



***Baseline Study Report
Strengthening Reading and School Feeding
in Totonicapán Project “Learning for Life”***

With the support of:
Catholic Relief Services and USDA

BASELINE STUDY REPORT - STRENGTHENING READING AND SCHOOL FEEDING IN FY 2013 McGOVERN-DOLE TOTONICAPÁN PROJECT “LEARNING FOR LIFE”

Program: McGovern-Dole International Food for Education and Child Nutrition

Agreement Number: FFE-520-2013/029-00

Project Duration: 2013 – 2018

Implemented by:

Catholic Relief Services

Diagonal 6, 11-97 zona 10, Edificio Internaciones

Telephone: (+502) 23622173

Author: Vinicio Ramírez- Master’s Degree in Social Development

Organizations that participated in the development of the Baseline Study for the “Learning for Life Project”

- Proyecto de Desarrollo Santiago(PRODESSA)
- Asociación Proyecto Conrado de la Cruz (APCC)
- Catholic Relief Services(CRS)

The baseline was conducted from February 7 to April 30, 2014.

DISCLAIMER: This evaluation was conducted by an independent third party firm. The views expressed in this report do not necessarily reflect the views of the United States Department of Agriculture or the United States Government.

Accessibility Note: An accessible version of this report can be made available upon request by emailing FAS.monitoring.evaluation@usda.gov.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF MATRICES

LIST OF CHARTS

ACRONYMS

EXECUTIVE SUMMARY

CHAPTER I	BASELINE STUDY METHODOLOGY	11
CHAPTER II	EDUCATION CONTEXT	12
CHAPTER III	EDUCATION COMMUNITY CONTEXT ACCORDING TO THE BASELINE STUDY	14
	3.1 SCHOOL PRINCIPALS	14
	3.2 TEACHERS.....	15
	3.3 PARENTS	16
CHAPTER IV	RESULTS AND ANALYSIS OF PROJECT INDICATORS	18
	4.1 STRATEGIC OBJECTIVE.....	19
	4.2 R1.1: IMPROVED QUALITY OF LITERACY INSTRUCTION	24
	4.3 R1.2: IMPROVED STUDENTS' ATTENTIVENESS	36
	4.4 R1.3: IMPROVED STUDENTS ATTENDANCE	47
	4.5 R1.4: STRENGTHENED CAPACITY OF GOVERNMENT OFFICIALS.....	61
CHAPTER V	CONSTRAINTS AND STRENGTHS FOUND IN THE BASELINE PROCESS	67
CHAPTER VI	CONCLUSIONS.....	68
CHAPTER VII	RECOMMENDATIONS	75
	BIBLIOGRAPHY	79

ANNEXES

ANNEX 1: BASELINE STUDY METHODOLOGY

ANNEX 2: BASELINE STUDY MATRIX

ANNEX 3: TOOLS USED IN THE BASELINE STUDY

ANNEX 4: SELECTED SCHOOLS PER MUNICIPALITY

ANNEX 5: TRAINING AGENDA OF BASELINE FIELD STAFF

ANNEX 6: LIST OF PARTICIPANTS

ANNEX 7: DATA ENTRY PROCESS

LIST OF TABLES

- Table 1:** Weight percent in sample schools per municipality
- Table 2:** FFE Guatemala- Learning for Life Results
- Table 3:** Education indicators in the department of Totonicapán
- Table 4:** Socio-economic indicators related to the Learning for Life project in Totonicapán
- Table 5:** Number of years and percentage of time length in the principal's position
- Table 6:** Percent ranges in principals' command of the K'iche' language
- Table 7:** Number of years and percentage of time length in the teaching position
- Table 8:** Percent ranges of teachers' command of the K'iche' language
- Table 9:** Minutes spent on reading in Spanish per week
- Table 10:** Minutes spent on reading in K'iche' per week
- Table 11:** Opinion of school principals' about teachers' attendance per grade (2013)
- Table 12:** Teachers' opinions on the pros and cons of the Kemom Ch'ab'al methodology
- Table 13:** Teacher Training Needs
- Table 14:** Pros and Cons of the Kemom Ch'ab'al methodologies identified by school principals
- Table 15:** Results from the observation in class environment in 24 selected schools
- Table 16:** Frequency of the variables of boys and girls' attentiveness in sample schools
- Table 17:** Food type given to children for breakfast as reported by their parents
- Table 18:** Frequency and percentage of children from 3rd grade with a diet of more than two food items for breakfast
- Table 19:** Frequency of children from 3rd grade with a diet of less than two food items for breakfast
- Table 20:** Frequency of children from sixth grade with a diet with more than two food items for breakfast
- Table 21:** Frequency of children from sixth grade with a diet of less than two food items for breakfast
- Table 22:** Principals' opinion about the percentage in which children attend school without having eaten breakfast per grade
- Table 23:** Extracurricular activities proposed by students' parents
- Table 24:** Percentage of girls' participation in school governments per role
- Table 25:** Percentage of teachers who commented about the number of school days missed by students due to illness
- Table 26:** Usage of the kitchen and storeroom
- Table 27:** Hygiene conditions of kitchen and supplies
- Table 28:** Hygiene conditions of the people who prepare the food in school
- Table 29:** Animals and insects in the kitchen
- Table 30:** Children in the kitchen
- Table 31:** Uses of water in schools
- Table 32:** Availability of drinking water in schools
- Table 33:** Bathrooms/latrines in schools
- Table 34:** Hygiene conditions in the school bathroom/latrines
- Table 35:** Municipal officials' knowledge of the project in four target municipalities
- Table 36:** Municipal budget allocation for school infrastructure for 2014 per municipality
- Table 37:** Percentage of schools that will be improved with municipal funds in 2014 per municipality
- Table 38:** Opinion of municipal officials about coordination established with the project
- Table 39:** Interventions implemented by the four target municipalities to support education
- Table 40:** Boys and girls' school enrollment in 2013-2014 per municipality
- Table 41:** Benefits of education mentioned by parents
- Table 42:** Benefits of education mentioned by PTAs

LIST OF MATRICES

- Matrix 1:** Measurement of the indicator and variables for the strategic objective
- Matrix 2:** Measurement of indicators and variables for result 1.1: Improved Quality of Literacy Instruction
- Matrix 3:** Measurement of indicators and variables for result 1.2: Improved Students' Attentiveness
- Matrix 4:** Measurement of indicators and variables for result 1.3: Improved Student Attendance
- Matrix 5:** Measurement of indicators and variables for result 1.4: Strengthened capacity of government officials

LIST OF CHARTS

- Chart 1:** Reading comprehension average result per skill for boys and girls from third grade
- Chart 2:** Reading comprehension average result per skill for boys and girls from sixth grade

Acronyms

APCC	Asociación Proyecto Conrado de la Cruz
CNB	National Basic Curriculum
CRS	Catholic Relief Services
COCODES	Community Development Councils
CTA	MINEDUC's Technical/Administrative Coordinator
DIDEDUC	MINEDUC's of Education's Departmental Office
DIGEFOCE	MINEDUC's Department for Education Capacity Building
DMP	Municipal Planning Department
ENSMI	National Mother-Child Health Survey
HDI	Human Development Index
MEAL	Monitoring, Evaluation, Accountability and Learning
MINEDUC	Ministry of Education
MSPAS	Ministry of Health and Social Assistance
PRODESSA	Programa de Desarrollo Santiago
SESAN	Food Security and Nutrition Secretariat
SEGEPLAN	Presidential Secretariat for Planning and Programming
SIGSA	Managerial Health Information System
SPSS	Statistical Package for the Social Sciences
UNDAF	United Nations Development Assistance Framework
UNDP	The United Nations Development Program
USDA	The United States Department of Agriculture

EXECUTIVE SUMMARY

This document is the Final Baseline Study Report for the Learning for Life project (from this point forward referred to as “the Project”) conducted in the municipalities of San Andrés Xecul, Santa Lucía la Reforma, San Bartolo Aguas Calientes, and Momostenango in the department of Totonicapán, Guatemala. Findings will be used by CRS and partner organizations “...as a basis for comparison so that monitoring and evaluation processes during the life of the project can determine to what extent the project’s objectives are being achieved...”¹

The content of this report and the annexes are the result of a series of processes including: a) Participatory workshops of the consulting team with technical staff from CRS, APCC and PRODESSA to validate the evaluation matrix, its extent and variables; b) Design of the methodology and tools to register quantitative and qualitative data based on the Scope of Work for this study; c) identification of sample; d) field work; e) data entry and processing; f) analysis and preparation of the report; and, g) presentation of results.

The methodology used for the baseline study included: *(See Annex 1: Baseline Study Methodology)*

- a) A statistically representative sample of 69² schools³ out of a universe of 223 schools located in the four target municipalities.
- b) Interviews conducted with the following stakeholders:

Participants	Planned	Actual	%
School principals	69	69	100.0
School teachers ⁴	92	60	65.0
DIDEDUC/DIGEFOCE	4	4	100.0
Municipal officials	4	4	100.0
Parents ⁵	99	91	92.0

Source: Learning for Life Project Baseline Results

- c) **11** focus groups (six in Momostenango, three in Santa Lucía la Reforma and two in San Bartolo Aguas Calientes) with a total of 43 participants.

¹Scope of Work. Section IV: Methodology expected from the Baseline Study. Page 5

²The sample is 69 schools. Five more schools were estimated as back up.

³Selected among the list of schools provided by CRS.

⁴The sample identified 92 teachers. Of these, **14** were acting as principals. Consequently, in these cases, the field team only administered the interview addressed to school principals. **18** teachers assigned to a specific grade were not in the school at the time of the interview.

⁵ **72.5%** were women and **27.5%** men; **96.7%** were K'iché and **2.2%** were mixed or ladinos.

- d) **1,347** reading comprehension tests were administered to children from third grade and **1,040** to children from sixth grade, for a total of **2,387** children in 69 schools which represent **85.25%** of anticipated tests.
- e) **2,387** surveys about breakfast consumption administered to children from third and sixth grades.
- f) The quantitative and qualitative information registered, processed and analyzed responded to the indicators and variables already established in the 1) Monitoring Plan of the MEAL system – Learning for Life Project; 2) Annex G: Results Framework of Learning for Life Project; 3) Annex A: Plan of Operation - Learning for Life Project – USDA’s McGovern-Dole Program.
- g) Weight percent of number of schools per municipality:

Table 1: Weight percent in sample schools per municipality

Municipality	Number of Sample Schools	Weight Percent
Momostenango	45	60.8
Santa Lucía La Reforma	12	16.2
San Bartolo Aguas Calientes	10	13.5
San Andrés Xecul	7	9.5
TOTAL SAMPLE	74	100.0

Source: Learning for Life Project Baseline Results

Baseline Study Results

The baseline study allowed quantifying the indicators proposed by the project and confirming that the planned objectives and results respond to the education needs of the target zone and that there are favorable conditions (interest, acceptance, credibility, available capacity and human resources) for project implementation.

The conclusions drawn from the baseline study and the recommendations to strengthen project implementation are included at the end of this document.

Table 2: FFE Guatemala- Learning for Life Results

Result	Indicator	Baseline	Final Target
Improved literacy of school-aged children	Percent of girls who, by the end of 6th grade, demonstrate reading comprehension equivalent to their grade level as defined by national standards at USDA supported schools	25.19%	+10%
	Percent of boys who, by the end of 6th grade, demonstrate reading comprehension equivalent to their grade level as defined by national standards at USDA supported schools	24.31%	+10%
Improved quality of literacy instruction	1.1 Percentage of teachers in target schools who demonstrate use of new and quality teaching techniques or tools	69.4%	80%
Increased government support	1.4.3 Percentage of MINEDUC disbursements (financial or material) which arrive on time to the appropriate institution.	13.1% ⁶	10%
Increased engagement of local organizations and community groups	1.4.4 Number of PTAs contributing to their school as a result of USDA assistance	69 ⁷	221
	1.4.4a Number of PTAs that have developed a school improvement plan	18 ⁸	133
Increased capacity of government organizations	1.4.1 Number of DIEDUC and DIGEFOCE staff who have increased their capacity to implement their roles and responsibilities	0	20
More consistent teacher attendance	1.1.1 Percentage of teachers at target schools who attend and teach school at least 90% of scheduled school days per school year	86.7%	90%
improved literacy instructional materials	1.1.3b Percentage of classrooms in target schools with literacy instructional materials (textbooks, workbooks, etc.) sufficient for effective instruction	75.4% ⁹	100%
Increased skills and knowledge of school administrators	1.1.5 Percent of school administrators in target schools who demonstrate use of new and quality teaching techniques or tools	0.0%	75%

⁶ Information provided by school principals. According to 67.5% of CTAs, the disbursements arrived on a timely manner.

⁷ The baseline study identified that all schools (100%) had a PTA created. This indicator has two variables: "created" and "contributing to schools". This data refers to "created."

⁸ 18 PTAs represent 26.7%.

⁹ The percentage assigned to the indicator is related to didactic materials (60.9% of text books for different subjects and only 14.5% of workbooks). CRS distributed 62,104 sets of didactic materials (including text books and workbooks) to schools participating in the project. 1,595 teachers' guides on the Kemon Ch'ab'al methodology were also distributed among teachers. This explains the percentage reported in the baseline column. The baseline did not identify the affectivity of the didactic materials in literacy instruction because this process should be subject to an investigation with an experimental-controlled relation protocol in the schools targeted by the Project.

Increased skills and knowledge of teachers	1.1.4 Percent of teachers in target schools who demonstrate use of new and quality teaching techniques or tools	0.0%	70%
Improved students' attentiveness	1.2 Percent of students in classrooms identified as attentive by their teachers	27.0%	80%
Reduced short term hunger	1.2.1 Percent of 3rd grade students in target schools who indicate they are not hungry during the school day	15.8% ¹⁰	60%
	1.2.1a Percent of 6th grade students in target schools who indicate they are not hungry during the school day	8.2%	60%
Improved student attendance	1.3 Percent of boys regularly (80%) attending USDA supported classrooms/schools	60.0%	85%
	1.3a Percent of girls regularly (80%) attending USDA supported classrooms/schools	71.7%	85%
Increased economic and cultural incentives (or decreased disincentives)	1.3.1 Number of school children who participate in extra-curricular school activities	1,820	3,505
Reduced health related absences	1.3.2 Average number of school days missed by students due to illness (for each school and in aggregate)	2.5 days	2
Improved school infrastructure	1.3.3 Number of educational facilities (school buildings, classrooms, and latrines) rehabilitated / constructed as a result of USDA assistance	0	312
Increased student enrollment	1.3.4 Percent increase in boys enrolled in school as a result of USDA assistance	0% ¹¹	4%
	1.3.4a Percentage increase in girls enrolled in school as a result of USDA assistance	0% ¹²	4%
Increased community understanding of the benefits of education	1.3.5 Percentage of parents in target communities who can name at least three benefits of primary education	96.4%	80%
School governments	Number of school governments established	213	NDA ¹³
Needs assessments	Number of needs assessments conducted	1 ¹⁴	NDA
Improvement plans	Number of existing school improvement plans	142 ¹⁵	NDA

¹⁰ Percentage average of 3rd grade students (**23.8%**) and 6th grade students (**8.2%**) who indicated not being hungry.

¹¹ This indicator will be the basis for boys' enrollment. The Project will monitor the increase or reduction of the enrollment rate based on the assessment of boys' enrollment conducted by CRS in 2014 - 18,437 boys enrolled.

¹² This indicator will be the basis for girls' enrollment. The Project will monitor the increase or reduction of the enrollment rate based on the assessment of girls enrollment conducted by CRS in 2014 - 17,765 girls enrolled.

¹³ NDA: No data available.

¹⁴ Infrastructure assessment conducted by APCC from January to March 2014.

¹⁵ 63.8% of principals affirmed that the schools have an improvement plan, percentage equivalent to 142 schools of a universe of 223 as established in the Scope of Work.

CHAPTER I

BASLINE STUDY METHODOLOGY

1.1 OBJECTIVE OF THE BASELINE STUDY

To establish an actual scenario where the “Learning for Life” project will be implemented, obtaining an accurate portray of the project intervention area in terms of school infrastructure, nutrition, competency level of students and teachers, and level of organization of parents and schools, among others. This input will serve as a basis for comparison so that monitoring and evaluation processes within the project’s MEAL system during the project timeframe, determine to what extent the project’s objectives are being achieved¹⁶.

1.2 BASELINE STUDY METHODOLOGY: (See annex 1: Baseline Study Methodology)

The study used the participatory rapid intervention methodology¹⁷ to register simultaneous information in an appropriate, efficient and effective manner, in a relatively short period of time. The process encompassed three phases:

Phase 1: Design of the process. This included document review,¹⁸ development and validation of matrix of indicators and variables (see Annex 2: Baseline Study Matrix), development and validation of tools to register data (see annex 3: Field Tools), calculation of sample size (See Annex 4 Selected Schools) and incipient report.

Phase 2: Field work. It included coordinating and contacting municipal and community authorities, training the field team (see Annex 5: Training Agenda), and data registry (see Annex 6 Participants’ List)

Phase 3: Reporting. Processing quantitative and qualitative data (see Annex 7 Data Entry Process) led to a Baseline Draft Report which was sent for the revision and feedback of implementing organizations whose input was incorporated into the final report. This phase also includes the presentation of the results of this study to the implementing organizations.

¹⁶Taken from the SOW for this study. Section IV. Page 5. The SOW does not include specific objectives.

¹⁷ This methodology was created in Germany, in the 70’s and it is used in social sciences. It was selected for its advantages that include: a) it values local knowledge; b) It relativizes the concept of scientific research, making flexible the concept of truth and universal science; c) the investigators also learn; d) the method allows active participation of the group and the identification of its members with the work being done; e) the principle of triangulation is feasible to use; f) The use of semi-structured tools is feasible. *Universidad Nacional Experimental Simón Rodríguez. Núcleo Canoabo. Formulación de Proyectos Socio Comunitarios. “Metodologías participativas para Proyectos socio comunitarios”*

¹⁸See bibliography on page 75

CHAPTER II

EDUCATION CONTEXT

The current education system in Guatemala has a student population of 4,342,335 students; 202,603 teachers and 45,515 schools. The illiteracy rate in Guatemala is 18.44%.

Reading tests conducted by the MINEDUC¹⁹ in first, third and sixth grades from 2006-2009 showed a slight improvement of 8 points for 1st grade (from 39.9% in 2006 to 47.9% in 2009), 18 points in 3rd grade (from 33.5% in 2006 to 51.8% in 2009) and 6.7 points in 6th grade (from 24.2% in 2006 to 30.9% in 2009²⁰), as a result from the reading programs promoted by the MINEDUC in previous years. However, none of these numbers reach the national reading standard score - 60.

In Guatemala, 49.8% of children under the age of five are chronically malnourished due to the consumption of nutrient-poor foods, little availability of food and the lack of access and availability of potable water. All these factors together affect the health, school achievement and living standards of Guatemalan children.

The department of Totonicapán has a population of 461,850 persons, of which 98% is Maya K'iché, a student population of 122,001 students and by 5,187 teachers in 1,236 schools²¹. The education indicators are the following:

Table 3: Education indicators in the department of Totonicapán

Indicator	Primary Level (%)
Gross Enrollment rate	110.9
Net enrollment rate	88.4
Repetition rate	12.2
Retention rate	96.6
Drop-out rate	3.4
Promotion grade	85.95
Illiteracy rate	21.8

Source: MINEDUC's. Primary Education Annual Statistics. Guatemala, 2010.

¹⁹ Administered by MINEDUC's General Quality Office (DIGEDUCA).

²⁰ No data on reading or math tests were found in MINEDUC's official statistics after 2010.

²¹ MINEDUC's Primary Education Annual Statistics. Guatemala, 2010.

Although the quantitative indices in Totonicapán are relatively positive, there are some questioned aspects in terms of quality of education such as the teaching-learning methods being used, infrastructure conditions, scarce resources and didactic materials, lack of 100% bilingual teachers and poor coverage (22.0%) of Intercultural Bilingual Education (known by its Spanish acronym EBI.)

Recent studies²² indicate that 71.4% of households in the K'iche' linguistic community (one of the most relevant Mayan languages in Guatemala), educate children in their mother tongue; however, primary school coverage of Intercultural Bilingual Education during 2000-2009 barely increased by 5.7%, leaving more than 150,000 students not being taught in their mother tongue.

Socio-economic indicators in Totonicapán reflect high indices of poverty and extreme poverty, chronic malnutrition among children under the age of five, and a high percentage of rural households without water supply.

Table 4: Socio-economic indicators related to the Learning for Life Project in Totonicapán

Socio-economic Indicators	Total
Percentage of general poverty ^{23,24}	76.21%
Percentage of extreme poverty ^{25,26}	26.18%
Percentage of chronic malnutrition (height-for-age) among children < 5 ²⁷	82.2%
Percentage of acute malnutrition	0.9%
Cost of basic food basket (CBA) ²⁸	Q 2,172.60
Percentage of households with access to piping water	71.15%

Source: SEGEPLAN. *Departmental Development Plan of Totonicapán 2011-2025*. Guatemala.

²²ICEFI-UNICEF. *¿y dónde están los ausentes?* Newsletter 5. Pages 66-78. November 2011.

²³ SEGEPLAN. *Poverty Map*. Guatemala, 2002.

²⁴ National Poverty Line: 51.0%

²⁵ National Percentage: 16.8%

²⁶ National extreme poverty line:14.5%

²⁷ UNDP. *Human Development Figures– Totonicapán*. Guatemala, 2010. Data source: ENSMI 2008/9. Based on the MSPAS data, San Andrés Xecul has the highest development index with 80.55% while Momostenango's index is 70.4%. National average is 43.4%.

²⁸ *El Periódico*. Guatemala, January 23, 2014. Source: National Statistics Institute (INE).

CHAPTER III

EDUCATION COMMUNITY CONTEXT ACCORDING TO THE BASELINE STUDY

This chapter presents the information related to the current context of school principals, teachers and parents in 69 sample schools in terms of school staff position, length of time on the job, gender, ethnic identity and command of the K'iché language.

3.1 School principals

- a) Position: **88.4%** of school principals also act as teachers besides performing the administrative tasks pertained to the principal job. The remaining **11.6%** exclusively dedicates to the role of school principal.
- b) Length of time on the job: **11.6%** of principals have been less than a year/a few months on the job and the same percentage has been over 14 years (17 years maximum) on the job. The average number of years on the principal job is 4-6 years (**29.0%**).

Table 5: Number of years and percentage of time length in the principal's position

Time Length (years)	Number	Percentage
< 1 year	8	11.6
1 - 3	16	23.2
4- 6	20	29.0
7 – 10	13	18.8
11 – 14	4	5.8
> 14 years	8	11.6
	69	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

- c) Sex: **50.7%** of principals are women and **49.3%** are men. Hence, there is no significant difference in terms of equal number of males and females in that role.
- d) Ethnic identity: **87.0%** of principals identified themselves as K'iche' and **13.0%** as mixed/ladino.
- e) Command of the language: The results of principals (and teachers') abilities in the command of the K'iche' language are presented in four variables: speaking, reading, writing and comprehension.

Table 6: Percent ranges in principals' command of the K'iche' language

Percent Ranges	Speaking		Reading		Writing		Comprehension	
	No.	%	No.	%	No.	%	No.	%
0	3	4.8	7	11.3	11	17.7	1	1.6
1 - 20	0	0.0	2	3.2	2	3.2	1	1.6
21 - 40	3	4.8	2	3.2	5	8.1	1	1.6
41 - 60	16	25.8	17	27.4	13	21.0	7	11.3
61 - 80	17	27.4	17	27.4	16	25.8	16	25.8
81 - 100	23	37.1	17	27.4	15	24.2	36	58.1
	62	100.0	62	100.0	62	100.0	62	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

To analyze the command of the language, the consulting team proposed 80% or above as a positive result. Results reveal that even when over 80% of the principals identified themselves as Mayan K'iche', their reading and writing skills had serious weaknesses.

3.2 Teachers

- Grades being taught: **23.3%** of teachers were teaching 1st grade, **21.7%** were teaching 2nd grade, **11.7%** were teaching 3rd grade, **15.0%** were teaching 4th grade, **15.0%** were teaching 5th grade and **13.3%** were teaching 6th grade. The total teacher distribution is related to the number of students per grade.
- Length of time on the job: **15.0%** of teachers are in the lower number of years range while **6.7%** is in the highest number of years range (21 years maximum). The former data can have a negative impact in the continuity of performance with possible consequences in student promotion and the loss of trained staff.

Table 7: Number of years and percentage of time length in the teaching position

Time Length (years)	Number	Percentage
< 1 year	9	15.0
1 - 3	16	26.7
4- 6	14	23.3
7 - 10	10	16.7
11 - 14	7	11.8
> 14 years	4	6.7

60	100.0
----	-------

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

- c) Sex: **55.0%** are women and **45.0%** are men.
- d) Ethnic identity: **91.7%** identified themselves as K'iche' and **8.3%** as mixed or ladino.
- e) Command of the language: Skills results are presented using the same four variables used for principals: speaking, reading, writing and comprehension.

Table 8: Percent ranges of teachers' command of the K'iche' language

Percent Ranges	Speaking		Reading		Writing		Comprehension	
	No.	%	No.	%	No.	%	No.	%
0	3	5.4	9	16.7	9	16.4	1	1.8
1 - 20	3	5.4	1	1.9	3	5.5	2	3.5
21 - 40	2	3.6	4	7.4	5	9.1	4	7.0
41 - 60	14	25.0	13	24.1	10	18.2	2	3.5
61 - 80	14	25.0	14	25.9	14	25.5	14	24.6
81 - 100	20	35.7	13	24.1	14	25.5	34	59.6
	56	100.0	54	100.0	55	100.0	57	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

From table 8, this study concludes that even though 90% of the teachers identified themselves as Maya K'iche', which is positive for the project, the greatest difficulties as found among principals, were their speaking and writing abilities.

The above can negatively influence the results expected from the use of the Kemom Ch'ab'al methodology should no complementary activities be implemented to improve the four skills to command the language (see Recommendations section.)

3.3 Parents

- a) Sex: **72.5%** are women and **27.5%** are men;
- b) Ethnic identity: **96.7%** identified themselves as K'iche' and **2.2%** as mestizo or ladino.
- c) Skills in K'iche' language: speaking: **76.9%**, reading: **13.2%**, writing: **1.1%**, and comprehension: **76.9%**.

As expected, the speaking and comprehension skills had the highest results, in contrast to the writing and reading skills, which considering the national literacy indices, present difficulties in both languages (Spanish and K'iche').

The invitation to participate in the baseline study was accepted mainly by mothers due to two factors: the main responsibility of education and caring for children falls in the hands of the mothers and the fact that fathers were working when the interviews were being conducted.

Shared participation and responsibility between mothers and fathers in child education is key to achieve better results. Hence, this study recommends conducting meetings, campaigns and trainings as well as developing materials and conducting other interventions in the local language to facilitate mothers' comprehension and do it during times that do not interfere with fathers' working hours.

CHAPTER IV

RESULTS AND ANALYSIS OF PROJECT INDICATORS

This chapter presents the measurement of the project indicators and qualitative information that increase the understanding of the aspects researched, beginning with the strategic objective 1 that literally says: “In a period of three years (...) Improved Literacy of School-Age Children in 4 municipalities in the department of Totonicapán... ”.²⁹

To achieve this objective, the project set the following results:

R 1.1: Improved Quality of Literacy Instruction

R 1.2: Improved Attentiveness

R 1.3: Improved Student Attendance in 221 primary participating schools

CRS and implementing partners APCC and PRODESSA established a set of indicators and units of measurement for each of these results. These were put into a Performance Monitoring Plan Matrix and Annex 2 - Project Level Framework “Learning for Life”. Both were the reference point for the development of the Baseline Matrix, which in turn served to determine the dimensions, indicators and variables of the study through the use of tools for data registration.

4.1 Strategic Objective:

Indicator: % of boys/girls who, by the end of 6th grade, demonstrate reading comprehension equivalent to their grade level as defined by national standards at USDA supported schools

The analysis of this indicator was conducted through a reading test with 30 questions in Spanish designed by PRODESSA. The test was administered to a sample of 2,387 students (1,040 boys and girls from third grade and 1,347 boys and girls from sixth grade) which represents 85.25% of planned sample. The study could not test 100% of the anticipated number of children because of students and teachers’ absence on the day when the data was collected.

²⁹ Annex 2, Project Level Framework “Learning for Life”.

4.1 Strategic Objective: Matrix 1: Measurement of the indicator and variables for the strategic objective

Description		Indicator (s)	Variable(s)	Baseline Result
Strategic Objective	Improved literacy of school-age children in 4 municipalities in the department of Totonicapán	% of boys/girls who, by the end of 6th grade, demonstrate reading comprehension equivalent to their grade level as defined by national standards ³⁰ at USDA supported schools	1. Reading comprehension of girls from 6º grade 2. Reading comprehension of boys from 6th grade	1. 25.19% of girls demonstrate reading comprehension 2. 24.31% of boys demonstrate reading comprehension

³⁰ MINEDUC defines the standards as statements that establish clear, simple and measurable criteria that teachers should consider as students' learning target which is translated into what is expected from the teaching-learning process. In general, the educational standards are classified in different categories: *content, performance and opportunity* and they are related to improve the quality of education. The minimum acceptable reading comprehension standard is 60%, which is also a criterion used by the tests administered. MINEDUC. *Educational Standards for Guatemala – Education Standards and Research Program*. Guatemala, March, 2007.

The following information corresponds to the reading comprehension data disaggregated by sex and grade. Results among **third grade boys** (see chart 1) reveal that:

- 1) Overall results of the skills evaluated are below 22%;
- 2) Results - the highest percentages out of the ten skills (above 15%) are: a) logical reasoning, b) problem identification/solution, and c) identifying the subject.
- 3) General average is **12.4%**;
- 4) None of the male students (0.0%) obtained a score over 60.

Results among **third grade girls** (see chart 1):

- 1) All the results are below 20.0%;
- 5) Of the ten skills, the highest percentages (above 15%) are: a) logical reasoning, b) problem identification/solution, and c) identifying the subject.
- 2) General average is **8.53%**;
- 3) None of the female students (0.0%) obtained a score over 60.

The analysis of the results allowed the study to conclude that:

1. Reading comprehension skills among both boys and girls do not reach the national standard (60).
2. The percent difference between boys and girls is **3.91%**.
3. Among boys, the skills less developed (below 10%) are: a) identifying a cause and effect, b) identifying characters and environment, c) identifying a sequence, and d) identifying the main idea.
4. Among girls, the skills less developed (below 10%) are: a) identifying a cause and effect, b) identifying characters and environment, c) identifying a sequence, and d) identifying the main idea.

Results among boys from sixth grade (see chart 2) are the following:

- 1) Overall results of the skills evaluated are below 40%;
- 2) Of the ten skills, the highest percentages (above 30%) are a) identifying a cause and effect, b) comparing, and c) identifying the difference between a fact and an opinion;
- 3) General average is **24.31%**;
- 4) None of the male students (0.0%) obtained a score over 60.

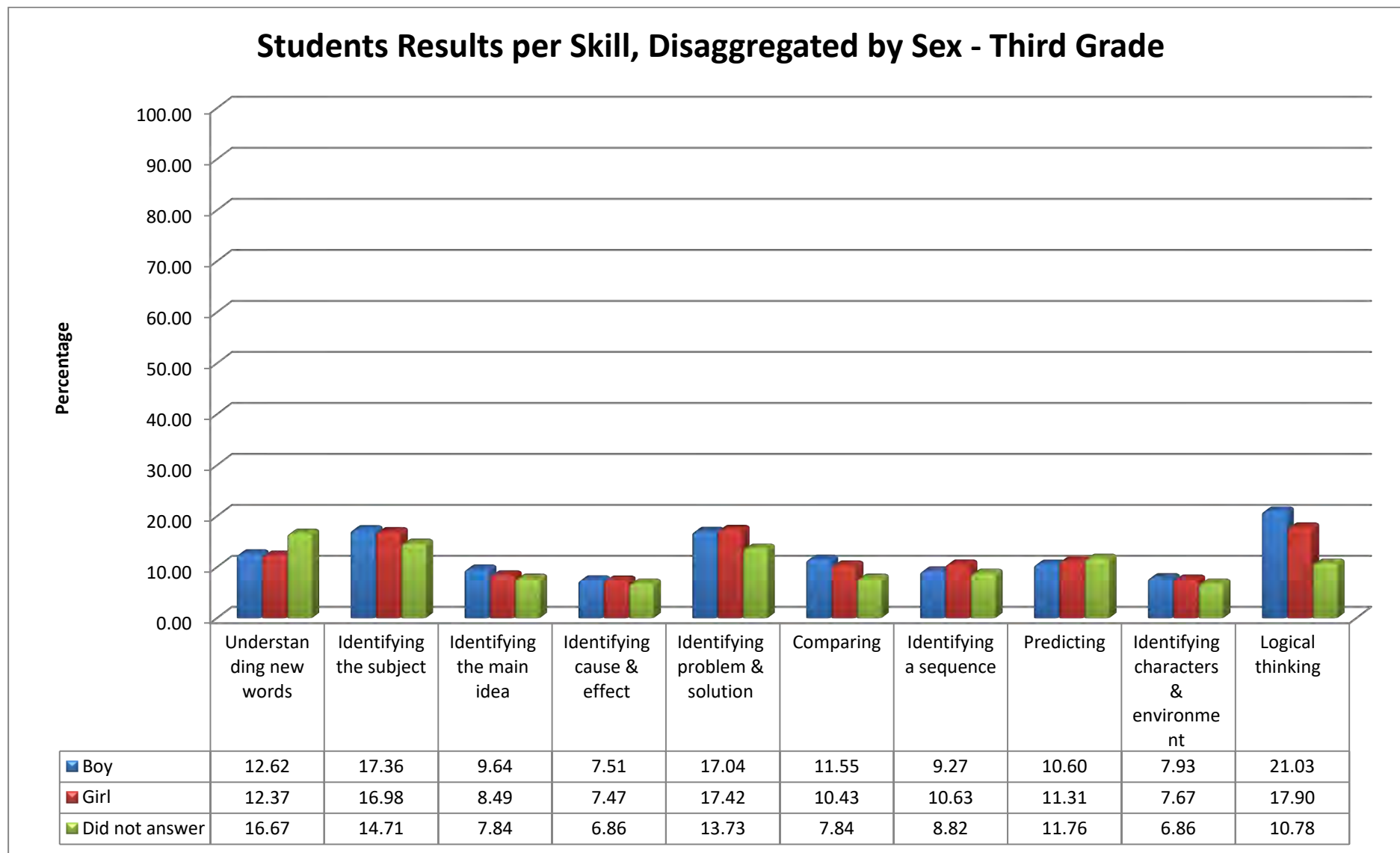
Results among girls from sixth grade (see chart 2) are the following:

- 1) Total results of the skills evaluated are below 40%;
- 2) Of the ten skills, the highest percentages (above 30%) are a) comparing, b) identifying a cause and effect, and c) identifying the difference between a fact and an opinion;
- 3) General average is **25.19%**;
- 4) None of the female students (0.0%) obtained a score over 60.

The analysis of the results allow the study to conclude the following:

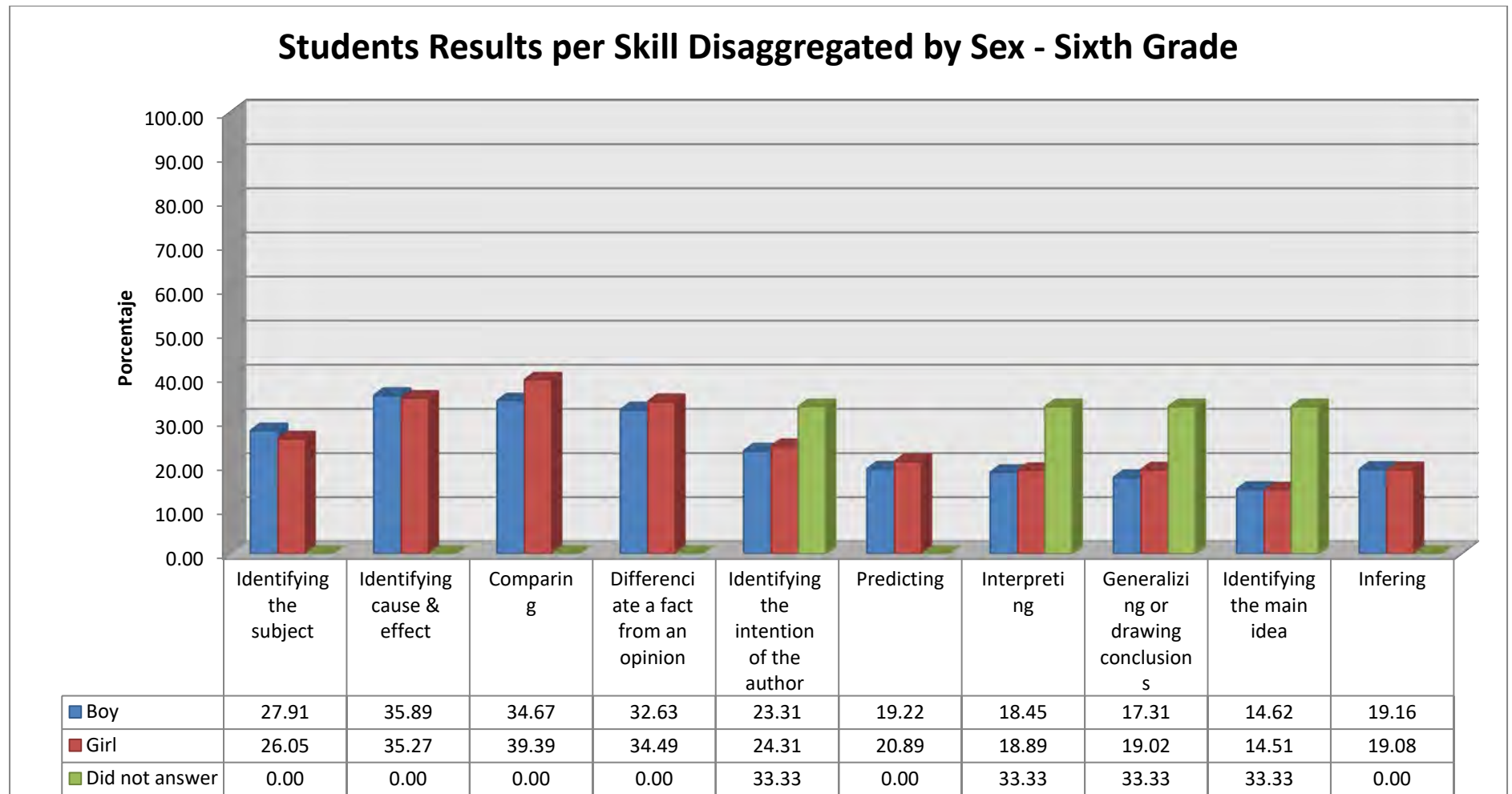
- 1) Reading comprehension skills among both boys and girls are deficient as these do not reach the national standard (60).
- 2) The percent difference between boys and girls is **0.88%**.
- 3) The skills less developed (below 30%) are the same for both boys and girls.

Chart 1: Reading comprehension average result per skill for boys and girls from third grade



Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Chart 2: Reading comprehension average result per skill for boys and girls from sixth grade



Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

4.2 R.1.1-Matrix 2: Measurement of indicators and variables for result 1.1: Improved Quality of Literacy Instruction

The following information was obtained through interviews with principals and teachers in 69 sample schools of the baseline study.

Description		Indicator (s)		Variable(s)	Baseline Result
Result 1.1	Improved quality of literacy instruction	1.1	% of teachers in target schools who demonstrate use of new and quality teaching techniques or tools	1. New and quality teaching techniques or tools.	1. 64.9% of teachers who demonstrate use of techniques and tools
		1.1.1	% of teachers at target schools who attend and teach school at least 90% of scheduled school days per school year	1. Teachers' attendance to school	1. 88.8% of teachers attended 90% of scheduled school days during 2013. ³¹
		1.1.3b	% of classrooms in target schools with literacy instructional materials (textbooks, workbooks, etc.) sufficient for effective instruction	1. Classrooms with literacy instruction materials	1. 75.4% of classrooms have literacy instruction materials (text books, workbooks, etc.) sufficient for effective instruction
		1.1.4	% of teachers in target schools who demonstrate use of new and quality teaching techniques or tools ³²	1. New and quality teaching techniques or tools	1. 0.0% of teachers who demonstrate the use of the Kemom Ch'ab'al methodology

³¹ Data provided by school principals.

³² CRS, PRODESSA and APCC defined the variables "knowing" and "using" the Kemom Ch'ab'al methodology to evaluate behavior of indicator 1.1.4

1.1.5 % of school administrators in target schools who demonstrate use of new and quality teaching techniques or tools

1. New and quality teaching techniques or tools

1. 0.0% of school principals who demonstrate the use of the Kemom Ch'ab'al methodology

Indicator 1.1: % of teachers in target schools who demonstrate use of new and quality teaching techniques or tools

The results of the variables presented below were obtained through interviews with teachers.

- a. Time spent on reading in Spanish. The research identified the amount of time spent on reading in Spanish in the classroom. The group with the highest recurrence (**49.2%**) spends 121-150 minutes a week reading in Spanish and the second highest group (**16.9%**) spends 211-240 minutes per week.

Table 9: Minutes spent on reading in Spanish per week

Minutes per week	Number of Teachers interviewed	%
30 – 60	2	3.4
61 – 90	3	5.1
91 – 120	5	8.5
121 - 150	29	49.2
151 - 180	2	3.4
181 - 210	4	6.8
211 - 240	10	16.9
241 - 270	1	1.7
271 - 300	3	5.1
	59	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

- b. Amount of time spent on reading in K'iche'. The results of this variable demonstrate that the time invested in reading in K'iche' is lower than the time invested in reading in Spanish, as **11.7%** invests 121-150 to read in K'iche' per week. It is important to note that **28.3%** of the teachers affirmed that they do not dedicate time to reading in K'iche'. The group with the highest recurrence - **18.3%** spend 61-90 minutes reading in K'iche' per week.

Table 10: Minutes spent on reading in K'iche' per week

Minutes per week	Number of Teachers interviewed	%
0	17	28.3
1 – 30	6	10.0
31 - 60	10	16.7
61 - 90	11	18.3

91 - 120	8	13.3
121 - 150	7	11.7
151 - 180	0	0.0
Over 180	1	1.7
	60	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

To calculate the use of techniques and tools used by teachers, the study obtained the average of the results of three variables – pre-reading activities (**15.0%**), techniques used during reading (**100.0%**) and post-reading exercises (**93.3%**) with an average of **69.4%**

- c. Activities that teachers perform with children prior to reading. **85.0%** of teachers reported not performing any activity. Of the remaining **15%** (that use techniques and tools), **20.0%** resort to observation of images, **10.0%** resort to observation of the structure of the text and **70.0%** perform other activities such as role-play, reflection, exploration reading, recreational-learning activities, asking questions about the main topic, stories, riddles, tongue twisters, poems, jokes, vocal exercises, presentation of books, brainstorming, one-word prompts, motivation of reading, preparation of a reading plan which includes asking questions about their reading and going over the reading together; and looking up words in the dictionary.
- d. Techniques used by teachers during the reading period in the classroom. **23.3%** reads aloud in unison; **25.0%** reads aloud, **28.3%** takes turns to read in small groups and **23.4%** uses other techniques including reading aloud, stressing relevant aspects of the text, reading comprehension with speed and fluency (reading 120 words per minute) drawing or illustrating the text, role-play in pairs, discussion about the reading, comprehensive reading, guided reading, chain reading, picture-book reading, cross words, individual silent reading, reading to a large audience, word lottery, riddles, reading in front of the class, direct questions and work in groups to analyze a reading.
- e. Exercises conducted by teachers after the reading session. **93.3%** conducts exercises after reading. These include exercises to identify: the subject matter (**21.7%**), the main ideas of a topic (**28.3%**), the main events of a reading (**13.3%**) the characters in a text (**20.0%**). **6.7%** affirmed that they do not conduct any exercise of those mentioned in the interview but they claimed using other exercises such as: making comments about a reading and writing a summary of a reading

in their notebook, reading comprehension and feedback exercises, direct individual and group questions, narration, identifying new words and making illustrations or an outline of what they read.

Indicator 1.1.1: % of teachers at target schools who attend and teach school at least 90% of scheduled school days per school year.

90% of scheduled school days is equivalent to 162 days per school year. According to school principals interviewed, in 2013, **86.7%** of teachers attended school from 151 to over 200 days per year (see table 11); CTAs³³ reported that average teachers' attendance was **95.0%**. For **84.6%** of parents,³⁴ teachers' attendance was consistent (same range mentioned above), which results in an average percentage of **88.7%**. Parents confirmed teachers' consistent attendance, expressing that the teachers missed school only to attend administrative activities or due to holidays, meetings or trainings called by the MINEDUC. This leads to the conclusion that teachers' attendance is good. Hence, this study recommends the project to make the most of this positive practice to promote the activities planned by the project.

Table 11: Opinion of school principals' about teachers' attendance per grade (2013)

Number of Days Attended	1st		2nd		3rd		4th		5th		6th		Average
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
125 - 150	7	10.1	7	10.1	6	8.7	5	7.2	7	10.1	5	7.2	8.9
151 - 175	32	46.4	33	47.8	32	46.4	33	47.8	34	49.3	33	47.8	47.6
176 - 200	26	37.7	25	36.2	27	39.1	27	39.1	24	34.8	27	39.1	37.7
Over 200	1	1.4	1	1.4	1	1.4	1	1.4	1	1.4	1	1.4	1.4
Did not respond	3	4.3	3	4.3	3	4.3	3	4.3	3	4.3	3	4.3	4.3
	69	100.0	69	100.0	69	100.0	69	100.0	69	100.0	69	100.0	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Indicator 1.1.3b: % of classrooms in target schools with literacy instructional materials (textbooks, workbooks, etc.) sufficient for effective instruction

³³ San Andrés Xecul, 95%; Santa Lucía La Reforma, 100%; San Bartolo Aguas Calientes, 85%; and Momostenango, 90.0%

³⁴ 7.7% of parents reported not having the information and in 7.7% of the cases, attendance was below 150 days.

The following information was provided by school principals:

- a. Number of classrooms per school. **65.2%** of schools have 2-7 classrooms; **18.8%** has 8-10 classrooms; **1.4%** has 11-13 classrooms; and **13%** has 14 or more classrooms. One of the schools visited only had one classroom (**1.4%**).
- b. Type of didactic materials. During 2013, the schools had the following materials: **60.9%** of schools had books on different subjects; **14.5%** had workbooks; **44.9%** had pencils, crayons, water color, tempera paints and erasers; **26.1%** had glue, scissors and masking tape; and **84.1%** had cardboard and paper.
- c. Quantity of didactic materials.³⁵ **82.6%** of schools did not have enough didactic materials.
- d. Quality of didactic materials in general. Good: **63.8%**, regular: **25.0%**. The criteria used to evaluate it as “regular” included: purchasing cheap materials, purchasing good brands is not authorized due to insufficient funds, the materials are not used properly, and students do not take care of the materials.
- e. Quality of the text books. According to **40.2%** of school principals, the text books are of good quality due to the following: the texts are in K’iche’ language (**53.6%**), the language used is understandable (**55.1%**); the illustrations are adapted to the local culture (**20.3%**) and the content is related to the local cultural context (**31.9%**).³⁶
- f. Months when the materials were received. **13.0%** of the school principals indicated that in 2013 the didactic materials were received in February; **31.9%** reported receiving them in March and **27.5%** in April. This means that in every case, the materials were received in the schools when classes had already begun.

Results reveal that even though schools have didactic materials, these are not enough to meet the needs of the school population. Both principals and teachers reported being satisfied with the materials as they are appropriate for the cultural context. A critical aspect that is currently beyond the control of the Project is the timeliness of the distribution of the didactic materials by the MINEDUC, which is not in line with the beginning of the classes. Consequently, this study recommends ensuring the distribution of school supplies, text books and the set of didactic materials at the beginning of each school year.

³⁵ The budget per child is Q 55.00 for materials.

³⁶ There was a reference to texts not adapted to local context. This had to do with illustrations not adapted to the rural area. They were in Spanish and the language was complicated – students had difficulty understanding it.

Indicator 1.1.4: % of teachers in target schools who demonstrate use of new and quality teaching techniques or tools.

Kemom Ch’ab’al is the tool used by the Project to promote a dynamic methodology that allow the improvement of the quality education. When the baseline was carried out, PRODESSA and APCC had already conducted one training about the Kemom Ch’ab’al methodology with teachers and school principals which influenced their level of knowledge. The indicator “demonstrate its use” was not measured during the research because the Project had recently began. Hence, the baseline process was focused on the teachers and principals’ knowledge.

The results of the interviews with teachers revealed the following: **13.3%** reported being trained in the Kemom Ch’ab’al methodology,³⁷ **16.7%** mentioned knowing it, and **28.3%** reported having used it. **41.7%** reported not knowing the methodology.

Clearly, this inconsistent data is confusing and reveals lack of knowledge about the methodology by the teachers. This conclusion is ratified by using the triangulation method to cross-check data about the knowledge of the methodology where **18.3%** of teachers responded “reading exploration”, **11.7%** responded “reading only”, **10.0%** reported “exercises about the reading”, **10.0%** indicated “reflection about what the reading is about”, **3.3%** indicated “review the exercises” and **46.7%**—the majority—did not respond.

Teachers’ input about the pros and cons of the Kemom Ch’ab’al methodology are presented in priority order as follows:

Table 12: Teachers’ opinions on the pros and cons of the Kemom Ch’ab’al methodology

Pros	Cons
It helps the teacher develop a topic in line with the book	K’iché is not spoken at home
It supports the learning of each boy and girl	Children have a hard time reading a text in K’iché because the language used is different from the one

³⁷ PRODESSA staff indicated that school principals and teachers participated in a training on the Kemom Ch’ab’al methodology in January and February 2014, before the baseline study was conducted.

	used in their community. In addition, they are not used to reading in K'iché.
It helps improve the child's reading skill	The methodology cannot be used as it is too advanced for children who cannot read
It is more participatory and reflexive	The content of the books forces teachers to re-plan their activities
It facilitates students' understanding	The methodology requires more time than is available
It has charts	Its use becomes a routine
Reading becomes significant	Children from 1st grade do not know how to read instructions
The suggested activities are good	The books are black and white
It does not let the student forget what he/she has read	
The child understands better in his/her mother tongue	
The students' mother tongue is recovered	
Children express their doubts	
It stimulates student's interest	
The student understands what the reading is about more quickly	
It is a guide for the teacher	
It fosters communication among students	
It facilitates the work of the teacher	
Children learn in a fun way	

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Teacher Training Needs

As a request of CRS, the baseline study incorporated an item in the teacher interview to identify their training needs, obtaining the following results in priority order.

Table 13: Teacher Training Needs

	Subject	Number of Responses	%
1	Learning methods and techniques for first grade, literacy techniques for children and motivational techniques	37	23.87
2	People's culture, K'iché language, literacy in K'iché, Mayan number system and interculturality	23	14.84
3	Math courses: arithmetic and algebra	16	10.32
4	The Kemom Ch'ab'al methodology (Reading comprehension techniques)	9	5.81
5	Handicrafts and cultural/artistic expression (drama classes) and educational games	8	5.16
6	Communication, language, Spanish, narration and writing	7	4.52
7	Nutrition (nutritious food) and hygiene, health and life	5	3.23
8	Childhood sexuality and sexual education, reproduction and human development	5	3.23
9	Values	5	3.23
10	Human rights and children's rights	3	1.94
11	Environment	3	1.94
12	Importance of education	2	1.29
13	How to create a school government	2	1.29
14	Spelling and calligraphy	2	1.29
15	Learning problems	2	1.29
16	The National Basic Curriculum and curriculum orientation	2	1.29
17	Techniques to teach children with special needs	2	1.29
18	Conflict resolution among children	2	1.29
19	English	2	1.29

20	Globalization and current events/topics	2	1.29
21	Motivational techniques for parents	1	0.65
22	Natural and social sciences	1	0.65
23	Human development and personal growth	1	0.65
24	Physical education	1	0.65
25	Road safety education	1	0.65
26	Gender equity	1	0.65
27	Learning techniques and methodologies for schools where the principal also performs the role of the teacher	1	0.65
28	Evaluation tools	1	0.65
29	Evaluation	1	0.65
30	Logical thinking	1	0.65
31	Child psychology	1	0.65
32	Curriculum orientation guides per area	1	0.65
33	Subjects of the different text books	1	0.65
34	Production of didactic materials	1	0.65
35	Children's achievement	1	0.65
36	How to conduct assessments	1	0.65
			100.00

Source: Learning for Life Project Baseline Results.

Indicator 1.1.5: % of school administrators in target schools who demonstrate use of new and quality teaching techniques or tools.

The question about the level of knowledge and the use of the Kemom Ch'ab'al methodology was not answered by **75.4 %** of school principals because they have not heard of it while **24.6%** reported having used it prior to 2014 through the following steps: **11.6%** "reading exploration", **15.6%** "reading", **11.6%** "exercises about the reading", **1.4%** "review of the exercises" and **7.2%** "reflect about what the reading is about". In contrast with the project progress at this early stage, **73.9%** did not know and **5.8%** did not remember.

26.4% of the principals expressed that the value-added of the Kemom Ch'ab'al methodology is that it respects the culture and the traditions of the children and it promotes the learning of the K'iche' language. The remaining **73.6%** indicated that the methodology stimulates children's imagination, it includes a text book and a workbook presented in an attractive way, the content is of good quality and children's attention is drawn by the illustrations.

Principals' opinions about the pros and cons of the Kemom Ch'ab'al methodology are presented in priority order as follows:

Table 14: Pros and Cons of the Kemom Ch'ab'al methodologies identified by school principals

Pros	Cons
It is understandable. Children grasp the subject matter	There is a certain level of difficulty when reading and writing
Students read and practice their mother tongue	The teacher does not speak 100% in K'iché
Students learn to express their ideas	It requires a long time when the child does not know how to read
It is easy to implement	It has dialect variants
The student's mother tongue is being encouraged	It is not useful for children who do not speak K'iché
Reading is done in an orderly fashion	Parents do not want their children to speak K'iché
Students grasp the characters of the reading material	It does not address specific topics
It takes previous knowledge as a starting point	It is better understood in Spanish than it is in K'iché
It develops students' skills	It requires more teacher training
It is a detailed guide for the teacher to implement activities	Students read slowly
It fosters student participation	The book instructions are confusing
It is adapted to the context	
The student illustrates his/her own thoughts	
It facilitates reading and comprehension	
It allows the students to reflect using games	

• It includes suggestions for the teacher
• It helps the student to develop his/her public speaking abilities
• It is attractive for the students
• It presents analytical reading material related to students' environment

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Relation of the Kemom Cha'ab'al methodology with the CNB

58% of the principals did not answer to the question addressed to explore principals' opinion about the relation between the Kemom Ch'ab'al methodology and the National Basic Curriculum (CNB). The remaining 42% recognized the these two are related in the following aspects: a) **20%** of the teachers reported that both are appropriate to the cultural context of the children and use the mother tongue and strengthen the inter-cultural bilingual education; b) **4.2%** of the teachers indicated that both are participatory and creative; c) **4.2%** of the teachers reported that both are knowledge building and that are applicable to the life of boys and girls; and d) they both address artistic expression, civic education and natural sciences. Other characteristics mentioned were that both are flexible and that the Kemom Ch'ab'al methodology is part of the CNB. A small proportion of the principals (**4.2%**) expressed that these two do not have any relation and that the Kemom Ch'ab'al methodology has specific objectives in contrast to the CNB which does not.

4.3: R1.2- Matrix 3: Measurement of indicators and variables for result 1.2: Improved Students' Attentiveness

Description		Indicator(s)	Variable(s)	Baseline Results
Result 1.2	Improved students' attentiveness	1.2 % of students in classrooms identified as attentive by their teachers	1. Attention in class	1. 27.0% of students who are attentive
		1.2.1 % of students in target schools who indicate they are not hungry during the school day	1. Students who are hungry	1. 23.4% of 3rd grade students are hungry 2. 8.2% of 6th grade students are hungry

Indicator 1.2: % of students in classrooms identified as attentive by their teachers

Table 15: Results from the observation in class environment in 24 selected schools

Number	Category	Percentage
1	The students' desks are arranged in circle or U shape	25.0
2	The students' desks are placed in a disorderly fashion	0.0
3	The students desks are in good condition	75.0
4	The classroom is clean and orderly	50.0
5	The classroom has adequate lighting and ventilation	75.0
6	The board is in good condition	66.0
7	The teacher has materials to work with boys and girls	45.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Observation conducted in 24 schools revealed that only **25%** of the classrooms had students' desks arranged in a "U" shape or a semi-circle, which facilitated the interaction between boys and girls, while in **75%** of the classrooms the desks were arranged in horizontal rows, which is against the precepts of participatory education. In both cases, the desks were placed in order. In **75%** of the classrooms, the students' desks were in good condition, in other words, in one piece, painted, and still had the desk top and the book rack underneath the seat.

50% of the classrooms had been swept and mopped. The disorder was found more in the book shelves and the corners of the classroom than in students' desks. The majority of the classrooms (**75%**) had large windows which provided the classroom with illumination and ventilation. In **66%** of the cases, the boards were in one piece, the majority were made of white Formica, which allowed students to read clearly.³⁸ In **45%** of the cases, the teacher had materials to perform his/her work such as board markers, text books, workbooks, crayon dispensers, scissors, rulers and other didactic materials.

Observation helped confirm that even though the CNB establishes the need of having education based on competencies with active and creative methodologies, the traditional classroom structure prevail in

³⁸ In the remaining 44% of schools, some of the boards were made of wood, which was deteriorated. This did not allow children to read clearly.

the schools visited – mostly lecture-based classes with students’ desks placed in rows and little resources were available.

Analysis results of boys and girls’ attention in the classroom

For class observations, this study used the tool “checklist for boys and girls’ attentiveness”³⁹ which registers ten variables (see table 16). To visualize the results, each variable has four categories of horizontal reading. The highest or lowest score was selected as valid, depending on each question.

In terms of the attentiveness level, the category that defines the indicator is: *boys and girls showed attentiveness for periods of about 15 minutes*. The result was **27.2%**⁴⁰. Table 16 shows representative disaggregated results of the nine additional categories which reveal the attitudes and behaviors of the student population in different situations that occur in the classroom.

Observations revealed children’s difficulty to concentrate, complete their homework and work independently. A lot of noise coming from the classroom itself and school activities (music from other classrooms, children playing in the patio, community events, etc.) hindered children’s capacity to listen attentively. In addition, the instructions or information were given to K’iche’ children in Spanish. The use of the traditional methodology, the lack of resources and the need of teachers to perform different activities or teach more than one grade at a time offered little opportunities for the classes to develop without interruptions or in a dynamic and motivating manner, missing the opportunity to make the most of the potential attention showed by boys and girls.

Often, the consulting team observed classes where the teacher was teaching six grades at the same time or classrooms where first graders shared classes with fifth graders. In **47%** of the observed classes, there was an exchange of yelling, kids pushing one another or disturbances over the use of didactic materials (e.g. books, balls or toys).⁴¹ The age and interests differences of classrooms like these led to interruptions for both grades in spite of the great efforts made by the teacher to complete the tasks or cover the lessons.

³⁹ This tool was provided by CRS to obtain information about the levels of boys and girls’ attentiveness.

⁴⁰ Considering that the indicator refers to students in classrooms identified as “attentive”, the consulting team has identified the percentage of students that fall in the “completely attentive” range, making a reference to the percentage that is more positive.

⁴¹ In **53%** of the cases there was a good relation among the children. There were no fights or disturbances among them.

The above reveals the need to develop better structured classes with dynamic and creative methodologies, resources and teachers attention that strengthen the autonomy and the independence so that boys and girls, with the guidance of the teacher, become the protagonists of their own learning.

There are ten points of difference between boys' participation (**48%**) and girls' participation (**38%**), which reveals the need to develop affirmative measures to strengthen girls' participation.

Table 16: Frequency of the variables of boys and girls' attentiveness in sample schools

Variables	No at all (%)	Very little (%)	A little (%)	A lot (%)	Total (%)
1. Do boys and girls look attentive during long periods of time (about 15 minutes) in the classroom?	4.54	31.81	36.40	27.27	100.0
2. Do boys and girls seem distracted from classroom activities?	9.09	31.81	50.0	9.09	100.0
3. Do boys and girls follow the teacher's instructions?	4.35	8.70	39.13	47.82	100.0
4. Do boys and girls seem asleep in the classroom?	80.95	14.28	4.76	0.0	100.0
5. ¿Does it seem as if boys and girls have difficulty concentrating?	4.76	38.09	42.85	14.28	100.0
6. Do boys and girls dedicate to one activity until they complete it?	0.0	10.0	50.0	40.0	100.0
7. Do boys and girls work independently (take materials, work on their own, ask and respond to questions)?	10.0	25.0	40.0	25.0	100.0
8. Do boys and girls listen attentively?	0.0	38.0	48.0	14.0	100.0
9. Do boys and girls fight in class or are too restless?	52.38	23.80	9.52	14.28	100.0
10. What is the boys' level of participation?	0.0	9.0	43.0	48.0	100.0
11. What is the girls' level of participation?	4.76	28.57	38.09	28.57	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Indicator 1.2.1: % of students in target schools who indicate they are not hungry during the school day

- a. Information about boys and girls who are hungry. Data reveals that **23.4%** (of boys/girls) from 3rd grade and **8.2%** from 6th grade were hungry the day of the research. This contrasts with the information provided by parents who affirmed that their children ate breakfast (**95.0%**) on the day of the survey. The causes that **5%** did not eat breakfast include: a) they wake up late, b) there is no food in the house due to families' scarce resources, c) the mother does not have time to prepare breakfast as she is performing other tasks y d) they eat only twice a day. The analysis of food consumption revealed that although they indeed ate some food, the amount of food is not enough to meet their caloric needs.
- b. The following table shows the food items most mentioned.

Table 17: Food type given to children for breakfast as reported by their parents

Food Type	%
Tortillas	52.7
Beans	42.9
Coffee	42.9
Eggs	33.0
Porridge	25.3
Small tamale (small) (made of a corn-based dough with meat and tomato sauce, boiled in a leaf wrapper)	19.8
Bread	13.2
Chili	7.7
Leafy greens	7.7
Rice	5.5
Cereal	5.5
Noodles	5.5
Milk	4.4
Cheese	4.4
Tomato sauce	4.4
Broth	3.3
Barley	3.3
Other	2.2
Boiled water	2.0
Chao mien	1.1
Chirmol (similar to "pico de gallo")	1.1
An instant soup because there is no money	1.1
Did not prepare breakfast	1.1
Did not eat anything	1.1

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

- c. Survey of boys and girls from 3rd grade. Along with the reading test, the study used a form to find out if the child had eaten breakfast and what type of food he/she had eaten. Of the 1,347 children surveyed, **43.0%** stated that they had indeed eaten breakfast, **2.7%** responded that they have not eaten breakfast and **54.3%** did not respond. The food items eaten for breakfast as reported by the children were the following:

Table 18: Frequency and percentage of children from 3rd grade with a diet of more than two food items for breakfast

Food Type	Number	%
Beans with tamale, chili, tortillas, rice, porridge, meat, sour cream, egg, bread, cheese, incaparina, chicken, barley, pork crackling	79	5.9
Egg with coffee, tamale, beans, rice, sausage, bread, chili, ham, chicken, pork crackling, nachos, cheese, strawberry shake, noodles, tortillas, milk	58	4.3
Meat with water, tomato sauce, chirmol, coffee, chili, tamale, tortillas, porridge, beans, cheese, chicken	25	1.9
Chicken with rice, potato, small tamale, tortilla, coffee, beans, bread, milk	20	1.5
Tortilla with rice, coffee, beans, eggs, cheese, sausage, tomato, porridge, soup	27	2.0
Tamale with meat, bread, rice, coffee, chili, beans, cheese, broth, egg	21	1.6
Bread with water, coffee, beans, tortilla, egg, cheese, coffee, porridge, meat	15	1.1
Coffee with bread, tamale, rice, chili, chicken, chocolate	12	0.9
Cheese with eggs, sausage, tortilla, potatoes, coffee, small tamale	11	0.8
Soup with chicken, porridge, small tamale, tortilla, water, coffee	9	0.7
Tomato with sausage, tortilla, egg, chili, meat, coffee	5	0.4
Sausage with egg, rice, porridge, tamale, coffee	6	0.4
Chili with coffee, tortillas, small tamale	4	0.3
Broth with small tamale, egg, barley	4	0.3
Noodles with small tamale, incaparina, tortilla, coffee, meat	3	0.2
Cereal with soup, egg, sausage	2	0.1
	299	22.2

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

The table above reveals that **22.2%** of boys and girls surveyed have a diet with more than two food items, with recurrence of beans, egg and corn (tortilla/tamale). Although the combination of these foods is adequate, it is conditioned to the quantities being consumed, a fact not investigated in this baseline study.

Table 19: Frequency of children from 3rd grade with a diet of less than two food items for breakfast

Food type	Number	%	Food Type	Number	%
Avocado only	3	0.2	Noodles only	16	1.2
Avocado with a small tamale or tortilla	2	0.1	Cookies only	1	0.1
Leafy greens only	4	0.3	Broad bean only	2	0.1
Leafy greens with something else (coffee, bread)	2	0.1	Milk only	1	0.1
Rice only	6	0.4	Milk with bread	1	0.1
Bread only	5	0.4	Potatoes only	4	0.3
Porridge with milk, noodles or bread	3	0.2	Cake only	1	0.1
Beans only	50	3.7	Plantain only	1	0.1
Broccoli, coffee and tamale	1	0.1	Plantains with another ingredient (milk, coffee, bread)	2	0.1
Coffee only	1	0.1	Cheese only	11	0.8
Broth only	6	0.4	Sauce, coffee and tortilla	1	0.1
Meat only	25	1.9	Chocolate only	1	0.1
Chicken only	17	1.3	Sausage only	7	0.5
Bone-in meat with broth	1	0.1	Sardines only	1	0.1
Barley, bread, eggs and tamale	1	0.1	Soup only	9	0.7
Cereal only	2	0.1	Small tamale only	2	0.1
Cereal and milk	8	0.6	Tomato only	1	0.1
Chili only	5	0.4	Tortilla only	2	0.1
Chow mien noodles only	2	0.1	Carrot only	1	0.1
Sausage only	1	0.1	Chuchito and coffee	1	0.1
Chuchito (small tamale with a piece of meat in it) only	1	0.1	Cauliflower only	1	0.1
Cabbage only	2	0.2	Noodles with two small tamales	1	0.1
Spaghetti only	6	0.4	Egg only	54	4.0
Spaghetti with another ingredient (tortilla and coffee)	1	0.1	Sour cream only	2	0.1
Stew only	1	0.1			
	156	11.6		124	9.2

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Based on table 19, **20.8%** of children have a very poor diet during breakfast with the consumption of one or two food items.

- d. Survey conducted with 6th grade boys and girls. The same process was conducted with 1,040 boys and girls from 6th grade, of which **49.1%** affirmed having eaten breakfast the *day* of the

survey, **3.3%** reported not having breakfast and **47.6%** did not respond. The food items mentioned more often were the following:

Table 20: Frequency of children from sixth grade with a diet with more than two food items for breakfast

Food Type	Frequency	Percentage
Egg with beans, small tamale, tortilla, tomato, onion, beans, rice, porridge, coffee, bread, sausage, ham, plantain, “cornflakes”, pancakes, barley, cheese, banana, noodles, chirmol, cookies, milk, pinol (roasted corn drink), chocolate and cauliflower	138	13.3
Beans with egg, tortilla, water, porridge, rice, coffee, small tamale, oat meal, meat, pork crackling, sour cream, egg, Incaparina, bread, cheese, chili, sausage, milk, chirmol, and leafy greens	114	11.0
Tortilla with chili, egg, coffee, beans, cheese, fish broth, avocado, meat, water, porridge, noodles, Incaparina	23	2.2
Rice with another ingredient (chirmol, beans, tortilla, Incaparina, sugary drink, egg, sausage, cabbage, potato, coffee)	20	1.9
Cheese with beans, small tamale, milk, egg, tortillas, coffee, tomato, sausages, cereal	18	1.7
Coffee with cream, egg, beans, bread, tortilla, tamale, rice	14	1.3
Broth with meat, vegetables, tamale, cow’s foot, chicken, noodles, tortilla, coffee	14	1.3
Tamale with cheese, coffee, tortilla, rice, milk, meat, spaghetti, egg, beans	13	1.3
Meat with small tamales, tortilla, coffee, Incaparina, chicken, barley	10	1.0
Chicken with broth, tortillas, coffee, rice, sausage	8	0.8
Bread with beans, egg, tortilla, cheese, milk, porridge, tamale	6	0.6
“Cornflakes” with milk, Coffee, bread, vegetables, egg	5	0.5
Soup with chili, noodles, tortilla, egg, an instant soup, Coffee, small tamales, bread	5	0.5
Avocado with tamale, small tamale, Coffee, tortilla, Incaparina	3	0.3
Chao mien with a small tamale, beans, tortilla and coffee, tortilla y café	3	0.3
Pancakes with plantains, rellenitos (made of plantains and beans), tortillas and coffee	1	0.1
Total	395	38.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

As shown in table 20, **38.0%** of children surveyed have a diet with more than two food items, with recurrence of beans, egg and corn (tortilla/tamale). Although the combination of these foods is adequate, it depends on the quantities being consumed, a fact not investigated in this baseline study.

Table 21: Frequency of children from sixth grade with a diet of less than two food items for breakfast

Food Type	No.	%	Food Type	No.	%
Avocado only	1	0.1	Potato only	2	0.2
Rice only	4	0.4	Potatoes with another ingredient (fried foods, sauce, tortilla)	2	0.2
Broccoli only	2	0.2	Cake only	1	0.1
Coffee only	3	0.3	Fish with chirmol	1	0.1
Meat only	1	0.1	Plantains and egg	2	0.2
“Cornflakes” only	6	0.6	Cheese, tamale and coffee	1	0.1
Barley, bread, eggs and tamale	1	0.1	Protemás (soy protein blend) only	2	0.2
Cereal only	2	0.2	Protemás with spaghetti	2	0.2
Cereal and milk	8	0.8	Cheese only	4	0.4
Chili, tortilla and coffee	1	0.1	Cabbage and tortilla	1	0.1
Chuchito, a small tamale and coffee	1	0.1	Sausage only	5	0.5
Noodles (spaghetti) only	5	0.5	Sausage with another ingredient (tortilla, coffee and chili)	2	0.2
Noodles with another ingredient (tortilla, barley, protemás)	10	1.0	Sardines with tortilla	1	0.1
Leafy greens	5	0.5	Tortilla only	1	0.1
Leafy greens with another ingredient (small tamale, coffee, tortillas, fruit)	3	0.3	Soup only	4	0.4
Egg only	14	1.3	Small tamale only	3	0.3
Milk with bread only	2	0.2	Carrot only	1	0.1
Bread and coffee only	8	0.8	Lettuce and radish with beans	1	0.1
	77	7.4	Bread only	1	0.1
			Bread with water and a slice of water melon	1	0.1
				38	3.7

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

11.1% of sixth graders ate at least one food item for breakfast the day of the survey. Although the table shows a wide range of foods, the common denominator is the intake of one food item and a small percentage of students who ate two.

The information provided by the children match with the information provided by their fathers/mothers. Although boys and girls from both grades affirmed that they “ate breakfast in the morning”, the percentages (**20.8%** for third graders and **11.1%** for sixth graders) indicate that the food they ate was of poor quality and quantity. This has a direct impact in the child’s physical and mental status due to the lack of nutrients that allow the adequate functioning of the child’s body and consequently affects his/her school achievement.

The students’ caloric intake standards⁴² are conditioned by their age. Boys in ages 9-10 (3rd grade) require a daily intake of 2,150 calories while girls in the same age need 1,850 calories. Boys in ages 12-13 (6th grade) need 2,310 calorie intake and girls in the same age need 2,050 calories.

A little over **50%** of boys and girls from both 3rd and 6th grades did not respond to the survey probably because they could not handle the tool⁴³ in spite of its simplicity and brevity.

e. Food in schools

- Number of days in which a cup of porridge is provided to boys and girls in schools. **98.6%** of principals affirmed that the snack is given daily (180 days per year) for five days a week.
- The organization source of the food as snack. **89.9%** reported that the funds to purchase food come from the MINEDUC.⁴⁴
- Food preparation in school. In **53.6%** of the schools, it is the mothers of students who prepare the snack; in **26.1%** of the schools, it is cooked by hired cooks; in **5.8%** of the schools, the snack is prepared by students’ mothers and fathers. In **2.9%** the snack is cooked by the Parent Teacher Associations (PTAs) and in **1.4%** of the schools it is cooked by the students’ fathers.

The information that the TPAs provided through focus groups is in line with the data provided by the principals in relation to the mothers being the ones who prepare the snack - they take turns assigned by the teachers (porridge) and to a lesser extent, the janitors and single mothers are hired to do so.

⁴² FAO/WHO/UN. Energy and Protein Requirements. World Health Organization Technical Report Series 724. Geneva 1985

⁴³ Data about breakfast and food type was collected through a form where the students had to answer simple questions about what they had eaten or not for breakfast that day and the type of food eaten. No interviews were conducted.

⁴⁴ The remaining **9.9%** reported other sources such as the government, the government’s rotating fund and DIGEPSA.

According to TPAs, the procedure conducted by the cooks to prepare the snack is as follows: 1) tie back their hair and wash their hands, 2) collect firewood, 3) boil the water, 4) cook the Incaparina or the porridge,⁴⁵ 5) let it cool down, 6) serve, 7) do the dishes and pots, and 8) sweep the kitchen.

- f. Opinion of the principals about the boys and girls who attended school without breakfast. **41.7%** (average) of the principals expressed that 0-10% of boys and girls go to school without a breakfast, which is in line with the data provided by children - **2.7%** for 3rd graders and **3.3% for 6th graders**.

Table 22: Principals' opinion about the percentage in which children attend school without having eaten breakfast per grade

Percentage of boys and girls who attend school without having eaten breakfast	1st	2nd	3rd	4th	5th	6th	Average
	%	%	%	%	%	%	%
0 - 10	35.3	35.3	38.2	41.2	50	50	41.7
11 - 20	10.3	13.2	16.2	14.7	11.8	10.3	12.8
21 - 30	11.8	5.9	5.9	2.9	4.4	2.9	5.6
31 - 40	5.9	7.4	4.4	5.9	2.9	4.4	5.2
41 - 50	13.2	16.2	16.2	16.2	11.8	11.8	14.2
51 - 60	7.4	10.3	5.9	7.4	10.3	5.9	7.9
61 - 70	4.4	4.4	4.4	1.5	2.9	2.9	3.4
71 - 80	5.9	1.5	3	2.9	1.5	5.9	3.5
81 - 90	2.9	2.9	2.9	2.9	2.9	2.9	2.9
91 - 100	2.9	2.9	2.9	4.4	1.5	2.9	2.9
	100	100.0	100	100	100	100.0	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

- g. Schools without snacks available. Only **5.8%** of the schools surveyed did not have food available for children.

⁴⁵ They stated the porridge needed to be boiled for at least 10 minutes so the children could drink safely.

4.4 R1.3-Matrix 4: Measurement of indicators and variables for result 1.3: Improved Student Attendance

Description		Indicator (s)	Variable(s)	Baseline Result
Result 1.3	Improved Student Attendance	1.3 % of boys ⁴⁶ regularly (80%) attending USDA supported classrooms/schools	1. Monthly attendance of 1st graders ⁴⁷ 2. Monthly attendance of 4th graders ⁴⁸	1. 60.0% of children from 1st grade attended school 80% of scheduled days per month 2. 71.7% of 4th grade students attended 80% of the scheduled days per month
		1.3b % of girls regularly (80%) attending USDA supported classrooms/schools	1. Monthly attendance of girls in 1st grade ⁴⁹ 2. Monthly attendance of girls in 4th grade ⁵⁰	1. 63.3% of girls from 1st grade attended 80% of the scheduled days per month 2. 70.0% of girls from 4th grade attended 80% of the scheduled days per month
		1.3.1 Number of students who participate in extra curriculum activities		1. 1,820 students participate in extracurricular activities
		1.3.1a Number of school governments established	1. Number of schools with school governments	1. 95.7% of schools with a school government
		1.3.2 Average number of school days missed by students due to illness	1. Average number of school days per year missed by boys and girls due to illness	1. 67.6% of students missed school from 1-5 days per year

⁴⁶ **75.0%** of interviewed teachers did not have the 2013 school year attendance book available.

⁴⁷ During 2013

⁴⁸ During 2013

⁴⁹ During 2013

⁵⁰ During 2013

1.3.3	Number of educational facilities (school buildings, classrooms, and latrines) rehabilitated / constructed as a result of USDA assistance	1. educational facilities rehabilitated /constructed	1. 0.0% of facilities rehabilitated/built
1.3.4	% increase in boys enrolled in school as a result of USDA assistance ⁵¹	1. School enrollment 2013 - 2014	1. 2.0% for boys
1.3.4a	% increase in girls enrolled in school as a result of USDA assistance	2. School enrollment 2013 - 2014	1. -1.5% for girls
1.3.5	% of parents in target communities who can name at least three benefits of primary education	1. Parents who know about the benefits of primary education	1. 96.4% of parents who mentioned at least three benefits of primary education

⁵¹ It cannot be established if boys and girls' attendance increased in schools because there is no census information available. This aspect should be considered to measure the achievement of the indicator as a result of project interventions.

**Indicator 1.3: % of boys regularly (80%) attending USDA supported classrooms/schools;
Indicator 1.3b: % of girls regularly (80%) attending USDA supported classrooms/schools**

To measure each indicator, the consulting team agreed with PRODESSA, APCC and CRS to obtain the 1st and 4th grade students' attendance information from the records kept by the teachers for school year 2013. Considering the possibility that those registries may not exist or were not going to be available, the study proposed to request an "attendance estimate" where the former was not available. Indeed, the majority (75.0%) of the teachers no longer had their attendance books from 2013 (these were thrown away, burnt or lost). Hence, the data presented in this report is a combination of the "attendance estimate" provided by the teachers and the data obtained from the revision of the existing attendance books (25.0%); consequently, this data is not statistically verifiable.

Indicator 1.3.1: Number of school children who participate in extra-curricular school activities

The variables identified and measured for this indicator are as follows:

- a. Principals' knowledge of "Spaces to grow". **85.5%** of principals reported not knowing this initiative, but **95.7%** expressed their interest in having them in their schools.
- b. Existence of "Spaces to Grow in Schools". **5.8%** of schools (12 of the sample) have "Spaces to Grow" where they conduct the following activities: homework leveling, recreation and personal growth (values, respect).
- c. Parent's interest that their children participate in school activities in the afternoon. **71.9%** of parents were in favor of their children participating in extracurricular activities (Spaces to Grow) and offered some ideas about the activities that could be implemented. These are presented in priority order in the following table:

Table 23: Extracurricular activities proposed by students' parents

Extracurricular Activities Proposed	Number of times mentioned
Cooking course for girls	42
Reinforcement in literacy, math and the main school subjects and support to do their homework	20
Sports	3
Games, energizer activities and drama	2
Courses on other languages	2
Others: Courses on handicrafts, music, IT, typing and embroidery	5

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

71.9% of parents are willing that their boys and girls participate in extracurricular activities. A response that attracts attention among the activities proposed by parents is the “cooking course for girls” and the number of responses which reinforces the traditional role of women. Consequently, this study recommends implementing activities to raise the awareness of the education community about the potential and actual needs of girls to have integral development.

5.5% of parents conditioned the attendance of their children to spaces to grow to the following factors: a) that the project provides information about the objectives of the activities, b) as long as boys and girls have the time to do so, c) it should not be every day because their children have other tasks assigned; d) if all student population attends and if it is approved by the education authorities; and e) if the project provides the children with food (lunch).⁵²

13.5% of parents were against this proposal claiming that their children have to do their homework and help with the chores, and that they already went to school in the morning and they would find it boring to return again in the afternoon. **9%** did not provide their opinion.

Indicator 1.3.1a: Number of school governments established

⁵² A concern expressed by parents is that students will not be able to go home to eat lunch and come back because some students live far from school.

- a. School governments with commissions. **71.0%** of the principals and **68.3%** of the teachers mentioned that the school governments work through commissions/committees.
- b. Gender equity in school governments. **95.7%** of the principals and **85.0%** of teachers affirmed that there are boys and girls participating in the school governments.⁵³
- c. Positions within the school governments occupied by girls. According to the average numbers in table 24, the majority of the girls occupy secondary positions while boys usually occupy the positions of “president and vice president.” This reveals the exclusion of girls and the need to foster activities that help level their participation in quantity and quality.

Table 24: Percentage of girls’ participation in school governments per role

Position	As reported by Principals	As reported by Teachers	Average
President	30.4	20.0	25.2
Vice-president	23.2	30.0	26.6
Secretary	50.7	40.0	45.3
Treasurer	37.7	25.0	31.3
Vocal	59.4	35.0	47.2

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

- d. Interest in creating a school government with the participation of boys and girls. **100%** of principals and **86.7%** of teachers expressed their interest to create, strengthen and continue promoting the participation of boys and girls in the school governments.

Indicator 1.3.2: Average number of school days missed by students due to illness

The data for this indicator were obtained from the information provided by the teachers of the sample schools. The highest percentage (67.6%) refers to 1-5 school days missed per year due to illness and there was an exceptional case of one child that missed 70 school days per year.

⁵³ The baseline does not explore the number of boys and girls participating in school governments.

Table 25: Percentage of teachers who commented about the number of school days missed by students due to illness

Number of days missed by students due to illness	%
From 1-5 days/year	67.6
From 6-10 days/year	22.9
From 11-15 days/year	4.7
From 16-20 days/year	2.9
From 21-25 days/year	1.0
From 26-30 days/year	0.7
Up to 70 days/year	0.2
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Indicator 1.3.3: Number of educational facilities (e.g. school buildings, classrooms, and latrines) rehabilitated / constructed as a result of USDA assistance

The information for this indicator was obtained through observations of infrastructure in 12 schools and 11 focus groups with the PTAs. These allowed collecting qualitative information about the use, functioning and expectations of the education community in terms of infrastructure.⁵⁴

a. Kitchens

The observation of the infrastructure allowed the consulting team to confirm that in **83%** of the schools, the kitchens are used to prepare the snacks and other food and to store the cleaning and kitchen supplies.

Table 26: Usage of the kitchen and storeroom

Usage of the kitchen and storeroom	%
To prepare the snack, other food and fruit. Dish washing, and to store tables, appliances, brooms, and kitchen supplies	83.0
The kitchen is not being used because the chimney is broken. The snack is prepared in another area.	11.6
It is used to store firewood	5.4
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Inadequate hygiene conditions were found in 63% of the kitchen (the floor and walls were dirty and there were bugs and smoke in them).

⁵⁴ For more information on quantitative data, refer to the infrastructure assessment conducted by APCC.

Table 27: Hygiene conditions of kitchen and supplies

Hygiene conditions of kitchen and supplies	%
The dishes are clean and stored in an orderly fashion	15.0
The walls are painted and are clean	11.0
The kitchen is clean	11.0
Everything is dirty because after preparing the snack, the persons who cooked it had to attend a meeting. The floor was dirty with dust. It had not been swept. There were traces of slug slime in the kitchen table. The walls had smoke spots on them and there was smoke in the kitchen.	63.0
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

In **45%** of the kitchens, the people who prepare the food washed their hands and implemented hygiene measures while in **50%** of the schools, people in charge of food preparation did not tie back their hair and did not wear an apron.

Table 28: Hygiene conditions of the people who prepare the food in school

Hygiene conditions of food preparation	%
Those who prepare the food wash their hands	37.5
Food preparation is made with hygiene	8.3
Two men who prepared the snack did not wash their hands	4.2
Women who prepared the snack did not tie back their hair and did not wear an apron	50.0
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

In **83%** of the kitchens, there were no animals/insects inside the kitchen

Table 29: Animals and insects in the kitchen

Animals in the kitchen	%
There are no animals/insects in the kitchen	83.4
There are flies in the kitchen	16.6
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

In **50.6%** of the schools observed, there were no children in the kitchen, in **41.6%** of the schools there were a total of 18 children from all ages in the kitchen, the majority were the children of the mothers who were preparing the snack.

Table 30: Children in the kitchen

Children in the kitchen	%
Of the children observed in the kitchen (18), eight were in ages 2-4: One was eating near the flat cooking surface, six were being carried on the back by their mothers who were cooking and three were students	41.7
There are no children in the kitchen	50.0
Small children come and exit the kitchen	8.3
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

b. Water in schools

In **69%** of the observed schools, the water was being used appropriately: to prepare food, to drink, to wash people's hands, to do the dishes, to mop, to do the dishes and to clean the bathrooms.

Table 31: Uses of water in schools

Uses of water in schools	%
Uses of water: to prepare food, to do the dishes used to prepare the snack, to wash people's hands, to drink, to wash the mops and to clean the bathrooms	69.0
There is no water in the school, the children bring water from their homes to wash the utensils and prepare the snack. Some containers with a little water brought from the river were observed	31.0
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

In **27%** of the cases, boys and girls did not drink tap water. No water wastage was observed in **53%** of the schools.

Table 32: Availability of drinking water in schools

Drinking water	%
There were no boys or girls drinking water	36.4
There was no water in school	27.3
The boys and girls did not drink tap water	27.3
Children who drank water from the tap	9.0
Total	100.0
Water Wastage	%
There is no water wastage	71.0

There is water wastage observed in buckets and around the washing basin	20.0
Do not have enough water; hence, there is no water wastage	9.0
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

c. Bathrooms/latrines observed in schools

In terms of infrastructure, it is the bathrooms/latrines that present the most critical conditions. Observation allowed the consulting team to confirm that only in **35.7%** of the schools there were separate bathrooms for boys, girls and teachers. In the rest of the schools, the bathrooms did not have a sign that identifies them for boys/girls/teachers and these are not working; there are no bathrooms specifically for boys, girls or teachers.

Table 33: Bathrooms/latrines in schools

Bathrooms are separate for boys, girls and teachers	%
Yes, there are separate bathrooms for boys, girls and teachers but they do not have a sign that says so	35.7
Everyone use the same bathrooms. The men's room is closed due to bad smell and ladies' room is closed due to malfunctioning	21.4
Schools with only one pit latrine for boys and girls; or with a bathroom built in an area with poor soil conditions; hence, it is not being used.	21.4
There are three latrines, two for teachers and one for boys and girls	7.14
Male teachers and boys use one latrine while female teachers and girls use another	7.14
There is one restroom used by boys and girls and the principal. There are no teachers.	7.14
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

46% of the bathrooms were clean, illuminated and ventilated, but did not have a trash can, soap or a towel to dry their hands. **37.5%** of the bathrooms were dirty, mostly due to the lack of water supply in school and had no needed supplies such as a towel, soap and trash can.

Table 34: Hygiene conditions in school bathroom/latrines

Hygiene conditions	%
The toilets or latrines are dirty, scale build-up. There is no towel, soap or a trash can. There is no running water in the school; therefore people cannot wash their hands	37.5

There is a wastebasket next to each latrine	4.0
The bathrooms are clean, illuminated and ventilated but there is no trash can, towel or soap	46.0
They have water for hand washing but not for flushing	12.5
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

d. Importance of infrastructure

The study allowed the consulting team to confirm PTA's adequate understanding of the use of school infrastructure as they believe that the kitchen is important to protect and prepare food in the school and bathrooms are important to prevent pollution.

Interviewees expressed that some schools currently lack water supply. Therefore, they get water from a neighbor or from the children who bring water from their homes. PTAs' members expressed that If they had running water they could improve their hygiene practices, prepare food and keep the bathrooms clean.

The infrastructure priorities identified are the following: build bathrooms (because there are schools that only have latrines with metal sheeting as walls and roof), build more classrooms, build a water system and get a flat cooking surface (plancha) to prevent smoke from cooking. Only one school had everything needed as expressed by the interviewees.

e. School store rooms

PTAs assessment of the conditions of the store rooms was the following: **53.33%** reported that they meet the minimum conditions, they are clean and are large, they are in a good location and although some of them are small, they are kept in an orderly fashion. **26.66%** reported that schools do not have specific store rooms; hence, they use community warehouses where they keep the food along with construction materials and tools, which affect their health and hygiene. **20.0%** affirmed that the warehouse is located within the school facilities where they keep the food but do not have appropriate shelves. Some windows are broken and are small, leaving room for insects to sneak in.

f. Municipal authorities opinion in relation to the Project and infrastructure

1. Municipal officials interviewed in the baseline study expressed having little knowledge about the "Learning for Life" project. This information is presented in the table below.

Table 35: Municipal officials' knowledge of the project in four target municipalities

Project's Knowledge	Response per Municipality
"We do not know about it because it is from a new NGO".	San Bartolo Aguas Calientes
"We are just being told about the Project this year (2014)".	Santa Lucía La Reforma
"We do not know about the Project and we need to be informed about it".	Momostenango
"We do know about the Project. The Project will benefit schools with food."	San Andrés Xecul

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

2. Municipal budget allocation for school infrastructure in 2014. The three municipalities that allocated funds for 2014 will use it for building a perimeter wall or fence around the school, making improvements, paying teachers' salary and supporting educational events (uniforms, Independence Day celebrations and parades, among others).

Table 36: Municipal budget allocation for school infrastructure for 2014 per municipality

Municipality	Municipal Budget allocation for 2014 (%)
San Bartolo Aguas Calientes	0.0
Santa Lucía La Reforma	60.0
Momostenango	3.0
San Andrés Xecul	10.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

3. Percentage of schools in each target municipality that will be improved by the municipality in 2014. Improvement works are related to enlargement and remodeling.

Table 37: Percentage of schools that will be improved with municipal funds in 2014 per municipality

Municipality	Schools to be improved (%)
San Bartolo Aguas Calientes	2.0
Santa Lucía La Reforma	75.0
Momostenango	6.0 a 7.0
San Andrés Xecul	3.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

4. Coordination established among CRS, PRODESSA, APCC and the four project municipalities for school infrastructure. The following is the opinion of municipal officials about the coordination established with CRS or implementing partners for school infrastructure.

Table 38: Opinion of municipal officials about coordination established with the project

Knowledge about the project	Municipality
There is no coordination because we do not have any information about the project and its components.	San Bartolo Aguas Calientes
Conrado de la Cruz is planning meetings to inform us about the Project, but at the time of the interview, no coordination has been established yet.	Santa Lucía La Reforma
There was coordination with the Mayor and not with the Municipal Planning Office.	Momostenango
There have been conversations between the project and the municipality about school kitchens and how to equip them.	San Andrés Xecul

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

5. Municipality support to education in target municipalities. The activities conducted by the municipalities to support formal education are included in the following table:

Table 39: Interventions implemented by the four target municipalities to support education

Interventions Implemented in the Municipalities	Municipalities
Musical instrument and snacks for fairs	San Bartolo Aguas Calientes
Provision of school supplies for teachers and students	Santa Lucía La Reforma
Improvement of infrastructure, furniture and equipment, payment of teachers' salaries, support to school parades	Momostenango
Snacks, musical instruments for parades, soccer uniforms and soccer balls	San Andrés Xecul

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

The consulting team considers that the interest and the support that the municipalities authorities give to education is positive and believe it is an important step to implement the Municipal Code. However, it is evident that these isolated contributions do not respond to the education needs defined in the municipal development plans. The Project could influence this by fostering and promoting joint planning that includes school infrastructure, provision of didactic materials, strengthening of school governments, PTAs, and by raising the awareness of the members of COCODES so that they incorporate education strengthening as a priority into their work.

Indicator 1.3.4: % increase in boys enrolled in school as a result of USDA assistance

Indicator 1.3.4a: % increase in girls enrolled in school as a result of USDA assistance

According to MINEDUC's annual statistics, boys' enrollment in four municipalities targeted by the Project decreased **2.95%** and **4.3%** among girls during 2011-2012. Data provided by the CTAs about boys and girls' enrollment in four project target municipalities in 2013-2014 are indicated as follows:

Table 40: Boys and girls' school enrollment in 2013-2014 per municipality

Municipality	2013		2014	
	Boys (%)	Girls (%)	Boys (%)	Girls (%)
Average enrollment	66.0	61.5	68.0	60.0
San Andrés Xecul	69.0	56.0	67.0	55.0
Momostenango	60.0	40.0	65.0	35.0
Santa Lucía La Reforma	90.0	95.0	95.0	95.0
San Bartolo Aguas Calientes	45.0	55.0	45.0	55.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

In 2013-2014, average enrollment increased **2.0%** among boys but decreased **1.5%** among girls. The enrollment rate among girls in four target municipalities from 2011 to 2014 decreased in comparison to boys' attendance rate that stayed uniform (it decreased in the first period of time and it increased in the second period of time). The permanent declining trend of enrollment among girls means that it is important to raise the awareness of the education community about the importance of promoting girls' participation in all the education process, beginning with school enrollment.

Indicator 1.3.5: % of parents in target communities who can name at least three benefits of primary education

As table 41 shows, parents are clear about the importance of primary education. **31.2%** of parents value that their children learn to read write and perform basic math operations; **22.1%** of parents expressed that the importance relies on learning for life and having a better future. This is related to **15.6%** of parents who see job opportunities as an important benefit of education.

Table 41: Benefits of education mentioned by parents

Benefits of education	%
Learning how to read, write, add and multiply	31.2
Learning about life to be able to succeed and have a better future and become someone in life	22.1
Getting a job as a teacher, to become a professional	15.6
Developing one's mind and memory and learn life-skills abilities	8.5
So that our children do not have the same future that we as their parents had	5.0
Learning to speak well in Spanish	4.0
Being more active and intelligent	2.5
Making money, to start a business	2.5
Going to other places and broaden their knowledge	2.0
Letting go of fear and participate	2.0
Learning how to draw and paint	0.5
Learning how to respect others	0.5
He/she does not know	1.5
Other responses ⁵⁵	2.1
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

⁵⁵ Responses not related to the benefits of education

4.5 R1.4-Matrix 5: Measurement of indicators and variables for result 1.4: Strengthened capacity of government officials

Description		Indicator (s)	Variable(s)	Base Line Results
Result 1.4	Increased capacity of government officials	1.4.1 Number of DIEDUC and DIGEFOCE staff who have increased their capacity to implement their roles and responsibilities	1. Trained staff	1. 2 CTAs of four target municipalities have been trained 2. One DIGEFOCE official has been trained in the four target municipalities
		1.4.3 % of MINEDUC disbursements (financial or material) which arrive on time to the appropriate institution.	2. Disbursements received on time	1. 13.1% of the disbursements arrived on time in 2013 ⁵⁶
		1.4.4 Number of PTAs contributing to their school as a result of USDA assistance	1. PTAs created 2. PTAs contributing to their school	1. 100.0% ⁵⁷ of schools have a PTA created 2. 59.4% of the PTAs contribute to their school
		1.4.4a Number of PTAs that have developed a school improvement plan	1. School improvement plans developed by PTAs	1. 0.0% of PTAs have developed (implemented) a school improvement plan

⁵⁶ Information provided by school principals.

⁵⁷ 100% means that all schools of the sample (69) have a PTA created. This indicator has two variables "created" and "contributing to schools". This data refers to "created".

Indicator 1.4.1: Number of DIEDUC and DIGEFOCE staff who have increased their capacity to implement their roles and responsibilities

The baseline study revealed that CTAs were trained on school gardens, active participation & moral values, HIV, food security, educational reform, management and development, sexual education and administrative issues. They also received training on their functions and responsibilities, use of reading materials, school supervision, data registration and analysis. On the other hand, a DIGEFOCE official reported that he was trained on how to conduct a school needs assessment, use of reading materials, school supervision, data registration and data analysis. In general, this training should be complemented with topics that strengthen the capacity of key MINEDUC staff to design and allocate a budget for education and improved school feeding plans and policies as the project has proposed.

Indicator 1.4.3: % Percentage of MINEDUC disbursements (financial or material) which arrive on time to the appropriate institution.

The information for this indicator was obtained through interviews with opened questions to principals and CTAs, which were entered into an electronic sheet. The results are the following:

a. MINEDUC disbursements arrived on time to schools.

For CTAs, **67.5%** of the MINEDUC's disbursements arrived on time to schools in 2013. This was confirmed by **13.1%** of teachers. The remaining teachers (**86.9%**) reported that the disbursements did not arrive on time due to: a) lack of funds from the MINEDUC, b) in general the MINEDUC does not prioritize or look for solutions to problems; c) there was poor coordination, and d) political reasons.

To illustrate this situation, in 2013, the snack arrived in the months of February, April, May, June, October and December; school supplies and the set of didactic materials arrived in March and April and the school-fees funds allocated by the MINEDUC (known as "gratuidad" funds) corresponding to school year 2013 were not received until November 2013.

b. MINEDUC's funds are allocated in the amounts necessary

90.6%⁵⁸ of the principals expressed that the 2013 funds were not allocated in amounts sufficient to meet the school needs due to the following: 1) Schools have plenty of needs related to didactic materials and

⁵⁸ **9.44%** of principals stated that the MINEDUC's funds were sufficient and were used to prepare the snack (purchase of porridge, cinamon, sugar, salt and milk) to purchase cleaning supplies, a set of didactic materials and to cover school fees (*gratuidad*). Although they were sufficient, they arrived late and in some cases, these were received in multiple disbursements.

infrastructure; therefore, funds are not enough for the snack; 2) budget allocation is based on the statistics of the number of students enrolled the previous year; consequently, it is not enough for all students actually enrolled in the current year; and 3) the didactic materials are too expensive and there are not enough funds to purchase them for all classrooms.

The services most affected are: the provision of snack (for example, in one of the schools the snack arrived for 42 children but in actuality there were 52 students. In another school, they received the snack for 8 students but there were 15) and school supplies and didactic materials (in **89.6%** of the schools the materials were not enough for all students). According to school principals, this is due to administrative controls based on outdated MINEDUC statistics that prevent schools from purchasing the supplies actually needed in each school.

c. Where does the funds allocated to schools go?

The total funds allocated to the schools in 2013 went to: a) school fees (*gratuidad*), b) small repairs in schools; c) feeding-school snack; d) school supplies and e) set of didactic materials.

Indicator 1.4.4: Number of PTAs contributing to their school as a result of USDA assistance.

This indicator has two variables “created” and “contributing to schools”. The baseline study revealed that there are PTAs created in 100% of the sample schools. The variable “contributing to schools” was operated as follows:

- a. Activities conducted by PTAs. **59.4%** of PTAs work through commissions/committees. PTAs reported that their activities have been focused on:
- Support the school snack, which includes purchasing and transporting food supplies and report writing
 - Support to school infrastructure to build the school, the kitchen, installation of electric power system and infrastructure maintenance.
 - Attention to children education, ensuring that they attend school and raising parents’ awareness so that they send them to school and support their education.

12.5% of PTAs reported that they have not conducted any activities to support the school because they are in the planning phase; **6.0%** of PTAs reported that parents are not in favor of supporting the work being done in schools as they consider it a waste of time.

- b. Knowledge of the functions of the PTAs. **100.0%** of PTAs mentioned that their functions are the following:⁵⁹
- **32.3%** reported that it is to ensure the provision of the snack, transportation of supplies and liquidation of expenses.
 - **32.3%** reported it is to anticipate to risk situations (potential landslides)⁶⁰.
 - **17.6%** reported it is to meet school needs, solve school problems (including school supplies), promote parents' participation and participate in trainings.
 - **11.8%** reported it is to participate in infrastructure activities: get funds for balconies, build a store room, enlarge the kitchen and build a basic drainage system.
 - **5.9%** reported it is to clean the school and look after children's hygiene.

The activities conducted are in line with the functions and responsibilities that PTA members reported.

- c. Training PTAs. **89.9%** of PTAs have participated in some of the trainings organized by MINEDUC in the following topics:
- Funds management and liquidation
 - Food handling and preparation
 - Child feeding
 - Hygiene in the store room
 - Collective work
 - Functions and responsibilities of the PTA
- d. Interest in creating a network of PTAs in each municipality. **69.23%** of PTAs were in favor of creating a PTA municipal network, which will contribute to: 1) advocate at municipal level to have a greater impact for the delivery of textbooks, food to prepare the snack and other supplies to meet school needs, and 2) exchange ideas and have more influence to make school improvements. Only in two of the schools⁶¹ PTAs were not interested in creating a network, claiming that each school has different needs and creating a network would mean investing more time, which they do not have.
- e. PTA perspective on the importance of children's education.

⁵⁹ In Momostenango, all COCODES agreed that their role is to anticipate potential landslides.

⁶⁰ Information provided in Momostenango.

⁶¹ One landslide in Momostenango and another in San Bartolo Aguas Calientes.

PTAs as well as parents identified several advantages of their children's education, which are presented below in priority order:

Table 42: Benefits of education mentioned by PTAs

Benefits of Education	%
So that children have a better future and have better living conditions to what their parents had	40.9
To get a job	36.4
To be good children and to have the skills to succeed and so that they are not discriminated	13.6
To support activities and proposals presented by the community	9.1
Total	100.0

Source: Learning for Life Project Baseline Results, Guatemala, April 2014.

Indicator 1.4.4a.: Number of PTAs that have developed a school improvement plan

- a. School improvement plans developed by PTAs. At the time of the investigation, none of the PTAs had developed (implemented) an improvement plan; however **26.7%** (18) affirmed having one plan that included repairs to the kitchen, store room for food, bathrooms, water, flat cooking surface, construction of more classrooms (so that each grade receives classes in their own classroom) and enlargement of the school as the number of students have overwhelmed the capacity of the school facilities.
- b. Existence of a school improvement plan. **63.8%** of principals affirmed that their schools have an improvement plan. Of these, **26.1%** showed the actual plan to the interviewer.
- c. What does the school improvement plan include?⁶² Of the principals who affirmed having an improvement plan, **64%** reported that the plan included the following components:⁶³
 - Infrastructure and maintenance (kitchen, store room, perimeter wall, soccer fields, balconies, computer lab, library and classrooms), maintenance of the potable water system and power system for some classrooms.
 - Coordination and organization of children, PTAs, CTAs, community mayor and the Learning for Life Project to hold periodic meetings with students' parents.
 - A healthy school plan which includes school cleaning, waste management and children's hygiene.
 - Distribution of the snack.

⁶² The study did not make a value judgment on the quality of these plans.

⁶³ **36.0%** of school principals did not remember what the improvement plans included.

- Cultural issues such as the calligraphy Olympics, poem and singing contests, singing and sports
- Administrative aspects

The following issues were less frequently mentioned by principals as part of the improvement plans: gender equity, school garden, disaster risk management and issues related to the mission and vision of the school, school strengths, threats, school schedule of activities, indicators and projects.

- d. Importance of the School Improvement Plan. **65.0%** of school principals that have a plan reported that this is important because it promotes the participation of PTAs and the community and it serves to identify needs of improvements, to have clear goals, to work for quality education and it is useful to plan, monitor, and evaluate the work being done.
- e. Participation of the PTA in the School Improvement Plan. According to **33.3%** of the principals, the PTA participated in the development of the plan in contrast with **29.0%** that stated that PTAs did not participate as the majority of its members are illiterate and they have not received any training on how to develop them. **37.6%** of principals did not know if PTAs participated in the development of these plans or not.
- f. School Improvement Plans implemented. **35.0%** of principals stated that the implementation of the plans is complex, **50%** reported that the plans have been implemented, **11.6%** reported that these were not implemented and **37.6%** did not respond to this question.

CHAPTER V

Constraints and Strengths Found in the Baseline Process

Constraints

- The school visits for this study were planned in coordination with the school principals. However, changes had to be made because when confirming these visits later on, there were several principals that were not going to be available because in the end since they had been called by the MINUEDUC to perform some administrative duties or the visit overlapped with local festivities. Consequently, the schedule of the visits was actually prepared on a day-to-day basis, which created uncertainty among the members of the consulting team.
- In 14 schools out of the 69 sample schools, the principal also acted as the teacher. Hence, the consulting team only administered the “school principal” interview. This reduced the number of teachers to be interviewed; however, this did not statistically affect the representativeness of the sample.
- In some of the communities visited, there was no full participation of the members of the PTAs because many of them were traders/salespersons who were working outside the community at the time of the study.

Strengths

- The study was conducted in the selected sample size thanks to the collaboration from school principals, teachers and other sample groups.
- The information was collected and registered by a bilingual team originally from the target zone that used the local language in the interviews, especially with mothers which helped facilitate their response and build rapport.
- The openness of school principals allowed the team to conduct the planned observations.
- Coordinated work among CRS, APCC, PRODESSA and the consulting team allowed to achieve planned results.

Chapter VI

Conclusions

1. The Baseline Study provided information to quantify and assess the indicators and variables of the Learning for Life project and valid parameters to develop a monitoring and evaluation system.
2. The baseline study allowed to confirm that the strategic objective, the results, the indicators and the activities planned by the project are coherent with the needs and the realities of the population in terms of education, feeding, infrastructure, inter-cultural bilingual education, methodology aspects and technical assistance. In the same way, these respond to the context, characterized by child malnutrition patterns, teachers' weak management of the K'iché language, low coverage of inter-cultural bilingual education (22.0%) and disadvantage conditions for girls.
3. In spite that 87.0% of principals and 91.7% of teachers identified themselves as K'iché, the variable with the best score in the command of the language was "comprehension." The results are different in terms of their oral, written and reading skills. This aspect must be taken into account by the project because it is crucial to identify strategies that allow achieving the proposed results by implementing the Kemom Ch'ab'al methodology.
4. The results of the reading tests (25.19% among girls and 24.31% among boys of 6th grade in schools in 4 municipalities) reveal that boys and girls are below the national standard. This can be conditioned by factors such as the little weekly time spent on reading in Spanish (49.2% of teachers reported spending 121-150 minutes to reading per week) and in K'iché (only 11.7%). 69.4% demonstrate the use of teaching techniques, activities or tools before, during and after reading. This study concludes that it is important that the project focuses on these indicators, with an emphasis on girls through the use of the Kemom Ch'ab'al methodology.
5. As to teachers' attendance to school in 2013, CTAs informed that teachers attended 95.0% of the expected time (180 days); principals reported that they attended 86.7% of the time while parents reported teachers' attendance at 84.6%. This study concludes that principals and parents reported similar information because they are more present in school and have more

relation with the teachers. These percentages are acceptable, considering that the causes for teachers' absences are related to their work – to attend events organized by MINEDUC which they cannot refuse.

6. The investigation process revealed that 75.5% of all schools in the sample had didactic materials (especially text books and supplies) to work with. 53.6% of the principals rated these materials with “good quality” because they were in K'iche', the language used was understandable and the content and illustrations were appropriate to the local cultural context.

The main problem identified was the quantity of materials available in schools, which 82.6% of teachers rated as insufficient. This happens because the distribution of materials is made based on school statistics of a previous year; therefore, the materials received do not match the actual number of students. Furthermore, the budget per child is only Q55.00. Another critical issue is the arrival of the materials once classes have already started (72.4% stated that the materials are distributed in February/April). Consequently, often school activities begin without these materials.

7. 16.7% of teachers affirmed knowing the Kemom Ch'ab'al methodology; 13.3% of teachers reported having been trained in it and 28.3% claimed that they have used it. 24.6% of principals affirmed knowing and using it prior to 2014. It is important to consider that prior to the baseline study; both teachers and principals had participated in one training about the entire planned process organized by PRODESSA and APCC, which affected these results. However, when investigating the knowledge about the actual steps for its implementation, the baseline study revealed that 79.7% of the principals did not know the steps nor they remember them (73.9% and 5.8% respectively) and 41.7% of teachers reported not knowing the methodology. This stresses the need to conduct a training process on the methodology for school principals and teachers.
8. This study found similarities between the responses given by teachers and principals about the advantages of the Kemom Ch'ab'al methodology. The most relevant ones include the fact that the methodology promotes learning in K'iché language, the culture and the traditions, noting that the following factors must be taken into consideration for its implementation: a) children's difficulty to read in K'iché; b) the language used and the translation of the books present some difficulties

(some words were incorrectly translated or have a different meaning to that used in the community); c) teachers do not speak, nor read or write 100% in K'iché.

In spite of the difficulties found, the consultancy team considers that this process will require substantial work but will have a positive effect on children's motivation and learning as well as school for school achievement and strengthening the local culture and ethnic identity.

9. 42.0% of school principals recognize that there is a link between the Kemom Ch'ab'al methodology and the National Basic Curriculum (CNB) as they both focus on the children's cultural context, strengthening children's mother tongue and interculturality through the use of the local language and the use of its content in children's lives. This recognition is a good starting point for project interventions as this methodology will contribute to the implementation of the CNB.
10. The results of the analysis of attentive boys and girls in the classroom, (27.27%) reveal that attention level is low because the class is conducted in a traditional manner, it does not flow much and it offers little motivation, missing the opportunity to make the most of the potential showed by the children. The possible causes are related to the current conditions of school infrastructure (overcrowded classrooms), lack of didactic resources, teachers juggling multiple tasks or having to teach more than one grade at a time and the use of traditional education methodologies.
11. Baseline data reveal significant differences between participation of boys (48.0%) and girls (38.09%) revealing that boys show more skills to participate (ask questions, request teacher's assistance, request review of homework, get up from their desks, communicate and express themselves, among others) as a result from cultural patterns that exclude girls.
12. The baseline study confirmed that 23.4% of boys and girls from 3rd grade and 8.2% from 6th grade were hungry the day of the research. 95.0% of parents reported that children had breakfast at home, which confirms the information reported by students – 2.7% of 3rd graders and 3.3% of 6th graders reported that they did not eat breakfast that day.

The analysis of the results indicate that the common denominator is - "over 95% of children ate breakfast;" however, the type and quantity of food in the majority of cases was scarce (one or two food items). Although the research did not intend to quantify the calorie intake, the study

concludes that the calorie intake is below the standards needed for the children's age. This has implications in the physical and mental development, and consequently, children's school achievement.

13. The majority of the schools (98.6%) provide a cup of porridge to boys and girls every school day, prepared with funds from the MINEDUC. Although only 13.1% of the schools received the funds on a timely manner in school year 2013, 90.6% of principals believe these funds were insufficient to satisfy the needs to pay for the snack, school supplies and the set of didactic materials.
14. Snack preparation has variations. In 53.6% of schools it is the mothers who prepare the snack, but there is a significant percent (26.1%) of schools that hire cooks to do so because parents do not have time to do it themselves. PTAs participate in 2.9% of schools and parents participate in 1.4% of schools. This reveals that there is an organized plan to prepare snacks in schools.
15. The study found adequate understanding among PTAs on the use of the school infrastructure and their willingness to contribute to construction or repair of school infrastructure. This is important because the infrastructure presents deficiencies such as: 31.0% of schools do not have water supply; 64.3% of bathrooms/latrines are insufficient, are in poor condition and are not clean. Both aspects are fundamental for the health and hygiene of the student population.

TPAs know the infrastructure priority needs of schools but face the lack of an effective response from the MINEDUC, municipalities and other support organizations to which they have submitted requests without success.
16. The aspects on which the project has to focus great part of its work is: kitchens: a) hygiene of the persons who prepare the food and the locations b) safety, the presence of children represents a potential risk of harm and injuries for children; c) water: deficiency in the supply, availability and use of water in the majority of schools; d) bathrooms: critical need in school infrastructure as only 35.7% of schools meet the basic conditions for its use, and e) store rooms: 53.33% meet the minimum conditions (cleanliness, size, ventilation, safety and order) for food handling. Hence, the project must prioritize work in the schools identified in the assessment conducted by APCC that

present the most critical sanitation infrastructure conditions in collaboration with the local municipality.

17. The results of the interviews held with municipal authorities about infrastructure allow the study to conclude that in general, they do not have information about the project. Out of the four municipalities, only Santa Lucía la Reforma reported allocating 60% of its budget for school infrastructure which will be invested in 2014. The project has not yet established formal coordination with municipal authorities even though they support schools in different ways including snacks, school supplies, teachers' salaries, infrastructure and others.
18. The baseline study revealed low students' absence due to illness (67.6% of children miss school from 1-5 days due to illness in 2013) which is positive and shows that in general, boys and girls' health is good, are motivated to attend school and have the support of their parents to do so.
19. The study found a positive response from school principals, teachers and parents for the creation of "Spaces to Grow." Their acceptance is related to the importance and benefits that they associate with the education of their children. Only 13.5% showed disagreement with extra-curricular activities. This leads to conclude that there are favorable conditions to promote this type of extra-curricular activity, which will need to be accompanied by complementary interventions such as meetings and especially a radio campaign in K'iche' to satisfy parents' demand of more information about these activities to raise the awareness of the parents who are still not willing to send their children to spaces to grow activities.
20. In 95.7% of schools there are school governments where both boys and girls participate, although girls play secondary roles. 100% of school principals and 86.7% of teachers are aware of the importance of these spaces to promote active participation of boys and girls in the democratic management of the school, problem solving, and for the personal and social development of children. Consequently, the project should focus on strengthening the school governments.
21. For parents (96.4%) and PTAs (100%), the education offers more than three benefits to their children (see tables 41 and 42). This shows that there is clarity about the importance that

education has as a vehicle to achieve better personal, family and social development for living a full life.

22. In general, teachers are aware of their weaknesses in knowledge, capacities and skills to develop quality formative processes. Hence, they requested trainings in topics related to bilingual literacy and the Kemom Ch'ab'al methodology. This also reveals their positive attitude and willingness for personal development (see table 13).
23. Considering that DIEDUC training processes are not systematic and do not cover all staff, the result of institutional strengthening will play an important role in strengthening the capacities of education officials.
24. 100% of schools have TPAs and 89.9% have received some type of training, 59.4% function through commissions/committees. Among the activities that they conduct is preparation of the school snack, support to infrastructure and ensuring that parents send their boys and girls to school. 69.23% expressed interest in creating a municipal network of TPAs. This could help them have more organizational capacity and impact in advocating for improvements with municipal authorities.
25. 26.7% of PTAs affirmed having school improvement plans; 63.8% of schools have school improvement plans developed with relative PTA participation. These plans are characterized by the lack of homogeneity in its content and implementation mechanisms. 50.7% of the plans are put into action by teachers with the support of PTAs and parents. Only 26.1% of the school improvement plans⁶⁴ were actually seen during the evaluation. However, from the answers received, we conclude that these do not meet the technical requirements and are not presented in a standardized format. Hence, it will be necessary to strengthen the participatory development of these plans through training and technical assistance.

⁶⁴ The baseline study did not include assessing the quality of the school improvement plans.

CHAPTER VII

RECOMMENDATIONS

1. The fact that principals are not 100% bilingual in the command of the four skills in the K'iche' language can negatively influence the results expected from the use of the Kemom Ch'ab'al methodology should no complementary activities be developed such as stimulating teachers to improve the command of that language on their own initiative and promote *learning circles among teachers* per school, setting a time apart (determined by the teachers) to practice the language, conduct reading fairs as well as poetry and oratory contests in K'iche'. The consulting team also recommends CRS to respond to the request of teachers of being trained in the K'iche' language.
2. The results of the reading comprehension tests reveal that girls from 3rd grade require more assistance to strengthen their abilities. This means that besides the interventions planned by the Project, Learning for Life should educate and raise the awareness of the education community in gender equity so that they can give girls the same opportunities for participation and learning. When comparing the baseline with the results of MINEDUC (2006-2009), it is confirmed that the greatest needs for attention, reinforcement and follow up for reading comprehension is in third grade.
3. Considering that students attendance records are not structured to stay in schools, this study recommends that the Project designs a system—previously agreed by principals and teachers—that allow the schools to have their own statistics that include student attendance, absences due to illnesses, student promotion, repetition and drop out figures, among others. These records will allow the schools to access this information at any given moment and to inform decisions to improve education indices even beyond the life of the Project.
4. Since the resources from the MINEDUC arrive late to schools, it is necessary that the Project makes school supplies and the set of didactic materials available by mid-January of each school year to avoid affecting students' education process. The baseline study recommends to do the same for the provision of the school snack.

5. As planned by the Project, it is necessary to reinforce teachers training so that they are able to develop dynamic and participatory classes with sufficient didactic materials that help boys and girls become active participants in their own learning.
6. To facilitate discussion and reflection with the MINEDUC to unify criteria that allow to standardize the placement of students based on their ages and grade⁶⁵ in schools with multi-grade classrooms.⁶⁶
7. The project should implement strategies focused on the teachers so that they implement positive techniques to boost girls participation such as: giving girls priority to speak in class, call girls by their name, smile at them, ask them simple direct questions, look at them in the eye, recognize their achievements in front of the class, motivate them to coordinate group work for an specific task and encourage them to perform any type of activity or play any sport.
8. To modify the concept of current indicator 1.2.1 (% of students in target schools who indicate they are not hungry during the school day) and re-word it as: “boys and girls who receive food in the school”, so that it is objective and verifiable.
9. To strengthen PTAs capacity through a formation process that include their role and responsibilities, the development, implementation and monitoring of the school improvement plan, management and social auditing to advocate with municipal authorities and the COMUDE (Municipal Development Council), so that they incorporate their education proposals into the municipal budget along with proposals that address other issues that allow them to perform a more central role in the education of community members.
10. To reinforce training in hygiene and food safety⁶⁷ for mothers and members of PTA’s in charge of cooking the school snack using adult learning methodologies (andragogy) in a way that they

⁶⁵ For example, put first and second grades together; and place third and fourth grades together and finally, put fifth and sixth grades together.

⁶⁶ 20.3% of the sample were schools with multi-grade classrooms.

⁶⁷ Considering that the baseline study identified children under the age of five in the kitchen. Safety also refers to measures and mechanisms that should be taken into account in the kitchen to prevent accidents (burns, poisoning, and cuts, among others) or do not allow small children to stay in the kitchen.

acquire the knowledge, skills and attitudes required to perform their role with effectiveness and gratification, making the most of their capacity and experience.

11. To establish from the start of the Project, a mechanism to communicate, coordinate and plan with municipal authorities through the Municipal Planning Offices and the COMUDE to strengthen PTA's advocacy capacity and joint management of technical and financial resources. This will allow to have more influence in the incorporation of education proposals into municipal planning.
12. Design a social awareness campaign for the education community in general and community members to encourage boys and girls' school attendance every school day, inform about Space to Grow and strengthen the importance of girls' education and reinforce communities' commitment to education. This study suggests to conduct radio campaigns in K'iche', as well as produce posters and flyers with key messages in both Spanish and K'iche' using images adapted to the local context. The use of alternative communication methods (e.g. theater, music, wall newspapers, among others) making the most of the artistic talents of youth and the community in general could also be promoted.
13. To strengthen gender relationships within school governments and among teachers so that with adequate training , girls can occupy leading roles such as president and vice-president more quickly while keeping gender-balanced participation between boys and girls.
14. To design a continuing training program during the project timeframe for the education community (school principals, teachers and DIEDUC officials) based on the needs identified in the baseline study, with a focus on gender, ethnicity, participatory methodology and structure it based on competencies. Its sustainability will depend on the capacities built by the project among MINEDUC key staff.
15. The project's monitoring system should generate from the schools and the MEAL system should be articulated at different levels – community, implementing partners, CRS and USDA, so that the information can flow both from the bottom of the system to the top of the system and vice versa. This will allow the information to provide feedback to project stakeholders in planning, implementation, monitoring and evaluation of process and impact results.

BIBLIOGRAPHY

1. Ajú,Patal,Celia Angélica. *El rostro de la educación actual en Guatemala*. Instituto de Lingüística y Educación. Universidad Rafael Landívar
2. CRS' Project documents. Annex G - Logical Project Framework in Spanish; assessment conducted by CRS in each school; statistics of students enrolled in schools in target municipalities; third and sixth grade student population; list of schools in four target municipalities with the number of students enrolled per school in 2013; FFE Guatemala list of targeted schools; Project Narrative Proposal (Annex A and E) in Spanish; USDA FFE activities in Spanish; USDA FFE Logical Framework in Spanish; USDA FFE Performance Monitoring Plan in Spanish.
3. National Mother- Child Health Survey (ENSMI) 2008/2009.
4. FAO/WHO/UN. Energy and Protein Requirements. World Health Organization Technical Report Series 724. Geneva 1985.
5. ICEFI-UNICEF.¿y dónde están los ausentes? Newsletter 5. Pages 66-78. November 2011
6. National Statistics Institute -INE-demography
7. MINEDUC. National Reading Program *Let's Read Together*, April 2012
8. MINEDUC. Intercultural Bilingual Education Protocol in the National Education System. General guidelines, March 2013
9. MINEDUC. Annual statistics of Primary Education. 2011 and 2012.
10. MINEDUC. Annual statistics of Primary Education. 2010.
11. MINEDUC -USAID. Education Standards for Guatemala. March 2007
12. UNDP. Human Development Figures – Totonicapán. 2010. SEGEPLAN. Poverty map. 2002
13. REDMISAR-Totonicapán. Salud reproductiva, nutrición y educación.
14. Universidad Nacional Experimental Simón Rodríguez. Núcleo Canoabo. Formulación de Proyecto Socio Comunitarios. *“Metodologías participativas para Proyecto socio comunitarios”*. Núcleo Canoabo.