ALL CHILDREN READING:
A GRAND CHALLENGE FOR DEVELOPMENT

Baseline Report:

Nos Enfants Apprennent à Lire (Our Children Learn to Read)

Réseau d'Acteurs Pour le Renouveau de l'Education, Mali

Prepared by:
School-to-School International and
Réseau d'Acteurs Pour le Renouveau de l'Education
For All Children Reading: A Grand Challenge for Development

July 2016

USAID FROM THE AMERICAN PEOPLE
World Vision
Australian Aid
SCHOOL-TO-SCHOOL INTERNATIONAL

Table of Contents

Table of Contents 2
I. Executive Summary 3
Key Findings 3
II. Project Description 4
III. EGRA Instrument Development 5
Research Questions 5
Instrument Development 5
Validation Process 6
Item Quality 7
Sample 8
IV. Assessor Training 8
Inter-rater Reliability (IRR) Test 9
Institutional Review Board for Human Participants (IRB) 9
Data Analysis 9
V. Summary of Findings 10
VI. EGRA Baseline Findings 11
Orientation to Print 12
Initial Sound Identification 13
Letter Sound Knowledge 13
Non-word Reading 14
Oral Reading Fluency 15
Reading Comprehension 16
Listening Comprehension 16
Contextual Factors 17
VII. Recommendations 18
Recommendations for Program Implementation 18
VIII. Annexes 19
Annex A. EGRA Adaptation Workshop 19
Annex B. EGRA Assessor Training and Pre-Testing 21
Annex C. Item Statistics 23
Annex D. Baseline EGRA Instrument 28
Annex E: Descriptive Statistics and Scores by Group and Gender 47

I. Executive Summary

Recognizing that literacy is fundamental to learning, skill acquisition, and success in primary school and beyond, education stakeholders are increasing their focus on the assessment of early grade reading skills. The Early Grade Reading Assessment (EGRA) is an oral student assessment designed to measure the basic foundational skills for literacy acquisition in the early grades: recognizing letters of the alphabet, reading simple words, understanding sentences and paragraphs, and listening with comprehension.[1] The EGRA methodology was developed under EdData II, and has been applied in more than 30 countries and 60 languages.[2] All Children Reading: A Grand Challenge for Development (ACR GCD), a joint partnership between the United States Agency for International Development (USAID), World Vision, and the Australian Government, has adopted the standard EGRA to systematically assess reading skills across all Round 2 grantees. The instrument is adapted according to each grantee's project context.

Réseau d'Acteurs Pour le Renouveau de l'Education (RARE), one of two ACR GCD Round 2 grantees in Mali, conducted an EGRA baseline assessment in collaboration with School-to-School International (STS) in 41 public schools in three districts in the Bougouni region. This report presents the results of baseline data collection from the sample population of 637 students in Grade 1, along with analysis and recommendations based on those findings.

Key Findings

1. **Students did not demonstrate essential reading skills**. This population was entirely comprised of Grade 1 students who just entered school. Across all groups, the students lack essential pre-reading skills as demonstrated by the low scores on subtasks such as Orientation to Print, Initial Sound Identification, and Listening Comprehension.
2. As expected with students entering Grade 1, across the entire sample population, no students were able to read a single word of connected text as measured by the Oral Reading Fluency subtask (oral reading fluency rates were 0 correct words per minute for all students).
3. The lowest proportion of zero-scores—or students who were unable to answer a single item correctly on a given subtask—was on the Orientation to Print subtask. One out of three students was unable to correctly identify how words are arranged on printed text.

[1] RTI International and International Rescue Committee. Guidance Notes for Planning and Implementing Early Grade Reading Assessments: 2011. https://www.eddataglobal.org.
[2] USAID EdData II. https://www.eddataglobal.org/reading.

II. Project Description

The purpose of this project is to improve reading and writing instruction in the early grades in Mali. The proposed intervention will use mobile technology to strengthen teacher training. Teachers in 18 schools will be provided with tablets preloaded with the Stepping Stone application,[3] a platform developed by Education Development Center, Inc. (EDC). Videos of teachers demonstrating good reading and writing instructional techniques as well as refresher lessons will be uploaded to Stepping Stone, allowing teachers to review good practices throughout the week during their teaching.

The tablets will be distributed to teachers at the end of a training workshop held in three districts in the Bougouni region (Koumantou, Bougouni, and Yanfolia). At these workshops teachers will be trained on the balanced literacy approach[4] which incorporates seven strategies (see textbox, adjacent). When coupled with Interactive Radio Instruction,[5] this approach seeks to provide teachers with the techniques to help students master basic reading and writing competencies in the early grades. This model is based on two pillars:
(1) supporting teachers to learn and practice proven instructional techniques for literacy instruction, and
(2) providing tools for teacher auto-evaluation to ensure the strategies are being implemented correctly.

<u>The Seven Balanced Literacy Strategies</u>

1. Games for Learning Language Mechanics
2. The Class News
3. Find What You Know
4. Guided Decoding
5. Invented Writing
6. Guided Reading
7. Guided Writing

RARE will lead the workshop for 36 schools. Half of the teachers will receive tablets with the Stepping Stone technology at the end of the training while the other half will not. In this way the project will have two treatment arms: training plus tablets (Treatment A) and training alone (Treatment B). All teachers will receive monitoring and support visits from pedagogical counselors on a monthly basis.

By training teachers in 36 schools, but only providing tablets to 18, the project establishes two treatment groups. To measure the impact of the intervention on reading gains, the project will compare baseline and endline EGRA scores in the Bamanankan language. Students will begin the intervention when they are in Grade 1. By the end of the intervention, those same students will be in Grade 2. The same teachers will work with them in both grades. While French is introduced in Grade 2 in Malian schools, this

[3] More on Stepping Stone can be found at: http://sstone.edc.org/
[4] The balanced reading approach was first used in Mali as part of the USAID-PHARE program in 2009.
[5] Interactive Radio Instruction provides teachers with 30-minute programs that model strategies and techniques to enhance student learning under the balanced literacy approach.

intervention will provide support to teachers to develop French reading skills, but it is primarily focused on Bamanankan and will be measuring reading change in Bamanankan.

III. EGRA Instrument Development

To measure results of the program, Grade 1 students' reading skills were assessed at baseline using the Early Grade Reading Assessment (EGRA); students will be reassessed again at endline. The baseline assessment was conducted in October 2015 while the endline is scheduled for May 2017. Together, the baseline and endline will measure gains across all three groups. Results from students in the Treatment A and B schools will be compared to results from students in control schools at baseline and at endline.

Research Questions

The research questions that this study baseline assessment aimed to answer were:

1. What is the effect of the balanced reading approach including interactive radio instruction (IRI) on children's reading outcomes?
2. What is the value added of using Stepping Stone in addition to the balanced?

Instrument Development

The EGRA instrument was adapted to Bamanankan for students in Grades 1-3 during a six-day instrument adaptation workshop led by STS. Both ACR GCD grantees implementing in Mali—RARE and Œuvre Malienne d'Aide à l'Enfance du Sahel (OMAES)—participated in the workshop and used the same instrument. The final assessment tool included the following subtasks:

1. Orientation to Print
2. Initial Sound Identification
3. Letter-sound Knowledge
4. Non-word Reading
5. Oral Reading Fluency
6. Reading Comprehension
7. Listening Comprehension

These subtasks were chosen for several of reasons. First, to ensure that the "core" reading skills will be captured across all ACR GCD projects, STS, in consultation with a literacy expert, determined that a minimum of four subtasks should be included across projects: Letter-sound Knowledge, Non-word Reading, ORF, and Reading Comprehension. ACR GCD grantees are encouraged to include other EGRA subtasks , depending on the nature of their intervention. In the case of this EGRA, stakeholders—which included experts

from the national pedagogical association—added Orientation to Print and Initial Sound Identification to measure key pre-literacy skills and Listening Comprehension as a measure of vocabulary and comprehension.

Two previous EGRA's were conducted in Mali. In 2009, RTI International and Centre de Promotion de la Citoyenneté pour le Développement Durable à la Base (CEPROCIDE) conducted an EGRA in Bamanankan, Bomu, Fulflde, and Songhoy. From 2014-2015 RTI led an updated EGRA baseline assessment for students who had completed second grade. However, this project will work with students entering Grades 1 and follow them into Grade 2. Therefore, STS adapted the existing EGRA updated by RTI in 2015 specifically for the students entering school, including pre-reading subtasks.

Validation Process

During the EGRA adaptation workshop, participants used this updated EGRA tool as a basis for the new tools. The Orientation to Print subtask was added (it had not appeared in previous EGRAs in Mali) while the Letter Sound Knowledge and Non-word Reading subtasks were retained for this EGRA, but re-randomized. Seventeen workshop participants from OMAES, RARE, Direction Nationale de la Pedagogique (DNP), EDC, Direction Nationale de L'Enseignement Normale (DNEN), Direction Nationale de L'Enseignement Fondamentale (DNEF), USAID, and World Vision also developed stories for the ORF, Reading Comprehension and Listening Comprehension subtasks. On the fifth day of the workshop, the tools were pretested at a rural school on the outskirts of Bamako where conditions resembled those in the sample populations where OMAES and RARE would implement their interventions.

The results from the pretest showed a high number of zero scores for all students on all subtasks except Listening Comprehension. In light of these results, the workshop participants, with the help of the experts from STS, RARE, OMAES, and the Ministry of Education, took the following steps:

1. Simplified the language used in the instructions for each subtask.
2. Simplified the formulation of the Orientation to Print questions.
3. Re-organized the first line of the randomized items in the Letter Sound Knowledge and Non-word Reading subtasks to remove any two grapheme sounds and two syllable words, respectively.
4. Simplified the ORF stories by reducing the number of words from 60 to 50.
5. Simplified the ORF stories by replacing some words with shorter, more familiar words and shorter sentences.
6. Eliminated one ORF story that was too complex.

7. Rewrote Reading Comprehension stories to correspond with newly simplified stories.
8. Simplified the remaining original Reading Comprehension questions by replacing some words with shorter, more familiar words.

Three versions of the new simplified tools were piloted during the assessor training the following week. Zero scores decreased marginally in the pilot, which contained a larger proportion than the pretest of Grade 1 students compared to other grade levels.[6] Upon review of the data, final ORF and Listening Comprehension stories were selected and the EGRA received approval from the Ministry of Education.

In addition to student reading assessments, a student questionnaire was developed and piloted for gathering data on contextual factors that may affect reading proficiency, such as availability of Bamanankan reading materials, absenteeism, and preschool attendance.

Item Quality

Subtask reliability, as measured by Cronbach's alpha, was low for most subtasks. (See Annex C). Normally, a minimum Cronbach's alpha score of 0.7 is considered an acceptable level of reliability on assessments such as EGRA—meaning that, on average, the subtasks and items measure the same constructs consistently. However, when there is such a high proportion of students who are unable to answer items, Cronbach's alpha can be misleading, particularly when there are a high number of items that were either not attempted by any students or on which there are no valid data.

Item discrimination for items that had valid data was also acceptable for four of six items for the Orientation to Print subtask; all items in the Initial Sound Identification subtask; 27 of 29 items with valid data on the Letter-sound Knowledge subtask; four of six items with valid data on the Non-word Reading subtask, and all items on the Listening Comprehension subtask. For these items and subtasks, the items were able to distinguish between different levels of learners (advanced learners should correctly answer more difficult items and less-advanced learners should correctly answer fewer difficult items). Results above 0.2 are generally considered acceptable with this measure.

[6] The enumerator training included trainees for both the RARE and OMAES data collections. Because RARE's EGRA targeted only first graders, their enumerators worked only with Grade 1 students during the pilot. OMAES' enumerators worked with all three levels targeted by their EGRA and intervention.

Sample

The students for this intervention were drawn from 41 schools in three districts in the Bougouni region. A total of 637 students in Grade 1 participated in the EGRA baseline. Table 1 shows the breakdown of the sample by gender and treatment group.

Table 1: Total Grade 1 Students Assessed by Group and Gender

Group	No. boys	No. girls	Total
Treatment A	126	106	232
Treatment B	170	142	312
Control	49	44	93
All	345	292	637

The average age for students in each group was comparable, as shown in Table 2.

Table 2: Average Student Age by Group and Gender

Group	N	Mean	SD[7]	Min	Max
Treatment A	231	6.5	0.8	5	10
Treatment B	311	6.5	0.9	5	10
Control	93	6.4	0.7	5	10
All	635	6.5	0.8	5	10

Note: age was missing for two students.

IV. Assessor Training

The EGRA Assessor Training took place from October 12-16, 2015. RARE recruited the assessors and all candidates had previous survey experience and experience working with OMAES, including with ASER—a widely used international literacy test, which helps determine the reading level of a student. Many candidates had previously served as EGRA assessors for other projects as well. During the training, assessor candidates:

- Reviewed EGRA principles and gained a comprehensive understanding of the EGRA instrument components;
- Practiced EGRA administration and scoring procedures;
- Practiced conducting the Bamanankan EGRA assessment on tablets and on paper as a precautionary alternative;

[7] SD=Standard Deviation. The standard deviation of the measure of interest (here, mean fluency rates) describes how spread out the scores are. Smaller SD values indicate that the majority of values lie close to the mean; larger SD values indicate that mean fluency rates varied and were more spread out.

- Became familiar with the roles and responsibilities of both supervisors and assessors in the field;
- Participated an Inter-rater Reliability (IRR) test administration and scoring.

The training included a variety of simulation methods and a half-day of practicing data collection with students in rural schools near Bamako.

Inter-rater Reliability (IRR) Test

As part of their training, IRR tests were conducted to ensure consistency between assessors and against the key of "acceptable" subtask responses. IRR measures the degree to which different assessors agree in their assessment decisions. Ninety percent consistency is considered the gold standard, meaning that 90% of assessors' ratings are consistent both with the list of acceptable responses and with one another. During IRR testing sessions on the final day of training, two candidates were unable to meet this threshold and did not participate in data collection.

Institutional Review Board for Human Participants (IRB)

The Institutional Review Board (IRB) is responsible for ascertaining the acceptability of proposed research in terms of institutional commitments and regulations, applicable laws, standards of professional conduct and practice, and ethical and societal norms. The IRB examines subject recruitment procedures, proposed remuneration, and the informed consent process. The Board also evaluates the potential risks and benefits to participants outlined in each protocol.

During project start-up, it was determined that there was no appropriate local IRB process. Therefore, RARE provided the Ministry of Education with details about the research aspect of the project and obtained a letter of approval to proceed.

Data Analysis

The data were analyzed using STATA and Excel which resulted in graphs and frequency tables. The final analytical sample consisted of 637 students. Differences between control and treatment groups were tested for significance; where found, these differences are noted in the results. Mean scores on each task were compared using ANOVA[8] and differences in the proportion of zero-score students (or non-readers) was compared using the chi-square test for significance. No students were excluded from the analyses as a result of decision rules applied to exclude outliers.

[8] ANOVA stands for Analysis of Variance. It is a statistical model that is used to analyze the differences between group means, which helps identify differences in the sample the can be generalized to the population.

A description of each subtask is provided in Table 3.

Table 3. EGRA Subtask Names and Data Analysis Method

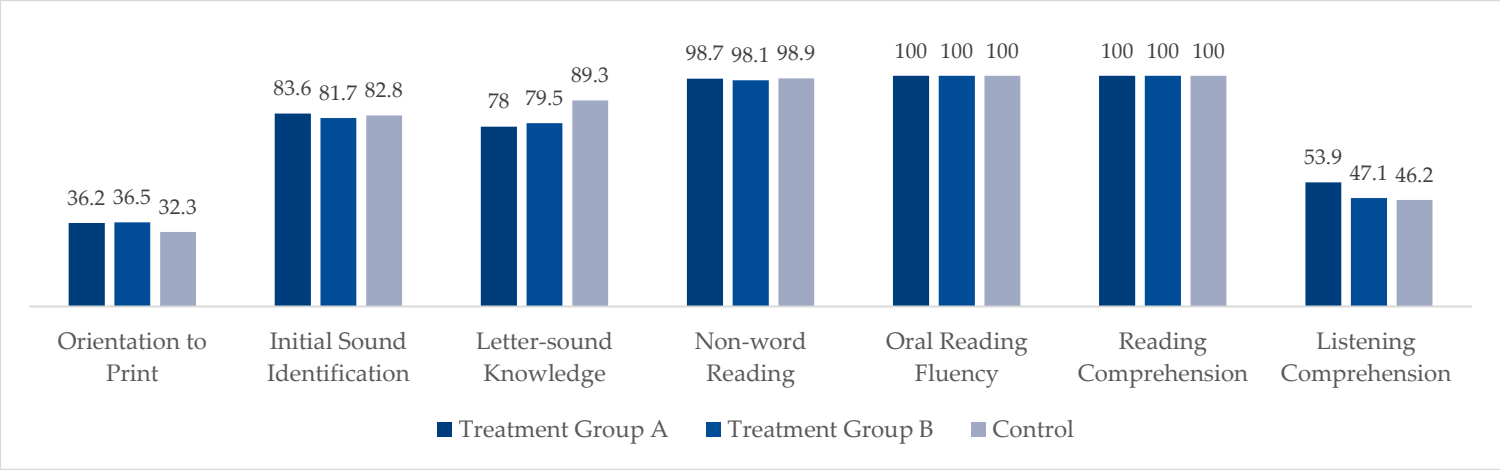
Subtask	Type	Analysis
Orientation to Print	Untimed	Measured as number of questions a student can correctly answer regarding text direction, the concept of a word, or basic knowledge of printed material. There are six questions in this subtask.
Initial Sound Identification	Untimed	Measured as number of correct initial sounds identified out of 10 questions. Each student had the opportunity to identify 10 beginning phoneme that is different from two others in a series of words.
Letter-sound Knowledge	Timed	Measured as correct letter-sounds read in one minute. Letter-sound Knowledge is a measure of alphabet knowledge. Each student had the opportunity to read up to 100 upper and lower case letters.
Non-word Reading	Timed	Measured as correct "non-words" read in one minute. Non-word Reading measures decoding. Each student had the opportunity to read up to 50 one and two syllable "non-words."
Oral Reading Fluency (ORF)	Timed	Measured as correct words read in one minute. ORF is a decoding and reading fluency measure. Each student had the opportunity to read 50 words. The ORF passage formed the textual basis for the Reading Comprehension Subtask.
Reading Comprehension	Untimed	Measured as number of correct answers verbally delivered to the assessor based on questions asked about the passage read as part of the ORF subtask. Each student had the opportunity to answer five questions.
Listening Comprehension	Untimed	Measured as number of correct answers verbally delivered to the assessor. Listening Comprehension is a measure of vocabulary. Each student had the opportunity to answer five questions based on a passage read to them by the assessor.

V. Summary of Findings

Overall, the data show that Grade 1 students lack the foundational reading and pre-reading skills as measured by the EGRA. The lowest proportion of zero-scores—or students who were unable to answer a single item correctly on the subtask—was on the

Orientation to Print subtask (one out of three students was unable to correctly identify how words are arranged on printed text). No students were able to read a single word of connected text (ORF rates were zero correct words per minute for all students) and as a result, none of the students were presented with a single Reading Comprehension question (which translates to 100% of students scoring zero on the Reading Comprehension subtask).

Figure 1. Proportion of Zero-Scores by Subtask



VI. EGRA Baseline Findings

The following section presents EGRA findings by subtask. Where possible, comparisons between groups (Treatment group A, Treatment group B and Control group) are also presented.

This EGRA included seven subtasks. Of these, three were timed: Letter-sound Knowledge, Non-word reading, and ORF. The timed subtasks measure what a child is able to do in one minute. For example, with ORF, the child's speed and accuracy is measured (i.e., how many words he/she can correctly read in one minute). Timing these subtasks is important because children's fluency, or speed with which they can accomplish these tasks, helps us understand how well children will be able to acquire higher level reading skills, especially comprehension. The Reading Comprehension, Listening Comprehension, Initial Sound Identification, and Orientation to Print subtasks were untimed.

Orientation to Print

The Orientation to Print subtask measures students' knowledge of how words are organized on a page by asking questions about the direction of print (e.g., left to right), and how print materials are organized (e.g. title of a story). In this subtask, students were presented with a short passage and were asked to demonstrate understanding of how words on a page are organized and read (e.g., which is the first word of the text? Which is the last word? Where do you start reading? Which direction do you read?) Students indicated their response to six items by pointing to the correct part of the page or indicating the correct direction of reading.

By group, students in all groups attempted up to five of the six questions. Overall, students in each of the three groups demonstrated poor understanding of the conventions of print, answering one out of six items correctly (**on average, students answered correctly 1.1 out of six questions**, as seen in Table 4). The number of items that students answered correctly were not significantly different by group.

The proportion of students who were unable to answer any questions—therefore, students who did not seem to have any knowledge of how print materials are organized—was also examined. Specifically, one out of every three students were unable to answer a single item on this task correctly. By group or by gender, the proportion of students with zero-scores on this task did not vary significantly.

Table 4: Orientation to Print by Treatment Group and Gender

Group	Gender	N	Mean Score	SD	Zero Scores (n)
Treatment A	Male	126	1.2	1.1	39
	Female	106	1.0	1.1	45
	All	**232**	**1.1**	**1.1**	**84**
Treatment B	Male	170	1.2	1.1	59
	Female	142	1.0	1.0	55
	All	**312**	**1.1**	**1.1**	**114**
Control	Male	49	0.9	0.9	30
	Female	44	1.2	1.2	14
	All	**93**	**1.1**	**1.1**	**44**
	All Students	**637**	**1.1**	**1.1**	**242**

Initial Sound Identification

The Initial Sound Identification subtask is untimed. In this subtask, the enumerator reads a word to the student and asks the student to identify the initial sound in that word (e.g., What is the first sound in the word "dog"? /d/). This subtask measures the student's phonemic awareness, or ability to identify the smallest unit of sound in a word (a phoneme). Phonemic awareness is a foundational skill upon which students build their ability to link sounds to letters and, in time, to decode words.

By group, students in Treatment group A attempted up to a maximum of four out of 10 items. Students in Treatment group B attempted up to a maximum of seven items. Students in the Control group attempted up to all 10 items.

On average, across all groups, students were only able to correctly identify less than one of the 10 sounds correctly. More importantly, **more than four out of five students were unable to correctly identify a single initial sound presented to them**. The number of correct responses and the proportion of zero-scores did not significantly vary by group or by gender.

Table 5: Initial Sound Identification by Treatment Group and Gender

Group	Gender	N	Mean Score	SD	Zero Scores (n)
Treatment A	Male	126	0.23	0.52	102
	Female	106	0.24	0.72	92
	All	**232**	**0.23**	**0.62**	**194**
Treatment B	Male	170	0.29	0.79	140
	Female	142	0.32	0.89	115
	All	**312**	**0.30**	**0.83**	**255**
Control	Male	49	0.16	0.37	41
	Female	44	0.45	1.58	36
	All	**93**	**0.30**	**1.12**	**77**
All Students		**637**	**0.28**	**0.81**	**526**

Letter Sound Knowledge

The Letter Sound Knowledge subtask is a timed subtask. It measures students' understanding of the alphabetic principal—the sounds that correspond to letters. Once a reader understands this pattern, they can see a letter and produce its corresponding sound, which over time they will combine into syllables, then words, which is part of the encoding and decoding process. For this subtask, students were presented with 100

letters, including both upper and lower case, and asked to say the sound of each letter. Students had one minute to read as many letters as possible.

On average, students attempted 14 of the 100 letter-sounds in the three groups. By group, the maximum number of items attempted was 54 letter-sounds in Treatment group A, 61 letter-sounds in Treatment group B and 45 letter-sounds in the Control group.

Across groups, students were able to correctly identify the sound of less than one letter in one minute (correct letter-sounds per minute, or CLSPM). As with the initial sound identification subtask, the proportion of students who were unable to correctly identify a single letter-sound correctly was high. Overall, four out of five students received a zero score on this subtask. The number of correct responses and the proportion of zero-scores did not significantly vary by group or by gender.

Table 6: Letter-sound Knowledge by Treatment Group and Gender

Group	Gender	N	Mean Score	SD	Zero Scores (n)
Treatment A	Male	126	0.47	118	97
	Female	106	0.57	1.63	84
	All	**232**	**0.51**	**1.40**	**181**
Treatment B	Male	170	0.63	1.95	137
	Female	142	0.64	1.76	111
	All	**312**	**0.63**	**1.87**	**248**
Control	Male	49	0.12	0.44	45
	Female	44	0.32	1.25	38
	All	**93**	**0.22**	**0.92**	**83**
All Students		**637**	**0.53**	**1.59**	**512**

Non-word Reading

Non-word Reading measures decoding ability by requiring students to read invented words that follow the language structure but have no meaning (e.g., in English, "tork" would be a non-word). Using non-words instead of real words enables analysts to measure students' ability to "sound out" words based on rules of letters and sounds in their language without being able to do it from memory, as they can with familiar words.

On average, students attempted five of the 50 non-words in the three groups. By group, the maximum number of items attempted was 22 non-words in Treatment group A, 40 non-words in Treatment group B, and 14 non-words in the Control group.

For this subtask, students were presented with 50 one- and two-syllable non-words and asked to read as many as possible within one minute. Almost all students were unable to perform this task; 98 percent of students received zero-scores on this subtask. The number of correct responses and the proportion of zero-scores did not significantly vary by group or by gender.

Table 7: Non-word Reading by Treatment Group and Gender

Group	Gender	N	Mean Score	SD	Zero Scores (n)
Treatment A	Male	126	0.04	0.26	123
	Female	106	0	0	106
	All	**232**	**0.02**	**0.19**	**229**
Treatment B	Male	170	0.02	0.15	166
	Female	142	0.01	0.12	140
	All	**312**	**0.02**	**0.14**	**306**
Control	Male	49	0	0	49
	Female	44	0.05	0.3	43
	All	**93**	**0.02**	**0.21**	**92**
All Students		**637**	**0.02**	**0.17**	**627**

Oral Reading Fluency

Fluency is the ability to read with speed, accuracy, and proper expression. To comprehend text, students must be able to read the passage with a certain degree of speed, which varies by language.[9] In the ORF subtask, students were given a story of 50 words and asked to read it aloud within one minute. This subtask provides a measure of children's reading speed as well as their ability to read "connected text," or text in a series, like sentences or stories, as opposed to individual letters or words.

All students who participated in the EGRA were unable to read a single word correctly on the oral reading passage.

[9] The number of words a child can read per minute is a strong predictor of reading comprehension. However, no universal standard exists for the correct words per minute (CWPM) a child should be able to read. This is because languages vary in structure, complexity, and transparency and thus are not comparable. However, some reviews of CWPM have found that in most languages, children need to be able to read approximately 45 words per minute to comprehend what they are reading (Abadzi). CWPM standards have not been standardized for Bamanankan so this figure should be interpreted with caution.

Reading Comprehension

The Reading Comprehension subtask measures a child's ability to understand the meaning of a text. For this EGRA subtask, after students finished reading the text in the reading passage (previous task), the text was removed and students were asked five comprehension questions based on the text. Students were only asked questions pertaining to the part of the text they had read. For example, if they only read one to two sentences, they were only asked the first question; only students who read the entire story were asked all five questions.

Since no students were able to read any part of the reading passage, students were not presented with any comprehension questions. As such, all students who participated in the EGRA received zero-scores on the Reading Comprehension subtask.

Listening Comprehension

Listening Comprehension was the final skill assessed in this EGRA. This subtask assessed children's abilities to comprehend the meaning of a story read to them orally. In this subtask, the assessor reads a short passage to the student, then asks them to answer five comprehension questions about what they heard. Listening Comprehension is an important measure of students' pre-reading abilities because it helps detect obstacles to learning to read such as limited language proficiency, auditory problems, attention deficit and other difficulties.

On average, students attempted all five questions on the subtask. Across all groups, students were able to correctly answer one out of five listening comprehension questions correctly. However, half of all students were unable to perform this task and received zero-scores. The number of correct responses and the proportion of zero-scores did not significantly vary by group or by gender.

Table 8: Listening Comprehension by Treatment Group and Gender

Group	Gender	N	Mean Score	SD	Zero Scores (n)
Treatment A	Male	126	1.0	1.4	71
	Female	106	1.1	1.3	54
	All	**232**	**1.0**	**1.3**	**125**
Treatment B	Male	170	1.0	1.2	80
	Female	142	1.0	1.2	67
	All	**312**	**1.0**	**1.2**	**147**
	Male	49	1.0	1.4	25

Control	Female	44	1.2	1.4	18
	All	**93**	**1.1**	**1.4**	**43**
	All Students	**637**	**1.0**	**1.3**	**315**

Contextual Factors

To better understand the student population participating in the study, the team conducted a demographic survey including background information regarding (1) the types of reading materials available to students and (2) who else reads in the students' homes. These contextual factors help inform EGRA results and allow researchers to better understand the sample population.

Reading materials: Of the 637 first grade students who responded to the survey, 576 reported that they did not have books at school. Among the remaining students, 54 said they did have books at school and seven students did not know if they had books at school. When asked about newspapers, journals, and other print materials, the majority of students said they did not have these materials at school (Table 9).

Table 9*:* Percentage of Students Who Have Reading Materials at School by Type

Type of Reading Material	Accessible at School?	N	Percentage of Sample
Books	Yes	54	8.5%
	No	576	90.4%
	Do not know	7	1.1%
	Total	637	100.0%
Newspapers or other Materials	Yes	21	3.3%
	No	596	93.6%
	Do not know	20	3.1%
	Total	637	100.0%

Reading support: When asked if anyone in the home knew how to read besides themselves, 73 percent of respondents said "yes" someone in their home knew how to read. The survey then offered a follow-up question asking who knew how to read. The most common response was brothers and sisters, with 63 percent of respondents saying their siblings could read. Thirty-eight percent of students reported that their father knew how to read, and just 20 percent reported their mother as a reader.

The above findings suggest that access to reading materials and the diversity therein are limited for students in the school. These are also Grade 1 students in the very beginning of the year so they may have a limited understanding of what materials were available to

them at school. In the home, siblings make up the largest segment of readers, followed by parents.

VII. Recommendations

Overall, the results show that Grade 1 students who participated in the baseline EGRA, and who are the target beneficiaries of the RARE project, lack foundational pre-reading skills. Results did not vary by group or by gender. None of the students tested were able to read a single word of connected text correctly and more than one-third did not know how words are arranged on printed text. These data suggest that students are most in need of foundational support to prepare them to read.

Recommendations for Program Implementation

1. **Focus on pre-reading skills.** With such high proportions of students who were unable to perform on most EGRA subtasks, it is important to focus on pre-reading skills. Since the baseline was conducted at the beginning of the school year, students need support to become familiar with using books and the very early pre-reading skills such as: phonemic awareness.
2. **Devote significant time to the development of oral comprehension skills**, including vocabulary exercises, storytelling, question and answer (both during and after stories), acting out stories, and having children and parents create their own stories.
3. **Provide ongoing monitoring of the teachers to ensure that the literacy instruction methods are at an appropriate level for the students.** The students demonstrated the need for significant teacher support to develop the skills needed to begin to read connected text. Ensure that the Stepping Stone platform is leveled appropriately and able to provide resources that can support the students' growth.

VIII. Annexes

Annex A. EGRA Adaptation Workshop

Agenda

	Lundi 5 octobre	Mardi 6 octobre	Mercredi 7 octobre	Jeudi 8 octobre	Vendredi 9 octobre	Samedi 10 octobre
9h00 9h30	Ouverture - Introduction générale du Projet ACR/ OMAES/ RARE	Révision des contenus EGRA 2h15 (lecture, analyse, ajustements, traduction) Rédaction des textes pour la compréhension (travail par ateliers)	Simulations : « Introduction »	Pilote	Présentation des résultats et des outils (textes …)	Révision des textes et autres sous-tests de EGRA
9h30 10h00	Présentation d'EGRA 1/ l'historique 2/ dans le monde - *STS (Mark)*		Sous-test 1 « orientation à la lecture »			
10h00 10h30	Présentation des habiletés nécessaires à la lecture habile - *STS (Mary)*		Sous-test 2 « identification du son initial »			
10h30 10h45	PAUSE					
10h45 11h15	*Suite* – Présentation des sous-tests EGRA – *STS (Mary)*	Suite et fin	Sous-test 3 « connaissance des graphèmes »	Pilote	Lecture des supports pour le suivi « qualité » sur le terrain : Fiche de contrôle « point focal » Fiche d'observation « point focal » Fiche erreurs récurrentes et procédures « aide mémoire »	IDEM
11h15 12h00	Présentation de la structure du test - *STS (Mary et Claire)*		Sous-test: 4 « lecture de mots inventés »			
12h00 13h00	Révision des « informations d'introduction » et du « questionnaire » - *STS (Mary et Claire)*	Révision des consignes EGRA 1h30	Sous-test 5/6 « compréhension du texte lu »			
13h00 14h00	DEJEUNER					
14h00 15h30	Introduction (ACR, RARE, OMAES, USAID, STS, WV, MoE) Résumés des projets	Présentation de Tangerine 30 mn	Sous-test 7 « compréhension à l'audition »	Ajustement des activités : Révisions des supports Recueil des commentaires sur les textes	Préparation des matériels pour la formation	IDEM
		Initiation à Tangerine 2h15	« Questionnaire »			
			Questions de clarification/ mise en garde			
15h30 15h45	PAUSE					
15h45 17h00	Suite et fin	Initiation à Tangerine (fin)	Simulation du test intégral	Suite et fin	Suite et fin	IDEM
			Préparation matérielle pour le pilote (supports à			

			vérifier et école à confirmer)			
		Réviser (Budget et Work Plan) avec RARE	Réviser (Budget et Work Plan) avec OMAES			

Adaptation Workshop Attendees
ADAPTATION DES OUTILS EGRA
Liste des participants

Mohamad Elmoctar	RARE
Moussa Konaté	DNP
Lamine Dembelé	DNP
Thelma Khelghati (Ouverture)	EDC
Kourakoro Bagayoro	DNP
Aliou Tall (ouverture)	USAID
Chance Briggs (ouverture)	WV
Massanan Sinaba	OMAES
Ibrahima Traore	DNEN
Amos Dembele	WV
Théodore Nseka Vita	OMAES
Youssouf Sidibe	DNEF
Mamadou Niakate	Linguiste
Bréhima Traore	DNEN
Youssouf M. Haïdara	RARE
Moussadian Coulibaly	RARE
Eli Thera	OMAES

Annex B. EGRA Assessor Training and Pre-Testing

Agenda

<table>
<tr><th></th><th>Lundi 12 octobre</th><th>Mardi 13 octobre</th><th>Mercredi 14 octobre</th><th>Jeudi 15 octobre</th><th>Vendredi 16 octobre</th></tr>
<tr><td>9h00 – 9h30</td><td>Ouverture - Introduction générale du Projet OMAES/ RARE</td><td rowspan="3">Graphèmes (Almou/ MC)</td><td>Compréhension à l’écrit T1 (Almou/ MC)</td><td rowspan="3">Pilote</td><td rowspan="3">Fiabilité Remédiation</td></tr>
<tr><td>9h30 – 10h00</td><td>Présentation des habiletés nécessaires à la lecture habile et EGRA - STS (Mary)</td><td rowspan="2">Compréhension à l’écrit T2 (Moussadian/ MC)</td></tr>
<tr><td>10h00 – 10h30</td><td>Présentation de la structure du test - STS (Mary et Claire)</td></tr>
<tr><td>10h30 – 10h45</td><td colspan="5">PAUSE</td></tr>
<tr><td rowspan="2">10h45 – 12h00</td><td rowspan="2">Présentation de Tangerine (Claire)</td><td>Mots inventés (Almou/ MC)</td><td>Suite</td><td rowspan="3">Pilote</td><td rowspan="3">Suite</td></tr>
<tr><td rowspan="2">Revue de Tangerine pour le pilote</td><td>Compréhension à l’écrit T3 (Eli/ MC)</td></tr>
<tr><td>12h00 – 13h00</td><td>Consentement (Ibrahim/ MC)</td><td>Compréhension à l’écrit T4 (Ibrahim/ MC)</td></tr>
<tr><td>13h00 – 14h00</td><td colspan="5">DEJEUNER</td></tr>
<tr><td>14h00 – 15h00</td><td>Orientation à la lecture (Moussadian/ MC)</td><td>Pilote</td><td>Compréhension à l’oral T1 (Moussadian/ MC)
Compréhension à l’oral T2 (Eli/MC)
Testing intégral (Almou/ MC)</td><td>Debriefing, feed back</td><td>Logistique</td></tr>
<tr><td>15h00 – 15h15</td><td colspan="5">PAUSE</td></tr>
</table>

15h15 – 16h15	Son initial (Eli. MC)	Pilote	Testing intégral	Suite et fin	Supervision
16h15 – 17h00					

Assessor Training Attendees
FORMATION DES ENQUETEURS EGRA

Liste de participants

N°	Prénom	Nom	Structure
1	Almougairata H	Maiga	RARE
2	Oumar	Dabo	Consultant RARE
3	Mme Théra Kadiatou	Traoré	RARE
4	Bakary	Doucouré	OMAES
5	Ismaila	Nabé	Consultant RARE
6	Abdoul O	Touré	OMAES
7	Mamadou D	Traoré	Personne ressource
8	Koundou	Coulibaly	RARE
9	Adenème	Sangara	RARE
10	Almamy M	Sandji	OMAES
11	Maridiè	Niaré	CP/OMAES
12	Cheick A	Diarra	OMAES
13	Kadiatou	Kanté	OMAES
14	Siby	Dembélé	OMAES
15	Nougou	Dembélé	OMAES
16	André	Cissé	OMAES
17	Mahamadou B	Maiga	Personne ressource
18	Cheick Oumar	Coumaré	OMAES
19	Moussa	Sisssoko	OMAES
20	Fatoumata	Keita	OMAES
21	Emmanuel	Coulibaly	OMAES
22	Mahamadou	Kanté	Consultant RARE
23	Bréhima	Traoré	OMAES
24	Moussadian	Coulibaly	RARE
25	Mary	Denaw	STS
26	Claire	Wassounan	STS
27	Eli	Théra	OMAES
28	Dado	Yerou	DNP

Annex C. Item Statistics

Orientation to Print

Variable	Difficulty	Discrimination
Item 1	.4583987	0.3192
Item 2	.2464678	0.2895
Item 3	.1616954	0.0223
Item 4	.0800628	0.2256
Item 5	.1302983	0.2639
Item 6	.0141287	0.0412
Cronbach's alpha		0.407

Initial Sound Identification

Variable	Difficulty	Discrimination
Item 1	.0172684	0.3014
Item 2	.021978	0.4569
Item 3	.0031397	0.4070
Item 4	.1475667	0.3485
Item 5	.0376766	0.4047
Item 6	.010989	0.5215
Item 7	.010989	0.4579
Item 8	.0047096	0.5380
Item 9	.0172684	0.5071
Item 10	.0062794	0.4063
Cronbach's alpha		0.686

Letter-sound Knowledge

Variable	Difficulty	Discrimination
Item 1	.032967	0.5512
Item 2	.1726845	0.4702
Item 3	.0204082	0.3555
Item 4	.0251177	0.2984
Item 5	.0094192	0.4705
Item 6	.0455259	0.5299
Item 7	.0047096	0.2383
Item 8	.0031397	0.2472
Item 9	.021978	0.4481
Item 10	.010989	0.5013
Item 11	.0078493	0.4738
Item 12	.0172684	0.3533
Item 13	.0015699	0.3372
Item 14	.0094192	0.5355

Item 15	.0172684	0.4504
Item 16	.0282575	0.5961
Item 17	.0094192	0.3527
Item 18	.0204082	0.5369
Item 19	.0094192	0.5464
Item 20	.0031397	0.1759
Item 21	.0062794	0.4573
Item 22	.0125589	0.3709
Item 23	.0031397	0.3009
Item 24	.0015699	0.0615
Item 25	.0047096	0.3266
Item 26	.0078493	0.4035
Item 27	.0031397	0.0343
Item 28	0	0
Item 29	.0078493	0.3223
Item 30	.0031397	0.1226
Item 31	0	0
Item 32	0	0
Item 33	0	0
Item 34	0	0
Item 35	0	0
Item 36	.0015699	0.0615
Item 37	0	0
Item 38	0	0
Item 39	0	0
Item 40	0	0
Item 41	0	0
Item 42	.0062794	0.0990
Item 43	0	0
Item 44	0	0
Item 45	0	0
Item 46	0	0
Item 47	0	0
Item 48	0	0
Item 49	0	0
Item 50	0	0
Item 51	0	0
Item 52	0	0
Item 53	0	0
Item 54	0	0
Item 55	0	0
Item 56	0	0

Item 57	0	0
Item 58	0	0
Item 59	0	0
Item 60	0	0
Item 61	0	0
Item 62	0	0
Item 63	0	0
Item 64	0	0
Item 65	0	0
Item 66	0	0
Item 67	0	0
Item 68	0	0
Item 69	0	0
Item 70	0	0
Item 71	0	0
Item 72	0	0
Item 73	0	0
Item 74	0	0
Item 75	0	0
Item 76	0	0
Item 77	0	0
Item 78	0	0
Item 79	0	0
Item 80	0	0
Item 81	0	0
Item 82	0	0
Item 83	0	0
Item 84	0	0
Item 85	0	0
Item 86	0	0
Item 87	0	0
Item 88	0	0
Item 89	0	0
Item 90	0	0
Item 91	0	0
Item 92	0	0
Item 93	0	0
Item 94	0	0
Item 95	0	0
Item 96	0	0
Item 97	0	0
Item 98	0	0

Item 99	0	0
Item 100	0	0
Cronbach's alpha		0.834

Non-word Reading

Variable	Difficulty	Discrimination
Item 1	.0125589	0.4754
Item 2	0	0
Item 3	.0015699	0.0037
Item 4	0	0
Item 5	.0015699	0.0037
Item 6	0	0
Item 7	0	0
Item 8	0	0
Item 9	.0015699	0.2478
Item 10	0	0
Item 11	0	0
Item 12	0	0
Item 13	0	0
Item 14	0	0
Item 15	0	0
Item 16	0	0
Item 17	0	0
Item 18	0	0
Item 19	.0015699	0.2478
Item 20	0	0
Item 21	0	0
Item 22	.0015699	0.2478
Item 23	0	0
Item 24	0	0
Item 25	0	0
Item 26	0	0
Item 27	0	0
Item 28	0	0
Item 29	0	0
Item 30	0	0
Item 31	0	0
Item 32	0	0
Item 33	0	0
Item 34	0	0
Item 35	0	0
Item 36	0	0

Item 37	0	0
Item 38	0	0
Item 39	0	0
Item 40	0	0
Item 41	0	0
Item 42	0	0
Item 43	0	0
Item 44	0	0
Item 45	0	0
Item 46	0	0
Item 47	0	0
Item 48	0	0
Item 49	0	0
Item 50	0	0
Cronbach's alpha		0.380

Listening Comprehension

Variable	Difficulty	Discrimination
Item 1	.2009419	0.4207
Item 2	.2150706	0.4019
Item 3	.2339089	0.4383
Item 4	.1083203	0.3284
Item 5	.255887	0.4056
Cronbach's alpha		0.6449

Annex D. Baseline EGRA Instrument

EGRA En Bamanankan: Baseline

Enumerator Name	

La date et l'heure

Date	
Time	

Le site de l'ecolé

Ecole	

L'identification de l'élève

L'identification de l'élève	

Le consentement

I ni sɔgɔma! Ne tɔgɔ ye _____ I ɲɔgɔn demisɛnninw bɛ ne bolo. Kalanjɛ, farikoloŋɛnajɛ ani ntolatan ka di u ye. E dun, e tɔgɔ ? Mun de ka di e ye ?

[Attendez la réponse de l’enfant. Si l’enfant semble à l’aise, passez directement au consentement verbal.

S’il hésite ou a l’air peu à l’aise, posez la deuxième question avant de passer au consentement verbal].

N’i ma taa kalanyɔrɔ la don min, i bɛ mun kɛ? (Le jour où tu ne vas pas à l’école, que fais-tu ?)

Veuillez lire, à haute voix, la déclaration suivante à l'élève pour obtenir son *consentement verbal:*

N bɛ n nakun fɔ i ye. Kalan minisiriso y’a ɲini ka denmisɛnninw ka kalanjɛ kɛcogo kiimɛ. E sugandira k’i sendon o kiimɛni na. Nafaba de bɛ i sendonni in na ; nka n’a man di i ye, diyagoya tɛ.

An bɛna lamɛnni ni kalanjɛ tulon dɔw kɛ.

I bɛ waati min kɛ fɛn dɔw kalanni na, o bɛ jateminɛ. Nka ɲɔgɔndan tɛ. **Ne ni e bɛ min kɛ, o tɛ foyi falen i ka kuruw la kalanso kɔnɔ. N bɛna ɲininkali dɔw k’i la fana aw ka du kan**. **Maa si tɛn’a dɔn ko e ka jaabiw don. N’i t’a fɛ ka ɲininkali min jaabi, i b’o to yen. N b’a fɔ i ye hali bi, i diyagoyalen tɛ k’i sendon kiimɛni in na, n’a ma bɛn i ma**.

I sɔn na wa? *[Attendez la réponse de l'élève avant de poser la prochaine question. Si l'élève dit 'oui' à la question, posez la question suivante. Si l'élève dit 'non', remerciez l'élève et passez au prochain élève.]*

An bɛ se k’a daminɛ wa?

Consentement verbal obtenu: ☐

Information de l'eleve

Nom de l'élève

Age de l'élève

L'élève est dans quelle classe ?

☐ 1ere
☐ 2eme
☐ 3eme

Le sexe de l'élève

☐ Fille
☐ Garçon

ORIENTATION A LA LECTURE

[Montrez à l'élève la Feuille A]

Lisez les instructions suivantes et enregistrez les réponses de l'élève :

I tɛna masalabolo in kalan fɔlɔ, sisan n'i bɛna masalabolo in kalan i bɛ a kalan ka taa fan jumɛ fɛ. ([L'élève déplace son doigt de la gauche à la droite])

☐ Correct
☐ Incorrect
☐ Pas de Réponse

Sisan, ne b'a fɛ, i ka masalabolo in daminɛ jira. ([L'élève pose le doigt sur la 1ére ligne, le mot le plus à gauche « Bi / Bi sɔgɔmada »])

☐ Correct
☐ Incorrect
☐ Pas de Réponse

Sisan, ne b’a fɛ, i ka masalabolo in laban jira. ([L’élève pose le doigt sur « la / lakɔli la »])

☐ Correct
☐ Incorrect
☐ Pas de Réponse

Sisan, sira fɔlɔ laban jira (L’élève déplace son doigt sur le premier « Mun »])

☐ Correct
☐ Incorrect
☐ Pas de Réponse

N’i sera sira fɔlɔ laban na, i bɛna sira min kalan o kɔ, o jira. ([L’élève déplace son doigt vers le mot placé le plus à gauche de la seconde ligne – « b'i».])

☐ Correct
☐ Incorrect
☐ Pas de Résponse

Sisan, kumasen fɔlɔ laban jira. ([L’élève pose son doigt sur « ye »])

☐ Correct
☐ Incorrect
☐ Pas de Réponse

Identification du son initial

Instructions à l’élève : **Nin ye degeli de ye min bɛ kɛ baro senfɛ. N bɛna daŋɛ kelen fɔ i ye. Nb’a fɔ ka segin a kan. O kɔfɛ, i mana siginiden min mankan mɛn daŋɛ in daminɛ na, i b’o fɔ n ye. I sɔnna wa?**

Misali la “fa” daɲɛ bɛ daminɛ ni « fff » mankan ye. O tɛ wa ? « fa » daɲɛ bɛ fɔlɔ ni mankan jumɛn ye ? « fa» ? [Attendre que l’élève répète le son “fff”. S’il ne répond pas, dites-lui, “**« fa » daɲɛ bɛ daminɛ ni « fff » mankan ye.]**

An ka misali wɛrɛw lajɛ :

“sisi” daɲɛ bɛ daminɛ ni mankan jumɛn ye? « sisi » ?

(Si l’élève répond correctement, dites-lui **a ka ɲi kosɛbɛ. « sisi » daɲɛ bɛ daminɛ ni « sss » mankan ye.)**

(Si l l’élève ne répond pas, dites-lui « **« sisi » daɲɛ bɛ daminɛ ni « sss » mankan ye.)**

« taga » daɲɛ bɛ daminɛ ni mankan jumɛn ye? « taga » ?

(Si l’élève répond correctement, dites-lui «**a ka ɲi kosɛbɛ**! **« taga » daɲɛ bɛ daminɛ ni « t’ » mankan ye.)**

(Si l’élève ne répond pas, dites-lui « **« taga » daɲɛ bɛ daminɛ ni « t’ » mankan ye.)**

« Ami» daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « Ami » ?

(Si l’élève répond correctement, dites-lui «**a ka ɲi kosɛbɛ**! **« ami» daɲɛ bɛ daminɛ ni « a » mankan ye.)**

(Si l’élève ne répond pas, dites-lui **« Ami» daɲɛ bɛ daminɛ ni « a » mankan ye.)**

Ne bɛ min nɔfɛ i y’o faamu wa ? Sisan, ne bɛna daɲɛ wɛrɛw kalan i ye. N bɛ daɲɛ bɛɛ kelen kelen kalan siɲɛ fila. I tulomajɔ kosɛbɛ. I bɛ fɔlɔ ka mankan min mɛn daɲɛ daminɛ na, i b’o fɔ n ye. I sɔnna wa ?

Ne pas corriger l’élève pendant le test. En cas de non-réponse ou d’hésitation de sa part, après 3 secondes, relancer la question. Si l'élève ne réponds pas, marquer la case « Pas de réponse » et passez au prochain item.

1. « ba » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « ba » ? (/b'/)

- A ka ɲi
- A man ɲi
- jaabi ma di

2. « di » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « di » ? (/d'/)

- A ka ɲi
- A man ɲi
- jaabi ma di

3. « gafe » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « gafe » ? (/g'/)

- A ka ɲi
- A man ɲi
- jaabi ma di

4. « Umu » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « Umu » ? (/uuu/)

- A ka ɲi
- A man ɲi
- jaabi ma di

5. « so » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « so » ? (/ssss/)

- A ka ɲi
- A man ɲi
- jaabi ma di

6. « pili » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « pili » ? (/p'/)

- A ka ɲi
- A man ɲi

 jaabi ma di

7. « kɔ » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « kɔ » ? (/k'/)

 A ka ɲi
 A man ɲi
 jaabi ma di

8. « malo » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « malo » ? (/mmm/)

 A ka ɲi
 A man ɲi
 jaabi ma di

9. « ɲɛ » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « ɲɛ » ? (/ɲ'/)

 A ka ɲi
 A man ɲi
 jaabi ma di

10. « walan » daɲɛ bɛ daminɛ ni mankan jumɛn ye ? « walan » ? (/w'/)

 A ka ɲi
 A man ɲi
 jaabi ma di

Le son de la lettre

Siginidenw ni siginidenkuluw filɛ ka ɲɛ. Siginiden ninnu kalan i k’u mankan fɔ n ye. Misali la, nin siginiden in : *[Indiquer le “a": dans la ligne des exemples]***Ale bɛ kalan /a/ i n’a fɔ "naji” daɲɛ kɔnɔ.**

An k’a waleya sisan. Nin siginiden in kalan *[Indiquer le “l” dans le rang des exemples]*:

Si l'élève répond correctement, dites: **A ka ɲi kosɛbɛ, siginiden in bɛ kalan /l/ i n'a fɔ "lɛfɛ" daɲɛ kɔnɔ.**

Si l'élève ne répond pas correctement, dites: **Ayi, siginiden in bɛ kalan /l/ i n'a fɔ "lɛfɛ" daɲɛ kɔnɔ.**

An ka misali wɛrɛw lajɛ. Nin siginiden in kalan *[Indiquer le "aa" dans le rang des exemples]:*

Si l'élève répond correctement, dites: **A ka ɲi kosɛbɛ, siginiden in bɛ kalan /aa/ i n'a fɔ "naani" daɲɛ kɔnɔ**.

Si l'élève ne répond pas correctement, dites: **Ayi, siginiden in bɛ kalan /aa/ i n'a fɔ "naani" daɲɛ kɔnɔ**.

An ka misali wɛrɛw lajɛ tun. Nin siginiden in kalan [*Indiquer le "en" dans le rang des exemples]:*

Si l'élève répond correctement, dites: **A ka ɲi kosɛbɛ, siginidenkulu in bɛ kalan *len* / i n'a fɔ « den » daɲɛ kɔnɔ**

Si l'élève ne répond pas correctement, dites: **Ayi, siginidenkulu in bɛ kalan /en/ i n'a fɔ « den » daɲɛ kɔnɔ**

I y'a faamu wa? An bɛ se ka taa a fɛ ? Ni ne ko "a daminɛ", i kɛtɔ ka siginiden fɛn o fɛn kalan, i b'i bolo da o kan. I b'u kalanni daminɛ numanfɛ ka taa kininfɛ sira ni sira. I y'a faamu kosɛbɛ wa? I bolo da sigiden fɔlɔ kan. I labɛnnen don wa? I b'a lajɛ k'u kalan ka ɲɛ teliya la. A damiɛ!

b	a	u	I	s	o	ɔ	L	u	c
k	d	nj	h	t	e	l	ii	m	ɔ
r	u	c	ns	p	ee	ɛ	n	e	b
n	an	ɛ	L	ɔn	t	M	oo	I	g

nt	o	uu	h	u	d	W	r	g	I
k	nc	s	f	a	n	An	a	k	nf
ɛ	w	on	L	ng	s	np	in	a	s
j	a	ɛn	l	ɛɛ	p	nb	y	a	ɔ
m	ŋ	z	nk	b	e	U	L	d	aa
g	a	r	ɲ	ɔɔ	o	K	un	I	en

Time Remaining

Autostop?

Mots inventés

Daɲɛ dɔw filɛ, lala i ma deli ka minnu ye. Nka ne tun b'a fɛ i k'a lajɛ k'u kalan. Misali la, daɲɛ fɔlɔ in bɛ kalan «gɛ» *[Indiquer le mot « gɛ» avec le doigt]*. I bɛ se ka segin daɲɛ fɔlɔ in kalanni kan wa ?**

[Après sa réponse, ou après 3 secondes dans le cas de non-réponse, montrez-lui comment faire.]

Daɲɛ in dun ? *[indiquer le mot « zii » avec le doigt].* **I bɛ se k'o kalan wa ?**

[Après sa réponse, ou après 3 secondes dans le cas de non-réponse, montrez-lui comment faire.]

Nin dun ? *[indiquer le mot « hu » avec le doigt].* **I bɛ se k'o kalan wa ?**

[Après sa réponse, ou après 3 secondes dans le cas de non-réponse, montrez-lui comment faire.]

I y'a faamu wa ? N bɛ min nɔfɛ i y'o faamu wa? Ni ne ko "a daminɛ", i bɛ siraw ta kelen kelen k'u kalan k'a daminɛ numanfɛ ka taa kininfɛ. N'i sera sira dɔ laban na,

i b’o nɔkanta daminɛ. I labɛnnen don wa? I b’a lajɛ k’u kalan ka ɲɛ teliya la. A daminɛ!

zi	fe	do	lu	tee
laa	bii	kee	mo	sawa
ki	gibɔ	lezo	fuki	cuto
gamo	Luba	yow	basɔ	pifo
pa	kiwɔ	zaa	yenu	jowe
guu	Mire	maja	dɛca	nsɔ
yɛbu	lina	ɲipɛ	tansa	yonpe
wɛn	Mudo	sipu	poora	ŋasi
zuso	wɛɛ	Loo	lunan	njew
ɲope	Nbeli	luro	pini	leko

Time Remaining

Autostop?

Lecture du texte 1

Sisan, n b’a fɛ i ka maana in kalan. I b’i kan bɔ kosɛbɛ A lajɛ i k’a kalan ka ɲɛ teliya la; o kɔ ne bɛ ɲininkali dɔw kɛ i la. Ni ne ko i k’a daminɛ, i b’a daminɛ yan *(Mettez la feuille de la Section 5 devant l’élève (F/5). Montrez du doigt le premier mot du passage).* **I labɛnna wa ? An k’a daminɛ.** [*Faites démarrer le chrono en appuyant sur le bouton START / STOP]*

Samiyɛ	waati	don.	Ji	sigira
Sibi	bɔlɔnw	kɔnɔ.	Dɔgɔ	don,

Fati	ye	a	ka	ɔrɔbu
kura	don.	A	n’a	terimuso
Umu	taara	sugu	la.	U
bɛ	taama	na.	Sɔɔnin,	Fati
binna.	A	kasira.	A	y’a
ka	ɔrɔbu	lajɛ.	A	seginna
so.	A	ba	ye	ɔrɔbu
kura	wɛrɛ	di	a	ma.

Time Remaining

Autostop?

Questions de Compréhension

[Reprendre le texte]

Sisan, i bɛna ɲininkali damadɔ jaabi maana in kan.

1. Ko in kɛra san waati jumɛn ? ([Samiyɛ])

- Correct
- Incorrect
- Pas de réponse

2. Fati ye mun don? ([ɔrɔbu])

- Correct
- Incorrect
- Pas de réponse

3. Mun ye Fati sɔrɔ ? ([A binna])

☐ Correct
☐ Incorrect
☐ Pas de réponse

4. Jɔn kasira ? ([Fati])

☐ Correct
☐ Incorrect
☐ Pas de réponse

5. Fati binna. A ka ɔrɔbu bɛ cogo di ? ([ɔrɔbu nɔgɔlen])

☐ Correct
☐ Incorrect
☐ Pas de réponse

Compréhension à l'audition

Sisan, ne bɛna maana kelen kalan i ye siɲɛ kelen. O kɔ, n bɛ ɲininkali damadɔ k'i la maana in kan. I bɛ maana in lamɛn kosɛbɛ. I bɛ tila ka ɲininkaliw jaabi i fɛrɛ ma' I sɔnna wa? N b'a fɛ i ka min kɛ i y'o faamu wa? An k'a daminɛ. A lamɛn kosɛbɛ:

Bi ye seli ye.

Ma ye Buba n'a dɔgɔmuso Fanta ka fini kuraw labɛn.

U y'u pari ka taa warabafilɛso la.

U taara mɔbili ɲini sirada la.

U mɛɛnna u ma mɔbili sɔrɔ bawo mɔbili bɛɛ falen don.

Laban na, mɔbili dɔ sɔrɔla.

U selen warabafilɛso la Buba ni Fanta ye ji suma san.

O kɔfɛ, u ye waraba, sama, bama ani bagan caman wɛrɛw ye.

U ye fotow ta ani k'u teriw ye.

Seli diyara dɛ !

1. Buba ni Fanta taara min ? ([Warabafilɛso la.])

 Correct
 Incorrect
 Pas de réponse

2. Munna u ma mɔbili sɔrɔ joona ? ([Bawo mɔbili bɛɛ falen don. Bawo selidon don.])

 Correct
 Incorrect
 Pas de réponse

3. Bagan jumɛnw bɛ sɔrɔ warabafilɛso la ? ([Waraba, sama, banba (hali n'a ye bagan fila fɔ)/ Kungokɔnɔ baganw.])

 Correct
 Incorrect
 Pas de réponse

4. Jɔnw ye fotow ta ? ([Buba ni Fanta])

 Correct
 Incorrect
 Pas de réponse

5. Munna u ye ji suma san ? ([Bawo minnɔgɔ b'u la.])

 Correct
 Incorrect
 Pas de réponse

Entretien sur l'environnement de l'élève.

An tilala ka ban. An tɔ ye ɲininkali damadɔw ye e kan, aw ka du kan, i ka kalan kan ani aw ka so kan.

1. E si ye san joli ye? ((Enregistrez le nombre d'années. Si l'élève ne sais pas ou ne répond pas, enregistrez 99.))

2. I bangena kalo jumɛn ? ((Enregistrez le mois. Si l'élève ne sais pas ou ne répond pas, enregistrez 99.))

3. I bangena san jumɛn ? ((Enregistrez l'année. Si l'élève ne sais pas ou ne répond pas, enregistrez 99.))

4A. I bɛ kan jumɛn (w) fɔ so ? ([Jaabi caman bɛ se ka di])

- ☐ Bamanankan
- ☐ Fulfuldé
- ☐ Songhoi
- ☐ Bomu
- ☐ Français
- ☐ Arabe
- ☐ Autre
- ☐ Pas de réponse / ne sais pas

4B. Si la réponse est autre, précisez:

5. Kalanjɛ gafe dɔ b'i bolo wa?

 Oui
 Non
 Pas de réponse / ne sais pas

6A. Gafe wɛrɛw, kunnafonisɛbɛnw walima fɛn kalanta wɛrɛ b'i bolo k'a bɔ kalanso taw wa ?

 Oui
 Non
 Pas de réponse / ne sais pas

6B. Misali damadɔw di ((Pas besoin d'enreigstrer la réponse))

7A. Gafe ninnu bɛ kan jumɛnw na?

 Français
 Bamanankan
 Fulfuldé
 Songhoi
 Bomu
 Arabe
 Autre
 Pas de réponse / ne sais pas

7B. Si la réponse est autre, précisez:

8. K'a bɔ e la, mɔgɔ wɛrɛ bɛ a' ka du kɔnɔ min bɛ se kalanjɛ la wa ?

 Oui
 Non
 Pas de réponse / ne sais pas

9A. Jɔn ni jɔn bɛ se kalanjɛ la aw ka so ? ((Plusieurs réponses sont autorisée])

 Mère
 Père
 Soeur(s)/frère(s)
 Autre
 Ne sais pas / pas de réponse

9B. Si la réponse est autre, précisez:

10. Arajo b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

11. Telefɔni b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

12. Yeelen (kuran) b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

13.Tele b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

14. Firigo (jisumanyalan) b'aw ka so wa ?

 Oui

 Non
 Pas de réponse

15.Sokɔnɔɲɛgɛn b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

16. Nɛgɛso b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

17. Moto b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

18. Wotoro walima kurun walima pinasi b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

19. Mɔbili, kamiyɔn, 4x4, sɛnɛkɛmansin b’aw ka so wa ?

 Oui
 Non
 Pas de réponse

20. E ye zaridɛn kɛ yanni e ka don lakɔli la wa ?

 Oui

 Non
 Pas de réponse / ne sais pas

21. I bɛ kalanso jumɛn na ɲinan ?

 1ère année
 2ème année
 3ème année
 4ème année

22. E tun bɛ kilasi jumɛn na salon?

 Jardin d'enfants
 1ère année
 2ème année
 3ème année
 4ème année
 Pas à l'école
 Pas de réponse / ne sais pas
 Autres

23. Yala karamɔgɔ bɛ to ka baara d'e ma ka kɛ so wa ?

 Oui
 Non
 Pas de réponse / ne sais pas

24. [Ni 8 jaabi ye ɔwɔ ye] Yala mɔgɔ b'i dɛmɛ ka baara in kɛ tuma dɔw wa ?

 Oui
 Non
 Pas de réponse / ne sais pas

25. Salon, e ye kalan bila ka tɛmɛ dɔgɔkun kelen kan wa ?

 Oui

☐ Non

☐ Pas de réponse / ne sais pas

Annex E: Descriptive Statistics and Scores by Group and Gender

Distribution of students by group

Group	N	%
Treatment A	232	36.4%
Treatment B	312	49.0%
Control	93	14.6%
Total	637	100%

Distribution of students by group and gender

	Female		Male		Total
Group	N	%	N	%	
Treatment A	106	45.7%	126	54.3%	232
Treatment B	142	45.5%	170	54.5%	312
Control	44	47.3%	49	52.7%	93
Total	292	45.8%	345	54.2%	637

Descriptive statistic of student's age by group*

Group	N	Mean	SD	Min	Max
Treatment A	231	6.5	0.8	5	10
Treatment B	311	6.5	0.9	5	10
Control	93	6.4	0.7	5	10
Total	635	6.5	0.8	5	10

*Age is missing for 2 students