls in second grade.

The percentage of boys in second graders achieving the reading standard was 8 percentage points below that of girls (p-value 0.000) at baseline. However, this disparity decreased to 6 percentage points (p-value 0.02) in the midterm evaluation.

The disparity between boys and girls in reading increased between baseline and midterm in third and fourth grade, as girls made additional gains. Though boys have made advances in their reading achievement, the disparity between boys and girls in third grade increased from 8 to 14 percent and in fourth grade from 10 to 11 percent from the baseline to midterm. This difference in achievement indicates that girls made more gains in reading than boys during the same period.

Result: Improve the quality of literacy instruction of school-age children.

Target: 10 percent increase of students that have developed 100% reading competency (as prescribed by grade).

Indicator: Percentage of students attaining national standards in reading as measured by EGRA.

Target Achieved

Grade	Baseline	Midterm	Change
Second	18.6%	38.3%	19.7%
Third	20.3%	43.1%	22.9%
Fourth	27.1%	42.5%	15.7%

Table 3. Results stream 1: Students who achieved 100% of reading competency by grade and gender: Intibucá, 2013 and 2014

Indicator	Baseline	Midterm	Midterm	
			Non-critical schools	Critical schools
Second	18.6	38.3***	40.4	34.8
Third	20.3	43.1***	44.9	39.9
Fourth	27.1	42.5***	41.6	44.3
Boys				
Second	14.6	35.5***	37.0	33.1
Third	16.0	35.9***	38.1	32.4
Fourth	22.0	36.9***	36.5	37.6
Girls				
Second	22.5	41.2***	44.1	36.6
Third	24.2	50.3***	51.6	48.0
Fourth	31.6	48.1***	46.4	51.4

Level of significance: 1% ***, 5% **, 10%*

There is no evidence that students in critical schools are performing differently than students in non-critical schools. The differences in the percentage of students achieving the reading standard between critical and non-critical schools are not statistically significant. This is also true if the results are disaggregated by sex.

3.2.1. INTERMEDIATE RESULT 1.1: MORE CONSISTENT TEACHER ATTENDANCE

Result: More consistent teacher attendance.

Target: 5 percent increase in regular teacher attendance by year.

Indicator: Percent increase in regular attendance by year.

Good Progress

	Baseline	Midterm
Percent increase	0%	4%

Result 1.1 targets more consistent teacher attendance, for which reliable data is difficult to obtain in the Honduras context as teacher attendance records are not always kept consistently. In addition, classes may be suspended for local events (such as festivals) and are not considered as teacher absences, thus making it difficult for parents to determine whether the school closure was official or not. Finally, the parents' survey is not statistically representative of all parents and there may be a favorable bias towards the teachers, since the parents were selected by school principals. It is important to keep in mind that the results for indicators presented in this section are not necessarily representative of other schools.

The first indicator of teacher attendance was calculated using the parent survey. The indicator was divided between elementary schools and pre-schools, to align with the baseline indicator measurement. The indicator was calculated using 200 days as the total number of days that teachers should teach. The number of days a teacher was present divided by 200 gave the value of the indicator.

Teacher attendance has improved between the baseline and midterm evaluation. Parents reported that teachers were present at the educational centers nearly 100 percent of the time. In pre-school, parents reported that teachers were present 99 percent of the time during the school year. In elementary schools, the rate was lower, at 98 percent, but was still higher than the percentage reported during the baseline.

Table 4. Intermediate Result 1.1: More consistent teacher attendance

Indicator	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Average percentage of days teachers are present in a school year in pre-school	98.47	99.31*	99.31	99.30
Average percentage of days teachers are present in elementary schools	90.32	97.84***	97.93	97.71

Level of significance: 1% ***, 5% **, 10%*

Teachers in critical and non-critical schools were present at the same rate. There is not a statistically significant difference detectable in teachers' attendance between critical and non-critical schools. In an effort

to better measure the quality of this indicator, CARITAS collected attendance reports in the schools in the region where it works. The indicator corresponds to the number of days worked with students as a proportion of the total number of days teachers work in a month. The components used to calculate this indicator are presented in Table 5. The information varies in each municipality according to the availability of the data in each school. The calculations take into account these discrepancies.

Table 5. Teacher attendance according to school records by municipality: CARITAS region

Municipality	Average number of teachers	% Attendance
Dolores	50	90 %
San Juan	105	87 %
San Miguelito	77	89 %
San Isidro	40	33 %
San Francisco Opalaca	94.9	88 %
Intibucá	65.3	91 %
Yamaranguila	47.3	88 %
Average per region	480	84 %

There is significant discrepancy between parents' reports and school records on teacher attendance. According to school records on teacher attendance, on average in the CARITAS' region teachers are present for 84 percent of the school working days. The average parent reported indicator is 97 percent. This difference of 13 percentage points is statistically significant (p -value = 0.000). The education department of Intibucá does not have a department-wide policy to address the issue of when a teacher has surpassed his/her quota for absences. Therefore, a process to record teacher attendance is now being put into place.

"We are now implementing a policy in which each school principal will have a form listing all of the teachers and an explanation for the days s/he missed. [These numbers] can then be compared with the rightful number of days s/he is allowed to be absent, which are three. We will keep [monthly] records for each teacher in order to take the necessary measures in case s/he tries to be absent for more than the lawfully authorized 3 days a month." – District Director

Other issues that emerge as affecting teacher attendance are the low pay in CEPREB schools and the lack of any monetary

Teacher support volunteers (Supplementary teachers)

A teacher support volunteer is someone from the community who has been selected by local leaders or community organizations to support teachers, upon the teacher or education authorities' request. Volunteers should be a community leader, pastoral agent, unemployed, retired teacher, or other professional and should meet the following criteria:

- Resident of the community.
- Recognized by the Assembly for his or her dedication to service.
- 6th grade education (minimum).

Volunteer support is requested when the teacher will be absent from school so that children can still attend class, as well as receive school meals. These volunteers have been trained in tutoring methodology, communication (Spanish) and mathematics. The volunteer program is functioning in 509 communities and volunteers are responsible for complying with the same tutoring methodology that is being used in tutoring centers.

incentive for teacher support volunteers, as illustrated by the discussions with teachers and volunteers.

"I didn't go to the school for around 3 days, because of [the pay]. I have expenses too. I teach in a kindergarten, but [my family also needs] to eat. We need water, and I don't know, so many things. We don't have enough to survive.... I didn't go to work, because what am I doing there? I'm wasting my time. I have a lot of things to do. I have my kids, I have to take care of them, so I said [to the school], well, go look for someone else!" – Teacher support volunteer

While teacher absences are not generally an issue, there are isolated cases. One staff member said *"For the most part, now we have 100 % teacher attendance in our schools."* There are some absences, but they have to be justified and *"what [the school is] doing is putting in place a policy to give teachers permission, but requiring proof."*

3.2.2. INTERMEDIATE RESULT 1.2: BETTER ACCESS TO SCHOOL SUPPLIES

The Food for Education project is supplying educational materials and school supplies to teachers, educational centers, and some students. Since these materials had not been distributed prior to the beginning of the project, the baseline value of this indicator was zero and only the midterm indicated is reported here.

During the midterm evaluation, teachers were asked to report whether or not they have received educational kits from the project. The responses were aggregated by school and the percentage of schools that received these materials was calculated. The number of schools for this indicator was found by multiplying this percentage by the total number of schools in the program.

Result: Better access to school supplies.

Target: 1,047 schools receiving school supplies and material as a result of USDA assistance

Indicator: Number of schools receiving schools supplies and material as a result of USDA assistance

Good progress

	Baseline	Midterm
Number of schools	0	660

Table 6. Intermediate Result 1.2: better access to school supplies.

Indicator	Global	Non-critical Schools	Critical Schools
Percentage of schools who reported having received educational kits through FFE	63	56	80***

Level of significance: 1% ***, 5% **, 10%*

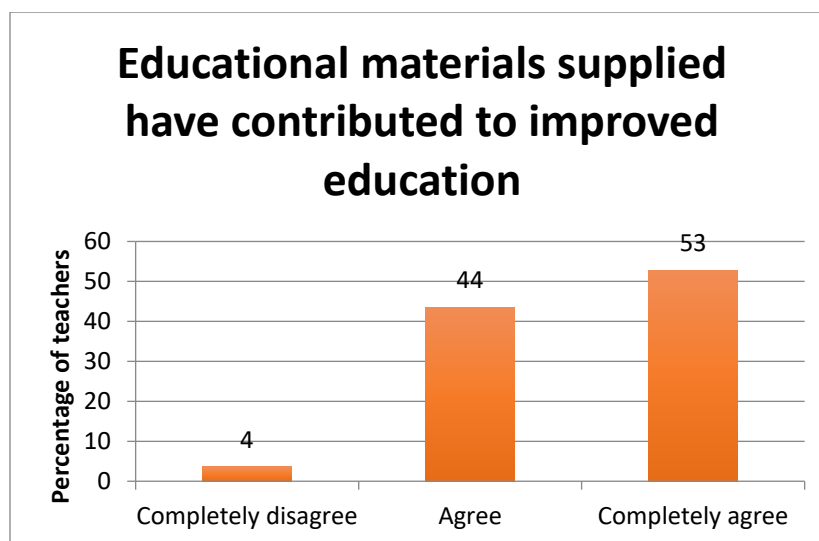
Critical schools reported a greater rate of receiving educational kits vs. non-critical schools. Overall, 63 percent of educational centers surveyed reported having received the educational kit. When comparing by the type of educational center, 80 percent of critical schools reported receiving kits versus only 56 percent of non-critical schools.

School selection criteria for supplementary materials:

- Fulfillment of 200 class days (90% attendance).
- No other NGOs or institutions supporting the secretary of education.
- Principals, teachers and administrative staff in the schools demonstrate commitment to children's education in the community and to the FFE project (e.g., acts, agreements).
- Reaching the EFA goals and school indicators.

An overwhelming majority of teachers who received educational materials and school supplies reported that the materials did contribute to an improvement in the quality of education. Figure 2 shows that 44 percent of teachers surveyed “agree” that educational materials have contributed to improved education. More importantly, 53 percent of teachers “completely agree” with this statement.

Figure 2. Views of teachers on the contribution of educational materials to improved education



Information from the qualitative data reinforces the finding that providing teaching materials to schools and supplies to students has had a significant impact on the educational process. The materials have helped teachers share knowledge with the students. Economically, it has also helped since teachers or community members would typically need to purchase these supplemental materials on their own.

“Just imagine, before we did not have any supplies to work with, and now, for each class we have materials to work with [and] to enhance our activities.” – Teacher

“It helps us to actually implement the activities that we plan. [Before], due to a lack of supplies that students did not bring with them, those activities could not be completed. But now, with the materials, it really helps them more.” – Teacher

“Yes, this material really helps us because there are certain communities in which it is difficult to ask the kids to bring finger paints, or things like that, and those came in the kit, so that really helps up to develop various activities with the students.” – Teacher

Parents, principals, teachers, and community also expressed positive opinions on the impact that donated materials have had on education. The majority stated that the backpack and notebooks have motivated the children to go to school, pay more attention, and it has helped them to feel equal to their peers.

Student backpack selection criteria:

- Extreme poverty
- High enrollment per school
- Priority to girls
- Low enrollment and high dropout risk.
- Living far from the school.

In the first year, children in first cycle will be eligible to receive backpacks and all participating schools will receive backpacks with school supplies during the life of the project. However, the amount per school may vary according to established criteria In the second and third year. Children from pre-school are also included (CCEPREB and daycares).

“There was a notebook in the kit, and the child was so happy with his notebook, because he now had a place to write and do his activities. It has motivated [the children]. It has improved the quality, imagine that! So yes, it has helped improve the quality [of education].” – Teacher

“[The project staff] gave them a real nice backpack and it really motivated the students because they started off with academic excellence, something really spectacular! The kit donated to the kindergarten was very beneficial around here.” – Teacher

Though the materials have provided benefits, not all schools have access to these materials. Although teachers and communities have recognized the benefits of school supplies, not all the centers, nor all the children, have received materials. This is a challenge since pre-schools, CCEPREB, and PROHECO are perhaps the most in need. All have requested a greater availability of materials for their school, but schools still need to meet the criteria to receive materials. In addition, by the end of the project all schools may be covered, but at midterm had not yet received these materials.

“... from the Ministry of Education, we don’t even receive a piece of paper. The teacher has to purchase paper, even to do roll-call. I don’t think that’s easy to purchase materials for the educational center on a teacher’s meager salary. So this is a priority need as well to be able to perform one’s job well.” – Teacher

“In my center, the problem is that children attend, but sometimes they don’t even bring a notebook or pencil. Then I have to find supplies for them, because their parents don’t buy them a notebook.” – Teacher

No issues were cited regarding the school meal distribution. In fact, those interviewed had very positive opinions as far as the handling of school meals.

“Management is important, since the institution lends its own vehicles and travels the necessary distances [to all schools].” – Principal

“What has helped us is that [the local organization] is accessible and covers the whole department. They are the ones who are responsible to bring [school meals] to all of the places and municipalities. So it’s easy for us since we only have to go get it and bring it to the educational center. They are responsible to tell us what is coming and then we go get it and distribute it.” – Principal

Those obstacles that were mentioned were often encountered at the educational center level. Some of the obstacles cited during the discussions included: parents not always coordinating well for meal preparation, at times the rice and beans not making it to the schools at the governmental level, and in some instances a lack of storage space at the centers was affecting the ability to stock food supplies.

Regarding the storage, one principle mentioned that *“[the storage space] is necessary because, if we had some storage space, the food supplies could be kept there, rather than having the teacher try to store all the food supplies herself, and it would be a cleaner environment”*

Challenges remain in providing complimentary increased for school meals. The project provides 3 of the 5 ingredients used in school meal recipes (CSB, Oil and Rice), but local procurement of beans and corn has not been secured. Project staff are negotiating with the government to provide additional complementary resources for these school meals. However, at the same time, the government is negotiating a new agreement with the World Food Program for local purchases.

The purchase of complementary ingredients, such as sugar, eggs, and vegetables for the preparation of CSB rich meals require additional contributions from parents until this challenge can be resolved. While most families have made these contributions on a weekly basis, others cannot. The ability of parents to provide these complementary materials limits each school’s ability to prepare the full proportion of CSB allocated to them.

From May to June 2014, the project staff and the Ministry of Social Development (SEDIS) piloted a 6 week plan to buy two eggs for each child to complement and enhance the nutritional content of the school meal delivered. Project staff hope that the 6 week pilot will be expanded and continued during the next school year, while negotiations to secure fulfillment of the governmental contract for the procurement of beans and corn continue. Dry rations will be provided to volunteers of the project (community members and parents) who participate in the activities of the project. Volunteers participated in various activities of the project including the peer to peer tutoring program, safety patrol groups, support and training of PTAs for preparation of school meals. Twice a year volunteers will receive a ratio of 50 kg of CSB and 13.6 kg of oil to take home, though in some cases parent’s expectations will need to be managed.

“In terms of dry rations, we have formed groups of volunteer leaders in all of the communities, but it is true that we don’t all cooperate well. When we receive the dry rations, everyone wants some. So it’s a challenge, are we going to give them some or not? But if it works out well, then we’ll also give out the next batch sent to us.”

– Technical assistant

Students who maintain 80 percent monthly attendance will also be eligible to take dry rations to their homes. Students will receive dry ration of 1 kg of CSB and 0.50 kg of vegetable oil per month to their homes. CRS will monitor the preparation and distribution of rations to take home and provide recipes for the preparation of CBS.

Supplies are being used in educational centers. Neither within focus group discussions nor during in-depth interviews was there any indication that the materials were not being used in the educational centers. As explained above, the problem is that, with the exception of school meals, there are simply not enough supplies delivered to cover the needs of teachers and students.

3.2.3. INTERMEDIATE RESULT 1.3: INCREASED SKILLS AND KNOWLEDGE OF TEACHERS

Result: Increased skills and knowledge of teachers.

Goal: 70 percent of teachers using five new/or improved teaching techniques in the classroom.

Indicator: Percent of teachers using five new/or improved teaching techniques in the classroom.

Lack of progress

	Baseline	Midterm
Percent	2.38%	2.03%

The Food for Education project has facilitated workshops for teachers in language arts and mathematics to update and refresh teaching techniques in these areas with the overall objective of improving quality of instruction. These teaching techniques fall under two methodologies: communicative approach for language arts and problem solving for mathematics. Teachers have been trained on strengthening the use of techniques within these two methodologies.

To measure teachers' skills and knowledge, the midterm evaluation assessed whether teachers were able to mention at least 5 teaching techniques, which are part of the teaching methodology in Honduras. Table 7 shows the percentage teachers who mentioned at least 5 of these techniques.

There has not been an increase in the percentage of teachers who mentioned using at least 5 improved teaching techniques.

Not disaggregating methodology and techniques in responses may explain the lack of progress of this indicator. Teaching methods include a set of techniques, and not vice-versa. For example, the communicative approach method includes group work, role play, interviews, games, information exchange as techniques. The baseline and midterm evaluation grouped these two concepts into one question. The first question was "Do you use any techniques or methods to facilitate the teaching process?" and the second question asked the respondent to "list the techniques or methods used." So, a teacher who responded with "communicative approach" may have been referring to a whole set of teaching techniques. However, a teacher who mentioned only communicative approach would not have been considered as having named 5 teaching techniques and thus, would show no increase in knowledge.

Table 7. Intermediate Result 1.3: Increased skills and knowledge of teachers

Indicator	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Percentage of teachers who use 5 improved teaching methods	2.38	2.03	1.74	2.61
Percentage of teachers who mention using the communicative approach	11.44	44.56***	42.90	47.92

Level of significance: 1% ***, 5% **, 10%*

The percentage of teachers who use the communicative approach has increased significantly. Taking into account the above complications in measurement of techniques, there has been a considerable increase from baseline to midterm in teachers who mentioned using the communicative approach as a methodology. This percentage increased from 12 percent to 45 percent between these two timeframes, demonstrating an increase of 33 percentage points.

Teachers have adopted better teaching techniques and tools through they still face some challenges in obtaining materials. Although many admit that they had already been using these tools, the training has helped them to contextualize how these techniques flow within a teaching methodology.

“We were receptive to change, and yes, it has worked for us. We had been using it all along, but we just didn’t know its name. We didn’t know its components... now we know to focus on the communicative approach. [We also know] that it is a transition period for students going into first grade. And it is being focused on in elementary school, so that there can be a connection between elementary school and pre-school, which is very important.”
– Teacher

“We have always applied the teaching techniques. We have done so at our own cost. I think most of us would never say, ‘I’m not going to do this because the Ministry of Education hasn’t sent me what’s necessary.’ we’ve always looked for whatever we can use to complete the activities. But now that we have been given [training], it has been easier for us, since it doesn’t come from our own pocket.” – Teacher

Major obstacles in the implementation of these teaching techniques and methodologies mentioned were the lack of materials, the quality of the infrastructure, and the availability of textbooks. In terms of materials, the teachers have been very resourceful and found ways to use what is readily available. In terms of infrastructure, the teachers have limited say in bettering the conditions of the school.

“We are limited by the building we are in. I work in a small common house and it is in very poor condition. With the infrastructure, it has been very difficult for me. This has limited our ability [to apply these techniques].” – Teacher

The teachers have also faced a couple of key limitations in their ability to maximize teaching techniques and tools using the government issued textbooks. The Ministry of Education often provided textbooks before the teachers have been trained by CARITAS or COCEPRADII, so teachers did not know how to apply the techniques yet. Also, textbooks sometimes arrived late, after classes had already started, making it difficult to change the school program.

“We don’t always get the textbooks on time; sometimes they come in mid-year, once we’ve already started the whole process.” – Teacher

At the same time, teachers felt that the new curriculum is more demanding and that they are in a period of transition in being able to apply this new curriculum, as many school children do not yet have the reading-writing abilities necessary to start the new curriculum.

“The children are being asked to start reading and writing right away and yet in the majority of rural educational centers, we don’t have pre-schools, and so that’s a hurdle.” – Teacher

3.2.4. INTERMEDIATE RESULT 1.4: INCREASED SKILLS AND KNOWLEDGE OF SCHOOL ADMINISTRATORS

In addition to providing workshops on teaching techniques, the Food for Education Project has also worked to improve the capacity of school principals in managing their educational centers.

School principals are putting their managerial tools to better use. The indicator used to measure this intermediate result is if the principals are using at least 3 tools for improved management. The increase in the use of these tools has been significant between the two measurements. During baseline, 20 percent of principals mentioned at least 3 improved management techniques, while during midterm evaluation, 56 percent of principals mentioned using these tools. Table 8 outlines these results.

Result: increased skills and knowledge of school administrators

Target: 70 percent of school administrators using three or more new and/or improved management tools.

Indicator: Percent of school administrators using three or more new and/or improved management tools

Good progress

	Baseline	Midterm
Percent	20%	56%

Table 8. Intermediate Result 1.4: Increased skills and knowledge the schools administrators.

Indicator	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Percentage of principals who use 3 or more new managerial techniques	20	55.57***	58.88	48.00
Percentage of principals who have a PEC and AOP	85.14	61.04***	55.56	73.59**
Percentage of principals who have an AOP	96.73	94.37	91.91	100.00**
Percentage of principals who have a PEC	87.17	63.51***	59.10	73.59*

Level of significance: 1% ***, 5% **, 10%*

A significant drop in the use of school plans. There are two types of school plans which have been promoted as part of the project's activities. The Annual Operative Plan (AOP) and the Educational School Project (PEC). These two plans contribute to better administration of educational centers. Between baseline and midterm, the percentage of principals who confirmed having these two plans decreased from 85 to 61 percent.

The use or availability of the Educational School Project (PEC) explains the decrease in the use of school plans. While directors reporting the use of an AOP only decreased from 98 percent to 94 percent from baseline to midterm, the percentage of directors who confirmed using PEC decreased from 87 percent to 64 percent from baseline to midterm.

Critical schools have school plans in greater proportion than non-critical schools. Results show that 74 percent of critical schools have school plans, while 56 percent of non-critical schools have them. This difference is statistically significant. More importantly, all of the critical schools have an Annual Operative Plan. The availability of PEC is higher in critical schools than in non-critical schools with a difference of 14 percentage points.

Changes have been observed as a result of the implementation of management techniques. The general perception was that the administration of educational centers and the motivation of principals have improved thanks to training in management techniques. Perceptions indicated that there is better organization in the

Educational School Project (PEC)

The Educational School Project is a strategic planning tool to guide a school towards implementation of the national curriculum and the achievement of educational goals. The plan is developed based on a comprehensive diagnosis and community participation and proposes common sense solutions to attain results. Implementation is achieved through the execution of specific projects and the AOP of the school. It includes plans and specific projects for the school as: Curricular School Project, Monitoring Plan, Annual Plan Operational, and the Plan for the Co-existence. Though the FFE project contributes to this initiative through training and preparation of the POA, as well as monitoring compliance, PEC is led by the Honduras government and implemented through the Ministry of Education. For this reason, it is not a key focus of the FFE project.

educational centers, and communication with parents. Additionally, offering a certificate of completion to the principals was perceived as a good motivation for them to participate in the program.

Principal certificate program selection criteria:

- Principals in schools that are not reaching EFA indicators
- No other support received by NGOs.
- Education level established by UPNFM
- Availability to travel outside their area during the weekends

“A change in attitude as teachers and administrators of the educational center [has been observed]. To go further, [they] have a vision for the future to improve and develop our educational centers. These training sessions have also helped us a lot to search or implement various strategies to involve the whole educational spectrum: businesses, parents, movers and shakers of the community, students, and all the other people who can become involved in these projects to develop our center and community.” – Principal

“We received a certificate of completion as principals of the educational centers. It has been of great use to us in the center, because now we know how to manage more effectively for the betterment of our educational center. We know how to organize our educational center, how to involve the parents and all of the community members, our peers, the kids... so it has greatly served us to improve our management.” – Principal

3.3. Results stream 2: Improved student attendance

Result: Improved Student Attendance

Target: 80 percent of students regularly (80%) attending USDA supported classrooms/schools

Indicators: Percent of boys regularly (80%) attending USDA supported classrooms/schools
Percent of girls regularly (80%) attending USDA supported classrooms/schools

Target achieved

Gender	Baseline	Midterm
Girls	90%	96%
Boys	89%	95%

The second principle aim of the Food for Education project is to improve student attendance, which is measured by students attending at least 80 percent of their classes during the school year. The data source to measure this indicator was derived from asking teachers how many students had not attended classes for 10 or more days, which de facto measured attendance to at least 95 percent of the classes given that there are 200 total days of class.

School attendance has improved significantly between the baseline and the midterm evaluation. The midterm evaluation determined that 95 percent of students regularly attend classes during the school year, representing a significant increase from the 89 percent found at baseline.

The disparity in boys' school attendance, as compared with girls, no longer exists. To measure the disparity in attendance,

the midterm also identified differences between boys' and girls' attendance. The baseline determined that boys attended less frequently than girls to 95 percent of their classes. This gap of almost 2 percentage points is statistically significant at 5 percent (p-value=0.021). Nevertheless, during the midterm evaluation, no difference could be detected between boys and girls in regards to school attendance.

Table 9. Stream Result 2: Improved student attendance

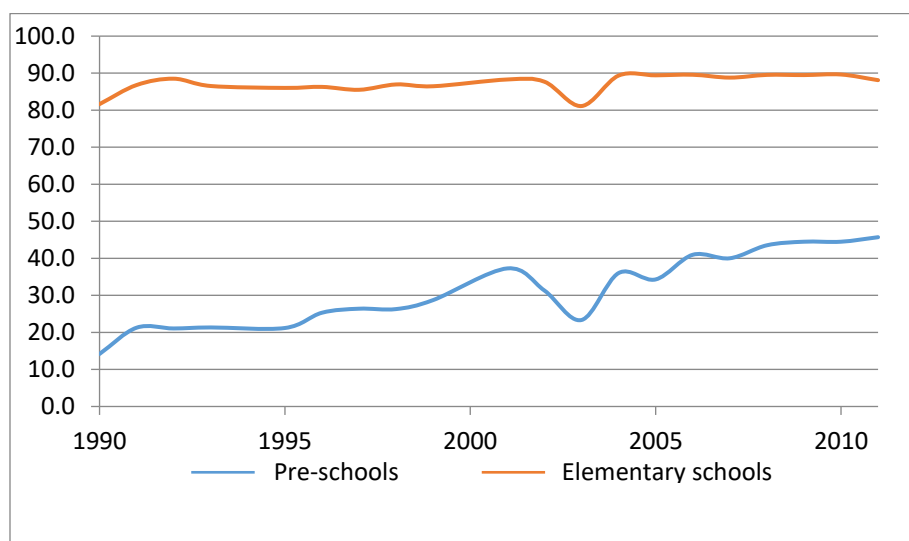
Indicator	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Percentage of girls who attend classes regularly	90	95.57***	95.71	95.30
Percentage of boys who attend classes regularly	89	95.19***	95.22	95.12

Level of significance: 1% ***, 5% **, 10%*

The indicator used for this project does not completely measure school attendance. As an alternative to the current indicator, school attendance could also be measured as the percentage of school-aged boys and girls who attend school. In general, this second indicator is more important in countries such as Honduras, as it captures both the percentage of children overall who are enrolled in school as well as the attendance rates of those children. Figure 3 shows the rate of enrollment in schools in Honduras. This enrollment rate in elementary schools has been above 80 percent during the last 20 years with only minor fluctuations.

Nevertheless, the pre-school enrollment rate is still under 50 percent with a moderate increase in the last 20 years.

Figure 3. School enrollment rate for pre-schools and elementary schools: Honduras, 1990-2011³



Measuring the school enrollment ratio is not possible with the methodology used. To obtain a measure of school enrollment ratio in the department of Intibucá, it would be necessary to know the total number of school-aged boys and girls and how many of them attend schools. Typically this would be done through a household survey or through records on minors living in the department during any given year, neither of which is available.

School meals have supported an increase in school attendance. The qualitative information collected show that community members recognize the importance of school meals in improving student attendance and learning. Poverty in the department of Intibucá has been identified as one barrier for parents in sending their children to school. However, providing school meals and school supplies has motivated parents to send their children. Also, the work done in parent committees has improved attendance by reducing school dropouts.

“In my experience, most parents do not enroll their children in educational centers because they don’t want to be bound to a commitment and for lack of economic resources. They say ‘no’ because enrolling a student in an educational facility implies expenses: they have to buy notebooks, supplies, so many things. But now that they see that the center is receiving outside help from these organizations, they are motivated to enroll their children. They know that they will have fewer expenses, because they know children will receive what they need in the educational center. And the only thing required then, is their collaboration.” – Teacher

However, this perception does not match with the statistics provided from the Ministry of Education in which the numbers of dropouts has increased from 475 to 497 students in the department between 2012 and 2013.

³Instituto Nacional de Estadística. <http://www.ine.gob.hn/index.php/datos-y-estadisticas/estadisticas-sociales-y-demograficas/educacion/66-asistencia-escolar>

This coupled with a decrease in the enrollment from 43,249 to 42,037 in the same period indicates an increase in the dropout rate.

3.3.1. INTERMEDIATE RESULT 2.1: INCREASED ECONOMIC AND CULTURAL INCENTIVES (OR DECREASED DISINCENTIVES)

As indicated by parents during the midterm evaluation, the Food for Education project has contributed to increased cultural and economic incentives.

School meals serve as the primary incentive for many, but other support such as transportation, backpacks, and other school supplies, has also contributed. According to the records from the project, the final enrollment for 2014 school year was 54,097 students.

Result: Increased economic and cultural incentives (or decreased disincentives)

Target: 53,863 students receiving educational incentives to encourage enrollment in schools.

Indicator: Number of students receiving educational incentives to encourage enrollment in schools.

Target achieved

	Baseline	Midterm
Number	0	54,097

Table 10. Intermediate Result 2.1: Increased in economic and cultural incentives.

Main type of aide received according to parents	Baseline	Midterm	Midterm	
	%	%	Non-critical Schools (%)	Critical Schools (%)
Money	17.39	21.36	20.11	23.25
Transportation	0.00	1.73**	1.52	2.06
Food supplies	8.27	12.41	10.09	15.95
School supplies/Uniforms	7.88	30.64***	30.11	31.44
Scholarships	2.85	2.66	3.48	1.42
Health fairs	2.76	0.47*	0.69	0.15
School meals	92.70	98.56**	98.20	99.10
Dry rations for volunteers	0.00	41.06***	39.37	43.89

Level of significance: 1% ***, 5% **, 10%*

Targeting criteria for children to receive transportation service:

- Poverty level
- Distance to school
- PTA organized
- High risk in the road to school (natural, social risks)

A significant increase was seen in the recognition of economic and cultural incentives provided. Of the three services provided by the Food for Education project (school supplies, transportation, and meals), the sample of parents reported receiving the above incentives at a higher rate during midterm evaluation than at baseline. The biggest change was in the receipt of school supplies, from 8 percent at baseline to 31 percent during the

midterm evaluation. School meals increased from 93 percent to 98 percent during the same period. Finally, transportation was mentioned by 2 percent of the parents, but is not a general service for all.

A significant proportion of parents who volunteered received dry rations as an incentive to participate. The project strategically supplied dry rations to parents who volunteer and though it was not for all parents, 41 percent of parent volunteers included in the sample declared having received dry rations.

Again, it is important to point out that the parent’s survey is not statistically representative of the larger population, so percentages based on the parent’s survey should be interpreted as valid figures *within the sample*, but not representative of parents across the project area. The total number of parents who received any type of economic or cultural incentives should not be calculated.

Parents greatly appreciated receiving school supplies and backpacks from the project. Parents explained that many families do not have enough resources to buy school supplies. However, when children received these items, they had more incentive to study, since they had their own notebooks and did not feel “less” than other children.

“Another thing that I witnessed which helped significantly is the backpack. While it is a benefit that some school children did not receive, those who did receive them, experienced change since they previously did not have a backpack or notebook. So, I give thanks to God for this help.” — Parent

Additionally, school meals were recognized as having a positive impact by parents. The food supplied gave children more energy and this affected their scholastic work. It also helped increase awareness of parents on the value of nutrition and its relation to school work.

“... [I] was talking to one of the teachers who received eggs and it’s good that they can have eggs. Before, kids even used to faint in school, but since they’ve been provided with eggs, they have more energy and it gives them more intelligence.” — Parent

3.3.2. INTERMEDIATE RESULT 2.2: REDUCED HEALTH RELATED ABSENCES

Result: reduced health related absences

Target: 10 percent decrease of students who miss more than 10 school days due to illness.

Indicator: Percent decrease of students who miss more than 10 school days due to illness.

Target Achieved

Percent decrease	Baseline	Midterm
Total	0	65%
Boys	0	63%
Girls	0	71%

Based on midterm results, illness does not seem to be an important factor in explaining school absences. This indicator was calculated based on teacher reported student absences and if students had stopped coming to classes for more than 10 days. As can be seen in the results of the indicator in Stream Result 2, school absenteeism is very low, which make illnesses an issue even less likely to emerge as a reason. See Table 11 for more information.

Table 11. Intermediate Result 2.2: Reducing the number of absences due to health issues

Indicators Percentage of students who missed more than 10 days due to illness	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Total	4.38	1.81***	1.64	2.14
Girls	4.49	1.56***	1.36	1.96
Boys	4.26	2.00***	1.85	2.32

Level of significance: 1% ***, 5% **, 10%*

School absences due to illness have reduced significantly for both boys and girls. The percentage of students absent at the baseline was just below 5 percent for both sexes, but decreased to 2 percent according to the midterm evaluation. This represents a 65 percent drop in the percentage of students' absences due to illness.

3.3.3. INTERMEDIATE RESULT 2.3: IMPROVED SCHOOL INFRASTRUCTURE

The Food for Education project is helping to improve school infrastructure through improving restroom facilities and constructing or renovating schools and classrooms. Data for this indicator was obtained directly from the project's records.

The project is close to completion of its goal. To date 84 construction projects have been completed, including the construction of 45 restroom units and 39 school renovations.

Result: Improved school infrastructure

Target: 94 educational facilities rehabilitated/constructed as a result of USDA assistance.

Indicator: Number of educational facilities (i.e. school buildings, classrooms, and latrines) rehabilitated/constructed as a result of USDA assistance

Good Progress

84 infrastructure projects completed.

Table 12. Intermediate Result 2.3: Improved school infrastructure.

	Restroom units	Classroom renovation / Construction	Total improvements
Critical Schools	6	6	39
Non-critical Schools	38	33	45
Total	44	39	84

The project aims to achieve a better overall learning environment in educational centers through the improvement of infrastructure, thus benefiting learning. Discussions with parents indicated that they understand that improvements in infrastructure, especially in the classroom and roofs, improved the educational environment and the children then felt more motivated to go to school. Nevertheless, parents did not seem to make a connection between better restroom services, fewer illnesses, and improved attention.

The reasons provided during the midterm evaluation centered on the physical appearance of the school, which then attracts parents to enroll their children there.

“[Parents often enroll their kids] based on the infrastructure, because now that the school is nicer-looking it gives off a better vibe. There’s more space and it’s more organized, so the parents are more motivated to enroll their children.” – Parent

“In [our] school, there was a donation by the embassy of Japan and with that the school was completely renovated. The difference can be seen...the infrastructure looks better and the school is up to par. The bathrooms are neat and parents are enrolling their children in the school.” – Parent

3.3.4. INTERMEDIATE RESULT 2.4: INCREASED STUDENT ENROLLMENT

Result: Increased student enrollment

Target: 10% increase in boys and 25% increase in girls enrolled in school as a result of USDA assistance

Indicator: Percentage increase in boys/girls enrolled in school

Lack of Progress

Gender	Baseline	Midterm
Total	0%	2.8%
Boys	0%	2.8%
Girls	0%	2.8%

The final 2014 enrollment increased compared to the 2013 enrollment. The total number of students enrolled rose from 52,618 at in 2013 to 54,097 in 2014. This is an increase of almost 3 percent in enrollment.

Girls and boys enrollment increased by the same amount. Girls and boys enrollment increased by 3 percent between 2013 and 2014.

The target for this result is not within reach. The target of 10 percent and 25 percent increase in enrollment for boys and girls respectively was not achieved. Table 13 shows that the only municipality that experienced this magnitude of change was La

Esperanza, the department’s capital. Nine of the seventeen municipalities experienced a decrease, while the rest experienced a modest increase in the single digits, except for Yamaranguila and Opalaca.

Government data related to student attendance and enrollment is unreliable at the moment. A new electronic database to register children was recently introduced by the Ministry of Education, but has already shown several problems in entering data and in capturing all children. An additional complication is that in 2006 the government created a program for free enrollment for all children. Based upon enrollment figures the government then assigns materials and funds. Over the years there have been several instances where teachers and directors were discovered inflating the number of children in school to receive more funding and resources. CRS would like to reserve any decision to adjust the current indicators until it has additional data to justify potential changes.

Enrollment numbers cannot be interpreted without a reliable measurement of the population that should be enrolled. Comparing number of students enrolled from one year to the next can produce erroneous conclusions. On the one hand, the student population is not the same in two academic years due to graduates and new students that enter the system. On the other hand, Intibucá is not an isolated system, the ebbs and flows of population migration affect the number of children that should be in school. These factors affect the

enrollment in different directions. A better indicator is the gross enrollment ratio or the net enrollment ratio that takes into account the student population as the eligible school-age children. However, there is not reliable estimation of the denominator at local levels in most parts of the world.

Table 13. Intermediate result 2.4: Increased student enrollment

Municipality	2013			2014			Percent change		
	Girls	Boys	Total	Girls	Boys	Total	Girls	Boys	Total
Total	25,782	26,836	52,618	26,511	27,586	54,097	2.8	2.8	2.8
La Esperanza	1,583	1,643	3,226	2,002	1,816	3,818	26.5	10.5	18.4
Camasca	752	760	1,512	714	749	1,463	(5.1)	(1.4)	(3.2)
Colomoncagua	2,279	2,312	4,591	2,451	2,527	4,978	7.5	9.3	8.4
Concepcion	1,194	1,179	2,373	1,100	1,102	2,202	(7.9)	(6.5)	(7.2)
Dolores	673	680	1,353	667	694	1,361	(0.9)	2.1	0.6
Intibucá	5,366	5,528	10,894	5,503	5,761	11,264	2.6	4.2	3.4
Jesus de Otoro	2,853	2,988	5,841	2,847	3,024	5,871	(0.2)	1.2	0.5
Magdalena	414	486	900	373	412	785	(9.9)	(15.2)	(12.8)
Masaguara	1,624	1,688	3,312	1,615	1,642	3,257	(0.6)	(2.7)	(1.7)
San Antonio	617	700	1,317	609	672	1,281	(1.3)	(4.0)	(2.7)
San Isidro	534	541	1,075	538	542	1,080	0.7	0.2	0.5
San Juan	1,443	1,555	2,998	1,423	1,518	2,941	(1.4)	(2.4)	(1.9)
San Marcos de la Sierra	1,134	1,247	2,381	1,093	1,206	2,299	(3.6)	(3.3)	(3.4)
San Miguelito	1,065	1,047	2,112	976	1,053	2,029	(8.4)	0.6	(3.9)
Santa Lucia	650	664	1,314	563	641	1,204	(13.4)	(3.5)	(8.4)
Yamaranguila	2,355	2,527	4,882	2,616	2,785	5,401	11.1	10.2	10.6
Opalaca	1,246	1,291	2,537	1,421	1,442	2,863	14.0	11.7	12.8

Source: Ministry of Education

3.3.5. INTERMEDIATE RESULT 2.5: INCREASED COMMUNITY UNDERSTANDING OF BENEFITS OF EDUCATION

The Food for Education project seeks to change how parents and the community value education and has outlined a target for 75 percent of parents to mention at least 3 valid reasons as to why it is important for children to attend school. Based on the midterm evaluation results, this indicator is still out of reach for achievement.

Parents recognized the value of education at a higher rate. Upon asking parents for valid reasons as to why it is important to send their children to school, the

Result: Increased community understanding of benefits of education.

Target: 75 percent of parents that can provide at least three valid reasons why education is important.

Indicator: Percent of parents, when asked, can provide at least three valid reasons why it is important for children to attend school.

Lack of Progress

	Baseline	Midterm
Percent	1.96%	12%

response rate increased from 1.96 percent to 12 percent. This increase of 10 percentage points is statistically significant.

The goal for this intermediate result is out of reach. Despite the fact that there has been an increase in the overall recognition on the value of education, the target is to have 75 percent of parents' give 3 valid reasons for sending their children to school. Unless other forms of communication, besides radio campaigns are used, this will not be accomplished. Furthermore, the capacity to reach this target is limited by the education level of parents.

Parents' education levels limit their ability to articulate three valid reasons. The education levels of parents are generally low throughout the department of Intibucá, which may limit their ability to articulate valid reasons. When parents were asked if education is important for their children, 99 percent of them said yes, as much in the baseline as in the midterm evaluation.

'Valid' reasons are an imposed construct that affects how the indicator is measured. Given that the project does not have activities to sensitize parents to which reasons are valid and which reasons are not, it does not make sense to impose this definition when it is not part of the project. Additional restrictions on what is valid also means that it was not enough that a parent was able to articulate reasons that for him or her are valid. In the future, a better indicator may be to assess whether parents already send their children to school, which demonstrates that parents value education. The ultimate objective is school attendance no matter what the reason. However, the sample of parents was not appropriate to measure school attendance.

If the indicator were to use a number of reasons given, without considering whether they are 'valid' or not, the level of the indicator would change considerably. This is most evident in the baseline where answers were open. While only 3 percent gave at least 3 'valid' reasons, 33 percent were able to mention at least 3 reasons. This is a difference of 30 percentage points. This difference can also be found in the midterm evaluation, although in lesser proportion. While only 12 percent were able to give valid reasons, 17 percent were able to give at least 3 reasons.

The number of reasons measured for this indicator is very high. Another factor that affected the low result in this indicator is the number of reasons required compared to the educational level of parents. Not only was it difficult for parents to articulate valid reasons, but even more so that they were required to mention at least three. If the number required was reduced to 2, the results would likely be different. In the baseline, 27 percent of parents were able to provide at least 2 valid reasons.

Awareness of and participation in parent-teacher organizations has not changed. Between the baseline and the midterm evaluation, no change was detected between the rate of parents who are aware of (99%) and who participate in (66%) parent-teacher organizations.

Table 14. Intermediate Result 2.5: Increased community-wide understanding of the benefits of education

Indicators	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Parents providing 3 valid reasons why education is important	2.55	11.88***	10.13	14.54
Parents providing 3 reasons why education is important	3.53	16.97***	14.81	20.25
Parents providing 2 reasons why education is important	26.88	56.12***	53.74	59.74
Parents are aware of the parent-teacher organization	98.53	98.99	98.81	99.26
Parents who participate in the parent-teacher organization	64.24	66.04	65.52	66.83

Level of significance: 1% ***, 5% **, 10%*

In focus group discussions with parents, there was greater awareness that parents play an important role in their children's education. Responses indicated that parents are important because they can positively influence (by supporting their child) or negatively influence them (not sending them to school).

"Parents should support children as well, because in [our] school, in my son's grade, there are some parents who are responsible, but many that are not responsible. Sometimes they send their child [to school] and sometimes they don't. So that's what it depends on – it can't all fall on the teacher, but the parent has to cooperate too. It's the parent, the student, and the teacher." – Parent

3.4 The Project's Sustainability

CRS and its partners are concerned with project sustainability and for this reason, the qualitative investigation included questions about the sustainability of the project.

School meals are a component which will require external aid in order to keep running. The general consensus was that school meals could not continue without external help from organizations such as CARITAS, COCEPRADII, and CRS, as well as USDA.

"Once the money stops, that generally tends to stop the distribution of food. When we are bringing in food from the outside – for example corn soybean meal – or we're bringing in some sort of packaged product – vegetable oil, or something else from the United States, usually when the program stops, [the meals] stop."

– Project manager

The knowledge acquired during the training workshops for teachers and principals will last. Teachers and principals can continue to apply what they learned during the workshops. Training sessions provided by the project have given teachers the tools and understanding necessary to increase student attendance.

"These trainings and workshops have taught us ways in which we can motivate parents and give them incentives for sending their children to [school]. It is very important that the child attends pre-school and that the child completes both levels, so that he does not fail in elementary school. These things will depend on the teacher's motivation to be able to attract children to attend. If we have consent, then it is possible to go out into the community to convince parents to enroll their children in our programs." – Teacher

Furthermore, behaviors learned and adopted by the community can continue on even if the project comes to an end. For example, the importance of proper hygiene and balanced nutrition through the school's garden project can have longer lasting effects.

"One of the things I think we will follow up with is on the hygiene and sanitation workshops that we have been given, because most parents are implementing water purification techniques. You can see some houses with their bottles on the zinc laminate, as one of the water purification techniques." – Teacher

"We have the school garden located at the school and another one on some land that parents lent to us. Because there is water and everything we need there, we can continue with the garden." – Parent

In terms of materials and infrastructure, there are examples where the community, with the support of teachers, obtained resources to improve education. While this is not the case in all communities, it can be considered as a component to help the community continue improving the quality of its education.

Here, everything has been done thanks to the parents and the community. People from the community who have left for the United States have helped us. They sent us the money necessary to buy the land, and then we set up chores through communal support system. Everyone did their chores and we were able to get the model down."

– Teacher

The attitude towards the sustainability of the project's components depends on raising awareness and modifying parents' behaviors.

"In the long term, we can accomplish something by raising awareness with the people, with all those involved. With the students, so that they realize the importance of education, that studying will change your life. And with parents, so that they realize that by putting their child in school, s/he will not suffer for it, but be better off later in life. Bringing awareness to the principals so that they put more effort into offering the best classes possible. That is how we contribute to change in a child's life, in the community, and in the department, and even in the whole country... In order to be sustainable, this project needs to raise awareness in the whole community." – Technical Assistant

Parents are concerned that if school meals were to stop, everything could stop working properly. For this reason, one key recommendation emerging from the midterm evaluation is to raise awareness among parents and community members, so that they are able to identify which components of the project are sustainable.

"What I was thinking, is that really, the only thing that holds us together is school meals. School meals are the key to keeping unity among the parents, because they get together to organize what they will make for the meals and to plan such and such a thing. If the project were to stop providing food... well, this worries me!"

– Parent

3. EGRA results analysis

The EGRA test has 6 sections which measure different aspects of reading. The evaluation only used the reading comprehension proficiency results for the project's indicators, but for better understanding of achievements has included all sections here. This section is not an in-depth analysis of the EGRA test, only a general presentation of the results. An in-depth evaluation is outside the scope of this evaluation report.

Results are presented by grade and divided between the baseline and midterm evaluation. The midterm evaluation results are divided between critical and non-critical schools. Results were compared and the statistical test of a null hypothesis, where no change would have occurred between these two points was conducted. Overall, results indicate that reading proficiency has significantly improved since the baseline.

There has not been any improvement in the recognition of beginning sounds. In the first section of the EGRA test, the student hears a word, and must pronounce the sound of the first letter, not its name. The student is considered proficient if s/he recognizes all the sounds of the 10 pronounced words. Percentages for students proficient in this area were: 6 percent for second grade, 8 percent for third, and 7 percent for fourth grade. No statistically significant difference could be detected.

Table 15. Students proficient in beginning sounds.

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	9	5.73	6.49	4.51
Third	6	7.63	6.59	9.36
Fourth	8	7.29	7.91	6.15

Level of significance: 1% ***, 5% **, 10%*

Improvement in producing the correct sound of letters. In the second section of the EGRA test, a student is given a table with 50 letters and s/he is asked to produce the sounds of each letter. This event is timed to see how long it takes the student to finish with all the letters, or the number of letters that the student can read in one minute. The standard for second graders is at least 40 letters per minute, and 50 letters for third and fourth. Compared to baseline, the percentage of students who demonstrated proficiency in producing the sounds of letters increased significantly: 52 percent of second graders are proficient compared to 4 percent in the baseline; and, 70 percent and 85 percent of third and fourth graders, respectively, were found to be proficient in this skill, compared to 2 percent in the baseline.

Table 16. Students proficient in producing the correct sound of letters.

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	4	51.77***	53.84	48.44
Third	5	70.21***	71.84	67.49
Fourth	6	88.40***	87.29	90.48

Level of significance: 1% ***, 5% **, 10%*

A significant improvement in reading simple words. In the third section of the EGRA test, the student is given a list of 50 simple words to read out loud. The student must read as many words as possible in one minute. The number of words read correctly is calculated and compared to the standard for each grade.

The standard in second grade is 50 words per minute, while in third and fourth grade, it is 90 words. Midterm evaluation results demonstrated an improvement in the proficiency of reading simple words. In second grade, the percentage of students meeting and exceeding the standard increased from 8 percent to 37 percent between both measures. In third and fourth grade, the percentages went from 2 percent to 21 percent, and 9 percent to 35 percent respectively.

Table 17. Students proficient in reading simple words.

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	9	37.11***	39.14	33.85
Third	2	20.50***	21.15	19.43
Fourth	9	35.90***	35.47	36.71

Level of significance: 1% ***, 5% **, 10%*

Significant improvement in reading nonsensical words. In the fourth section of the EGRA test, the student receives a list of 50 nonsensical words that also must be read in one minute. The number of nonsensical words the student reads in a minute is totaled and compared to the standard for each grade. The standard is the same as the previous section, i.e. 50 and 90 words per minute for second, and third and fourth grade. While in the baseline, the percentage of students who met the standard was under 1 percent, in the midterm evaluation, the percentages increased to 37 percent in second, 21 percent in third, and 36 percent in fourth grade.

Table 18. Students proficient in reading nonsensical words

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	0.77	37.11***	39.14	33.85
Third	0.62	20.50***	21.15	19.43
Fourth	0.47	35.90***	35.47	36.71

Level of significance: 1% ***, 5% **, 10%*

A significant improvement in reading story words. The fifth section measures two components. The first is the ability to read story words. The second is whether what was read was understood or not. The student is presented with a simple story, to be read as quickly as possible in one minute. The total number of words pronounced correctly per minute is compared to the standard for each grade, which is 60 wpm for second grade, and 110 wpm in third and fourth. The rate of students who met the standard increased in all grades. In second grade, this percentage went from 19 percent to 38 percent. For third, the increase went from 20 percent to 43 percent, and for fourth, from 27 percent to 43 percent.

Table 19. Students proficient in reading story words.

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	18.6	38.3***	40.43	34.72
Third	20.3	43.1***	44.93	39.93
Fourth	27.1	42.5***	41.56	44.29

Level of significance: 1% ***, 5% **, 10%*

Significant improvement in reading comprehension. In the second part of the fifth section, the student is asked five questions about the text s/he just read. The number of correct responses is compared to the standard for each grade. The standard is four correct responses for second and third grade and all five correct responses in fourth grade. The second grade had the greatest improvement in the number of students who were able to answer correctly. This percentage went from 18.6 percent to 38.3 percent. In third and fourth grade, the increase went from 20.3 percent to 43.1 percent, and 27.1 percent to 42.5 percent, respectively.

Second graders in critical schools are behind second graders in non-critical schools. Whereas there were not any noticeable differences between critical and non-critical schools in any other measurements, the percentage of students who met the standard was 36 percent in critical schools, and 45 percent in non-critical schools. This difference is detectable at a 10 percent level of significance.

Table 20. Students proficient in reading comprehension.

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	27	41.64***	44.86	36.46*
Third	55	68.21***	70.14	65.02
Fourth	43	56.94***	55.98	58.73

Level of significance: 1% ***, 5% **, 10%*

Only in fourth graders can a difference be noticed in oral comprehension. In the sixth and last section of the EGRA test, the student is asked 5 questions about a paragraph which was read to them. The number of correct answers is then compared to the standard, which is the same as in the previous section. Only in the fourth grade was a 10 percent level of significance detected. The percentage of fourth graders who met the oral comprehension standard increased from 20 percent to 25 percent. The percentage increase was 30 percent and 44 percent for students in second and third grade.

Table 21. Students proficient in oral comprehension

Grade	Baseline	Midterm	Midterm	
			Non-critical Schools	Critical Schools
Second	27.89	30.05	32.32	26.39
Third	39.28	44.06	42.93	45.94
Fourth	20.48	25.42*	24.36	27.38

Level of significance: 1% ***, 5% **, 10%*

4. Conclusions

Results at a glance

Result Stream 1: Improved quality of literacy instruction. Target surpassed. Midterm results indicated a 10 percent increase in students that have developed 100% reading competency (as prescribed by grade). The increase in second grade was almost 20 percentage points (19% to 38%), in third grade, the increase was 23 percentage points (20% to 43%), and in fourth grade, this increase was 16 percentage points (27% to 43%).

Result Stream 2: Improved student attendance. Target surpassed. The target is for more than 80 percent of the students to attend classes regularly. At baseline 90 percent and 89 percent of girls and boys attended classes regularly. In the midterm, these percentages increased to 96 and 95 percent respectively.

Intermediate results under Results Stream 1:

Result: More consistent teacher assistance. Good progress. The target is a 5 percent increase in regular teacher attendance by year. The percentage of teachers present at school increased 4 percent between the baseline and midterm evaluation.

Result: better access to school supplies. Good progress. The target is for 1,047 schools to receive school supplies and materials as a result of USDA assistance. At the midterm 660 schools acknowledged that they had received these supplies.

Result: Increased skills and knowledge of teachers. Lack of progress. The target is that 70 percent of teachers use 5 new/or improved teaching techniques in the classroom. The percentage change between baseline and midterm was from 2.38 to 2 percent.

Result: Increased skills and knowledge of school administrators. Good progress. The target is that 70 percent of the administrators have better skills and knowledge. At baseline, 20 percent of principals mentioned at least 3 improved tools for management, while at the midterm evaluation, 56 percent of principals mentioned the use of such tools.

Baseline and midterm evaluation data was collected to evaluate the impact of the Food for Education program, and, more importantly, to obtain the necessary information to improve the program. As mentioned in the introduction, this program is being led by CRS, CARITAS and COCEPRADII, in cooperation with the Ministry of Education, the Ministry of Agriculture and Livestock, and the Ministry for Social Development. This project is being financed by USDA.

Mixed methods were used to complete the midterm evaluation. A probabilistic sample representative of principals and teachers was used. This was complemented with a voluntary sampling of student's parents, and interviews with mayors, staff, and district directors; and with focus groups including parents, pre-school and elementary school teachers, and CCEPREB. Additionally, students in second, third, and fourth grade took a reading proficiency test using the EGRA program.

Overall, we can conclude that the program is progressing satisfactorily toward its fundamental targets. A significant increase in student literacy rate can be observed, as well as a significant increase in student attendance, and community involvement in improving the quality of education in the department of Intibucá. Parents are participating as substitute teachers, in preparing the school meals and taking care of the school garden. These activities have been identified as having an impact on school quality.

The presence of CARITAS and COCEPRADII is very important to the municipalities and teaching centers. Overall, these organizations and their hard work in the implementation of the project are held in high esteem. This success is based on the trust, transparency, and fulfillment of the project's components.

Only three of the evaluation's indicators are not progressing satisfactorily. However, this evaluation has concluded that the problem lies in the definition of both indicators, and not in the project's lack of impact or implementation. The target for the increase in enrollment is very ambitious given the socio-economic situation of Intibucá, where out-migration is dominating the population growth.

The results of the EGRA test are quite encouraging because results demonstrate an increase in student's reading level in second, third, and fourth grade. Important gains have been achieved in reading comprehension and reading of independent words. However, oral comprehension and the pronunciation of the sounds of letters did not increase between the baseline and midterm evaluation. This could be due to the change in teaching methods in reading, meaning that the new cohort of students has been exposed to these methods for a longer amount of time than those in the higher grades. With this in mind, the final evaluation may be required to appropriately determine the total impact on all the skills that the EGRA test measures.

This midterm evaluation included a separate analysis comparing critical and non-critical schools. In general, there are very few differences between the two types of schools. In the cases where differences can be noted, the results are mixed. Principals' training, access to educational materials, and the presence of an Annual Operative Plan (AOP) are generally higher in critical schools, but some reading comprehension results were lower for students in critical schools.

Intermediate results under Results Stream 2:

Result: Increased economic and cultural incentives (or decreased disincentives). Target achieved. In total, 53,863 students received educational incentives to encourage enrollment in schools. There are 54,097 students enrolled in for the 2014 school year.

Result: Reduced health related absences. Target achieved. The target is a 10 percent decrease of students who miss more than 10 school days due to illness. The school absences decreased by 65 percent between the baseline and midterm evaluation.

Result: Improved school infrastructure. Good progress. The target is to accomplish improvements and/or finish construction projects for 94 educational centers. By the midterm 84 improvement and construction projects had been completed, which included both restroom units and classroom construction or rehabilitation.

Result: Increased student enrollment. Lack of progress. The target aims to achieve a 10 percent and 25 percent increase in boys and girls enrolled in school as a result of USDA assistance. The increase in enrollment between baseline and midterm is 2.8 percent for both sexes.

Result: Increased community understanding of benefits of education. Lack of progress. The target is that 75 percent of parents are able to mention at least three valid reasons for why attending school is important. This percentage increased from 2 percent to 12 percent between baseline and midterm.

5. Recommendations

- To better capture the measurement of the indicator *“percent of teachers using five new/or improved teaching techniques in the classroom,”* the recommendation is to ensure that the distinction between teaching methodologies and techniques is clearly articulated. The difference between these two aspects of teaching quality should be separated into two indicators and therefore separate questions for teachers. It also should be divided for administrators for consistency. Since teaching methodologies include many teaching techniques, teachers who responded with a methodology were at a disadvantage compared to teachers who mentioned specific teaching techniques. Though the methodology encompassed many techniques, it was only counted as one “improved teaching technique” during the survey. By making this change the project would better capture the knowledge of teachers. Furthermore, it would be possible to meet the project’s goal. Otherwise, the project will fail to show any improvements in this intermediate result.
- Ensuring that schools have an Educational School Project (PEC- Proyecto Educativo de Centro) is very important, not only to assure better planning in terms of activities, but also to contribute to community ownership as PEC’s ensure that communities feel part of and invested in the quality of the school’s education. The PEC is developed with the help of teachers, administrators, parents, and students, and is an important tool for community participation and school quality. Not having a PEC can negatively affect community ownership to improve the quality of education and thus, implementing organizations should continue promoting the creation and use of the PEC.
- The indicator for intermediate result 2.5 (*75 percent of parents that can provide at least three valid reasons why education is important*) should be adapted to better capture community’s understanding of the benefits of education. The project can either change the indicator to reflect “any reason” that parents give as a benefit of education for their son or daughter, or, the number could be lowered to two valid reasons. The first option would ensure that the indicator better takes into account the socio-cultural context of the region, while the second option would require a revised communication plan to ensure its effectiveness.
- Implementing organizations must work on increase the awareness of how different activities in the project can be sustainable or can continue after the project ends to achieve greater success in this area. The project should include information in their training to teachers, principals, and parents on how to ensure the sustainability of the project’s components. Nevertheless, the main component of the project—school meals—cannot be a sustainable component. The ingredients used to prepare the school meals are not locally sourced, and thus must be imported to the area. Furthermore, the costs and complications of receiving food and resources from the United States pose a major obstacle to sustainability for the impoverished and under resourced Honduran communities.
- To improve the reliability of data from parents during the final evaluation, a list of parents for each school can be created and used to randomly select parents for the survey. Alternatively, students

could be randomly selected and parents of those students could then be interviewed. However, while this improvement in data collection will give a representative sample of parents for the final evaluation, the data will not be technically comparable with the baseline or midterm evaluation data due to the change in methodology.

- Finally, the gross or net enrollment ratios cannot be calculated with the data that has been collected so far. The impact of the project in reducing the number of children out of school cannot be measured by comparing the number of student enrolled each academic year. The student population is affected by external changes in the general population due to migration and internal changes due to graduation and the size of incoming freshmen cohorts. A quick household survey at the department level could be conducted to assist in determining enrollment rates. Alternatively, CRS could work with demographers in the government to create population estimations by age, sex and municipality, if this is possible then an approximation could be done to the enrollment ratio. Alternatively, the community groups formed to prevent school dropout could carry out a census in their communities. Given that increasing enrollment is a key goal of the FFE project, obtaining this indicator would be a better measure of the impact of the project.

6. Appendices

7.1 Training content

TEACHER TRAINING

Year 1

Math Professor

Mathematics Camp at 100% of teacher, including 10 modules

- 1) Natural Numbers (place value)
- 2) Rational Numbers (addition, subtraction, multiplication and division)
- 3) Number Theory (planning DCNB tools, application problems, primes, factors and divisors, factorization, multiples, greatest common divisor)
- 4) Number Theory (teaching materials and application problems)
- 5) Fractions (definitions, common factors, proper and improper)
- 6) Fractions (addition and subtraction with common and uncommon denominators)
- 7) Fractions (multiplication and division word problems, algorithms, fear of giving certain topics in mathematics)
- 8) Exponentiation
- 9) Class plan, mathematics curriculum adaptation, problem solving
- 10) Combined operations

Year 2

Spanish Teacher

- 1) Communicative and functional approach is one of the main tools that is used by educators to organize daily educational work, which is why those teachers working in areas difficult to comprehend, in working together with classroom teachers should know and use this form of communication to meet the needs, interests and concerns of students, especially in collaborative work carried out in the regular classroom.
 - a) The DCNB and application tools
 - b) Teaching the alphabetical code
 - c) Journaling
 - d) Planning
 - e) Development of training module for Spanish facilitators
 - f) Literacy workshop 1

Info technology Teacher

- 1) Basic computing
- 2) Administrative System of the Secretary of Education

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Critical Education Centers

- 1) The EGRA as a teaching resource
- 2) The EGMA as a teaching resource

Preschool, Year 1 Teachers

- 1) Toolbox
- 2) School for parents and mothers

- 3) Active and participatory methodology
- 4) Transition from preschool to first year
- 5) Basic computer
- 6) Administrative System of the Secretary of Education
- 7) Communicative approach

CCEPREB Facilitators

- 1) Communicative approach

ADMINISTRATOR TRAINING

Center Directors or Administrators:

Year 1

- 1) Basic computing and Administrative System of the Secretary of Education
- 2) Flexible assessment
- 3) Dropout
- 4) Administration and Administrative Management
- 5) Methodology child/tutor

Year 2

- 1) Basic computing and Administrative System of the Secretary of Education
- 2) Educational Support:
 - a. Bases of existing monitoring
 - b. Supervision and monitoring
 - c. Technical support for teachers
 - d. Profile of an accompanying teaching
 - e. DCNEG and tools of curriculum concision
 - f. Accompanying the constructivist classroom communicative and functional approach
 - g. Evaluation and support chips
 - h. Accompanying the classroom with a focus on problem solving
 - i. Use organizational chalkboard
 - j. Use and manage The Work Notebook Teacher's Guide
 - k. Effective School
 - l. Achieve accompaniment through observation
 - m. Important considerations in accompaniment
 - n. Monitoring and follow-up
 - o. Accompanying Plan
- 3) Dropout and Education Indicators:
 - p. Dropout and Indicators
 - q. Statistical Reports
 - r. Goals
 - s. Statistics at the school-level
 - t. Half-year analysis, and remedial-level Education Center plan
 - u. Intibucá-numbers and achieving those goals. Coverage, dropouts, repetition, performance

- v. The Education Project Center: school management tool that contributes to the education indicators through joint action strategies and specific projects aimed at improving school performance
 - w. How to facilitate a process
- 4. Methodology child/tutor

CERTIFICATE TRAINING

Integral certificates to 112 principals in Year 1 and now 136 principals are receiving training with duration of 168 hours.

In 3 sessions:

Session I: Educational Administration: Foundations

Contents:

I. Administrative Foundations

1. Theories of Management and Organizations
2. Policies and Educational Systems. Historical and Comparative Perspective
3. Administration and global management of the education system
4. Policy and Administration at various levels and forms of education
5. Management by results; competitiveness; the pursuit of quality
6. The administrative process applied to education

II. The Leading Role

1. Challenges of the management function
 - a. The nature of managerial work; roles, functions and management styles; the delegation
2. Leadership and improving schools; participative leadership
3. Human Resources
 - a. The management of human, material and technological resources
 - b. Interpersonal relationships and teamwork

III. Educational Communication

1. Communication in the strategic management model
2. Communication in interpersonal relationships. Working meetings: types, methods and evaluation. The board meeting.
3. Building a vision and communicating it to all
4. Communication: Message and stakeholder engagement
5. Enhance and complement various types of communication
6. Integrate various communicative intentions

Session II: Educational Management

Contents

I. Paperwork of Educational Management

- Classification of management models; the management models through time: scope and validity; Immediate and medium impact.
- Development of Educational Models
- Managing Director.
- Leadership and management functions.

II. Management of Schools

Educational Approaches:

- Quality and excellence in schools
- Educational activities.
- Change and organizational development
- Decision making and management control
- Educational Supervision. Time, resources, opportunities
- Evaluation of the management board

III. Management Director

- Management of Schools.
- Paperwork Management: Managing human resources, recruitment, paperwork of educational management
- Development of teaching methods.
- Inter- and extra-institutional coordination.
- School Educational Project
- The role of the educational community in the process of managing the center.
- Participation as a condition of the bond center - community.
- Pedagogical reasons underlying community participation.
- Diagnosis of staff needs.
- Educational activities: programming, implementation, execution and evaluation.
- Management Assessment Directive.
- Management Functions.
- Educational approaches.
- Educational Perspectives.
- Quality and excellence in schools.
- Decision-making, educational-institutional control and evaluation.

Session III: Educational Evaluation and Innovation and Institutional Assessment

Academic Unit: Fundaunp

Contents:

I. Educational Evaluation

1. Evaluation of the teaching-learning process
2. Types of evaluation
3. Techniques and tools for evaluation.
4. National System of Evaluation of Educational Quality

II. Institutional Assessment

1. Framework and general principles of institutional assessment.
 - Modalities, moments, actors and instruments. Planning, design and review processes for evaluating schools
2. Quality and processes of educational management. Educational quality. Evolution, current concepts and reflections on quality. Quality management. Models of quality management: ISO, EFQM. Indicators. Tools for quality assessment.
3. Assessment. External evaluation and self-evaluation of feasibility. Evaluation of the planning, implementation and evaluation. Assessment processes and partial and final results, and concerted action commitments. The evaluation and feedback process.

III. Methods and techniques of educational research.

1. The importance of methods and techniques of educational research
2. Methods and techniques available for research
3. Use of specific methods and techniques in educational research
4. Apply in front of certain situations that make pedagogical methods and techniques studied

5. Research as a tool for innovation

- Justification. Methodological diversity. Research Strategies. Techniques for obtaining and analyzing information. Conducting educational research projects.

COMMUNITY TRAINING

Volunteer Training Support Teacher

Year 1

1. Role and Functions
2. Methodology Child/tutor
3. Spanish
4. Mathematics

Safety Patrol Training

1. Pass and roles
2. Plan of Action
3. Security
4. Culture of Peace

Training Equipment Dropout Prevention

1. EPRED and their roles
2. Action Plan
3. Dropout
4. Signs dropout.

Training Partnerships for Parents

1. Parliamentary Standards
2. Preparation of annual work plan based on the PEC center

Training for Children

1. Methodology Child Mentor

7.2 Midterm evaluation key questions

Project Objective and Results	Key Questions	Methodology: type of data to be collected	Methodology: Source of data
Strategic Objective Improve literacy of school-age children in 17 municipalities in the department of Intibucá	What % of students has improved literacy skills compared to baseline?	Quantitative	EGRA test for students
	Which factors have contributed to the development of these skills?	Qualitative	Focus Groups.
	What has been the significant change in students from the increase of these skills?	Qualitative	Interviews with teachers.

Results Stream 1 Improve quality of literacy instruction of school-age children	In what way has the quality of education improved as a result of the adoption of technical trainings for teachers?	Qualitative	Interviews with school administrators.
	Are the teachers utilizing these techniques in the development of their classes?	Quantitative	Administrators reports Observation of classrooms.
Intermediate Result 1.1 More consistent teacher attendance	Has teacher attendance improved in schools?	Quantitative	Statistics of Ministry of Education as principal source and to verify data parents' surveys applied to a sample of schools, about teacher attendance over the previous school year.
	What were the outside factors that influenced or that had no effect on the improvement of teacher attendance?	Qualitative	Interviews to Focus Groups (with parents and administrators)
Intermediate Result 1.2 Better access to school supplies and materials	Do you think that the delivery of these materials has helped to improve education?	Qualitative	Teacher survey. Administrators Survey
	What has been the contribution to the education process with the timely delivery of these materials?	Quantitative	Project Reports. Monitoring of use of educational materials.
	What factors have either contributed to or hindered improved access to school supplies and materials?	Quantitative	Teacher survey. Administrators Survey.
	Are the materials being used in schools?	Quantitative	Observe the use of educational materials
Intermediate Result 1.3 Increased skills & knowledge of teachers	What percentage of teachers has applied improved teaching tools and techniques in their classroom?	Quantitative	School administrator survey as principal source and to verify data: teacher survey and direct observation accompanied by school administrators.
	What factors have hindered (or promoted) the up-take of improved teaching tools and techniques?	Qualitative	Documents of successfully learning experiences and lessons learned. Evaluation of teacher training needs. Focus groups with teachers.

<p>Intermediate Result 1.4</p> <p>Increased skills & knowledge of school administrators</p>	<p>What percentage of administrators has applied their knowledge of new or improved management techniques and skills?</p>	Quantitative	<p>Teacher survey as principal source.</p> <p>Administrators Survey.</p>
	<p>How many understand and implement school plans?</p>	Qualitative	<p>Teacher survey as principal source.</p> <p>Administrators Survey.</p> <p>Focus Groups with teachers</p>
		Quantitative	<p>Review of school plans (PEC) and level of implementation</p>
	<p>In what way has the quality of education increased based on techniques used by the administrators?</p>	Qualitative	<p>Teacher survey as principal source.</p> <p>Administrators Survey.</p> <p>Focus Groups with teachers</p> <p>Reports of Administrators training process.</p>
	<p>How has the FFE training of administrators affected teacher supervision and the application of educational quality standards in the Ministry of Education?</p>	Qualitative	<p>Teacher survey as principal source.</p> <p>Administrators Survey.</p>

Results Stream 2 Improve student attendance in 1,047 education centers	Has annual student attendance increased?	Quantitative	Statistics of Ministry of Education as principal source. Parent surveys and focus groups with parents and teachers to triangulate information. Attendance data collected by CRS will also be used
	What factors have facilitated or have been an obstacle for attendance within the education system?	Qualitative	Parent surveys and focus groups with parents and teachers to triangulate information
	How has school meals contributed to the increase in student attendance?	Qualitative	Parent's survey and Focus groups with parents and teachers.
	How have the rest of the incentives provided by the project, and the removal of disincentives, improved student attendance?	Qualitative	Parent's survey and Focus groups with parents and teachers.
Intermediate Result 2.1 Increased economic & cultural incentives	What type of incentives have the students received?	Quantitative	Teachers Survey.
	In your opinion which incentive has had the best impact on school performance? Why?	Qualitative	Interviews with students. Focus Groups. Parents interview.
	How have incentives influenced the students in relation to school performance?	Qualitative Quantitative	Focus groups. Interviews with parents, teachers and other key actors in the community.
	How many volunteers received rations?	Qualitative	Focus Groups and interviews with parents, teachers and other key actors in the community.
Intermediate Result 2.2 Reduced health-related absences	Has enrollment of out-of-school students increased?	Qualitative	Focus Groups and interviews with parents, teachers and other key actors in the community.
	In what percentage the absences of students at the school are due to illness?	Quantitative	Teachers Survey.
	By what percentage have absences due to illness reduced?	Quantitative	Parents Survey. Focus Groups and interviews with parents, teachers and school administrators. Schools

	What factors have helped in the reduction of student absences due to illness?	Qualitative	with improvements to health facilities, provided by the project, will be compared with schools without them, to estimate if this factor affects the rate of attendance. Focus Groups and interviews with parents, teachers and school administrators.
Intermediate Result 2.3 Improved school infrastructure	How many schools have improved infrastructures? What type of improvements are the most needed?	Quantitative	Project reports. Direct observation in schools. Infrastructure Master Plan of Ministry of Education. Photos and physical evidence.
	What has been the impact on education based on these infrastructure improvements?	Qualitative	Focus groups with parents and teachers.
Intermediate Result 2.4 Increased student enrollment.	How many students have continued on for the following school year?	Qualitative	Focus Groups and interviews with parents, teachers and school administrators.
	By what percentage has following-year enrollment increased for students annually?	Quantitative	Statistics of Ministry of Education
	Which factors have facilitated or have been obstacles towards enrollment?	Qualitative	Focus groups with parents and teachers
Intermediate Result 2.5 Increased community understanding of the benefits of education	What percentage of parents can provide three valid reasons for why it is important that their children attend school? <i>Valid reasons are defined in the Performance Monitoring Plan (PMP) and the baseline</i>	Quantitative	Parents Survey.
	How have the parents and community organizations actively participated in education?	Qualitative	Focus Groups and interviews with parents and other key actors of community.
	How many PTAs exist and how many are active?	Quantitative	Local agreements Project Reports

7.3 Instruments

These instruments were designed to answer the above key questions. They are discussed in the document according to the previous table.

District Principals' Interview

Generating questions

1. What are the issues that have been identified in terms of the management process?
2. What are the solutions that have been generated from the main office?
3. What types of actions have been implemented in the schools as far as training for teachers?
4. What types of actions have been implemented in the schools as far as the administrative personnel?
5. How has the administration handled teacher absences?
6. Tell me about resource management to obtain assistance in the schools.
7. Which criteria were defined to grant aid to educational centers?
8. What are some of the difficulties that teachers face?

Municipal Mayors' Interview

Generating questions

1. What are the primary strengths of the municipality in terms of educational materials?
2. What issues have been identified in terms of educational materials?
3. What actions has your government undertaken to remedy these issues previously mentioned?
4. What has been the outcome of each of these actions?
5. Who has supported you in making sure these reforms or change can be implemented and how have you been supported?
6. Tell me about the schools' governance in terms of infrastructure maintenance – how is it done, how often, and by whom?
7. Tell me about any nutritional programs in the schools – are there any? Who is in charge of them? Do you supervise the process?
8. As far as the aid received in the form of school supplies (books, notebooks, teaching materials), where did it come from? Who is it given to? Under what criteria?
9. What do you know about the actions developed by CARITAS Santa Rosa de Copán, COCEPRADII and CRS in the region, in terms of education?
10. What changes have you noted in terms of education due to the actions and programs of these institutions?

Guide for Focus Groups with the Project's Staff

Generating questions

1. What are the primary challenges that you have faced during the implementation of the project?
2. And what are the opportunities?
3. Who has helped with the project's implementation?

4. Which aspects have hindered relationships?
5. What is the role that each actor has played during the intervention?
6. Which were the most difficult actions to achieve, and why?
7. What should be improved in order to increase the project's impact?

Guide for Focus Groups with parents of recipient children

Generating questions

Improving the quality of literacy instruction for school children

1. How does the teacher help your children when they are having difficulties with a topic or subject?
2. What would you change in order to improve the quality of education?
3. Out of the aid provided by the project, which aspects have had the greatest impact on the school?
4. How has this aid affected the students' educational performance?
5. Which educational aspects have been impacted due to improving the school's infrastructure?

Improving student attendance

6. Which factors have facilitated or hindered student attendance?
7. In your opinion, how has offering school meals affected children's attendance at school?
8. At this moment, at midterm, which activities could potentially continue after the project ends, to increase school attendance?
9. Which factors have helped increase (or decrease) current enrollments?
10. How have parents and community organizations participated in students' education?
11. Have school absences due to illness been reduced?
12. If yes, why? If no, why not?

Guide for Focus Groups with Educational Centers' Teachers

Improving the quality of literacy instruction for school children

How has receiving supplies from the project contributed to improving education?

Which factors have assisted in or limited improvements in accessing school supplies?

How are these materials being used in the educational centers?
Which factors have hindered (or promoted) adopting the new teaching techniques and tools?
How has the quality of education changed based on the new management techniques used by the administrators?
How has training administrators in management and supervisory techniques and applying the Ministry of Education's educational standards affected teachers?
What impacts on education have occurred based on the improvements in the school's infrastructure?
How have parents and community organizations participated in the students' education?

Improving student attendance

Which factors have facilitated or hindered students' attendance?
In your opinion, how has offering school meals affected children's attendance at school?
How the project's other incentives has contributed to students' attendance?
At this moment, at midterm, are there any activities which could potentially improve consistent student attendance after the project ends?
Which factors have helped increase (or decrease) current enrollment?
Have school absences due to illness diminished?
If yes, why? If no, why not?

Guide for Focus Groups with Educational Centers' Principals

A. Exploring Educational Directors' Knowledge

- a. How has the quality of education improved since the teachers were trained in techniques given by the FFE project?
- b. At this midterm point, which activities should be prioritized to insure that quality education be sustained?
- c. And which activities should be prioritized so that the improvements in literacy proficiency are sustained?
- d. Which outside elements influenced, or did not influence, improvement in teacher attendance?

Guide for Focus Groups with CCEPREB

A. Generating Questions

1. How are CCEPREBs sustainable?
2. What techniques are used so that school children develop their abilities and skills?
3. What kinds of challenges have you encountered with students and how do you solve them?
4. Who assists you in providing school meals?
5. How many training sessions do you receive per year, and what are the topics?
6. Describe the physical condition of the educational center as of now.
7. Do you receive any aid to reinforce the teaching-learning process? What kind of help do you receive? From whom do you receive it and how often?
8. What would be important to change to improve the CCEBREB's impact?
9. What are the challenges you face while trying to do your job?

Principal questionnaire

1. Gender
 - ☐ Male
 - ☐ Female
2. How old are you?
3. How many years have you been the director of the school in which you work?
4. What is your level of education?
 - ☐ High School Graduate
 - ☐ Technical/Vocational High School
 - ☐ Technical/Vocational College
 - ☐ Some college
 - ☐ College Graduate
 - ☐ Post-Graduate
 - ☐ Professional
5. Have you conducted training sessions on techniques or methods that facilitate the learning process of the teachers?
 - ☐ Yes
 - ☐ No

(if no, skip to question 10)
6. With what institutions have you managed these training sessions?
 - ☐ Secretary of Education
 - ☐ NGOs
 - ☐ Supporters
 - ☐ Others _____
 - ☐ NS
7. Specify the techniques and methods in which the teachers have been trained
8. What methods are the students using in the area of (Spanish) communication?
9. What is the method that the students use in the area of mathematics?
 - ☐ Communicative Method
 - ☐ Problem Solving
 - ☐ Other _____
 - ☐ NS
10. Do you think the methods used by the teachers are appropriate for improving the students' teaching-learning process?
 - ☐ Yes
 - ☐ No
11. Does your school follow the tools of the National Basic Curriculum?
 - ☐ Yes
 - ☐ No
12. Have the teachers been trained on attending to students with:
 - ☐ Learning disabilities
 - ☐ Special needs
 - ☐ Other ethnicities
13. How would you rate the level of knowledge the teachers have for identifying learning difficulties among their students?
 - ☐ Insufficient
 - ☐ Fine
 - ☐ Acceptable
 - ☐ Good
 - ☐ Very Good
14. Have you held workshops for teachers to enhance their skills or knowledge to address learning disabilities and literacy among their students?
 - ☐ Yes
 - ☐ No

(if no, skip to question 16)
15. What institutions have funded these workshops?
 - ☐ Secretary of Education
 - ☐ NGO
 - ☐ Supporters
 - ☐ Other _____
 - ☐ NS
16. What topics would you recommend for future training sessions, with the intent to increase the knowledge and strengthen the abilities of the teachers?
 - ☐ Spanish
 - ☐ Mathematics
 - ☐ Computation
 - ☐ English
 - ☐ Technology
 - ☐ Other: _____
 - ☐ NS
17. Do you promote hygiene practices in your school?

- Yes
- No

(if no, skip to question 18)

17.a. What hygiene practices do you promote in your school?

- Personal hygiene
- Hand washing
- Bathing daily
- Cleanliness of the environment
- Cleanliness of the school
- Cleaning the classroom
- Brushing teeth/ oral hygiene
- Cleanliness when eating
- Other _____

18. How often do you employ these practices in your school?

- Always
- Sometimes
- Never
- NS

19. Is your school accessible for students with physical handicaps?

- Yes
- No

20. In your opinion, in what condition are the structures of the school you direct?

- Bad
- Fine
- Good

21. What repair would be your priority in regards to improving the physical structure of the school?

- Improving the classrooms
- Improving the bathrooms
- Improving the sinks
- Building classrooms
- Building bathrooms
- Building sinks
- Fence
- Other _____

21.a. What other work would be your priority in regards to improving the physical structure of the school?

- Improving the classrooms
- Improving the bathrooms
- Improving the sinks
- Building classrooms
- Building bathrooms
- Building sinks
- Fence
- Other _____

22. Do you provide educational support for the teachers?

- Yes
- No

(if no, skip to question 24)

23. How often do you provide educational support?

- Monthly
- Twice per semester
- Three times per semester
- Once per semester
- Once per year
- Other _____
- NS

24. The school that you direct has:

- A curriculum
- Annual Operational Plan
- Didactic material
- Workbooks
- PEC

25. Do you use administrative techniques and tools to run the school?

- Yes
- No

(if no, skip to question 27)

26. What techniques and tools do you use?

- Techniques for interviewing/hiring
- Techniques for managing personnel/ teachers
- Methods of effective communication
- Training on standards and processes
- Annual Operational Plan
- Supervision and support for the teachers

27. Are the parents involved in the building up of PEC?

- ☐ Yes
- ☐ No

28. Do you know the EFA goals, and the educative indicators?

- ☐ Yes
- ☐ No

Teacher Questionnaire

1. Sex

- a. Male
- b. Female

2. How old are you?

3. In how many schools do you teach?

4. What type of learning center is that in which you have the majority of your classes?

- a. Preschool
- b. Primary School
- c. Core Education Center
- d. Other
- e. NR

What type of school is it?

- ☐ Preschool
- ☐ Primary School
- ☐ Core Education Center
- ☐ Other
- ☐ NR

5. In which grades have you been assigned to teach?

- a. Preschool
- b. First
- c. Second
- d. Third
- e. Fourth
- f. Fifth
- g. Sixth
- h. Seventh
- i. Eighth
- j. Ninth

6. Which is your highest-level job in the school in which you teach?

- a. Director
- b. Assistant Director
- c. Secretary
- d. Counselor
- e. Advisor
- f. Librarian

g. Teacher

h. Other _____

i. NR

7. What is your level of education?

- a. High school graduate
- b. Technical/vocational high school
- c. Technical/vocational college
- d. Some college
- e. College graduate
- f. Postgraduate
- g. Professional

8. Do you apply a certain technique or methodology to help the teaching/learning process?

- a. Yes
- b. No

9. How is the process for becoming a teacher?

10. Do you use any of these techniques or methods?

- a. Active Participation
- b. Group Work
- c. Deductive
- d. Investigation
- e. Focused Communication
- f. Brainstorming
- g. Other _____
- h. Don't know

11. What methods do you use in the area of communication (in Spanish)?

- a. Communicative
- b. Inductive
- c. Constructive
- d. Active and participatory
- e. Focus/ New focus
- f. Group
- g. Other _____
- h. Don't know

12. Which method do you use in the area of mathematics?

- a. Problem solving
- b. Communicative
- c. Inductive
- d. Active and participatory
- e. Constructive
- f. Group
- g. Individual
- h. Other _____
- i. Don't know

13. Do you think the techniques and methods you use are appropriate for improving the process of teaching and learning for the students?

- a. Yes
- b. No

14. Do you use the CNB tools in your teaching?

- a. Yes
- b. No

15. Do you help students with

- a. Learning difficulties
- b. Special needs
- c. Other ethnic backgrounds

16. How would you rate your knowledge of identifying learning disabilities in your students?

- a. Insufficient
- b. Average
- c. Acceptable
- d. Good
- e. Very Good

17. Have you participated in training sessions to enhance you knowledge of how to address learning and literacy problems in students?

- a. Yes
- b. No

18. Where have you received this training?

- a. Secretary of Education
- b. NGO
- c. Cooperatives
- d. Other _____
- e. Don't know
- f. NR

19. What topics would you recommend for future trainings, with the intention of

improving your knowledge and enhancing your abilities?

- a. Learning disabilities
- b. Mathematics
- c. Developing didactic material
- d. Communicative Approach
- e. Computation
- f. Spanish
- g. English
- h. Other _____
- i. _____
- j. Don't know
- k. NR

Grade	20	21	22	23		24				25	
	Number of children in your class	Number of girls in the grade	Number of boys in the grade	What is the number of students with the skills necessary for reading?		Specify how many students have unexcused absences from school				What is the number of students that have more than 10 absences per school year due to illness?	
						Less than 10 days		More than 10 days			
				Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys
Preschool											
First											
Second											
Third											
Fourth											
Fifth											
Sixth											
Seventh											
Eighth											
Ninth											
Don't know/NR											

26. In general terms, what type of reading do you think your students have?

- ☐ Mechanical (is there a better way of saying this? I'm guessing it means word-by-word but without great comprehension or cohesion?)
- ☐ Comprehensive
- ☐ Mechanical/fluid
- ☐ Comprehensive/fluid
- ☐ Don't know
- ☐ NR

27. Do you promote hygienic practices among your students?

- ☐ Yes
- ☐ No

28. What hygienic practices do you promote among your students?

- ☐ Personal hygiene
- ☐ Hand washing
- ☐ Bathing daily
- ☐ Clean environment
- ☐ Clean school
- ☐ Cleaning the classroom
- ☐ Brushing teeth/ Oral health
- ☐ Clean food
- ☐ Other _____

29. How often do your students employ these practices?

- ☐ Always
- ☐ Sometimes
- ☐ Never
- ☐ Don't know
- ☐ NR

30. In your opinion, in what condition are the physical structures of the school in which you teach?

- ☐ Bad
- ☐ Fine
- ☐ Good
- ☐ NR

31. What would you propose as a top priority for improving the building?

- ☐ Improving classrooms

- ☐ Improving bathrooms
- ☐ Improving sinks
- ☐ Building classrooms
- ☐ Building bathrooms
- ☐ Building sinks
- ☐ A fence
- ☐ Other _____
- ☐ NR

32. Does the director of the school provide support for teachers?

- ☐ Yes
- ☐ No

33. How often do you receive pedagogical support from the director?

- ☐ Month
- ☐ Every other semester
- ☐ Every third semester
- ☐ Once per semester
- ☐ Once per year
- ☐ Other
- ☐ Don't know
- ☐ NR

34. The school where you work uses:

- ☐ Teaching curricula
- ☐ POA
- ☐ Didactic material
- ☐ Workbooks
- ☐ PEC

35. Do you know if the personal administrator of the school uses the techniques and tools of administration and control for running the center?

- ☐ Yes
- ☐ No

36. To your knowledge, what administrative techniques and methods are they using?

- ☐ Techniques for recruiting/interviewing
- ☐ Management techniques for teachers and personnel
- ☐ Methods of effective communication
- ☐ Training in procedures and processes
- ☐ Preventing drop-outs
- ☐ Annual Operational Plans

- Supervision and Support Plans for teachers
 - Other _____
 - Don't know
 - NR
37. Are parents involved in the growth/promotion of PEC?
- Yes
 - No
38. Have you participated in trainings for the Food for Education project?
- Yes
 - No
39. In what areas have you received training?
- Mathematics
 - Spanish
 - Information Technology
 - Other _____
40. Are you using what you learned in these trainings?
- Yes
 - No
41. Have you received a school kit for "Food for Education"?
- Yes
 - No
42. Are those materials used in the schools?
- Yes
 - No

43. Has the introduction of these materials helped to improve education?
- Strongly disagree
 - Disagree
 - Agree
 - Strongly Agree
44. What factors have contributed to the improvement of access to school supplies/materials?
- FFE
 - Actions of the local government
 - Management by the direction of the school
 - NGO
 - Civil Society Organizations
 - Other _____
45. What factors have limited access to school materials/supplies?
- Lack of resources
 - Location of school
 - Not enough materials for everyone
 - Other _____

Parent Questionnaire

1. Sex
 - a. Female
 - b. Male
2. How old are you?
3. How many people do you live in your home, including yourself?
4. What level of education did you reach?
 - a. Some primary school
 - b. Completed primary school
 - c. Some high school
 - d. High school graduate
 - e. Technical school
 - f. Some college
 - g. College graduate
 - h. NR
5. What is your primary occupation?
 - a. Homemaker
 - b. Farmer
 - c. Rancher
 - d. Day laborer
 - e. Merchant
 - f. Professional
 - g. Office worker
 - h. NR
6. Do you have children between the ages of 5 and 18?
 - a. Yes
 - b. No

*(If the answer is **no**, the interview is complete.)*

7. How many children do you have in this age group?

(For each of the following questions, answer for each child, one by one)

8. What is this child's name?
9. What sex is {name}?
 - a. Male
 - b. Female
10. How old is {name}?
11. Is {name} a student?
 - a. Yes
 - b. No

*(If the answer is **yes**, skip to number 15)*

12. Why is {name} not in school?
 - a. Does not have documents
 - b. Do not have money
 - c. Does not want to study
 - d. Was not accepted
 - e. Has a disability

- f. Does not want to repeat a year
 - g. Need to help out at home
 - h. Works
 - i. Has difficulty learning
13. Have you received information regarding the necessary documentation for {name}'s tuition?
- a. Yes
 - b. No
14. Do you think you will use this information?
- a. Yes
 - b. No
 - c. Don't know
 - d. NR

(Now, skip to number 31)

15. In what type of school is {name} enrolled?
- a. Preschool
 - b. CCEPREB
 - c. School
 - d. Core Center
 - e. Alternative Education Center
16. What grade level is {name} in right now?
- a. Preschool
 - b. First
 - c. Second
 - d. Third
 - e. Fourth
 - f. Fifth
 - g. Sixth
 - h. Seventh
 - i. Eighth
 - j. Ninth
 - k. Tenth
 - l. Eleventh
 - m. Twelfth
 - n. Other _____
17. In one month, has {name} missed more than 10 days of school?
- a. Yes
 - b. No

*(If the answer is **no**, skip to number 20)*

18. What is the main reason for these absences?
- a. Illness
 - b. Did not want to go
 - c. Needed his/her help at home
 - d. Transportation issues
 - e. Security issues in the area
 - f. There wasn't class
 - g. Other _____

(If the response is not 'illness', skip to number 20)

19. What was the illness or illnesses that {name} experienced during this time?

- a. Acute respiratory infections
- b. Diarrhea
- c. Pneumonia
- d. Allergies
- e. Parasite
- f. Rash
- g. Malnutrition
- h. Anemia
- i. Dengue
- j. Malaria
- k. Don't know
- l. NR

20. Approximately how many days in one school year did {name} not have class?

(If the answer is 0, skip to question 22)

21. In general, what was the primary reason {name} did not have class?

- a. Natural disasters
- b. Teacher had health problems
- c. Security issues
- d. Teacher had transportation issues
- e. There was no teacher
- f. General meetings
- g. Teacher Trainings/ In-Service Days
- h. Work stoppage
- i. Other _____
- j. Don't know

22. Have you received any help from an organization or from the school for {name} to stay there?

- a. Yes
- b. No

(If the answer is no, skip to number 25)

23. What is the main help that you have received for {name}?

- a. Money
- b. Transportation
- c. Food
- d. School supplies/uniforms
- e. Scholarships
- f. Health --??
- g. Don't know
- h. Other _____

24. How often has {name} been granted this help during the school year?

- a. 1-5 times
- b. 6-10 times
- c. 10-15 times
- d. 16 or more times

e. Don't know

25. In the school where {name} studies, do they receive school meals?

a. Yes

b. No

*(If the answer is **no**, skip to number 27)*

26. How often do your children who attend school receive these meals?

a. Always

b. Sometimes

c. Rarely

d. Don't know

27. Is there a parent association at the school that {name} attends?

a. Yes

b. No

*(If the answer is **no**, skip to number 30)*

28. Are you a part of this association?

a. Yes

b. No

*(If the answer is **yes**, skip to number 30)*

29. Would you have formed a part of this association?

a. Yes

b. No

30. Do you think there are some classrooms or bathrooms that need immediate attention in the school {name} attends?

a. Yes

b. No

31. Do you consider your children's education important?

a. Yes

b. No

c. Don't know

d. NR

*(If the answer is **not yes**, skip to number 33)*

32. Why do you consider your children's education important?

a. Better employment/economic opportunities

b. Better life/future

c. For a better society/community

d. To be independent/to overcome adversity/to get ahead

e. Further knowledge/study

f. Better social status

g. Other _____

33. Do you participate in PEC?

a. Yes

b. No

c. Don't know

d. NR

34. Did you participate in the development/building-up of PEC?
- a. Yes
 - b. No
 - c. Don't know
 - d. NR
35. Do you belong to some of the organizational structures for the Food for Education project?
- a. Yes
 - b. No
36. To which?
- a. PASE
 - b. EPRED
 - c. Volunteer as support to the teacher
 - d. Snack committee
37. As a volunteer, have you received a dry ration personally?
- a. Yes
 - b. No

7.4 Power Calculation

The power analysis and sample size estimation is based on the methodology for cluster randomized trials (CRT). In this study, the control and treatment are the same schools but before and after the intervention. The schools are their own controls. The general design of a 2-level CRT with a binary outcome is students nested within schools. The outcome for the study is whether or not a student is above the national standard for each section of EGRA. The variable has only two possibilities so the outcome is binary.

The model for a 2-level CRT with a binary outcome is an extension of the generalized linear model applied to a multi-level setting. The level-1 is comprised of three parts: the sampling model, the link function, and the structural model. The level-1 sampling model defines the probability that the event will occur. Let $Y_{ij}=1$ if an event (often called a success) occurs and $Y_{ij}=0$ if not. The sampling model is :

$$Y_{ij} | \phi_{ij} \sim B(m_{ij}, \phi_{ij})$$

For $i \in \{1, 2, \dots, n_j\}$ students per cluster and for $j \in \{1, 2, \dots, J\}$ schools; where m_{ij} is the number of trials for student i in school j ; and ϕ_j is the probability of success for student i in school j .

The expected value and variance of $Y_{ij} | \phi_{ij}$ are:

$$E(Y_{ij} | \phi_{ij}) = m_{ij} \phi_{ij}$$

$$Var(Y_{ij} | \phi_{ij}) = m_{ij} \phi_{ij} (1 - \phi_{ij})$$

A common link function for a binary outcome is the logit link:

$$\eta_{ij} = \left(\frac{\phi_{ij}}{1 - \phi_{ij}} \right)$$

where η_{ij} is the log odds of success.

The third part of the level-1 is the structural model:

$$\eta_{ij} = \beta_{0j}$$

where β_{0j} is the average log odds of success per cluster j .

The level-2 model has the following form:

$$\beta_{0j} = \gamma_{00} + \gamma_{01} W_j + u_{0j}, \quad u_{0j} \sim N(0, \tau)$$

where γ_{00} is the average log odds of success across schools; γ_{01} is the intervention effect in log odds; W_j defines baseline and midline; u_{0j} is the random effect associated with each school mean; and τ is the between school variance in log odds.

In the model above, the intervention effect is noted by γ_{01} . It is estimated by:

$$\hat{\gamma}_{01} = \eta_M - \eta_B$$

where η_M is the predicted mean for the mid-term evaluation in log odds and η_B is the predicted mean for the baseline in log odds. In a balance design (equal clusters sized of size n) the variance of $\hat{\gamma}_{01}$ can be approximated by:

$$Var(\hat{\gamma}_{01}) = \frac{4(\tau + \sigma^2/n)}{J}$$

where $\sigma^2 = \left(\frac{1}{\phi_M(1-\phi_M)} + \frac{1}{\phi_B(1-\phi_B)} \right) / 2$

The test statistic is $\frac{\hat{\gamma}_{01}}{\sqrt{4(\tau + \sigma^2/n)/J}}$. We use the non-central t-distribution to approximate the power of the test with J-2 degrees of freedom.