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EVALUATION

BASELINE REPORT: USAID/LIBERIA READ LIBERIA IMPACT EVALUATION

July 2017

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USAID/LIBERIA READ LIBERIA IMPACT EVALUATION

BASELINE REPORT

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DISCLAIMER

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

EGR	Early Grade Reading
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
IE	Impact Evaluation
IRB	Institutional Review Board
KII	Key Informant Interview
LTTP	Liberia Teacher Training Program
MDES	Minimum Detectable Effect Size
M&E	Monitoring and Evaluation
RCT	Randomized Control Trial
RL	Read Liberia
SOW	Scope of Work
USAID	U.S. Agency for International Development

EXECUTIVE SUMMARY

EVALUATION PURPOSE AND EVALUATION QUESTIONS

The main purpose of the impact evaluation will be to assess the causal impact of the Read Liberia (RL) activity on reading performance of second grade students.

The main goal of the IE will be to answer the following question:

What is the impact of the Read Liberia activity on the reading fluency and comprehension of second grade students?

PROJECT BACKGROUND

Liberian students' reading performance is below the desired levels. A recent program, the Liberia Teacher Training Program (LTTP), measured oral reading fluency in treated schools at only 14 words per minute. This was accompanied by poor performance in other literacy abilities, such as reading comprehension. To address this issue, USAID is partnering with the Ministry of Education to implement Read Liberia (RL), a 5-year activity designed to improve early grade reading skills of Liberian students in grades one and two and pilot activities designed to develop emergent literacy skills for Liberian students in public kindergarten schools in six targeted counties (Lofa, Bong, Grand Bassa, Nimba, Margibi, and Montserrado) out of 15 counties.

NORC at the University of Chicago, through the USAID Reading and Access Evaluation Contract, has been charged with conducting the external impact evaluation (IE) of the Read Liberia (RL) program. The primary interest is to measure the degree to which the RL activity will increase the proportion of students who, by the end of two grades of primary schooling, demonstrate that they can read and understand the meaning of grade level text.

EVALUATION DESIGN, METHODS AND LIMITATIONS

The NORC team decided that an impact evaluation is feasible and necessary to properly answer the agreed upon evaluation question. An impact evaluation serves to assess the causal effect of a specific intervention on a set of outcomes.

The evaluation team is using an experimental or randomized control trial (RCT) approach to answer the evaluation question, with schools randomly assigned to treatment and control groups. The fact that the activity has not started yet and that the total number of schools is greater than the number of schools to be treated in the six counties, allows for an RCT.

The evaluation measures reading outcomes using subtasks of the Early Grade Reading Assessment (EGRA), a widely used tool to measure various aspects of reading proficiency. The EGRA includes several subtasks that measure higher-order skills (e.g., fluency and comprehension) and lower-order skills (e.g., phonemic awareness, letter name knowledge, and decoding), which were all conducted in English, given that English is the official language of instruction in Liberia. In addition to the EGRA tool, the baseline data collection included: (1) a short student background questionnaire which was

administered immediately following the EGRA to every student sampled, (2) a teacher questionnaire which was administered to the Grade 2 teacher of each sampled class, and (3) a questionnaire administered to the school's principal.

NORC will estimate the causal impact of the program on Early Grade Reading Assessment (EGRA) scores using regression models.

The evaluation faces several risks:

1. The design of the evaluation preceded the award of the Read Liberia contract, which potentially poses a threat to the evaluation in the event that the eventual implementation of the activity diverges from the assumptions on which the design is based.

2. Other risks are common to most evaluations and include the possibility of contamination across treatment and control groups; the evaluation team will attempt to detect and account for such contaminations prior to and during endline data collection.

3. A final risk that USAID's Goal 1 team has raised are concerns about test security related to the EGRA instrument being used for this evaluation, since it is the same assessment tools that was used in 2011 and 2015. However, there is no evidence of test leakage and, given time and budget constraints, NORC and USAID decided the creation and testing of new tools was not warranted.

FINDINGS AND CONCLUSIONS

In this report we present findings from the data collection activity that took place in May 2017 in order to establish the baseline reading level of Grade 2 students prior to the beginning of the 5 year RL activity.

- The baseline data collection was successful and went as planned. Tests conducted during fieldwork show very high reliability and consistency in the assessment work.

- Students are substantially older than what is expected for second graders. The official primary school age is 6-11, but starting school at six is rare and only 5.5% of six-year-old children are enrolled in school. Attention should be paid to this phenomenon.

- Student absenteeism and grade repetition, as reported by the learners, are high. Addressing absenteeism is very important as most activities planned for Read Liberia will take place in school and absenteeism could reduce its potential impact.

- Average scores in EGRA subtasks are in general, low for second graders.

EGRA subtasks	Average Score	Standard Error	% of Zeros
Correct Words per Minute (CWPM)*	10.2	0.6	17%
Oral Reading Fluency (ORF)*	14.6	0.9	35%
Reading Comprehension [max=5]*	0.8	0.1	58%

EGRA subtasks	Average Score	Standard Error	% of Zeros
Correct Letter Names per Minute (CLPM)	67.5	1.3	1%
Correct Non-words Per Minute (CNONWPM)	1.4	0.1	81%
Orientation To Print [max=3]	2.2	0.1	10%
Phonemic Awareness [max=10]	3.8	0.1	10%
Listening Comprehension [max=3]	1.6	0.1	17%

*main impact outcomes

On average, students in the sample can correctly identify 10.2 familiar words per minute and can correctly read 14.6 words per minute from a connected paragraph (Oral Reading Fluency). More than a third of the students could not identify a single word in the paragraph. On average, learners answered correctly less than one comprehension question based on the passage read aloud and more than half (58%) were not able to answer any of the 5 comprehension questions correctly. Students in the sample could identify 67.5 correct letter names per minute with only 1% unable to identify any letter names. On the other hand, decoding skills are low. Students could read, on average, 1.4 invented words correctly and, on average 3.8 out of 10 phonemes correctly. Most of the students (81%) were not able to read any invented words at all. Students were asked to identify where a sentence started, in what direction they would read, and where the next line starts as part of the Orientation to Print subtask. Students were able to perform 2.2 of these activities successfully with 10% of them unable to perform any of the activities. Finally, after listening to a short story students were asked 3 comprehension questions and, on average, they were able to respond1.6 questions correctly, with 17% of them not able to understand what was being read to them at all.

- On average, girls tend to score lower than boys in all EGRA subtasks and rural students' performance is substantially lower than that of urban learners.
- A third of the Grade 2 teachers interviewed are volunteer teachers. Their reported teaching practices and behaviors are similar to those of paid teachers. Having a volunteer teacher rather than a paid teacher does not seem associated with differential student performance.
- Teacher education levels and their reported classroom practices do not correlate with assessment scores.
- Most teachers report following the official curriculum, having teacher guides and preparing lessons plans. Principals report reviewing teachers' lesson plans and a large majority claims to do so every week or more often. However, less than half the teachers were able to show the interviewers the written lesson plan for the day of the visit. In the future, it would be useful to conduct classroom observations designed to capture elements specific to the Read Liberia pedagogy and include both low inference and higher inference items. Additional monitoring and other incentives could be included in the RL activity to improve actual behavior if needed.

EVALUATION PURPOSE

EVALUATION PURPOSE, AUDIENCE AND INTENDED USE

The main purpose of the impact evaluation will be to assess the causal impact of the RL activity on reading performance of second grade students.

Despite the different sub-activities that this intervention will include, the focus of this evaluation is to measure the effect of Read Liberia as a whole. NORC has been instructed by USAID to plan for an impact evaluation focusing only on Grade 2 students. To this end, NORC assessed Grade 2 students before the end of the 2016-17 academic year (May 2017) and interviewed their teachers and principals. These data serves as the baseline for the evaluation.

This evaluation will contribute to the increasing body of evidence on Early Grade Reading Activities in developing countries. The results of the baseline and the impact evaluation will inform USAID, USAID/Liberia Mission, the Government of Liberia –in particular the Education Sector-, the activity implementer, the research and practice community, and the donor community.

EVALUATION INDICATORS

Early Grade Reading Assessment

The evaluation measures reading outcomes using subtasks of the Early Grade Reading Assessment (EGRA), a widely used tool to measure various aspects of reading proficiency. The EGRA subtasks included in the assessment are described in Table 1 below and all were conducted in English.

We used an existing version of EGRA, created for Liberian students in 2011, to collect baseline data. The assessment was not modified, given the short time available before data collection. The skills tested with the EGRA tool and their corresponding sub-task are indicated in Table 1: Skills and corresponding sub-tasks included in baseline EGRA tool.

Table 1: Skills and corresponding sub-tasks included in baseline EGRA tool.

Skill	Sub-task & Measurement
Orientation to print	Awareness of text direction, where to start reading, how to read down a page. Total of 3 questions.
Alphabet knowledge	Number of letters names, out of 100, correctly identified in 60 seconds
Phonological awareness	Identify words that start with a different sound. Number of correctly identified sounds, out of 10
Decoding	Number of nonsense words, out of 50, correctly decoded in 60 seconds
Word Recognition	Familiar word reading, number of correct words, out of 50, read in 60 seconds
Oral Reading Fluency	Oral passage reading, number of words fluently read (with accuracy), out of 60, from a reading passage in 60 seconds
Reading Comprehension	Number of questions answered correctly, out of 5, about a passage read aloud by the student
Listening Comprehension; oral language	Number of questions answered correctly, out of 3, about a passage read aloud to the student by the enumerator

Additional Instruments

In addition to the EGRA tool, the baseline data collection included: (1) a short student background questionnaire which was administered immediately following the EGRA to every student sampled, (2) a teacher questionnaire which was administered to the Grade 2 teacher of each sampled class, and (3) a questionnaire administered to the school's principal.

NORC used validated questionnaires that had been previously used in Liberia along with the 2011 EGRA tool. While the EGRA assessment tool was not altered, we slightly modified questions in the Student Background, Teacher, and Principal questionnaires where necessary to ensure relevancy to the objectives of the activity as it was defined in March 2017.

The principal survey included questions about their education and experience, coaching and monitoring of teachers, interaction with education officers, parents, school resources, etc. The teacher questionnaire contained questions about the teachers' education and experience, interactions with the principal or others regarding coaching and monitoring, instructional practices related to reading, etc. Finally, the student context interview focused on the child's home language, reading practices at home, some instructional practices in the classroom, and household possessions.

PROJECT BACKGROUND

Liberian students' reading performance is below the desired levels. A recent program, the Liberia Teacher Training Program (LTTP), measured oral reading fluency in Grade 2 treated schools at only 14 words per minute while the recommended benchmark for Liberia is 35 words per minute[1] and the international standard for English is 45-60 words per minute. This was accompanied with poor performance in other literacy abilities, such as reading comprehension. To address this issue, USAID is

[1] LTTP II: Endline Assessment of the Impact of Early Grade Reading and Mathematics, Annex G, Interventions http://www.earlygradereadingbarometer.org/files/EGRA%20in%20Liberia.pdf

implementing READ Liberia (RL), a 5-year activity designed to improve early grade reading skills of Liberian students in grades one and two and pilot improvements in developing emergent literacy skills for Liberian students in public kindergarten schools in six targeted counties (Lofa, Bong, Grand Bassa, Nimba, Margibi, and Montserrado).

NORC at the University of Chicago, through the USAID Reading and Access Evaluation Contract, has been charged with conducting the external impact evaluation (IE) of the READ Liberia (RL) program.

The main purpose of the IE will be to assess: *What is the impact of the RL activity as a whole on the reading fluency and comprehension of second grade students*[2]*?* The evaluation will measure reading outcomes using the Early Grade Reading Assessment (EGRA), a widely used tool to measure various aspects of reading proficiency.

EVALUATION METHODS & LIMITATIONS

EVALUATION QUESTIONS

The main goal of the IE will be to answer the following question:

What is the impact of the Read Liberia activity on the reading fluency and comprehension of second grade students?

As explained above, the measurement of reading fluency and comprehension will be done using the EGRA in English, specifically designed for Liberia.

METHODOLOGY OVERVIEW

The NORC team decided that an impact evaluation is feasible and necessary to properly answer the agreed upon evaluation question. An impact evaluation serves to assess the causal effect of a specific intervention on a set of outcomes. It allows us to attribute changes in an outcome to a specific intervention or set of interventions by answering the counterfactual question "What would have happened to activity participants in the absence of the intervention?" Ideally, this is done by observing the same program participants both with and without the intervention at the same point in time. Of course, this is not possible; at any given time, a participant either receives the intervention or does not. Therefore, we can never directly observe the counterfactual and instead need to create a comparison group to serve as the counterfactual proxy. Identifying a credible comparison group is a critical aspect of an impact evaluation and there are several approaches to doing so.

The evaluation team used an experimental or randomized control trial (RCT) approach to answer the evaluation question, with schools randomly assigned to treatment and control groups. The fact that the

[2] At the time of writing this report, the Read Liberia activity is still in the procurement phase and an implementing firm has not been selected. Therefore, the details of the actual activity and its components are unknown. As such, the design of the IE is based on the information available in the Read Liberia RFP and agreements reached during conversations with USAID/Liberia and USAID/E3/ED.

activity has not started yet and that the total number of schools is greater than the number of schools to be treated in the six counties, allows for an RCT design for this evaluation. As mentioned above, we want treatment and control groups to be as similar as possible; the primary advantage of a randomized design is that it minimizes the potential for selection bias- that is, the possibility that observed differences in outcomes between the treatment and control groups are due not to the impact of the project, but to other external and possibly systematic differences between groups that the evaluation is not able to account for. Another advantage is that the randomizing approach tends to be fairly simple to explain to stakeholders and policy makers, and it is a fair allocation when not all schools can receive treatment at once.

Randomization into treatment and control groups will occur at the school level. Randomization at the school level is possible given that all sub-activities included in IR2, IR3 and IR4 will be implemented at the school level, while the IR1 sub-activities are common to all schools in the country.

Experimental Design

We use an experimental approach to create treatment and control groups of schools. We will estimate the causal impact of the program on EGRA scores using regression models explained in Annex VI. Although the evaluation question focuses on reading fluency and comprehension outcomes, we plan to estimate the impact of RL on all sub-tasks included in the EGRA tool.

In addition to estimating the overall impact of Read Liberia on reading outcomes, we will also conduct a sub-group analysis to examine whether the impacts were different between boys and girls. Depending on the findings derived from baseline data, we can potentially explore some interactions between school characteristics and the RL activity. For example, if we find that student characteristics and performance are different between rural and urban schools, we could study whether the effects of the activity are different accordingly to the school location.

Limitations

The evaluation faces several risks. Primary among them, is the fact that the design of the evaluation completely preceded the award of the Read Liberia contract, which potentially poses a threat to the evaluation in the event that the actual implementation of the activity diverges from the assumptions on which the design is based.

Another risk, which is common to most evaluations, is the possibility of contamination across treatment and control groups; evaluation plans were designed in order to minimize these risks and the evaluation team will attempt to detect and account for such contaminations prior to and during endline data collection.

A final risk -that USAID's Goal 1 team has raised- relates to test security of the EGRA instrument being used for this evaluation, since it is the same assessment tools used in 2011 and 2015. However, there is no evidence of test leakage and, given time and budget constraints, NORC and USAID decided the creation and testing of a new tool was not warranted.

SCHOOL AND STUDENT SAMPLE

Our methodological approach to answering the evaluation question requires collecting data before the start of the activity's implementation in order to ensure treatment and control schools are, on average, statistically identical. Data collection will take place again after two to three years of RL implementation.

We opted to use a repeated cross section sample, collecting data from a random sample of Grade 2 students in May 2017, as requested by USAID/Liberia, and again from a random sample of Grade 2 students in the same schools in two to three years[3].

School Selection

USAID/Liberia, in collaboration with the Ministry of Education, has defined a set of criteria that was used to identify schools that are eligible to receive the Read Liberia assistance. These criteria include all schools that: 1) are public; 2) are located in the six selected counties (Montserrado, Margibi, Bong, Grand Bassa, Nimba and Lofa); and 3) have both grade one and grade two classes. The evaluation sample will be drawn from schools who meet these same criteria.

For the evaluation, NORC requested an additional criterion, that the schools have at least 20 learners in Grade 2 (according to the EMIS) to assure finding enough learners for the assessment. The EMIS list of schools provided by the MOE includes designations for urban and rural schools. Using these data, the sample is assigned proportionally to the number of urban and rural schools within each county. As a result, the sample is representative of the population of public schools which have grade 1 and grade 2 classes for each of the 6 counties in the sample.

Student Selection

Sixteen second grade students - 8 girls and 8 boys - were selected randomly in each school. All learners were eligible for selection unless they refused to participate or severe disabilities precluded them from participating.[4]

Sample Size Calculation

The sample size calculation was made based on the following assumptions.

- α is the significance level of the test, or probability of Type I error. We use the standard value of 0.95.
- β is the power of test, where $(1-\beta)$ is the probability of Type II error. We use the standard value of 0.8.

[3] The exact length of the evaluation and the year in which endline data will be collected will be decided at a later date, and taking into account the activity details. There are trade-offs to consider: going sooner minimizes the risk of teachers switching between treatment and control schools while postponing the endline gives the activity more time to be fully implemented and adjusted.

[4] The request for 16 students addresses the need to maximize the probability of collecting data from a minimum of 16 students (eight girls and eight boys) per school. This provides enough observations to give the evaluation sufficient power to detect impact, given the number of schools in the sample. The NORC evaluation team specified 20 enrolled students, rather than 16, to account for absenteeism which is quite common.

- ρ is the intracluster correlation coefficient, or ICC. The ICC in the present case is a measure of how much variability lies between schools and how much lies within schools. Based on King et al. (2015) which describes Liberian EGRA data, we assume an ICC of 0.3.[5]

- r^2 is the proportion of the variation in the outcome due to the covariates anticipated in the regression analysis. In our case, these covariates will include a range of household and individual characteristics, as well as school fixed effects. For this parameter, we assume an approximate value of 0.2.

- MDES is the minimum detectable effect size. The MDES is the smallest impact of the activity on the outcome variable that the evaluation will be able to detect. The selected MDES is 0.34 of a standard deviation, a medium size effect. This corresponds to the standardized effect for Oral Reading Fluency found in the midline evaluation of LTTP (The NORC team estimated this standardized effect using our own calculations and data from the Midline LTTP report.[6,7]) During a phone call (February 2017) USAID/Washington and USAID/Liberia considered it a reasonable effect to be expected given previous experiences and the intensity of the intervention.

Based on these parameters, the required sample size is 45 schools in each study group (treatment and control) with 16 students in each school, for a total sample of 1,440 students. The teacher and head teacher sample consist of one Grade 2 teacher and one head teacher per school and has the objective of completing the picture of the learners' education context and helping understand the mechanisms behind the impact effects. The sample size by county is presented in

Table 2.

The number of schools in the sample is exactly as planned. The number of learners per school is sometimes lower than planned due to lower enrolment than anticipated or due to absenteeism. In other cases, it is higher given that it was decided to assess all learners in schools that had 20 learners or less. This decision was taken for two reasons, first to compensate for cases where the number of learner was insufficient and second to avoid leaving out of the exercise a very small number of learners which could have felt rejected by such an action. Overall, we have a sufficient number of schools and learners in our sample to conduct the IE as planned.

Table 2: Sample size by county and area.

County	Area	Number of Schools		Number of students	
		Planned	Observed	Planned	Observed
Bong	Urban	2	2	32	35
	Rural	15	15	240	262

[5] This figure corresponds to the one in Annex H for grade 2 in the Endline report of LTTP (King, Simon, Medina Korda, Lee Nordstrum and Susan Edwards (2015). Liberia teacher training program: Endline assessment of the impact of early grade reading and mathematics interventions)
[6] DeStefano, Joseph, Timothy Slade, and Medina Korda (2013). Liberia Teacher Training Program (LTTP): Midterm Assessment of the Impact of Early Grade Reading and Math Interventions.
[7] We divide the DID for ORF and grade 2 in table 8 of the midline report, by the standard deviation that we calculated using the data in table 2 of the midline report.

County	Area	Number of Schools		Number of students	
		Planned	Observed	Planned	Observed
Grand Bassa	Urban	2	2	32	35
	Rural	6	6	96	85
Lofa	Urban	2	2	32	36
	Rural	17	17	272	292
Margibi	Urban	1	1	16	17
	Rural	6	6	96	90
Montserrado	Urban	7	7	112	119
	Rural	6	6	96	100
Nimba	Urban	5	5	80	88
	Rural	21	21	336	363
	Total Urban	**19**	**19**	**304**	**330**
	Total Rural	**71**	**71**	**1136**	**1192**
TOTAL SAMPLE SIZE		**90**	**90**	**1440**	**1522**

BASELINE DATA COLLECTION

NORC worked closely with subcontractors School-to-School International and the Khana Group (TKG) to conduct all data collection activities. The data collection schedule is as follows:

Table 3: Data Collection Activities for the RL: Baseline and Endline Dates.

Survey Type	Baseline Date	Endline Date
Early Grade Reading Assessment	May/June, 2017	May/June 2019 or 2020
Student Survey	May/June, 2017	May/June 2019 or 2020
Teacher Survey	May/June, 2017	May/June 2019 or 2020
Head Teacher Survey	May/June, 2017	May/June 2019 or 2020

There were no significant challenges identified during baseline data collection. In addition to the extensive training and practice assessors received prior to starting fieldwork, they continued to be tested for reliability and consistency during data collection. NORC, organized a protocol for monitoring inter-rater reliability during baseline data collection. The percentage of agreement between assessors for different EGRA subtasks was very high, between 98 and 99%. The Kappa statistic ranged from 0.83 to 0.98. The Kappa strength of agreement indicates the extent to which two different ratings of the same subject could have happened by chance. Kappa values range from -1.0 to 1.0 where higher values indicate lower probability of agreement by chance. According to Fleiss (1981)8 Kappa measures greater than 0.75 are excellent, and according to Landis and Koch (1977) over 0.81 is almost perfect. Our indicators consistently show excellence in the quality of data collection.

[8] Fleiss, J. L. (1981). Statistical methods for rates and proportions (2nd ed.) New York: John Wiley.
Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. Biometrics, 33, 159–174.

BASELINE RESULTS

BASELINE DESCRIPTIVE RESULTS FROM THE BASELINE SURVEY

Student Sample Description

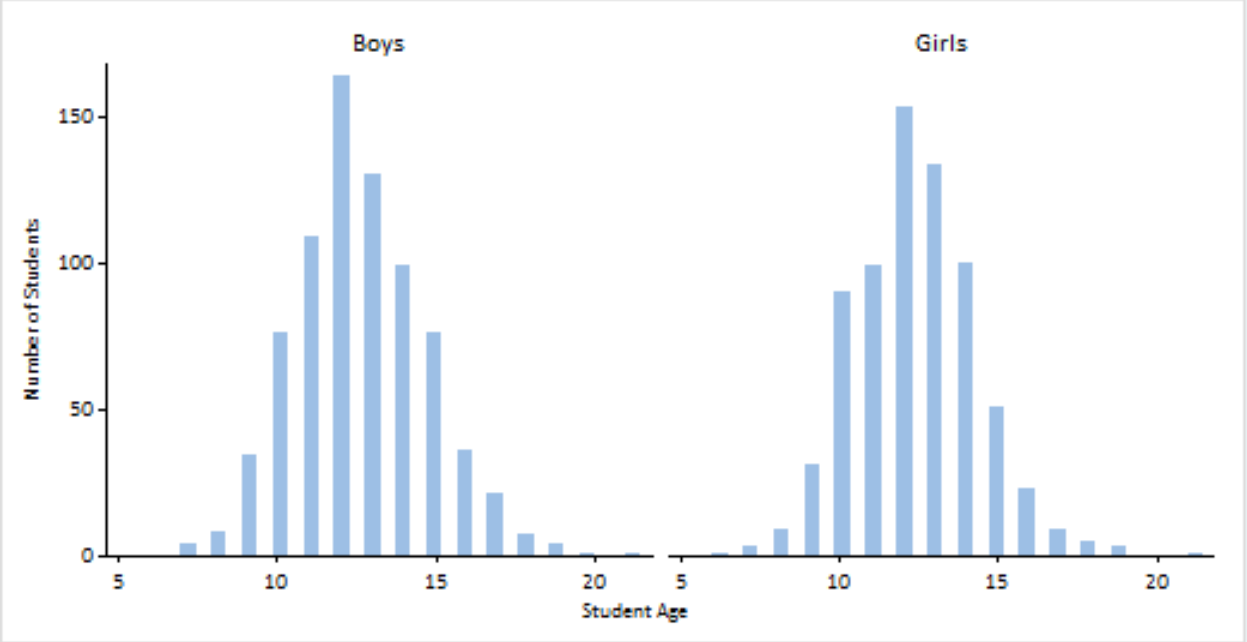
The student sample is composed of 52% boys and 48% girls however this difference is not statistically significant. We also see that more boys attending school in rural areas (81%) than girls (76%), and that difference is statistically significant. The distributions are presented in Table 4.

Table 4: Students average age and location, by gender.

	Boys	Girls	Difference
All	52%	48%	3%
Rural (proportion)	81%	76%	-5%
Age (average)	12.6	12.4	-0.3
Observations	786	736	

The average age of boys is 12.6 years old and for girls is 12.4 years old, and the difference in age is also statistically significant. Figure 1 shows the distribution of student age by gender. We note that there are observations of second grade students between 15 and 20 years old among both genders.

Figure 1: Distribution of student age by boys and girls.



A set of characteristics of the sample by County are presented in Table 5. The sample is predominantly rural (78% overall) and representative of the target population. Most counties contain more than 70% rural students with the exception of Montserrado (46%). The distribution of genders remains similar

across counties with a consistent skew toward boys, except in Montserrado where girls comprise 53% and boys represent 47% of the sample. The majority of the students are between 11 and 15 years old (75%). Around 10% of the Grade 2 students are 16 years or older in Bong (13%), Grand Bassa (11%), Margibi (9%), and Nimba (9%).

Table 5: Proportion of observations by County and selected variables.

Variable	Bong	Grand Bassa	Lofa	Margibi	Mont-serrado	Nimba	Total
Urban	12%	29%	11%	16%	54%	20%	22%
Rural	88%	71%	89%	84%	46%	80%	78%
Boy	54%	52%	52%	53%	47%	52%	52%
Girl	46%	48%	48%	47%	53%	48%	48%
6-10 years	12%	8%	29%	10%	27%	13%	17%
11-15 years	75%	81%	68%	82%	72%	78%	75%
16 and more years	13%	11%	3%	9%	1%	9%	7%
Total Observations	**297**	**120**	**328**	**107**	**219**	**451**	**1522**

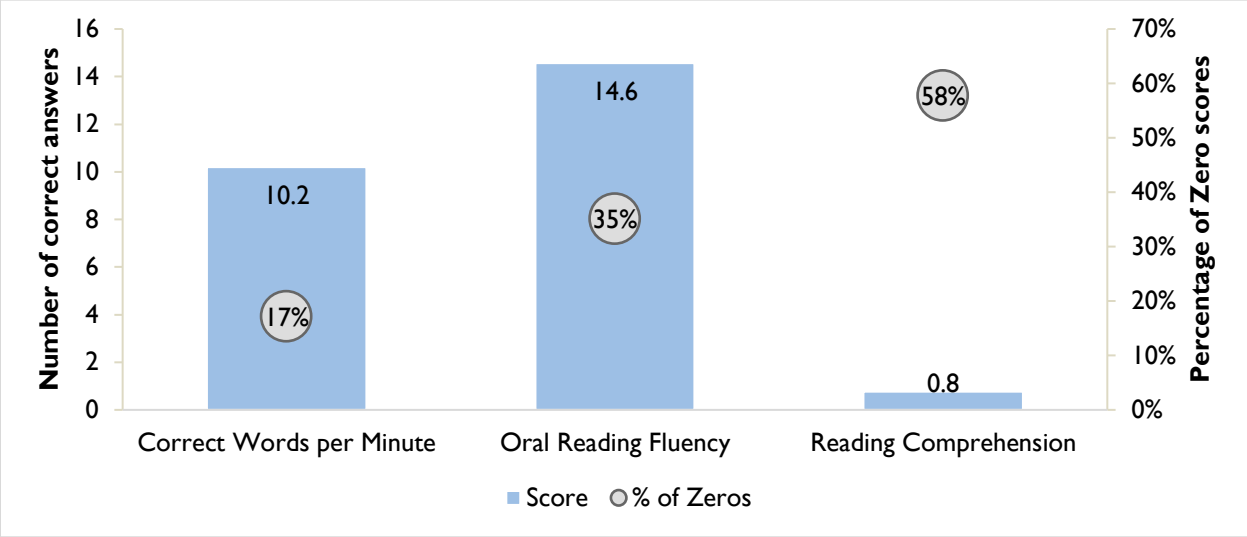
EGRA Scores

The different subtasks included in the assessment are described in Table 1. Our focus is on the main impact indicators (correct familiar words per minute (CWPM), oral reading fluency (ORF), and reading comprehension (RC)), but we also analyze the rest of the subtasks assessed (Correct Letter Names per Minute (CLPM) and Correct Non-Words per Minute (CNONWPM), Orientation to Print (OTP), Phonemic Awareness (PA), and Listening Comprehension (LC)). The aggregated results of the different EGRA subtasks are presented in Table 6.

On average, Liberian students in these 6 counties can correctly identify 10.2 familiar words per minute and can correctly read around 14.6 words per minute from a paragraph (Oral Reading Fluency[9]). Depending on how much of the paragraph the student is able to read, a certain number of comprehension questions about it are asked. It is important to bear in mind that there are 5 comprehension questions based on the reading passage but students are only asked the questions corresponding to the part of the passage that they were able to read. Less than half of the students were asked at least one comprehension question, while the rest did not read enough to particiapte. On average the learners that participated in the reading comprehension task answered less than one question correctly and more than half (58%) were not able to answer any of the comprehension questions correctly. These results are presented graphically in Figure 2.

[9] Oral Reading Fluency The oral reading fluency subtask is timed and measures speed and accuracy in terms of the number of correct words read per minute. The number of words per minute is calculated as= (Total words correct – Total incorrect) / [(60 – Time remaining on device) / 60]

Figure 2: Correct Familiar Words per Minute, Oral Reading Fluency, and Reading Comprehension score (primary axis) and percentage of zero scores (secondary axis).



Liberian students in the sample could identify 67.5 correct letter names per minute (CLPM) with only 1% unable to identify any letter names. They could identify, on average, 1.4 invented words correctly (81% were not able to read any invented words at all). The assessment asked students to identify where a sentence started, in what direction they would read, and where the next line starts as part of the Orientation to Print subtask. Students were able to perform 2.2 of these activities correctly with 10% of them unable to perform any of the activities. Students could identify on average 3.8 out of 10 phonemes correctly. Finally, related to listening comprehension, students were able to answer, on average, 1.6 out of 3 questions correctly, with 17% of them not able to understand what was being read to them at all.

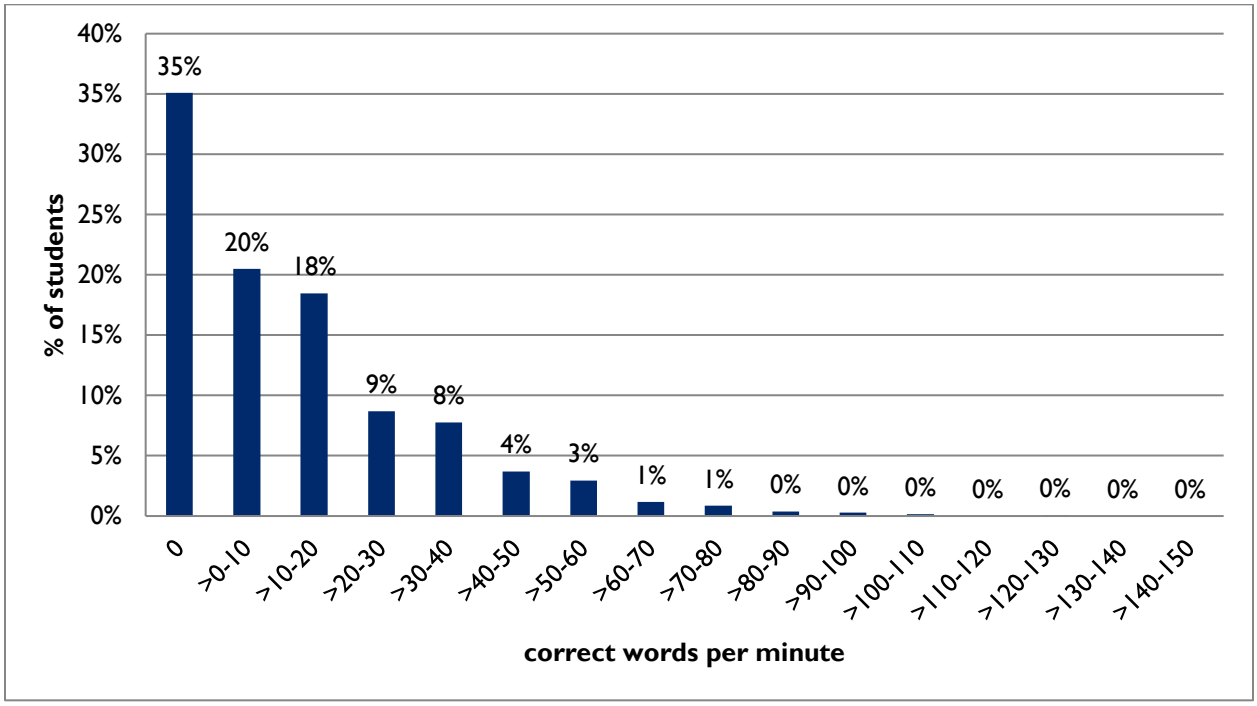
Table 6: Summary of EGRA mean scores.

EGRA subtasks	Average	Standard Error	Percentage of Zeros
Correct Words per Minute (CWPM)*	10.2	0.6	17%
Oral Reading Fluency (ORF)* CWPM from connected paragraph	14.6	0.9	35%
Reading Comprehension [max=5]*	0.8	0.1	58%
Correct Letter Names per Minute (CLPM)	67.5	1.3	1%
Correct Non-words Per Minute (CNONWPM)	1.4	0.1	81%
Orientation To Print [max=3]	2.2	0.1	10%
Phonemic Awareness [max=10]	3.8	0.1	10%
Listening Comprehension [max=3]	1.6	0.1	17%

* Main Impact Evaluation indicators.

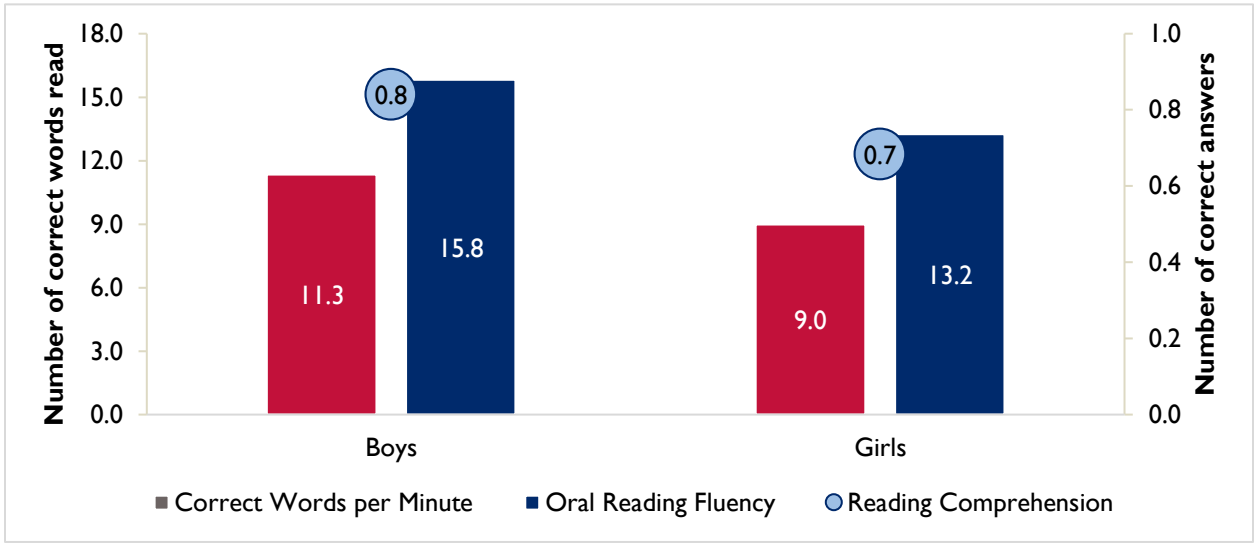
Figure 3 shows the complete distribution of ORF scores. While 22% of the students read at the proposed benchmark for second grade of 35 words per minute or even faster, the rest do not reach the level. As mentioned before about 35% of students are non-readers; this means that they were not able to read a single word from the reading paragraph.

Figure 3: Distribution of Oral Reading Fluency, correct words per minute.



There are statistically significant differences between boys and girls in the number of correct words per minute and oral reading fluency, but not for reading comprehension. In the first indicator, boys are able to read 11.3 words correctly per minute, while girls only 9 per minute. For oral reading boys read, on average, 15.8 words correctly per minute while girls correctly read only 13.2. In terms of reading comprehension, boys and girls perform similarly (0.8 and 0.7 correct answers respectively). These results are presented in Figure 4.

Figure 4: Correct Words per Minute (primary axis), Oral Reading Fluency (primary axis), and Reading Comprehension score (secondary axis) by boys and girls.



Boys tend to perform better than girls across the remaining EGRA subtasks, with the exception of phonemic awareness and listening comprehension where no statistically significant difference was found. For example, boys can identify 69.3 letters correctly per minute while girls can identify 65.5 letters correctly per minute. The differences are even greater when it comes to identifying invented words; boys can identify 2 non-words correctly per minute while girls could only identify 0.8 non-words correctly per minute on average. Finally, boys can perform the tasks under orientation to print (2.2 tasks out of 3) slightly better than girls (2.11 out of 3). These results are presented in table 7.

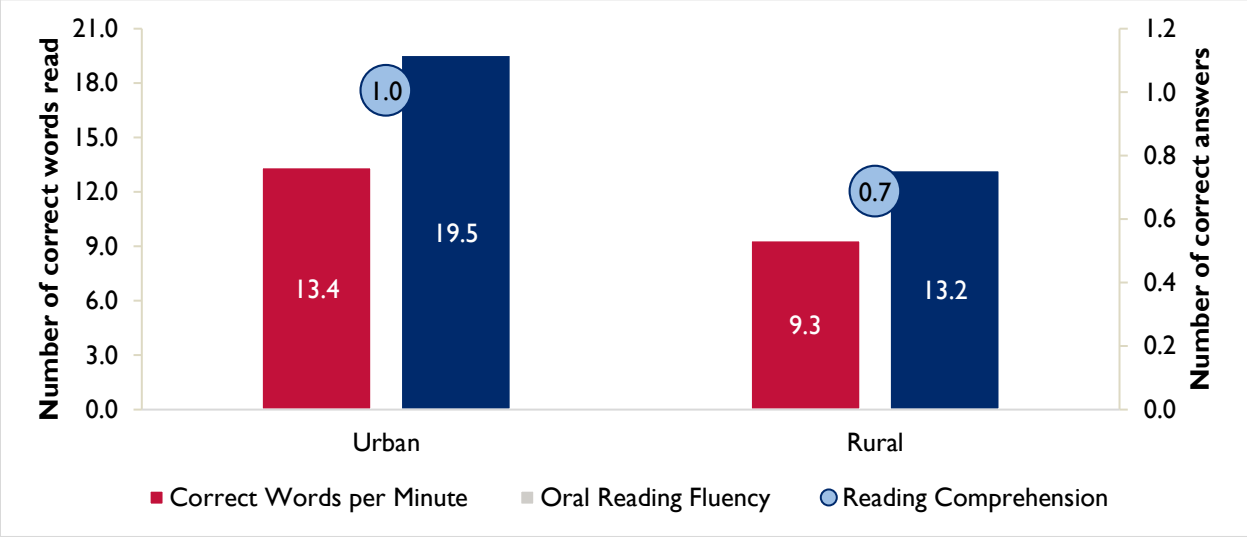
Table 7: Remaining EGRA subtasks, by gender.

EGRA Subtask	Boys	Girls	Difference
Correct Letter Names per Minute (CLPM)	69.3	65.5	-3.8*
Correct Non-words Per Minute (CNONWPM)	2.0	0.8	-1.2*
Orientation To Print [max=3]	2.2	2.1	-0.1*
Phonemic Awareness [max=10]	3.9	3.7	-0.2
Listening Comprehension [max=3]	1.6	1.6	0.0

* Statistically significant at 5%.

Students in urban areas performed better than those in rural areas (i.e. all differences are statistically significant). For instance, students in urban areas could read 13.4 familiar words correctly per minute while those in rural areas could read 9.3. Also, urban students are able to read 19.5 words correctly from a reading paragraph in a minute, while rural students read 13.2. Finally, urban students can, on average, answer 1.0 comprehension questions correctly while rural students can answer 0.7 questions correctly.

Figure 5: Correct Words per Minute (primary axis), Oral Reading Fluency (primary axis), and Reading Comprehension score (secondary axis) by urban and rural areas.



There are also statistically significant differences by urbanity in scores from the correct letter names per minute and listening comprehension subtasks. Students in urban areas can identify 74.1 letter names correctly per minute while students in rural areas identify 65.6 letter names correctly. In the case of

listening comprehension, students in urban areas can answer 1.8 questions correctly while students in rural areas answered 1.5 questions correctly on average. There are no statistically significant differences between urban and rural areas in the remaining EGRA subtasks. The results are presented in Table 8.

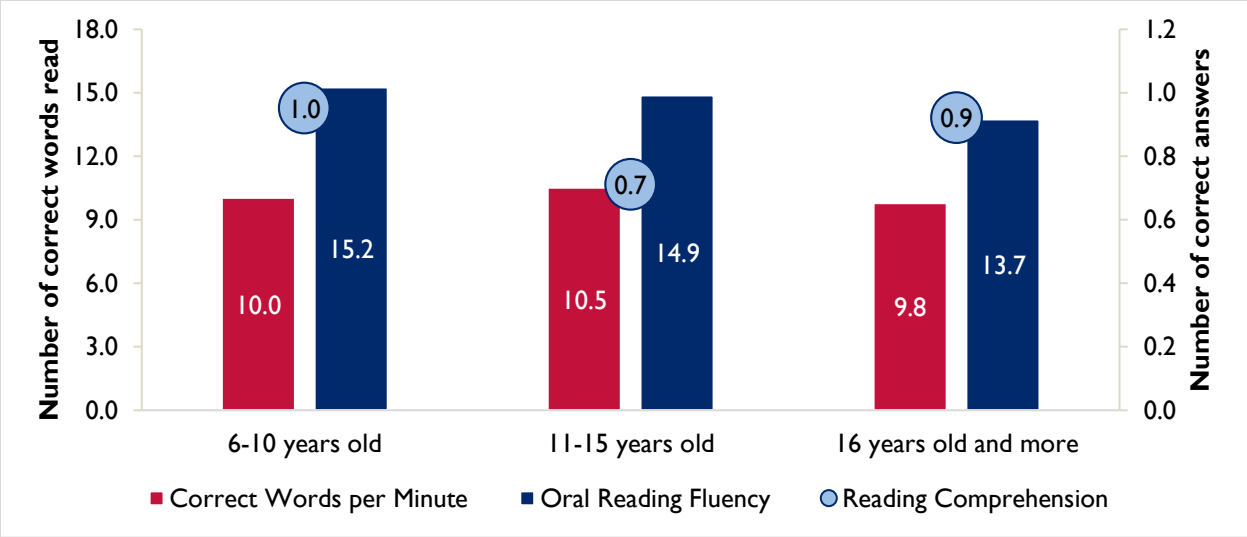
Table 8: Remaining EGRA subtasks by urban and rural area.

EGRA Subtask	Urban	Rural	Difference
Correct Letter Names per Minute (CLPM)	74.1	65.6	-8.5*
Correct Non-words Per Minute (CNONWPM)	1.7	1.3	-0.4
Orientation To Print [max=3]	2.2	2.2	0.0
Phonemic Awareness [max=10]	4.0	3.8	-0.2
Listening Comprehension [max=3]	1.8	1.5	-0.3*

* Statistically significant at 5%.

There were no statistically significant differences in the main impact indicators between the youngest students (6-10 years old) and oldest students (16 years old or more) when compared to students between 11 and 15 years old. Students between 6 and 10 years old correctly read 10 familiar words per minute on average, while those between 11 and 15 read 10.5 familiar words per minute and those 16 and older read 9.8. Oral reading fluency among students between 6 and 10 years old is 15.2 words on average, while those between 11 and 15 read 14.9 words and those 16 and older read 13.7 words. Finally, students between 6 and 10 years old correctly answered one question on average, while those between 11 and 15 correctly answered 0.7 questions and those 16 and older answered correctly 0.9 questions. The results are presented in Figure 66.

Figure 6: Correct Words per Minute (primary axis), Oral Reading Fluency (primary axis), and Reading Comprehension score (secondary axis) by age group.



There were no statistically significant differences in the remaining EGRA subtasks when comparing the younger (6-10 years old) and the older students (16 years old or more) with those 11 to 15 years old, with two exceptions. First, students between 6 and 10 years old correctly identified 61.6 letters per minute, while those between 11 and 15 identified 69.6 letters per minute. Second, students between 11

and 15 correctly answered 1.6 questions in listening comprehension, while those 16 and older correctly answered an average of 1.4 questions. These differences are statistically significant at conventional levels. All the results are presented in Table 9.

Table 9: Remaining EGRA subtasks by age group.

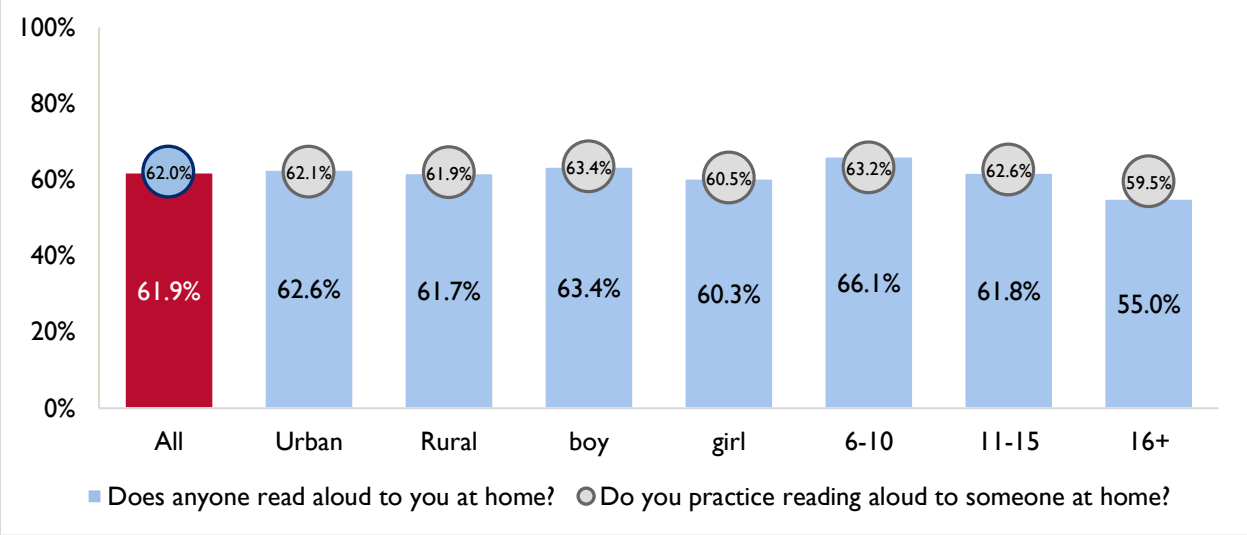
EGRA Subtask	6-10 (A)	11-15 (B)	16 + (C)	Difference (A)-(B)	Difference (C)-(B)
Correct Letter Names per Minute (CLPM)	61.6	69.6	69.0	-8.1*	-0.6
Correct Non-words Per Minute (CNONWPM)	1.6	1.4	1.5	0.2	0.1
Orientation To Print [max=3]	2.0	2.2	2.2	-0.2	0.0
Phonemic Awareness [max=10]	3.6	3.9	3.9	-0.3	0.0
Listening Comprehension [max=3]	1.6	1.6	1.4	0.0	-0.2*

* Statistically significant at 5%.

Student Reading Activities at Home and School

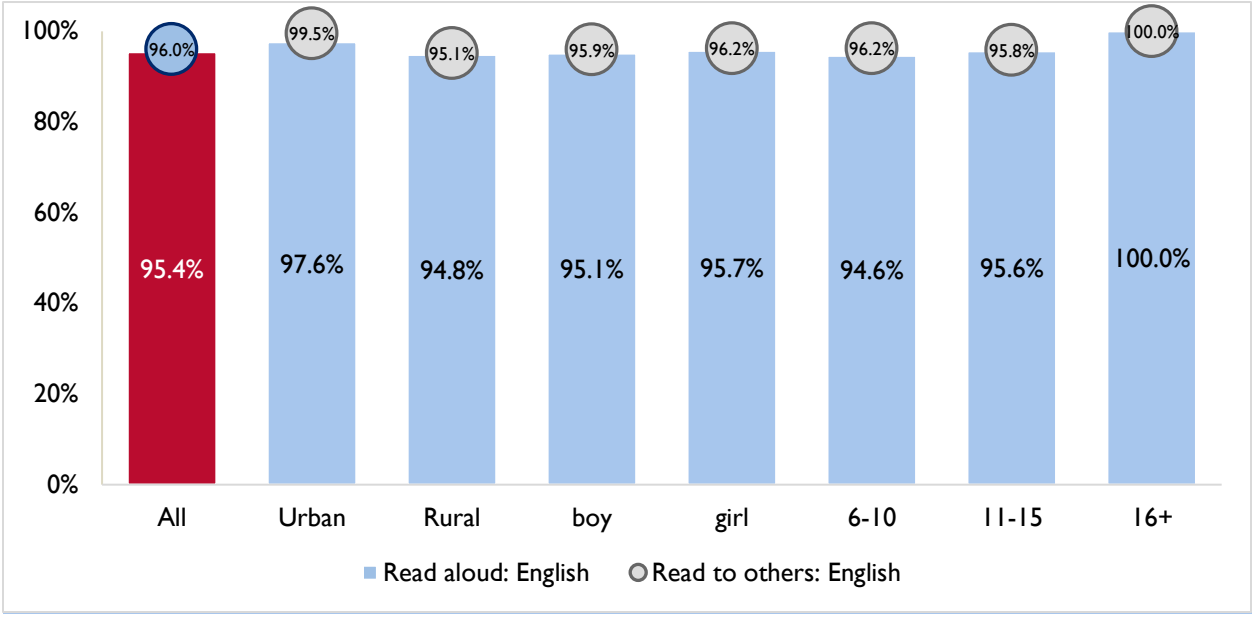
Reading Practices at Home: The majority of students reported that someone at home reads aloud to them (61.9%) and reported that they read to others at home (62%). The results are presented in Figure 77. There are small differences between urban and rural students and between boys and girls. Younger students report that someone reads to them aloud in larger proportion than older students.

Figure 7: Student is read aloud and reads to others at home, by area, gender and age group.



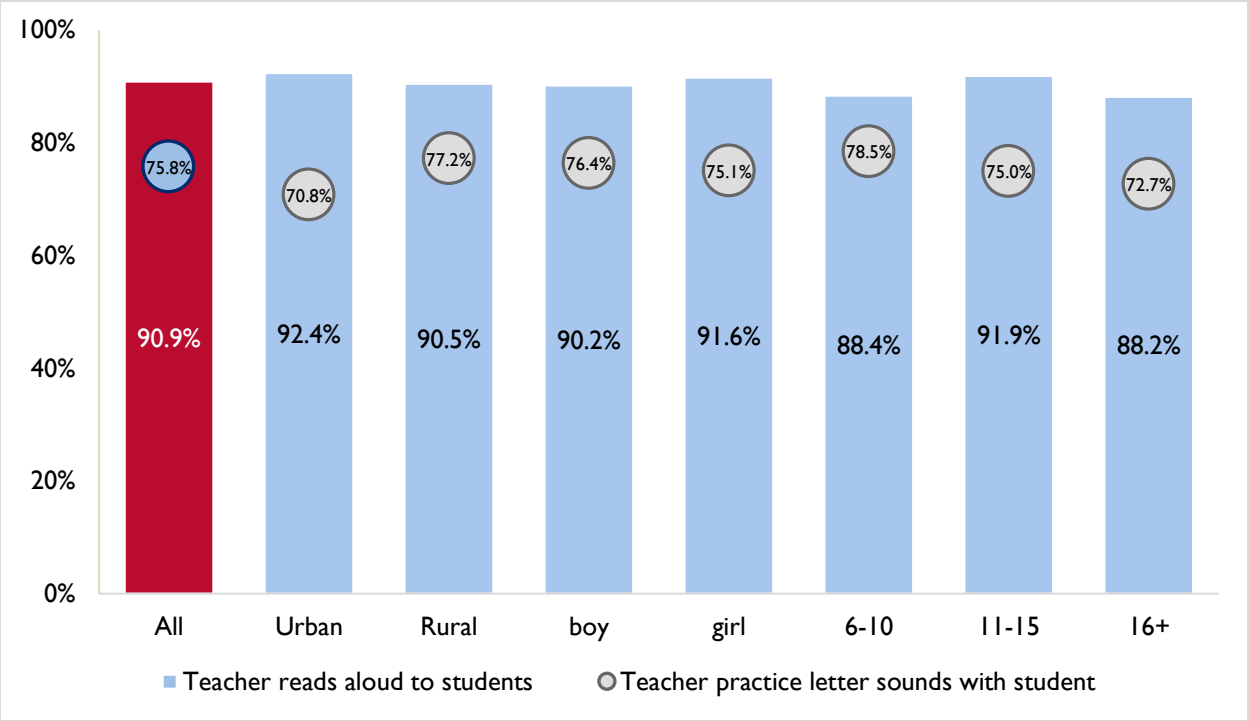
Almost all the students that reported being read to and read to someone at home, report that the language used is English. The results are presented in Figure 88.

Figure 8: Student is read to aloud and reads to others at home in English, by area, gender and age group.



Reading Practices in Class: Almost all students (90.9%) reported that their teacher reads aloud to them. There are no large differences in the reports between urban (92.4%) and rural (90.5%) students or between boys (90.2%) and girls (91.6%). Younger students (6-10 years old) and older students (16 years old or older) reported that the teacher reads aloud to them slightly less than those between 11-15 years old (88.4% and 88.2%, vs. 91.9%). The results are presented by the bars in Figure 99.

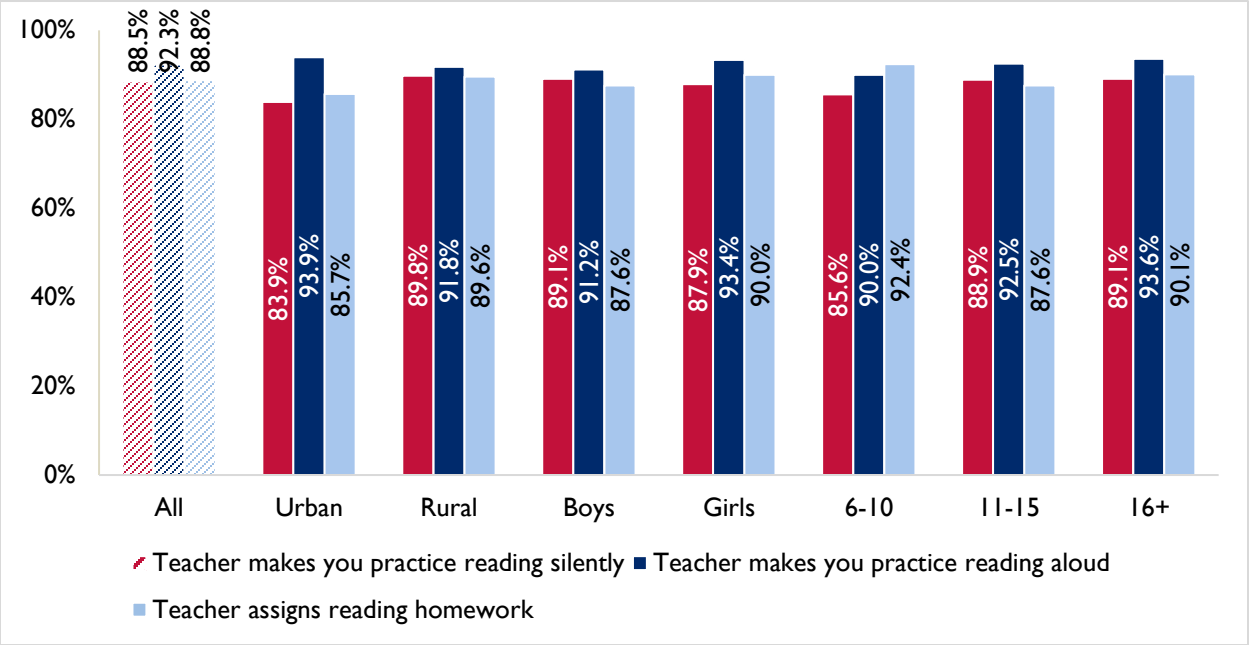
Figure 9: Teacher reads aloud to student and practice letter sounds with student, by area, gender and age group.



Around 3 out of 4 students reported that teacher practiced letter sounds with them. There are differences between urban (70.8%) and rural (77.2%) areas, and between the younger students (6-10 years old – 78.5%), and the older students (11-15 years old – 75% -, and 16 years or older – 72.7%). Those results are represented by the circles in Figure 9 above.

The majority of students reported that their teacher makes them read both silently (88.5%) and aloud in class (92.3%). The results are presented in Figure 10. Report of reading aloud are more common among urban students than among their rural counterparts. There are no important differences in the reports by age or gender.

Figure 10: Teacher makes student read silently and aloud, and assigns reading homework to students by area, gender and age group.

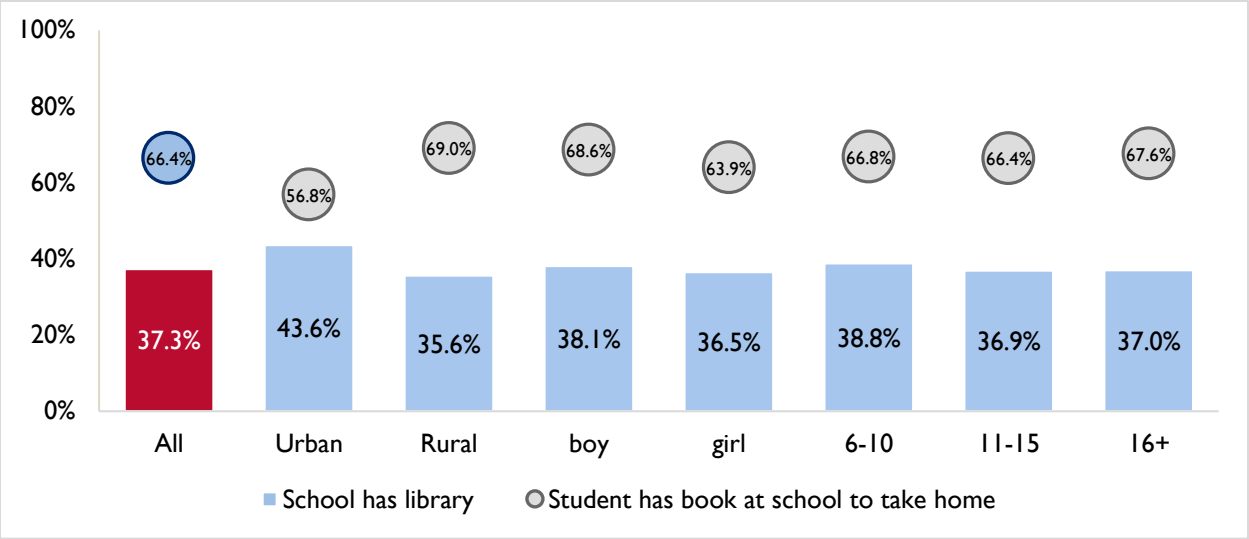


Similarly, the majority of students (88.8%) reported that teacher assigns reading homework to them. There are differences between urban (85.7%) and rural (89.6%) areas, between boys (87.6) and girls (90%), and between the younger students (6-10 years old – 92.4%), and the older students (11-15 years old – 87.6% -, and 16 years or older – 90.1%). The results are presented by the circles in The majority of students reported that their teacher makes them read both silently (88.5%) and aloud in class (92.3%). The results are presented in Figure 10. Report of reading aloud are more common among urban students than among their rural counterparts. There are no important differences in the reports by age or gender.

Figure 10School Library and Books: Around a third of the students (37.3%) reported that their school has library. This proportion is higher for urban students (43.6%) than for rural students (35.6%), and for boys (38.1%) than girls (36.5%). There are no significant differences by age. The results are represented by bars in Figure 1111.

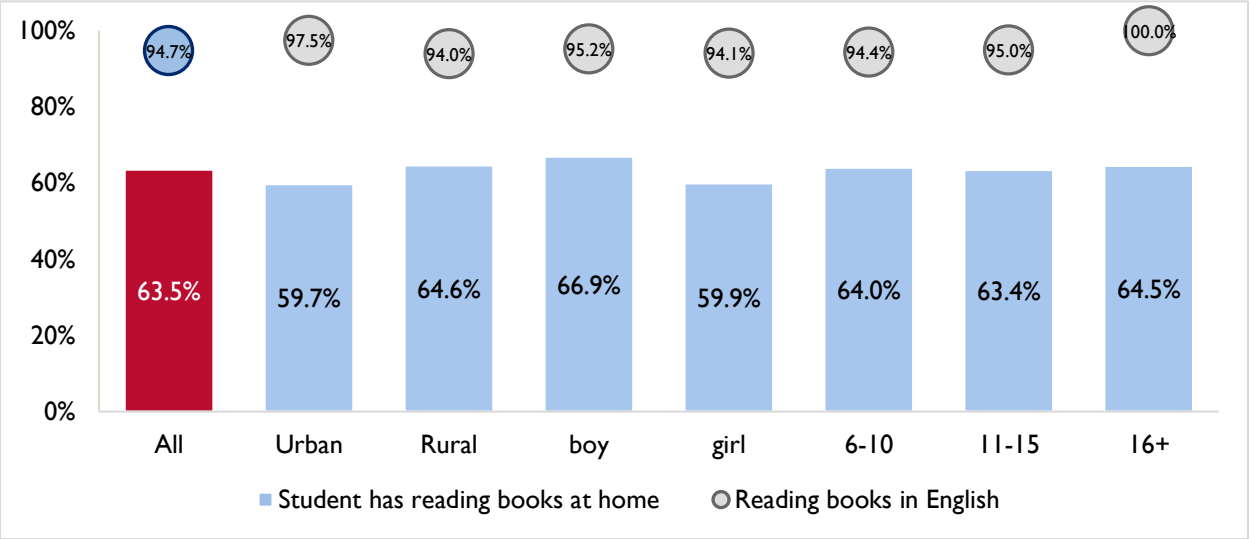
Around 2 out of 3 students reported having books at school that they could take home to read. There are large differences between urban (56.8%) and rural areas (69%). More boys (68.6%) report having books to take home than girls (63.9%) do however, there are no differences between age groups.

Figure 11: School has a library and student has books at school to take home to read by area, gender and age group.



Books at Home: Two thirds of students reported having reading books at home. There are differences between urban (59.7%) and rural (64.6%) areas and between boys (66.9%) and girls (59.9%), but not by age. Almost all students (95%) have reading books in English. The results are presented by the bars in Figure 1212.

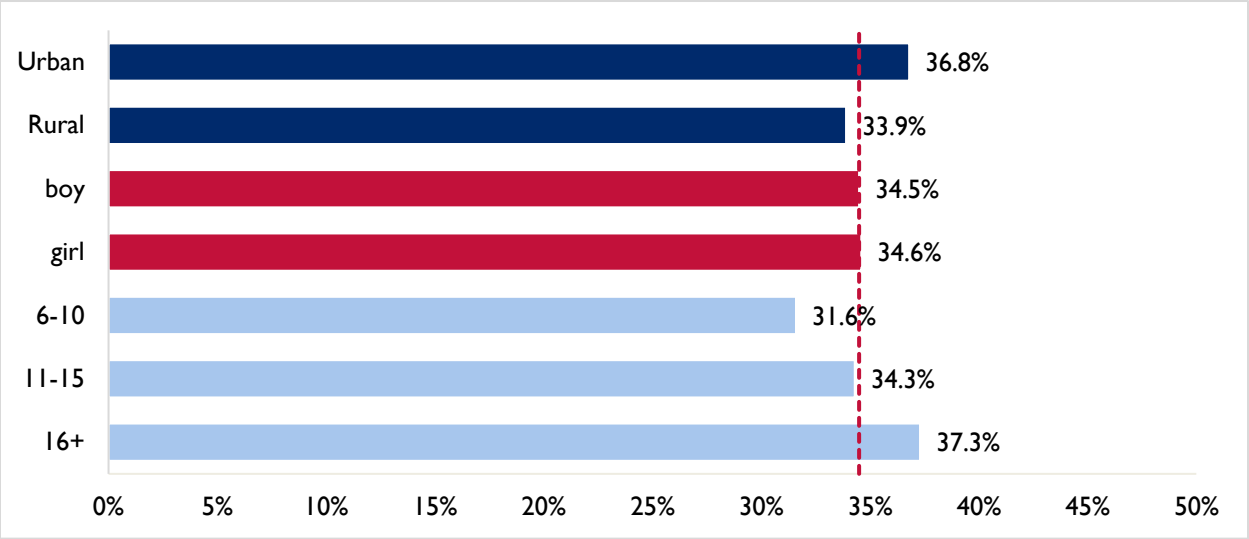
Figure 12: Books at home and books in English at home by area, gender and age group.



Students Absenteeism and General School Performance

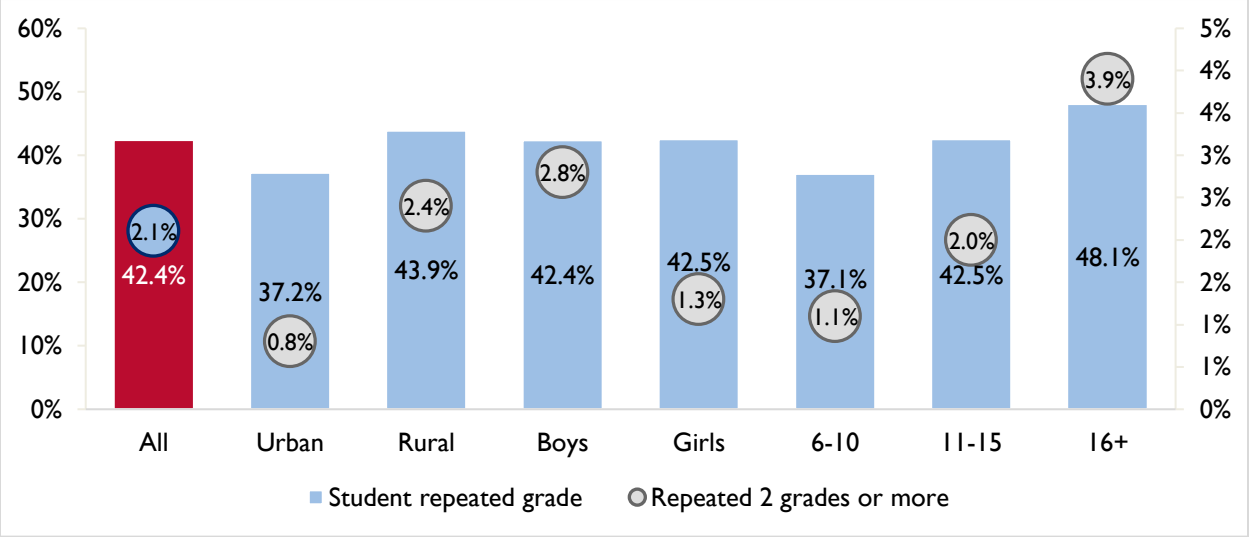
Around 1 out of 3 students missed at least one day of school in week prior to being interviewed. There is more absenteeism among urban students (36.8%) than students in rural (33.9%) areas and absenteeism seems to increase with age. However, there was no difference by gender. The results are presented in Figure 1313.

Figure 13: Student absenteeism in the previous week by area, gender and age group.



Around 4 in 10 students report having repeated a grade and of those, 2% of them have repeated 2 or more grades. These results are presented in Figure 1414. The proportion of students who have repeated is lower in urban areas (37.2%) compared with rural areas (43.9%) but is more common to repeat more than one grade in rural areas than in urban areas (2.4% vs. 0.8%). Boys and girls have the same proportion of repeating grades (42.4% and 42.5% respectively). As expected, younger students have lower rate of repeating grades than older students.

Figure 14: Grade repetition by area, gender and age group.

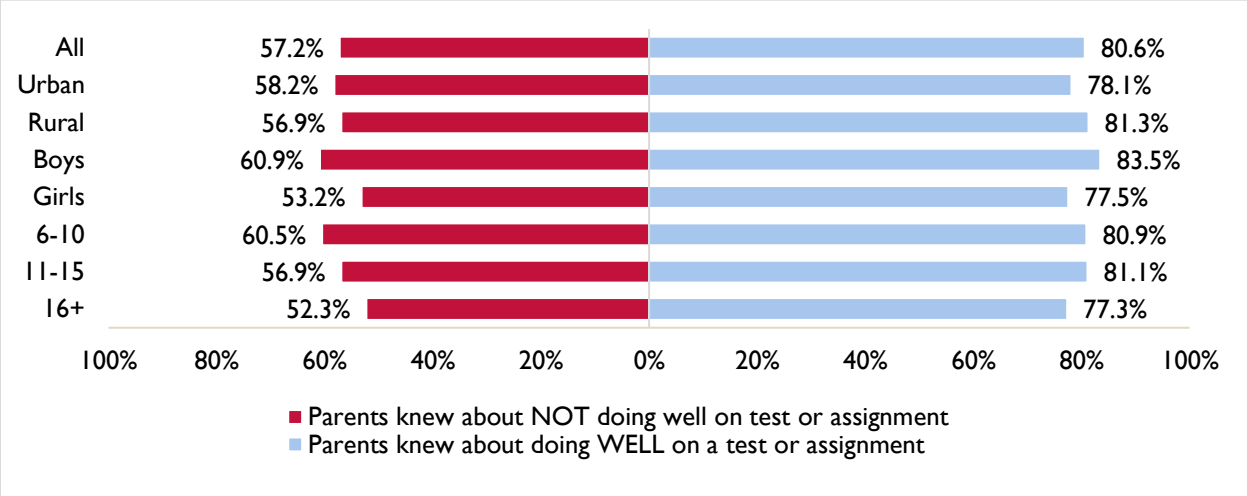


Parent Attitudes and Household Context

Parents Knowledge of Student Performance: Around 57.2% of the students reported that their parents knew when they did not do well on a test or assignment, while 80.6% students reported that their parents knew when they did well. The results are reported in Figure 1515. Urban area students are

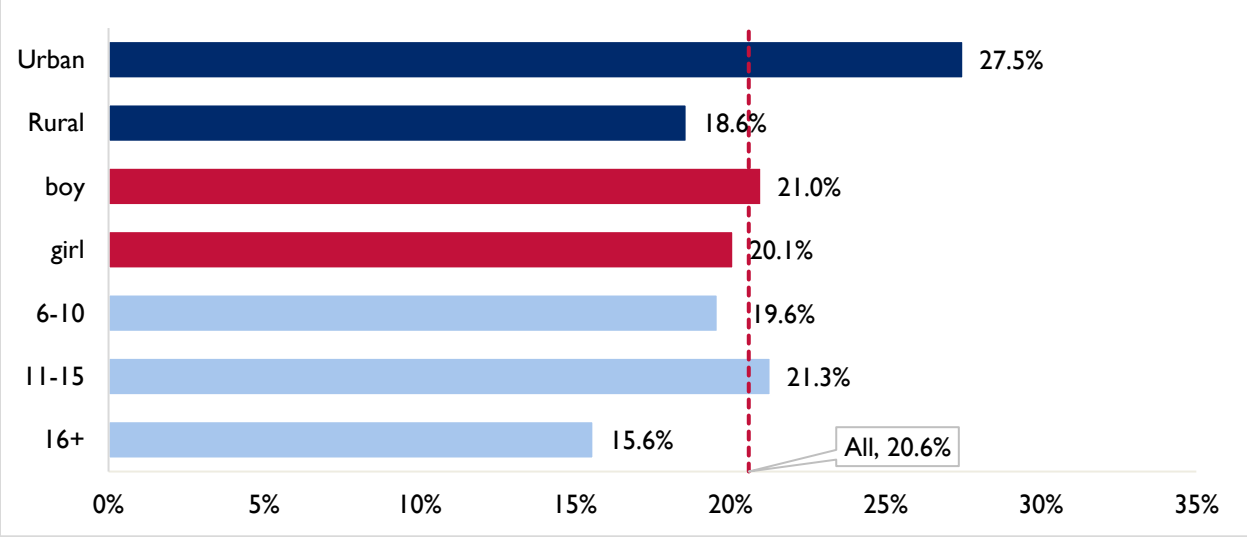
more likely to say their parents knew when they did not do well than rural area students, while the opposite holds for parents knowing when they did well

Figure 15: Parents knowledge of student performance, according to student report by area, gender and age group.



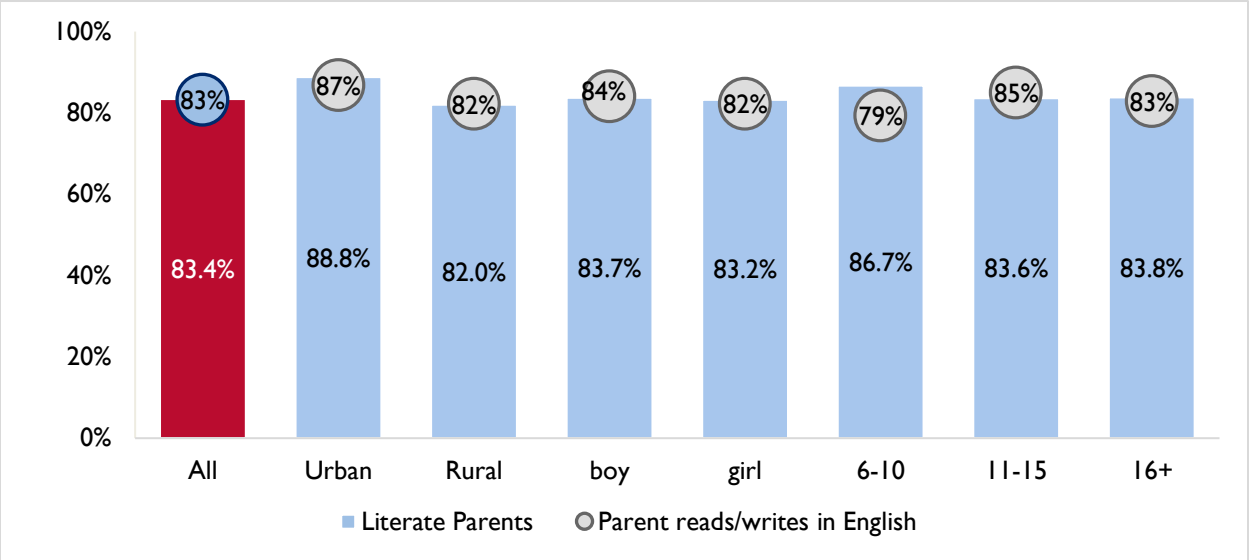
Boys report that their parents know their performance in higher proportion than girls (not doing well 60.9% vs. 53.2%; doing well 83.5% vs. 77.5%). Also, younger students are more likely to report that their parents knew when they did not do well and when they did not than older.

Figure 16: English as main language at home by area, gender and age group.



Language Spoken at Home: The survey included questions about the student's context at home. The most common language students speak at home is Kpelle (25.1%), followed by English (20.6%). Around 27.5% of urban households primarily speak English, while only 18.6% of rural households primarily speak English. There are some differences by student's age, with older students living in home where English is less commonly spoken.

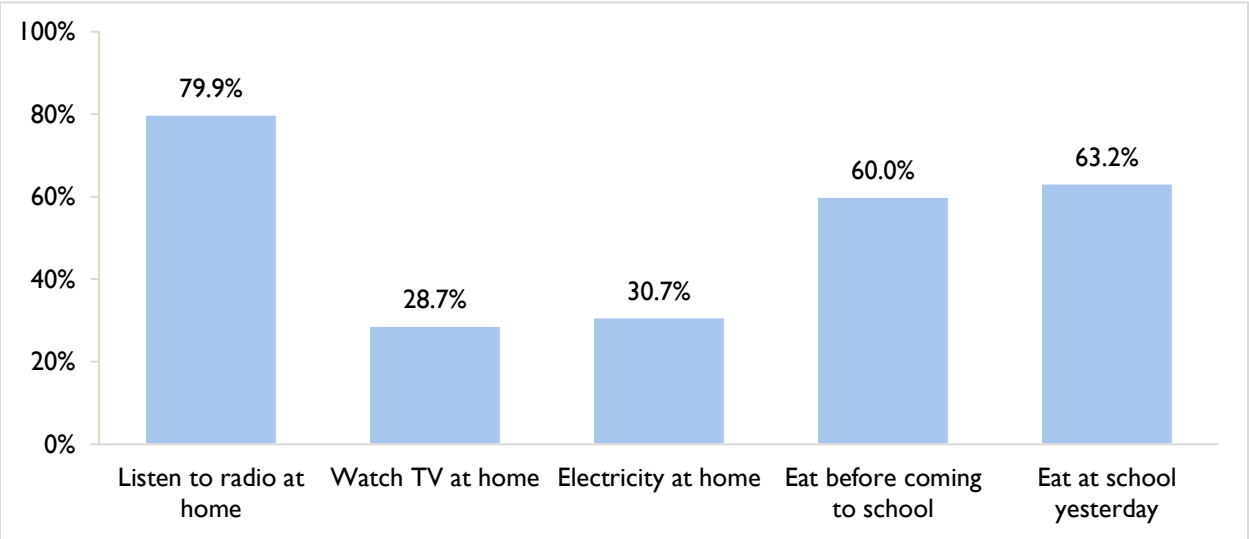
Figure 17: Parent's literacy and parent uses English as main language for reading and writing by area, gender and age group.



Parents' Literacy: The majority of parents can read and write and they are able to do so in English. The results by area, gender and age group are shown in Figure 1717. Literacy is slightly higher among between urban (88.8%) than rural (82.0%) parents. No differences are notable between gender and age groups.

Socio-economic Status: Approximately 8 out of 10 students listen to radio at home but only 3 out of 10 students watch TV or have electricity at home. Around 60% of students eat before coming to school and 63.2% ate at school the day before. The results are presented in Figure 1818.

Figure 18: Household factors related to students' socio-economic status.



As we show in Table 10, there are differences between urban and rural household. Urban households are more likely to have electricity and TV sets. Urban students also report eating before going to school in a higher proportion than rural students. Girls seem to listen to radio and watch TV at home in slightly larger proportions than boys. The percentage of younger students reporting watching TV and eating before school is higher than older students.

Table 10: Household factors related to students socio-economic status, by area, gender and age group.

Category	Listen to radio at home	Watch TV at home	Electricity at home	Eat before coming to school	Ate at school yesterday
Urban	80.8%	45.6%	47.9%	65.3%	64.8%
Rural	79.6%	24.0%	25.9%	58.5%	62.8%
Boys	78.6%	27.8%	29.4%	60.3%	62.7%
Girls	81.2%	29.6%	32.1%	59.7%	63.8%
6-10 years old	79.8%	33.3%	33.6%	66.8%	66.5%
11-15 years old	80.3%	28.2%	30.6%	58.6%	62.6%
16 years old or more	81.1%	21.6%	27.0%	54.1%	60.4%
Total Observations	**1,512**	**1,517**	**1,515**	**1,514**	**1,517**

NOTE: Total sample size of students is 1522. Response totals to individual questions vary due to item non-response.

Teacher Characteristics and In-Class Activities

The teachers of the selected grade 2 classes answered the teacher questionnaire. Select teacher characteristics are presented in Table 11. Twenty-two percent of teachers are female and 34% are volunteer teachers. The average number of years of experience is 11.

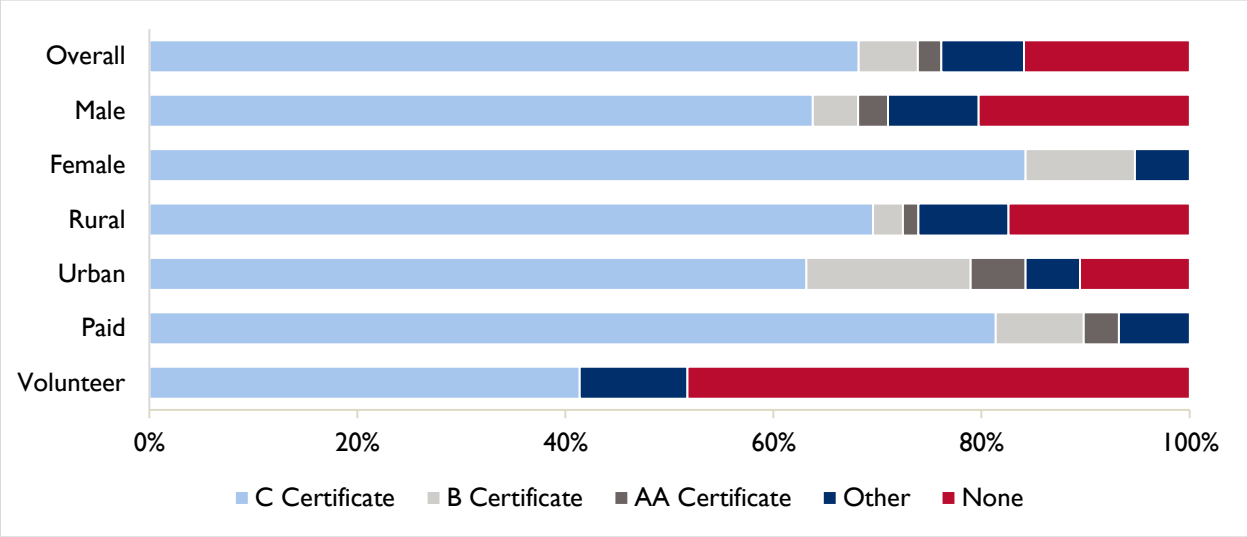
Table 11: Teacher gender, volunteer status and average years of teaching experience.

Characteristic		Observations
All Teachers		
Female Teacher (%)	22%	89
Volunteer Teacher (%)	34%	89
Urban (%)	21%	89
Number of Years of Experience Teaching (Average)	11.1	89
Volunteer teacher only		
Female Teacher (%)	7%	30
Urban (%)	7%	30
Number of Years of Experience Teaching (Average)	4.9	30

We have a sample of only 30 volunteer teachers; among them 7% are women and 7% live in urban areas. Their average experience is 4.9 years. These results are presented in the bottom portion of Table 11. No further disaggregation is possible, given the small number of observations.

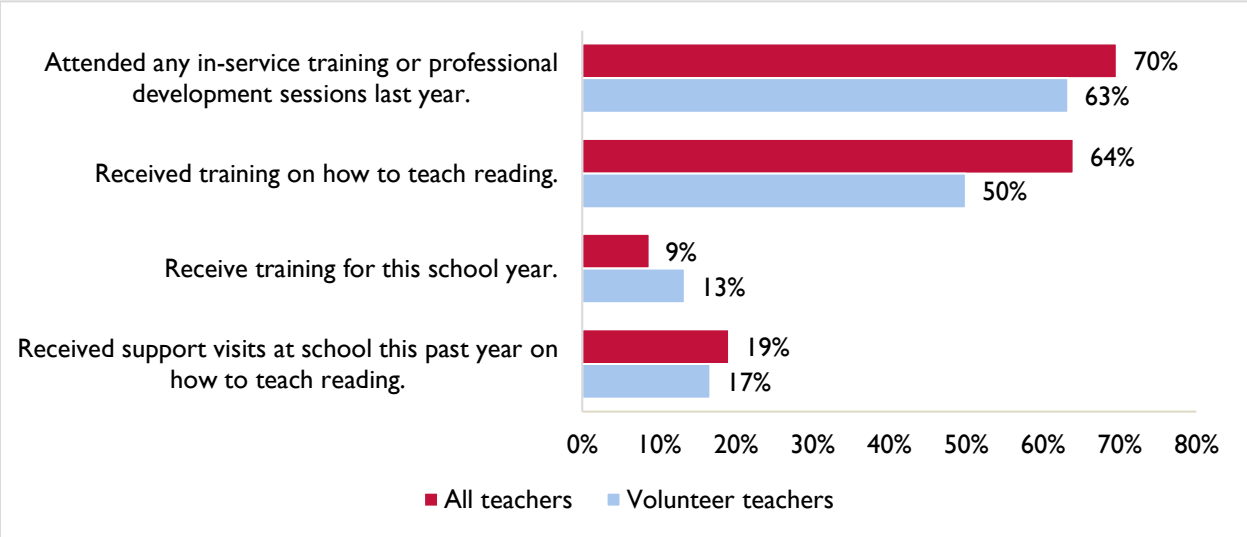
Teachers Certificate: The majority of teachers (84%) have some form of certificate (C certificate 68%, B certificate 6%, AA certificate 2%, and other 8%) while only 16% say they have no formal teaching certification. The results are presented in figure 19. All paid teachers had some sort of certificate however this is true for just over half of the volunteer teachers. Urban teachers (89%) are slightly more likely to report having a certificate of some sort than rural teachers (83%).

Figure 19: Distribution of teaching certificates by gender, area and type.



Teacher Training: 7 out of 10 teachers attended at least some in-service training or professional development sessions last year. Sixty-four percent of teachers in grade 2 have received training on how to teach reading at some point and 19% have received support visits at school within the past year on how to teach reading. Nine percent of teachers received training this school year, with an average duration of 15.4 hours. The results are presented in Figure 2020.

Figure 20: Training and professional development activities for all and volunteer teachers.



Among volunteer teachers, the percentage that received training is lower. In part, this could be because volunteer teachers have on average fewer years of experience. Sixty-three percent attended at least one in-service training or professional development session last year. Half of volunteer teachers in grade 2 have received training on how to teach reading and 17% have received support visits at school in the past year on how to teach reading. 13% of teachers received training this school year, with an average duration of 5.5 hours.

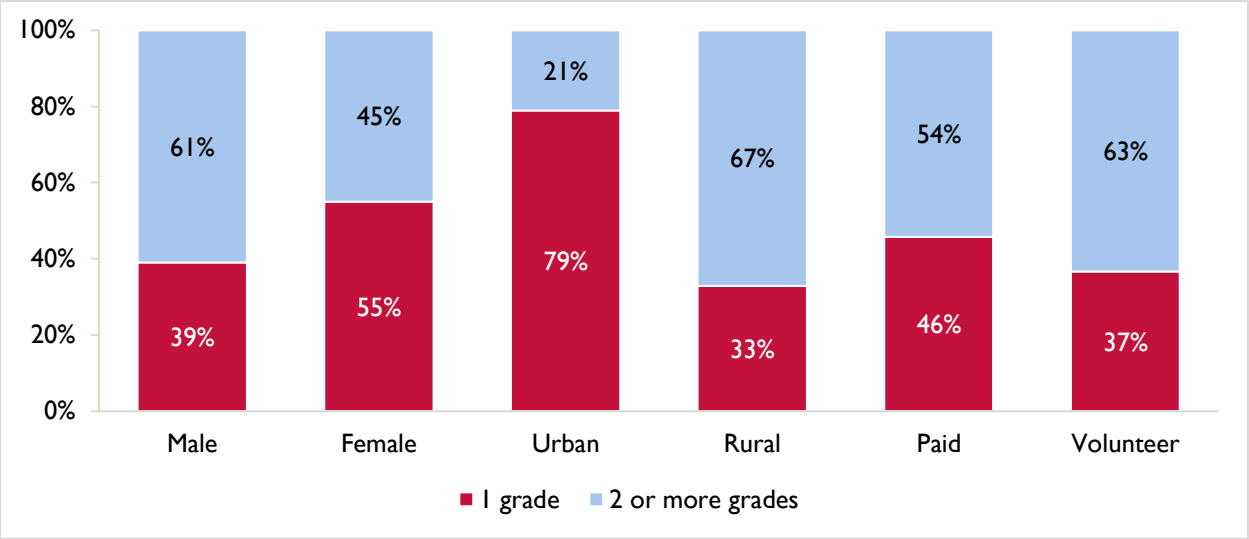
Table 12: Training and professional development, by area and gender.

Training and professional development activity	Male	Female	Rural	Urban	N
Attended any in-service training or professional development sessions last year.	70%	70%	70%	68%	89
Received training on how to teach reading.	59%	80%	66%	58%	89
Receive training for this school year.	12%	0%	11%	0%	57
Received support visits at school this past year on how to teach reading.	22%	10%	21%	11%	89

Around 70% of men, women, rural and urban teachers attended an in-service training or professional sessions last year. Around 59% of men received training on how to teach reading, while 80% of women received this type of training. Twenty-two percent of male teachers, compared to 10% of female teachers, received support visits at school on how to teach reading this past year. Sixty-six percent of teachers in rural areas received training on how to teach reading, while 58% of teachers in urban areas received this training. Twenty-one percent of rural, compared to 11% of urban teachers, received support visits at school this past year on how to teach reading.

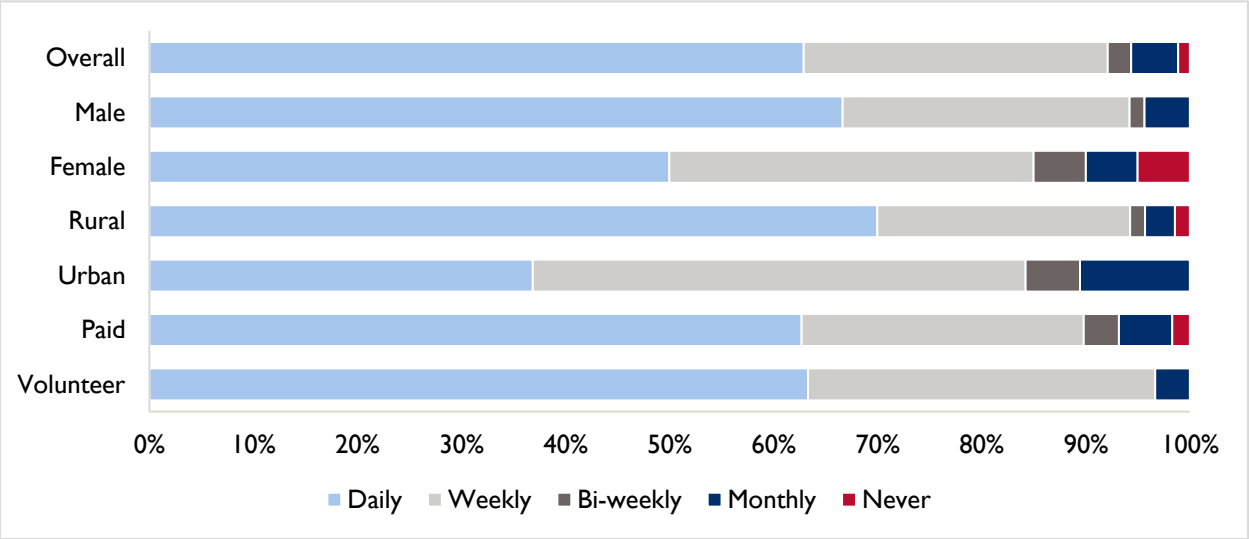
Multi-grade teaching: More than half (57%) of the teachers in the sample are teaching 2 or more grades this school year. Sixty-one percent of male teachers teach 2 or more grades, while 45% of female teachers teach 2 or more grades. Teaching 2 or more grades is more common in rural areas (67%) than in urban areas (21%) and slightly higher among paid teacher than volunteer teachers (46% vs 37%). The results are presented in Figure 2121.

Figure 21: Distribution of number of grades taught by gender, area, and teacher type.



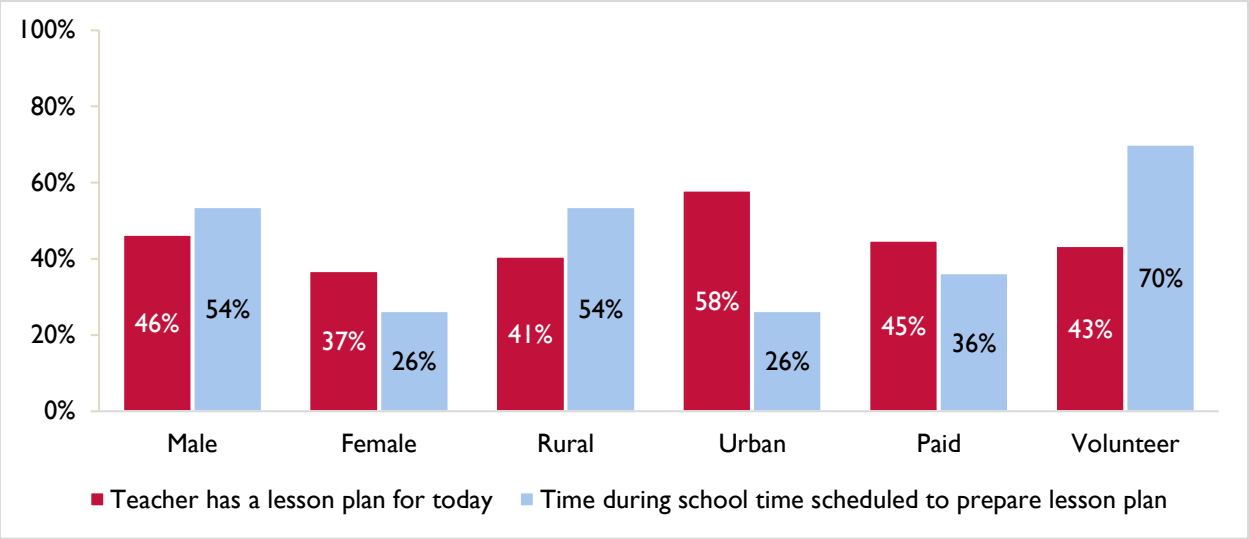
Lesson Plans: Sixty-three percent of teachers develop a lesson plan daily, 29% develop one weekly, 2% develop one biweekly, and 4% do so monthly. Male teachers tend to develop lesson plans daily more often than women, and teachers in rural areas also report preparing lesson plans every day in higher proportion than their urban colleagues. Figure 22 shows details.

Figure 22: Distribution of frequency of developing a lesson plan, by gender, area, and teacher type.



Despite the reports, only 44% of teachers had a lesson plan that they could show to the enumerator on the day of the interview. There were some differences between male (46%) and female (37%) teachers, and between rural (41%) and urban (58%) teachers. There was a very small difference between paid (45%) and volunteer (43%) teachers. The results are presented in Figure 2323.

Figure 23: Teacher had a lesson plan for the day of the interview, and teacher has a schedule time to prepare lesson plan during school day, by gender, area and teacher type.

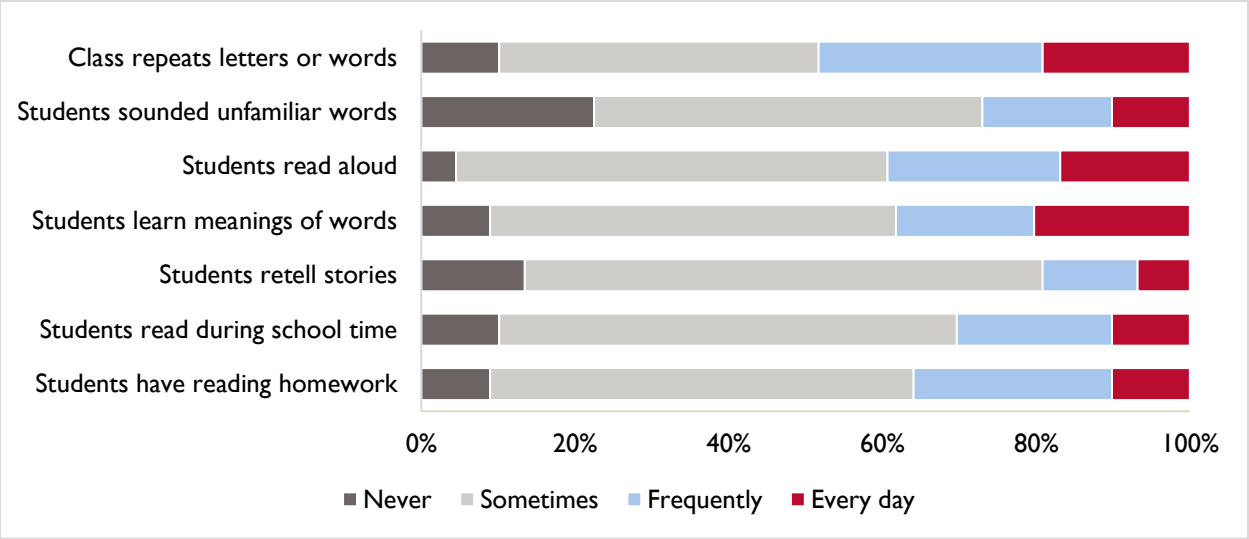


Additionally, 48% of teachers say they have time during school hours to prepare a lesson plan. There are differences between male (54%) and female (26%) teachers, between rural (54%) and urban (26%) teachers, and between paid (36%) and volunteer (70%) teachers. The results are presented in Figure 2323.

Teaching Practices: Teachers were asked to report the frequency in which they perform seven in-class activities over the last 5 school days: i) Class repeats letters or words; ii) Students sounded unfamiliar words; iii) Students read aloud; iv) Students learn meanings of words; v) Students retell stories; vi) Students read during school time; and vii) Students have reading homework.

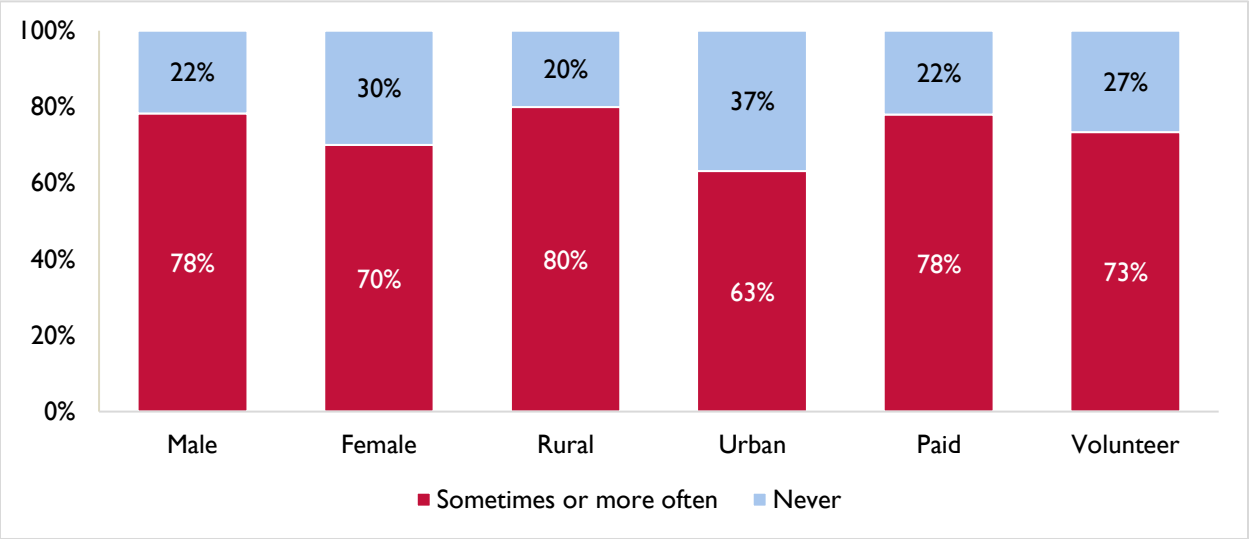
Between 67% (students sounded unfamiliar words) and 81% (students have reading homework) of teachers report doing all activities at least sometime over the past 5 days. The least frequent activity reported by teachers (22% of them reported never doing it) is students sounding out unfamiliar words, while the most frequent is students learning the meanings of words (20% reported doing this every day). The results are presented in Figure 2424.

Figure 24: Distribution of frequencies for the different in-class activities.



Reading Curriculum Use: Seventy-six percent of teachers reported using the official reading curriculum at least sometimes. There are differences between male (78%) and female (70%) teachers, between rural (80%) and urban (63%) teachers, and between paid (78%) and volunteer (73%) teachers. The results are presented in Figure 2525.

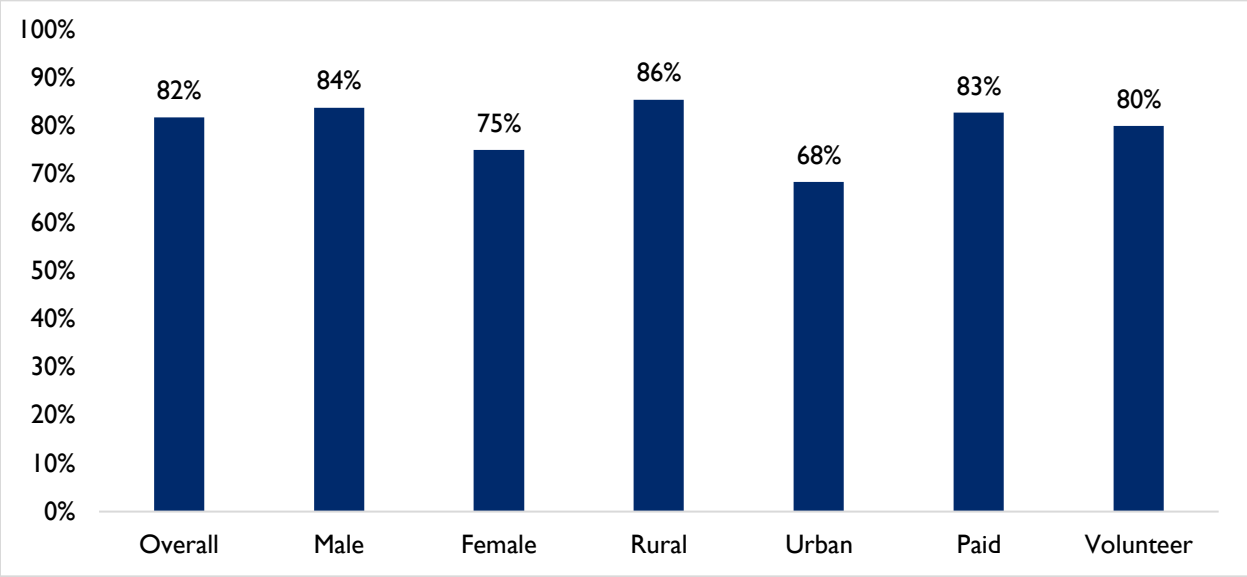
Figure 25: Frequency of use of official reading curriculum in classroom by gender, area and teacher type.



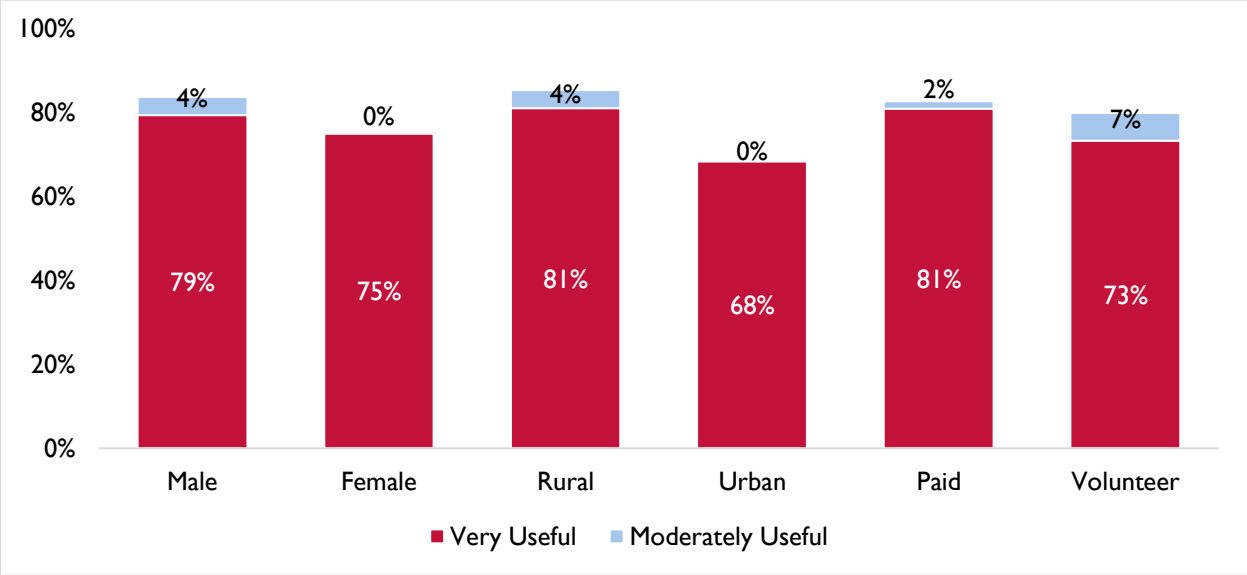
Teacher Guides: 8 out 10 teachers have teacher guides (Figure 26, Panel A) and all of them find them very or moderately useful (Figure 26, Panel B). There are some differences in having teacher guides between male (84%) and female teachers (75%), between rural (86%) and urban (68%) teachers, and a small difference between paid (83%) and volunteer (80%) teachers.

Figure 26: Teacher has teacher guide and how useful teachers find them by gender, area and teacher type.

Panel A



Panel B

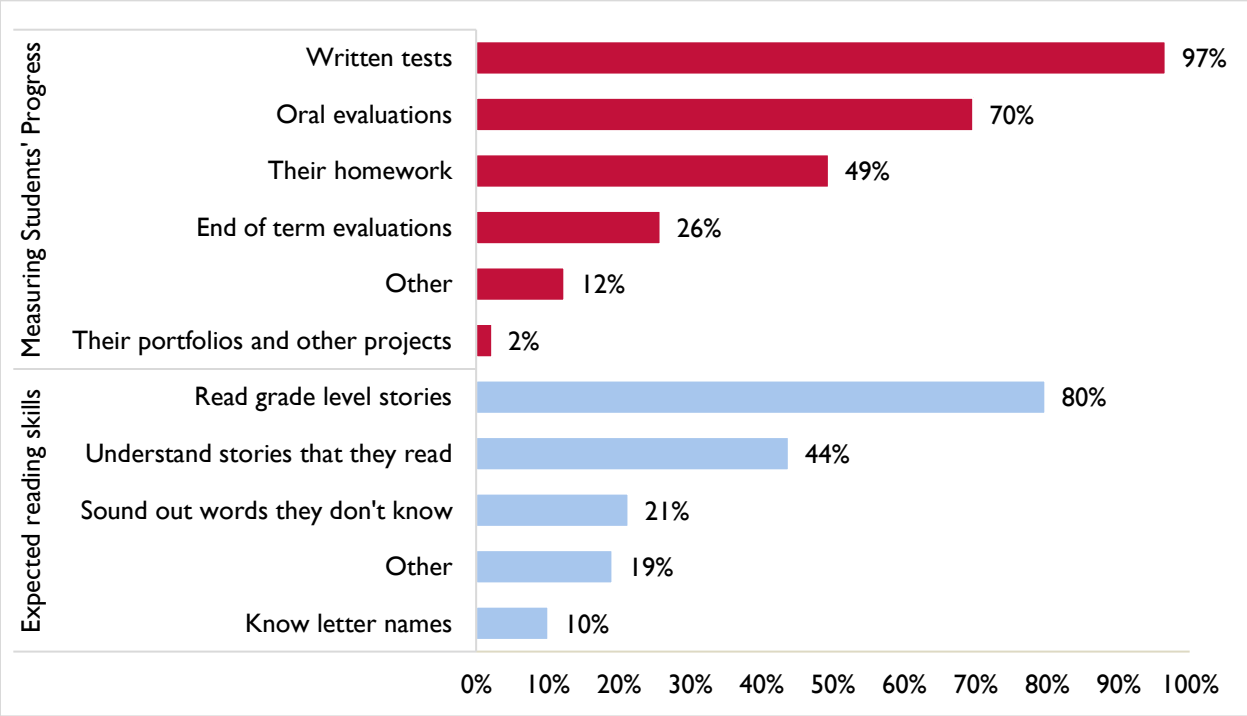


Most teachers find the guides useful, although they are less popular among urban teachers.

Student Assessments Used by Teachers: almost all teachers (97%) use written tests to measure students' progress, followed by oral evaluations (70%) and homework (49%). These results are presented by the gray bars in Figure 2727.

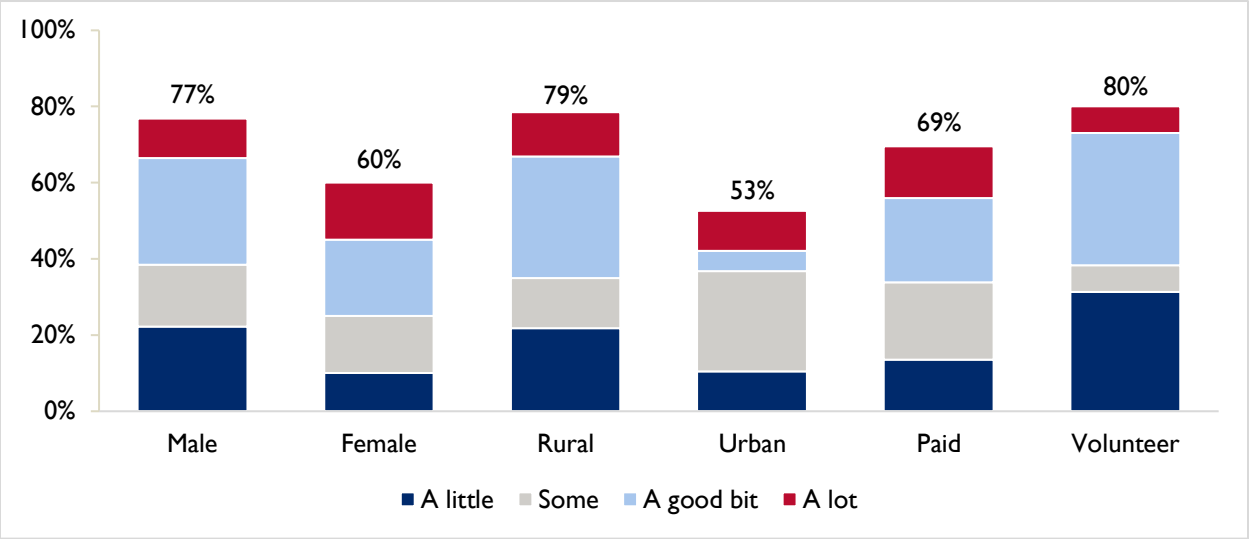
Expected Reading Skills: teachers were asked about the reading skills that they expect their students to have. Most of them (80%) mentioned to read grade level stories, but only 44% of them mentioned that they expect their students to understand the stories they read. Not many (20%) teachers mentioned sounding out unknown words. Even fewer (10%) mentioned that they expect their students to know letter names. We speculate that this pre-literacy skill did not come to many teachers' minds because it is a basic skill which most grade 2 students have. In fact, the average number of correct letter names that students identified was 65 per minute. These results are presented by the blue bars in Figure 2727.

Figure 27: Teachers activities to measure students' progress and expected reading skills.



Additional Efforts to Improve Reading: around 73% of teachers say they have made special efforts to improve reading skills. There are differences in whether the teachers made a special effort to improve reading between male (77%) and female teachers (60%), between rural (79%) and urban teachers (53%), and between paid (69%) and volunteer teachers (80%). The results are presented in Figure 2828.

Figure 28: Amount of extra effort made compared to a normal year, by gender, area and teacher type.

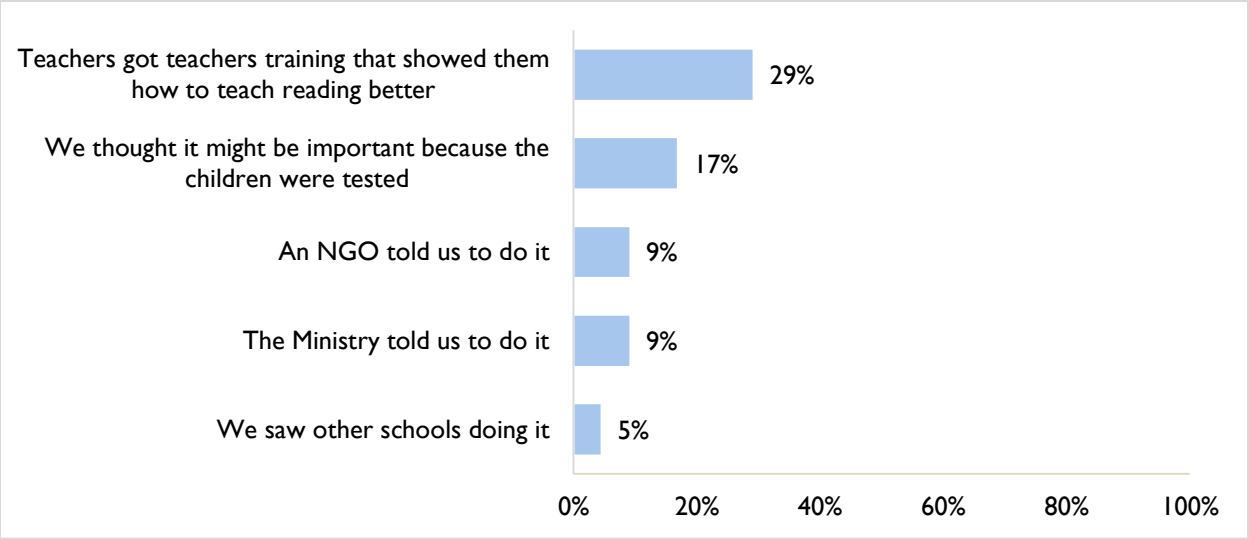


Among those teachers who made special efforts to improve reading, more than half report exerting a good bit or a lot more effort than they had in past years. Slightly more female teachers exerted a good bit or a lot of effort (58%), while half of male teachers did the same. The difference is greater by urbanity with 56% of rural teachers saying they exerted a good bit or a lot effort while only 30% of urban teachers did the same. There are no large differences between paid teachers (51%) and volunteer teachers (52%). The results are presented in Figure 2828.

Additionally, around 29% of teachers suggested that they exerted special effort because training showed them better ways to teach reading and 17% suggested that it was important because the children were being tested. Only around 5% of teachers suggested that they saw other schools doing it.[10] The results are presented in Figure 2929.

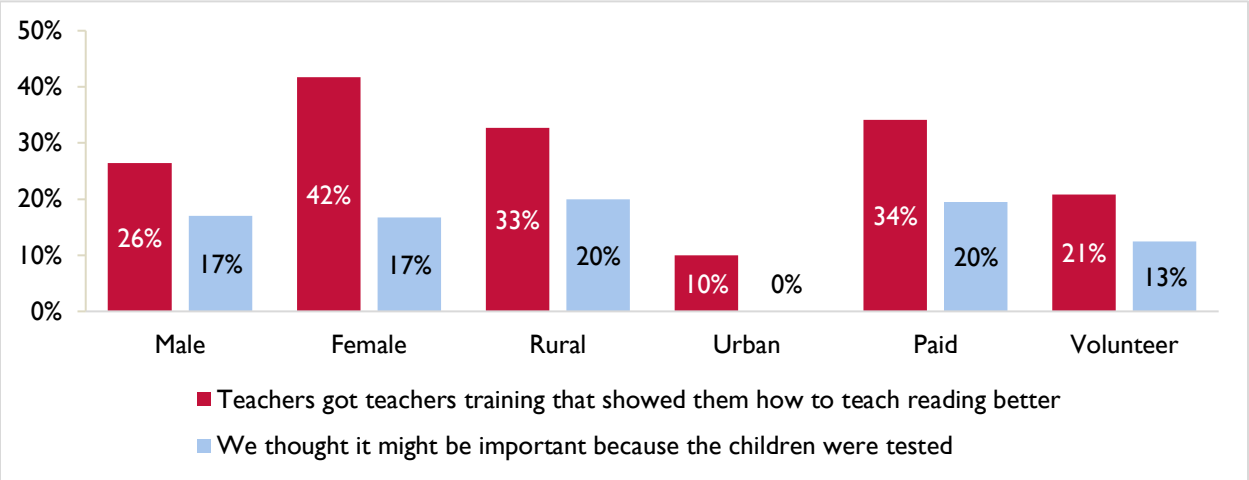
[10] 63% of teachers suggested *other* reasons for exerting the special effort. This might be an important issue to address in questionnaires moving forward.

Figure 29: Reasons why teacher exerted special effort to improve reading.



Some teachers were less likely to say they received training on how to better teach reading as 26% of male teachers compared to 42% of female teachers offered this explanation, urban teacher (10%) are less likely than rural teachers (33%), and volunteer (21%) are less likely than paid teachers (34%) to say they received this training. The results are presented in Figure 3030.

Figure 30: Percentage of teachers receiving reading training and thinking it might be important because children were tested, by gender, area and teacher type.

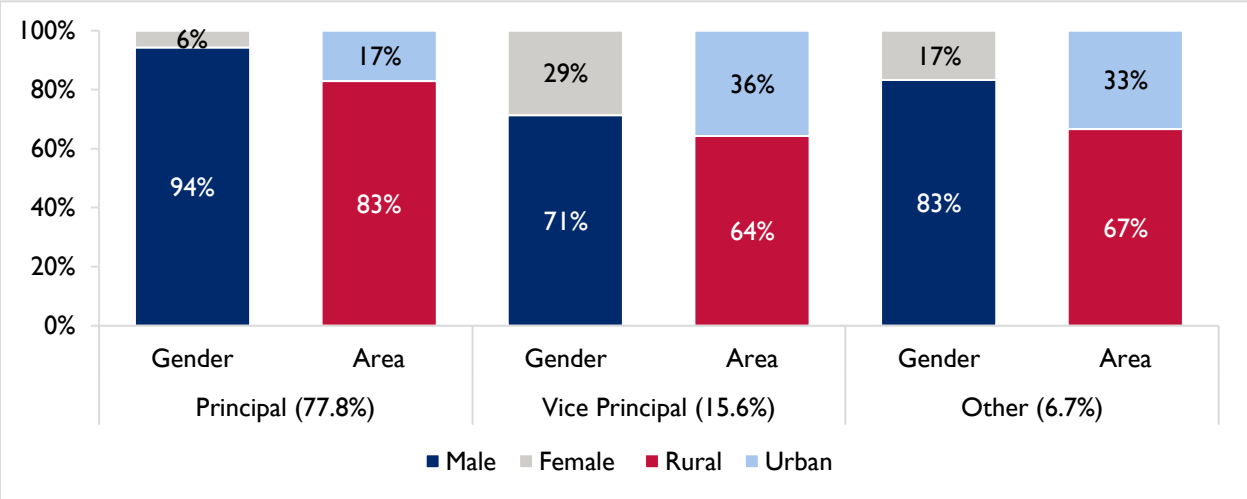


Additionally, there were some differences among teachers who suggested they thought it might be important because the children were being tested between rural (20%) and urban (0%) teachers, and between paid (20%) and volunteer (13%) teachers. There was no difference between male and female teachers. The results are presented in Figure 3030.

Principal and School Questionnaire

The survey asked the principal or highest level administrator available (if the principal was not available at the time of the visit) about his/her characteristics and activities to improve reading activities in their school. The principal was interviewed 78% of the time, 16% of respondents were vice principals, and 7% of these interviews were conducted with someone from another administrative position. In the case of the principals, 94% of them were men and among vice principals, 71% were men. These results can be found in Figure 3131.

Figure 31: Type of respondent to the principal questionnaire and distribution by gender and area.



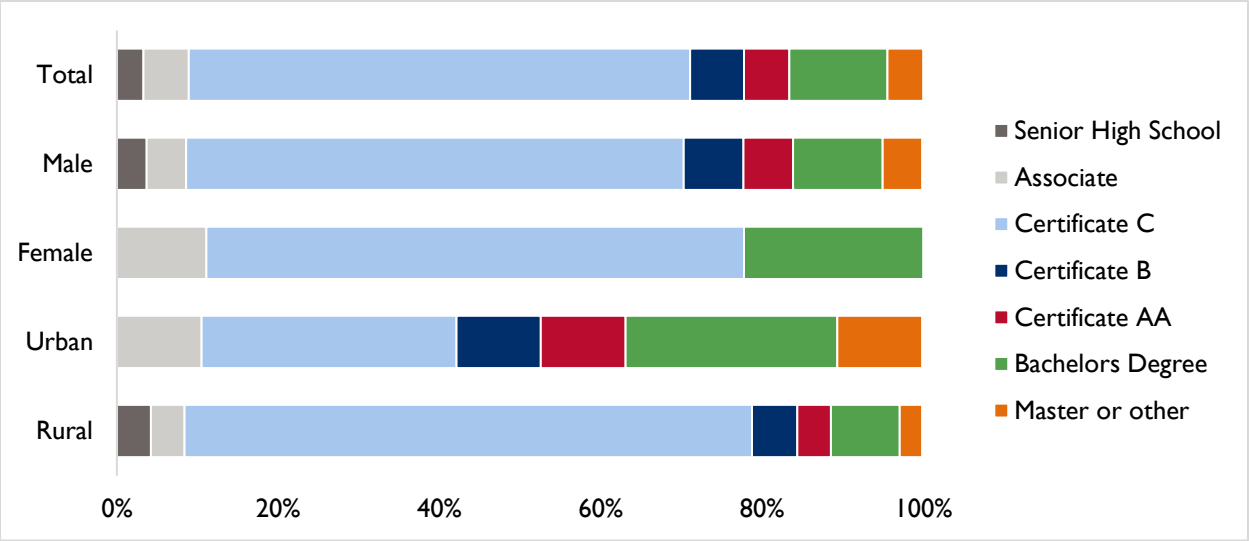
The average number of years in the position of the principal or vice principal is 6.6 years. The tenure is a longer for men (6.9 years) than for women (4.3 years), and for rural areas (7 years) than for urban areas (5.2 years). The results can be found in Table 13.

Table 13: Average years in principal (vice-principal) position.

	Average	Observations
Male	6.9	81
Female	4.3	9
Urban	5.2	19
Rural	7	71
Total	**6.6**	**90**

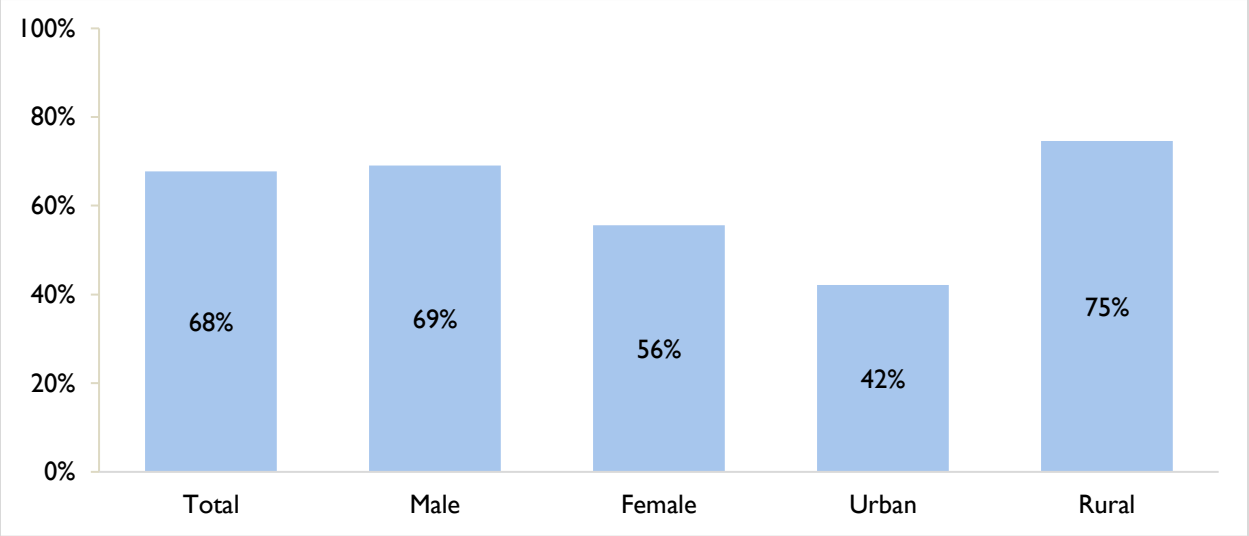
The majority of respondents to the principal survey have C, B, or AA Certificate (75%). Only 16% have a bachelor's, master's, or other type of college degree. About 4% of male principals a have senior high school degree only, as well as 4% of rural principals. The results are presented in Figure 3232.

Figure 32: Respondents to the principal survey education degree, by gender and area.



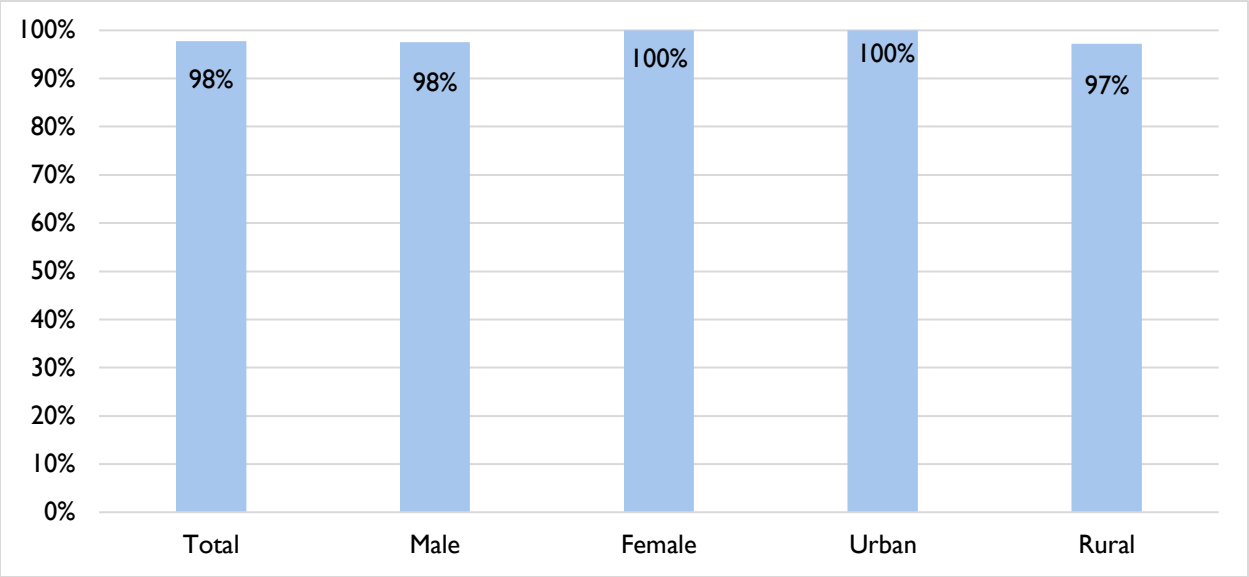
About 68% of respondents to the principal survey have received or taken courses to teach or support the teaching of reading. There are some differences between male principals (69%) and female principals (56%), and between urban (42%) and rural (75%) principals. The results are presented in Figure 3333.

Figure 33: Percentage of respondents to the principal survey that received training to teach reading, by gender and area.



Nearly all (97.8%) respondents report reviewing the lesson plans of first and second grade teachers and 86% of respondents say that the lessons plans are reviewed every week or more often. There are no substantial differences between genders nor between areas.

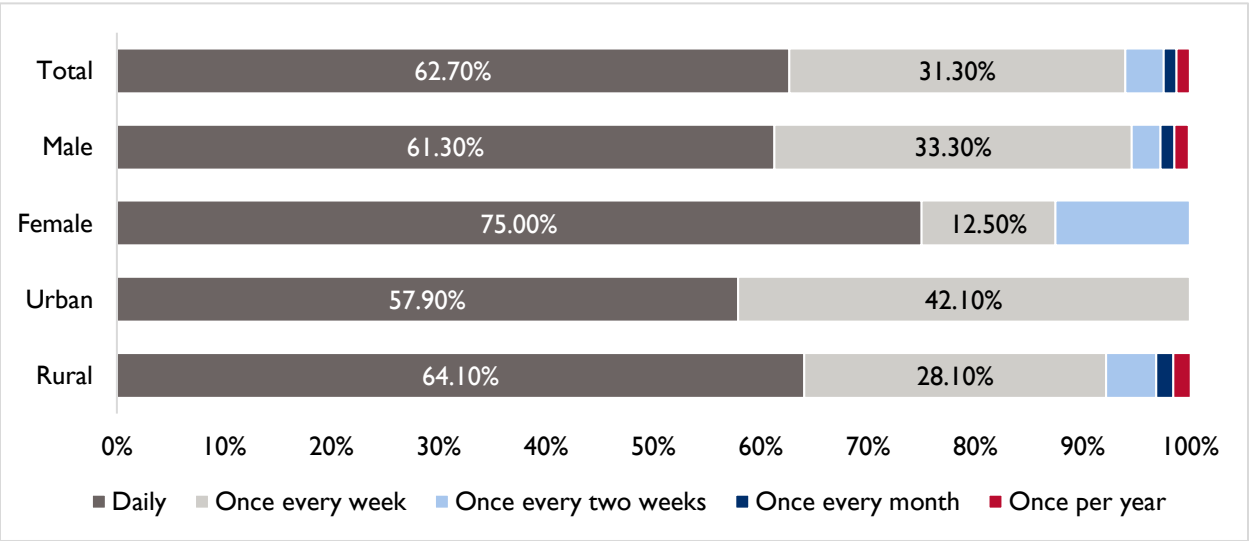
Figure 34: Review of teachers' lessons plans, by gender and area.



Furthermore, 93% of respondents say that teachers' lessons in grade 1 and 2 are observed in their classrooms.

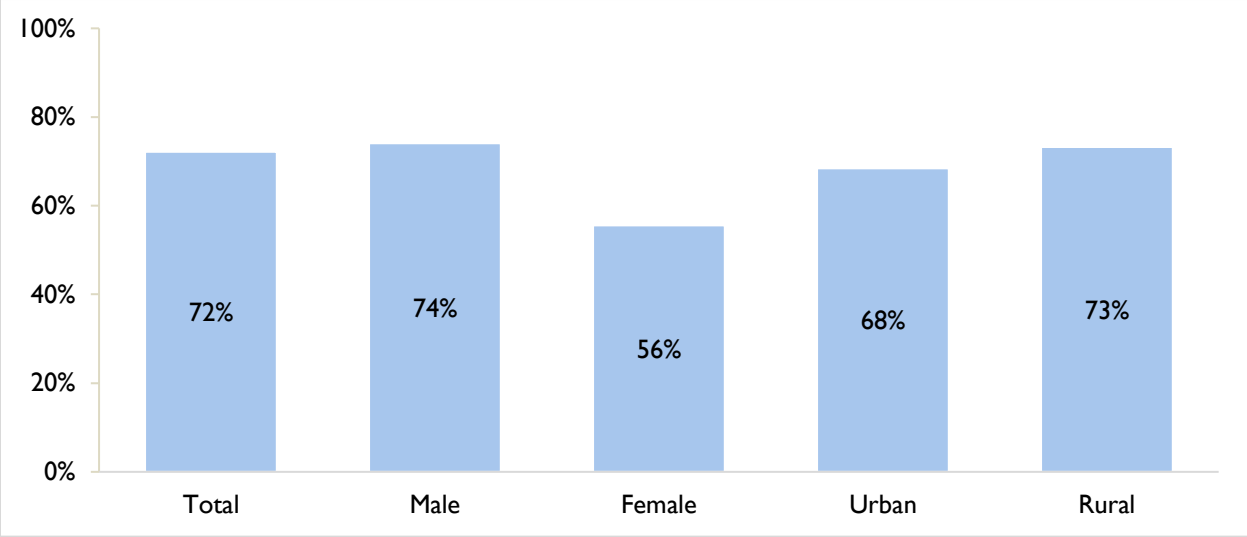
When asked about the frequency in which lessons are observed, there are differences by the gender of the respondent; 87.5% of female respondents suggested they observe lessons at least once a week or more often, while 94.6% of male respondents suggested the same. All urban respondents say they observe lessons at least once a week or more often, while 92.2% of rural respondents say they do so this frequently. The results are presented in Figure 3535.

Figure 35: Frequency of observation of teachers' lessons in grade 1 and 2, by gender and area.



Seventy percent of the respondents say they have made special efforts to improve reading at their schools the past year. There are differences by respondent gender where 74% of male respondents say they made a special effort to improve reading, while only 56% female respondents say the same. Also, there are differences by area where 68% of urban respondents say they are making a special effort to improve reading, while 73% of rural respondents say the same. The results are presented in Figure 36:36.

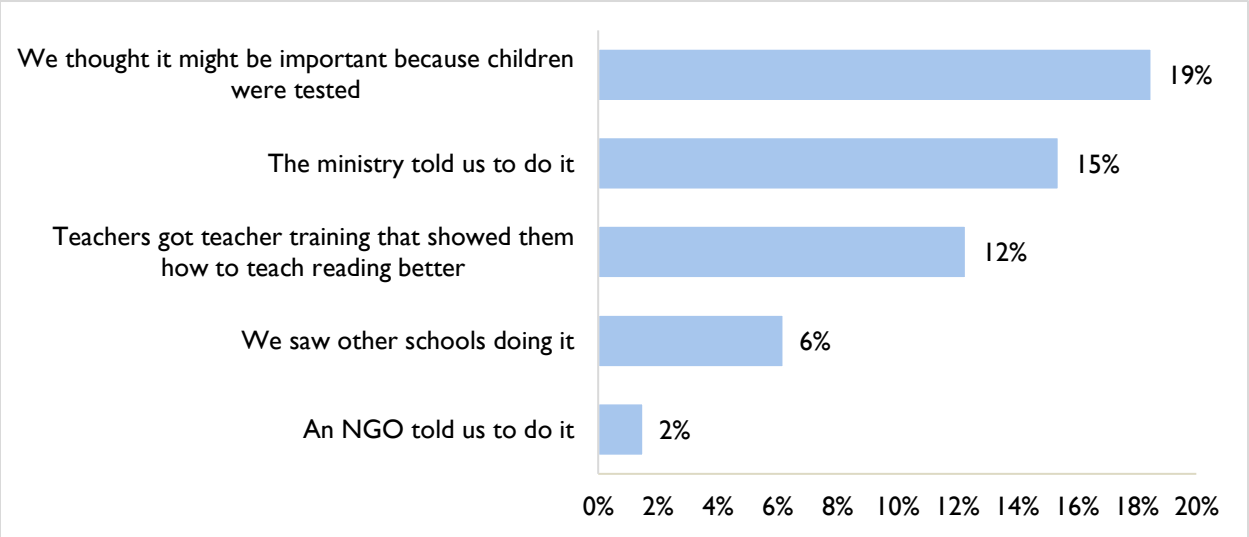
Figure 36: Principal made a special effort to improve reading at their school by gender and area.



Around 19% of respondents claim to have exerted special effort because they thought it might be important due to testing, while 15% say that the ministry told them to do it, and 12% say that teachers got teacher training which showed them better methods for teaching reading. Only around 6% of teachers say they increased their own effort because they saw other schools doing it. Forty-six percent of the respondents suggested *other* reasons for exerting the special effort.[11] The results are presented in **Error! Reference source not found.**37.

[11] This might be an important issue to address in questionnaires moving forward and understand motivation.

Figure 37: Reasons why respondents to principal survey exerted special effort to improve reading at their school this past year.



The Determinants of EGRA Scores

In addition to the descriptive analysis presented above, it is possible to use the baseline data to look into how student characteristics, household context, school and teacher characteristics correlate with observed differences across EGRA scores. In this section, we present results for a series of statistical processes for estimating the relationships (regressions) among available variables and EGRA subtask scores.

A large number of variables could be related to EGRA scores. We experimented with a range of specifications that include student characteristics and behavior, household characteristics, proxies for socio-economic status of the household, teacher characteristics and classroom practices, and school characteristics. In particular, we have included

1. Student' characteristics: age, sex, rural or urban location
2. Home environment: home language, parents' literacy status, household owns a working TV, radio, has electricity, student ate before going to school on the day of the assessment.
3. Home reading practices: student reads aloud to someone at home, someone reads to the learner at home
4. Teacher characteristics: sex, years of experience, paid or volunteer status, education degree, teacher received training to teach reading, teacher has lesson plan available
5. School characteristics: sufficient materials/textbooks for Grade 2, has library or reading room.

Each of these variables details are presented in Table 14 below.

Table 14: Explanatory variables for EGRA scores.

Variable	Mean	SE	Obs.	Min	Max
Girl	48%	1%	1522	0	1
Rural	78%	4%	1522	0	1
Student age	12.5	0.1	1481	6	21
Student reads aloud to someone at home	62%	2%	1509	0	1
Someone reads to the student at home	62%	2%	1506	0	1
Language Home: English	20%	2%	1522	0	1
Parents cannot read/write	17%	2%	1522	0	1
Do you watch television at home?	29%	2%	1517	0	1
Do you listen to radio at home?	80%	2%	1512	0	1
Do you have electricity at home?	31%	2%	1515	0	1
Did you eat before coming to school today?	60%	2%	1514	0	1
Female Teacher	23%	5%	1509	0	1
Volunteer Teacher	34%	5%	1522	0	1
Teacher's years of experience	11.2	0.9	1509	0	37
Teacher receive training to teach reading	64%	5%	1509	0	1
Teacher had lesson plan available	44%	5%	1491	0	1
Teacher has Junior/Senior High School	37%	5%	1509	0	1
Teacher has Certificate degree	57%	5%	1509	0	1
Teacher has BA degree	2%	2%	1509	0	1
Do you have sufficient resource materials/ textbooks for Grade 2?	8%	3%	1522	0	1
Do you have a library or reading room?	23%	4%	1522	0	1

While the full specifications of the regression analyses can be found in Annex VI: Full Regression Results, here we summarize the results.

Being a girl has a negative correlation across scores when compared to boys. For instance, when all else is equal, girls correctly identify 4.5 fewer letter names, 2.6 fewer familiar words, and read 2.8 fewer words from a paragraph than boys. Similarly, students in rural areas show a large disadvantage when compared to their urban counterparts. Urban learners identify 10 fewer letter names, 4 fewer familiar words than urban students, 6.6 fewer words from a connected paragraph than urban students. These results could be reflecting different aspects associated with rurality, such as lower socio-economic circumstances, but could also signal less exposure to print, or lower school quality, etc. We include in our analysis other variables such as parental literacy, having TV, radio and electricity at home, or eating before going to school to take into account the learner socio-economic background but rural status

In general teacher characteristics other than experience are not significantly associated with students' performance. Teacher sex, volunteer or paid status, training to teach reading, having written lessons plans or education degree have no significant correlation with EGRA scores. Only years of experience is associated with better scores but only in two EGRA subtasks, familiar word reading and oral reading fluency. Similar results have been found in other studies (for example, Luschei & Carnoy (2010), Rockoff (2004), Clotfelter et al. (2007))

Reading aloud at home is correlated with higher reading scores. The association does not prove causality from reading at home to better performance as reverse causality could be present. This is, it could be the case that only those learners that are able to read fairly well, read aloud at home.

In general, having materials, a library or a reading room in the school does not appear significantly associated to student performance.

CONCLUSIONS & RECOMMENDATIONS

In this report we present the findings from the Early Grade Reading Assessment of Grade 2 students and complementary teachers and principal surveys, which constitute the baseline for the Impact Evaluation of the Read Liberia Activity. The baseline data collection did not face significant challenges and the tests show very high reliability and consistency in the assessment work.

Appropriate ages for grade 2 are 7–8 years. However, very few students in Liberia start primary school on time. Students in our sample are substantially older (12.5 years on average) than what is expected for second graders reflecting this phenomenon. More research should be conducted to find how to address the problem. Issues related to school entry age, attendance, and repetition should receive attention. Student absenteeism and grade repetition, as reported by the learners, are high. Addressing absenteeism is very important as most activities planned for Read Liberia will take place in school and absenteeism could reduce the activity potential impact.

Average scores in EGRA subtasks are in general low for second graders. Students know letter names but their decoding skills are low. This is evident in the high percent (81%) of learners that are not able to sound a single non-word. Reading ability is low as well. Thirty-five percent of the students are non-readers –they cannot read a single word from a short grade level paragraph- and on average oral reading fluency is 14.6 words per minute which is far from the levels needed to be able to comprehend the text read. Excluding non-readers, the average oral reading fluency of the rest of the students is 22.4 words per minute, and only 22% of them read 35 or more words per minute. On average, girls tend to score lower than boys in all EGRA subtasks and rural students' performance is substantially lower than that of urban learners.

A third of the teachers are volunteer teachers. Their reported teaching practices and behaviors are similar to those of paid teachers. Having a volunteer teacher rather than a paid teacher does not seem associated with differential student performance. Teacher education and reported practices do not correlate with assessment scores either. Most teachers reported following the official curriculum, having teacher guides and preparing lessons plans. Despite that almost all teachers reported preparing daily lesson plans every day or once a week, less than half the teachers were able to show the interviewers the written lesson plans for the day of the visit. It is interesting to also note that almost all respondents to the principal questionnaire reported reviewing teachers' lesson plans and a large majority claimed to do so every week or more often. The contrast between reports and lesson plans available suggests desirability bias in the answers of teachers and principals regarding their classroom practices. In the future, it would be useful to collect more information through classroom observations.

The classroom observations can be designed to capture elements specific to the Read Liberia pedagogy and contain both low inference and higher inference items. Low inference items can include management tools, lesson plans, presence and quantity of instructional materials, use of them; examination of timetables to assess time allocated to reading specifically; examination of learners' workbooks and exercise books to assess curriculum coverage; etc. High inference measures should include pedagogical process variables. Based on the results, additional monitoring and other incentives could be included in the activity to improve actual behavior if needed.

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ANNEXES

ANNEX I: EVALUATION STATEMENT OF WORK

Contract No. AID-OAA-M-13-00010

Activity: Read Liberia Baseline and Impact Evaluation

October 3, 2017

Statement of Work

Budget Estimate: $905,000

Period of Performance: January 1, 2017-September 2020

INTRODUCTION:

This Statement of Work (SOW) outlines the details of a baseline data collection and impact evaluation of the upcoming Read Liberia activity, to be carried out by NORC at the University of Chicago, the prime contractor of the Reading and Access contract. The Reading and Access Contract This SOW covers contextual information as well as sub-activities already carried out by NORC and those activities to be handled in the remaining time on this evaluation activity. This abbreviated SOW takes the place of a formal Statement of Work, which was not developed prior to the inception of this activity. The information in this SOW draws from conversations held among USAID/Liberia, USAID/Washington (E3/ED), and NORC around the design of the evaluation and decision memos created prior to the development of an Evaluation Design Report and Data Collection. The Evaluation Design Report also provides additional details to the approach being taken and informed the development of this SOW.

In the remaining sections of this SOW, we provide the following information:

- Background Information on Read Liberia Activity
- Evaluation Objectives
- Evaluation Questions and Methodology
- Deliverables
- Period of Performance and Budget Estimate

Background Information:

USAID/Liberia is in the process of procuring a new basic education activity, designed to provide technical assistance to improve early grade reading skills for Liberian grade one and two students in in six targeted counties. The activity will also pilot test emergent literacy skills for Liberian students in selected public kindergarten schools. USAID/Liberia has an expected award date in September 2017. The new activity will be informed by lessons learned and experience from previous reading initiatives in Liberia, including follow-on to the Liberia Teacher Training Program, (LTTP II). Details of the approach to be taken will be finalized with the implementing partner post-award.

Project Context:

Since 2005, a number of education reforms aimed at restoring the educational infrastructure and reconstructing schools to accommodate the increasing population of school-age children have been championed by the Government of Liberia. The Government of Liberia's overarching goal of the education emergency response in 2005 was to get as many children, as quickly as possible, into school and deal with the quality of education issues in the future. As a result, the number of students enrolled in schools has increased significantly. Per the 2014 Census, the Ministry of Education now estimates a gross enrollment rate of 57.7% in grades one to six, this is a large improvement over the 31.8% gross enrollment in 2012, and prior years.

While enrollment has increased the issues of educational quality and efficiency at all levels of the system are a major challenge. Dropout is high, repetition is frequent, and student outcomes on system exams remain far from satisfactory. English is the official language of instruction in Liberia public schools, aimed at fostering a sense of national unity.

The Government of Liberia has implemented a robust policy framework to address these persistent hindrances to quality. The Education Sector Plan (ESP) (2010-2020); the Education Reform Law of 2011; the Roadmap for System Transformation; the National Agenda for Transformation (NAfT); and the MOE three-year Operational Plan (OP, 2014-2017) all highlight the importance of ensuring that Liberian children receive the "minimum stipulated quality (ESP)." Specific, reading-related initiatives incorporated in these plans include:

- The establishment of Liberia as a middle income country by 2030 (Education Reform Law and Poverty Reduction Strategy)
- A plan to decentralize the education system and create a management structure that is more locally focused (Education Reform Act of 2011- See Section J, J.4)
- The introduction of annual learning achievement tests in early grade reading (ESP)
- Analysis of test scores and their use to inform policy decisions as well as action (ESP)
- The prioritization of human development to address capacity and inclusiveness, and the improvement of the quality of basic education through soliciting community oversight (NAfT)
- A plan to Eradicate illiteracy to reduce the risk of conflict (NAfT)
- Results-based planning (MOE three-year plan -"Quality education for all-redirecting our future")
- The monitoring of all training activities with emphasis on mainstreaming early grades reading and math (OP, Objective 1, Output 2, Activity 2.2) 14
- Supplementary readers provided to public and community schools grades 1-4 (OP, Objective 1.4, Output 2)

Even with these ambitious initiatives, student results remain very low. As the USAID/Liberia Teacher Training Program II (LTTP II) results indicate, students make more progress when they receive regular, well-designed reading lessons. Therefore, the new activity will be structured to build on and supplement these initiatives.

Read Liberia:

While the Read Liberia Activity has not yet been awarded, the request for proposal (RFP), articulated a clear problem statement and hypothesis. The problem statement is as follows:[12]

PROBLEM STATEMENT: EARLY GRADE READING

1. Liberian students in grade one and two are not learning to read with fluency and comprehension because:
- Children in kindergarten are not being exposed early to oral vocabulary needed for emergent literacy.
- Time allocations for reading instruction in the early grades during the school day are insufficient
- Data to drive system-wide decision-making about early grade reading is not regularly collected
2. An evidence-based reading curriculum, with accompanying materials appropriate for reading instruction in the early grades, exists, but has not been incorporated into the primary grade comprehensive curriculum
3. Teachers' levels of literacy are very low. More time and resources are needed to coach teachers to become better readers.
4. Teachers receive insufficient training in reading instruction.
5. Monitoring and coaching systems for early grade reading instruction are under-developed.
6. Students' reading skills are not routinely assessed in the early grades.
7. Some children have limited access to print in their home environments.
8. Some parents and other family members lack the skills and time to support children's acquisition of reading skill.
9. Investment by the Government of Liberia and partners in early grade reading remains low.

The USAID/Liberia Development Objective hypothesis for Read Liberia states that:

IF:

1. Kindergarten students are taught the oral vocabulary lexicon needed for emergent literacy in English;

2. Official time allocations for reading instruction in the early grades are increased and enforced;

[12] The problem statement and hypothesis are stated on pages 11 and 12 of Request for Proposal (RFP) # SOL-669-17-000004, Read Liberia!

3. Data about early grade reading is collected and used to drive system-wide decision-making;
4. Reading intervention is refined and simplified with the key components needed for children to learn to read words and to understand what they read are preserved and improved if necessary;
5. Texts appropriate for early grade reading instruction are improved and additional leveled texts created;
6. Teachers receive intensive training and systematic coaching in effectively teaching the early grade reading curriculum;
7. Trained teachers receive evidence based, scripted reading lessons and materials to support reading improvement in the early grades;
8. Teachers are monitored and supported in their classrooms;
9. Children's reading skills in the early grades are routinely assessed and children provided opportunities to practice their reading skills at home;
10. More parents and other family members learn how to support their children in learning to read; and Private and public sources of funding to support early grade reading progress are identified;

THEN: Students will be able to read with fluency and comprehension at the end of second grade.

In addition to the aforementioned problem statement and development objective, the RFP for the Read Liberia activity outlines the intended results and provides illustrative examples of the sub-activities the implementing contractor may implement to reach the intended outcomes.[13] The intermediate results for Read Liberia targets include the following:

- Increased government commitment to and support of evidence-based reading instruction
- Improved early grade reading classroom instruction
- Improved service delivery systems
- Increased parent, community and private support for Early Grade Reading.

The RFP also includes a table of technical deliverables that outlines specific activities such as coaching, the development of new materials, and an MOE approved teacher's manual.

It is important to emphasize that the manner in which the Mission structured the Read Liberia RFP allows for the development of sub-activities that will help the Mission reach its intended outcomes. This is important because it could potentially place some limitations on the design of the evaluation described herein.

[13] See Appendix A for SOW (Section C) of Read Liberia RFP.

School Selection:

USAID/Liberia, in collaboration with the Ministry of Education, has defined a set of criteria that will be used to identify schools that are eligible to receive the READ Liberia activities. These criteria include schools that: 1) are public; 2) are located in the six selected counties (Montserrado, Margibi and Bong, Grand Bassa, Nimba and Lofa); and 3) have grade one and grade two classes. To strengthen the design of the Impact Evaluation, NORC has asked that the schools have at least 20 students in grade 2.

During the data collection process, the evaluation team learned that there was an agreement with the Liberian government that there be no overlap between the sample of schools selected for Read Liberia and for the Read Liberia Evaluation and the Partnership Schools for Liberia (PSL) treatment and control schools.

It will be essential for USAID/Liberia and its implementing contractor to follow these criteria as they serve as the basis for the sampling frame and the sample size calculations. If modifications are made, it could jeopardize the study.

EVALUATION OF READ LIBERIA

Evaluation Objectives, Intended Audience and Questions:

USAID/Liberia had two primary objectives when it reached out to USAID/Washington and NORC.

- OBJECTIVE ONE: undertake a baseline study that will inform USAID/Liberia and their contractor about the population with which they will be working-including schools, teachers and students.

- OBJECTIVE TWO: Conduct an impact evaluation to measure the impact of the Read Liberia activity on reading outcomes.

Objective One: Informing Activity Design

The baseline will be used to provide the Mission and Implementing Partner descriptions of the schools, students, and teachers included in the population of schools they will target to help them finalize the design of the sub-activities under Read Liberia. While both the information gathered about students' performance on literacy tasks and all the information gathered through the supplemental data collection (teacher survey, principal survey, and brief student survey) can be a helpful resource for understanding the population that will be served, USAID/Liberia are particularly interested in a several topics. First, they want to understand, from the students' perspectives, if teachers are working with students on letter sounds and if students are taking books home to read. Second, they want information about the qualifications of the teachers and whether or not the current teachers are government paid teachers or volunteers.

Objective Two: Examining the Results/Impact of Read Liberia

In addition to understanding the background of the activity participants and the context in which the activity will occur, USAID/Liberia also wants to assess the results of the Read Liberia activity. More specifically, the Mission would like to examine the impact of the activity on grade 2 students' ability to

read and understand grade level text in English after two years of schooling. Students' literacy gains will be assessed using the Early Grade Reading Assessment (EGRA).

During the design phase, USAID and the evaluation team identified three potential options for the impact evaluation.

1. An impact evaluation that examines the teacher to coach ratio needed for the activity to be effective and the effectiveness of teachers with different levels of coaching on reading fluency and comprehension of second grade students.

2. An impact evaluation with two treatment arms. One arm would target schools with a new kindergarten sub-activity. The second arm would target schools that received the remaining treatment without the kindergarten sub-activity. This design would allow us to assess the degree to which the activity as a whole had an impact on reading fluency and comprehension of second grade students, and the difference that adding a kindergarten component would have on impact, if any.

3. An impact evaluation with a treatment and control that examines the impact of all Read Liberia interventions, as a package, on reading fluency and comprehension of second grade students.

USAID/Liberia, USAID E3/ED, and the NORC team determined that the third was the best option due to a number of factors. First, USAID/Liberia concluded that the first option was not likely the best use of resources because they wanted to make sure that there weren't schools that were deprived of coaches or a potentially effective coach:teacher ratio. The second option was of great interest, especially given the political situation in Liberia and the role KG has played there and the lack of evidence we have on the effectiveness of literacy activities in kindergarten. Despite this, with a total budget of $900,000, it was not feasible to undertake an impact evaluation with three distinct arms. However, if additional funds became available, the team may consider adding an arm and undertake baseline data collection for this component in either the fall or spring. USAID will give NORC at least five months notice if they decide to add an arm for kindergarten so that NORC has sufficient time to prepare a new tool to assess literacy skills.

Taking the third approach also allows some flexibility in the design of the sub-activities, which is especially important because the Read Liberia contract has not yet been awarded.

To meet this objective, NORC will answer the following evaluation questions:

What are the features of the population that will be served through Read Liberia?

What is the impact of the Read Liberia activity on the reading fluency and comprehension of second grade students?

Evaluation Design and Methods:

Based on the objectives and evaluation questions identified above, NORC implemented a baseline data collection during the 2016-2017 school year. The sampling approach taken for the baseline data collection will allow for an impact evaluation of the Read Liberia activity as well as a description of the

population served. It is crucial, however, that the Mission and Implementing partner adhere to the same selection criteria used for the baseline in order to select schools. If differing criteria are used, this could jeopardize the design, as the sample may no longer represent the activity as a whole. The sections below provide details related to the expectations for the design, data collection, and analysis.

Design:

NORC was responsible for proposing an evaluation design. The design and analysis plan proposed consists of the following features:

- The primary outcome of interest for the IE is oral reading fluency and reading comprehension
- Randomized control trial of Read Liberia activity, with a single treatment arm
- Two rounds of data collection - at the baseline and at the endline
- Point of randomization at the school level
- Endline to occur either two or three years after implementation has commenced
- Data will be collected using four tools:
    - EGRA
    - Student Survey
    - Teacher Survey
    - Principal Survey
- The EGRA instrument previously used for the Liberia Teacher Training Program (LTTP) and follow-on, LTTP II will be used with minimum modification
- Power calculations to determine sample size rely on the following assumption:
    - α of .95
    - β of .80
    - ρ (or ICC) of .3
    - r^2 of .20
    - MDES of .34
- NORC in collaboration with STS and a local subcontractor will undertake enumerator training and data quality control.
- At a minimum, NORC's analysis plan should include an estimate of the impact of Read Liberia

on reading fluency and reading comprehension, as well as sub-group analyses of the impact of these indicators on boys and girls. Other sub-group analysis and analysis of other key dimensions of the EGRA may be proposed by NORC and approved by USAID/Liberia.

While the NORC evaluation team will be responsible for carrying out the baseline and impact evaluation, it will be up to USAID/Liberia and their contractor to carry out effective activity monitoring and activities such as data collection on the fidelity of implementation, classroom observations, and the collection of other performance data, such as annual learning assessments.

This is important because the impact evaluation will be supplemented with descriptive data gathered throughout the duration of Read Liberia implementation. These data will be gathered by the contractor that will be implementing the activity and will not only supplement the impact evaluation, but will also provide information that can help guide programming as the activity progresses. Data that will be systematically collected include, but are not limited to the following:

- LQAS
- Classroom observation
- Other relevant implementation data (including teacher retention and turnover)

If implementing contractor does not gather this information, it will not be included in the evaluation. Additionally, USAID/Washington and NORC expect that USAID/Liberia and its contractor to keep NORC aware of any potential contamination issues such as employment of coaches at control schools.

Instrument and Data Collection:

While some raised concerns regarding test security of the EGRA version that used in 2011, the team elected to move forward using the same version of the test due to limitations in the budget and timeline. The evaluation team collected the data electronically. NORC and their partners were responsible for training local enumerators, soft piloting of the instrument and undertaking data quality checks.

NORC undertook data collection for the baseline in June 2017. The evaluation team will collect endline data either in April/May, 2019 or April/May, 2020. NORC will use the same version of the instruments used at baseline.

NORC gained approval for the research from both the NORC IRB at the University of Chicago and the University of Liberia, and has worked in close collaboration with the Ministry of Education. The NORC evaluation team trained all team members from the local data collection firm in ethics and all team members committed to comply with child protection policies.

Deliverables and Audience:

Table 1.0 below reflects the deliverables as required Section F of the Read and Access Contract, Contract Number AID-OAA-M-13-00010. Descriptions of the standards for each deliverable are located under the results in Section C.4 of the contract. Table 1.0 also includes notes regarding the status of the deliverable.

USAID/Washington provided a report template to NORC for the Baseline report. USAID expects all reports to follow guidance in the Reading and Access contract. The evaluation team should develop clearly written reports in plain English with a non-technical audience in mind. USAID will identify specific targeted audiences prior to the creation of the deliverable so that the evaluation team may target that audience.

Deliverable Number	Type of Written Deliverable/Report	Due Date	Audience	Format	Notes
1.1	Consultation Plan	Within 30 calendar days after written notification of an evaluation task	N/A	Email	An outlined plan was not communicated. The process unfolded more organically as a formal SOW for the task was not issued
1.2	Draft Evaluation Plan	Within 60 calendar days of receiving written notification of the evaluation task or as agreed upon by CO	USAID/Washington, USAID/Liberia	Email	Received and accepted
1.3	Final Evaluation Plan	Within 90 calendar days of receiving written notification of the evaluation task or as agreed upon by the contractor and COR	USAID/W, USAID/Liberia	Email	Received and accepted
1.4	Data Collection Instruments for Data collection and Analysis for Impact Evaluation	30 days before pilot testing begins	USAID/W, USAID/Liberia	Email	Received and accepted
1.6	Evaluation Baseline Report and Data Files	Within 60 days of completion of baseline data collection or as	USAID/W, USAID/Liberia, MOE, Implementing	Email	Data collection completed prior to June 1. Deadline for the baseline report

		agreed upon by the contractor and COR	contractor, Development Partners		extended to allow for USAID to provide additional guidance on what was to be included in the report. Report Draft submitted August 25, 2017
1.8	Final Evaluation Report and/or Summative Evaluation Report and Data Files	Within 60 calendar days of end-line data collection or as agreed upon by the contractor and COR		Email	End line currently slated to take place in 2019 or 2020.
2.1	Evaluation Results: Briefing documents, summaries and analysis	Meeting with IP following award			Two that are suggested, one is a meeting with IP once award made and second one after endline to debrief Mission on findings

Evaluation Budget and Period of Performance:

The estimated budget for the evaluation is $905,000. The current Reading and Access contract was modified and is now active through September 29, 2021. The period of performance for this specific task, Impact Evaluation of Read Liberia runs from January 1, 2017 through September 2020.

Under this task order and at the request of USAID/Liberia, the baseline data collection occurred prior to the end of the 2016-2017 school year and prior to awarding the Read Liberia contract. This is important to note as it may create challenges down for the impact evaluation. However, USAID/Liberia chose to take this approach so that the information gathered during the baseline could be used to make programmatic decisions.

While the period of performance runs through 2020, the evaluation team may complete the work in 2019. This is because the evaluation team will collect endline data either two years after baseline, in 2019, or three years after the baseline data in 2020. During the planning phase, USAID/Liberia, E3/ED and NORC weighed the pros and cons of waiting three years before collecting endline data. The advantage of waiting until 2020 is that it maximizes the time for the intervention to have affect. This could increase the impact that the intervention has on outcomes and also allows necessary flexibility should the Read Liberia activity start too late in the year. However, there are conditions that may cause

a decline in outcomes after two years. If we see a substantial change in staff, with the number of experienced staff departing and new staff coming on board, the length of exposure to the treatment could decrease which could diminish the size of the impact on learning outcomes.

Building in midline data collection could help mitigate this risk. However, due to budgetary constraints, this is not an option for this evaluation. To reduce this risk, USAID/Liberia and their contractor will monitor the turnover of teaching staff and alert NORC if they are losing a substantial number of staff. If this occurs, the evaluation team may undertake the endline a year earlier, in 2019.

ANNEX II: EVALUATION METHODS AND LIMITATIONS

Experimental Design

The evaluation team will use an experimental or randomized control trial (RCT) approach to answer the evaluation question, with schools randomly assigned to treatment and control groups. The fact that the activity has not started yet and that the total number of schools is greater than the number of schools to be treated in the six counties, allows for an RCT. We want treatment and control groups to be as similar as possible; the primary advantage of a randomized design is that it minimizes the potential for selection bias- that is, the possibility that observed differences in outcomes between the treatment and control groups are due not to the impact of the project, but to other systematic differences between the two groups that the evaluation is not able to account for. Another advantage is that the randomizing approach also tends to be fairly simple to convey to stakeholders and policy makers and fair when not all schools can receive treatment at once.

We will estimate the causal impact of the program on EGRA scores using regression models of the following form:

$$Y_{ijt} = \beta_0 + \beta_1 \delta_{time} + \beta_2 \mathbf{X}_{ijt} + \gamma(\delta_{time} \times \delta_{treat}) + \varphi_j + \varepsilon_{ijt}$$

where:

Yijt is the EGRA sub-task score for student i in school j at time t,

δ_{time} is a dummy variable equal to one at endline,

δ_{treat} is a dummy variable equal to one for observations in the treatment group,

Xijt is a vector of control variables,

φ_j is a school-level fixed or random effect,

ε_{ijt} is a random error term, and

β_0, β_1 , the vector β_2 and γ are parameters to be estimated.

The parameter of interest is γ, the coefficient on the interaction term between the time and treatment dummies. The value of γ will provide an estimate of the impact of Read Liberia relative to the control group on EGRA scores.

The parameter of interest is γ, the coefficient on the interaction term between the time and treatment dummies. The value of γ will provide an estimate of the impact of RL relative to the control group on EGRA scores.

Although the evaluation question focuses on the reading fluency and reading comprehension scores, we plan to estimate the impact of RL on all the sub-tasks include in the EGRA tool.

Note also that the models will include a set of control variables Xijt reflecting student characteristics that will be obtained from short surveys of students in the course of administering EGRA. Potential control variables include age, home language if different from English, whether child reads at home regularly, and some basic questions about household assets to estimate wealth status, among others. Incorporating these control variables into the analysis will improve the precision of the impact estimates and help controlling for any potential change in characteristics of learners between baseline and endline as well.

In addition to estimating the overall impact of Read Liberia on reading outcomes, we will also carry out a sub-group analysis to examine whether the impacts were different for boys and girls. Depending on the findings derived from baseline data, we can explore some interactions between school characteristics and the RL activity. For example, if we find that student characteristics and performance are different between rural and urban schools, we could study whether the effects of the activity are different accordingly to the school location.

Limitations

The evaluation faces several risks. Primary among them, is the fact that the design of the evaluation preceded the award of the Read Liberia contract, which potentially poses a threat to the evaluation in the event that the eventual implementation of the activity diverges from the assumptions on which the design is based.

Other risks are common to most evaluations and include the possibility of contamination across treatment and control groups; the evaluation team will attempt to detect and account for such contaminations during endline data collection.

A final risk that USAID's Goal 1 team has raised concerns about test security related to the EGRA instrument being used for this evaluation, since it is the same assessment tools used in 2011 and 2015. However, there is no evidence of test leakage and, given time and budget constraints, NORC and USAID decided the creation and testing of a new tool was not warranted.

Liberia pre-visit questionnaire

1	School Code	
2	County	
3	District	
4	Address	(Village or Town?)
5	GPS Coordinates	Lat: Long:
6	School Name	
7	Is the school sometimes referred to locally by a different name than the one listed in the official registry?	Yes: _____ No: _____
8	[If yes]: What is this name?	
9	Interview Date (dd/mm/yyy)	Day: ___ Month: _____ Year:_____
10	Principal Name	First Name: _____ Last Name: _____
11	Principal Telephone	
12	Principal's email address	
13	Alternate Contact	First Name: _____ Last Name: _____
14	Alternate Contact's Title	
15	Alternate Telephone	
16	Alternate email address	
17	Are Grade 2 students in a multigrade classroom?	Yes _____ No _____
18	Number of Classrooms for Grade 2 students	Drop down with options for [1-10]
19	Classroom Size Grade 2	_____ students
20	Number of Grade 2 Students	Boys: _____ Girls: _____ TOTAL: _____
21	Time school day starts Grade 2	_____ hour _____ minute AM/PM
22	Time school day ends Grade 2	_____ hour _____ minute AM/PM
23	Please indicate any dates this school will be closed due to holidays, teacher training, or other events in the next month. (dd/mm/yyyy)	If more than 1 date, add field for each additional date the school will be closed.
24	**At the end of the questionnaire ask the principal to sign the consent form. [only for the enumerator]** Did the principal sign the consent?	Yes _____ No _____

Student Participation – Consent Statement from Principal

Written Consent

Hello, my name is _____. I work with The Khana Group in Liberia.

- **We are trying to understand how children learn to read and, in collaboration with the Ministry of Education, we are conducting the Early Grade Reading Assessment (EGRA) during May 2017 in 90 schools.**
- **Your school was selected randomly.**
- **We will randomly select 16 students in Grade 2 to assess their reading skills using a brief reading assessment. We will also ask these students a few questions about some of their normal school activities, reading practices at home, as well as home asset ownership.**
- **Each interview should take around 40 minutes and the entire interview process for all 16 students will last around 4 hours. The interviews will take place during the school day.**
- **Selected students need only participate if they wish.**
- **No names will not be mentioned anywhere in reports based on this exercise.**
- **The assessments and responses will NOT affect the school, you, the teachers or students in any way.**

Do you provide consent for the Grade 2 students to participate in this assessment and survey?

☐ **Yes**

☐ **No**

Signature: _____

Print Name: _____

Date:_____

Student Instrument

General Instructions

It is important to establish a playful and relaxed rapport with the children to be assessed, via some simple initial conversation among topics of interest to the child. The child should perceive the following assessment as a game to be enjoyed rather than a severe situation. After you have finished, thank the child for his/her time and effort.

Verbal Consent

Read the text in the box clearly to the child:

My name is _____. I work with the Ministry of Education in Liberia.

- **We are trying to understand how children learn to read. You were picked by chance, like in a raffle or lottery.**
- **We would like your help in this. But you do not have to take part if you do not want to.**
- **We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.**
- **Using this stopwatch, I will see how long it takes you to read.**
- **This is NOT a test and it will not affect your grade at school.**
- **I will also ask you questions about your family, like what language your family uses at home and some of the things your family has.**
- **I will NOT write down your name so no one will know these are your answers.**
- **Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.**
- **Can we get started?**

Check box if verbal consent is obtained: ☐ ***YES***

(If verbal consent is not obtained, thank the child and move on to the next child, using this same form)

			○

			○
D. Unique School code :		J. Class section:	
E. School shift :	○ 1 = Full day ○ 2 = Morning ○ 3 = Afternoon	K. Student's month and year of birth :	Month : _____ Year : _____ Age: _____
G. Teacher name ***(important!)***		M. Student's gender	○ 1 = girl 0 = boy

Task 1. Orientation to Print

Show the child the paragraph segment on the last page of the student assessment (Section 6).

Read the instructions in the gray boxes below, recording the child's response before moving to the next instruction.

I don't want you to read this now. On this page, where would you begin to read? Show me with your finger.

[Child puts finger on the top row, left-most word] ○ Correct ○ Incorrect ○ No Response

Now show me in which direction you would read next.

[Child moves finger from left to right] ○ Correct ○ Incorrect ○ No Response

When you get to the end of the line, where would you read next?

[Child moves finger to left-most word of second line] ○ Correct ○ Incorrect ○ No Response

Section 2. Letter Name Knowledge

Show the child the sheet of letters on the first page of the student assessment. Say,

> **Here is a page full of letters of the alphabet. Please tell me the NAMES of as many letters as you can--not the SOUNDS of the letters, but the names.**
>
> **1. For example, the name of this letter** [point to O] **is "OH".**
>
> **Now you try: tell me the name of this letter [**point to V]**:**
>
> [If correct:] **Good, the name of this letter is "VEE."**
>
> [If incorrect:] **The name of this letter is "VEE."**
>
> **2. Now try another one: tell me the name of this letter [**point to L]**:**
>
> [If correct:] **Good, the name of this letter is "ELL."**
>
> [If incorrect:] **The name of this letter is "ELL."**
>
> **Do you understand what you are supposed to do? When I say "begin," name the letters as best as you can. I will keep quiet and listen to you, unless you need help. Ready? Begin**.

Set the timer on 1 minute. Start the timer when the child reads the first letter. Follow along with your pen and clearly mark any incorrect letters with a slash **(/)**. Count self-corrections as correct. **Stay quiet,** except when providing answers as follows: if the child hesitates for 3 seconds, provide the name of the letter, point to the next letter and say "**Please go on**." Mark the letter you provide to the child as incorrect.

WHEN THE TIMER REACHES 0, SAY, "stop." ***Mark the final letter read with a bracket (⌋).***

Early stop rule: *If the child does not give a single correct response on the first line, say "**Thank you!**", draw a line through the letters in the first row, discontinue this exercise, check the box at the bottom, and go on to the next exercise.*

L	i	h	R	S	y	E	O	n	T	10
i	e	T	D	A	t	a	d	e	W	20
h	O	e	m	U	r	L	G	R	U	30
g	R	B	E	i	f	m	t	s	R	40
S	T	C	N	p	A	F	c	a	E	50

y s Q A M C O t n P	60
e A e s O F h u A T	70
R G H b S i g m i L	80
L i N O e o E r p X	90
N A c D d I O j e N	100

Time left on stopwatch if student completes in LESS than 60 seconds: _____

☐ Exercise was discontinued as child had no correct answers in the first line.

Task 3. Phonemic Awareness

This is **NOT** a timed exercise and **THERE IS NO STUDENT SHEET**. Read aloud each set of words **once** and have the student say which word begins with a different sound. Read these instructions to the child:

This is listening exercise. I'm going to say THREE words. ONE of them begins with a different sound, and you tell me which word BEGINS WITH A DIFFERENT SOUND

1. For example:

"lost", "map", "like". Which word begins with a different sound?

[If correct:] **Very good, "map" begins with a different sound.**

[If incorrect:] **"lost", "map", "like". "map" begins with a different sound than "lost" and "like."**

2. Now try another one: "train", "trip", "stop". Which word begins with a different sound?

[If correct:] **Very good, "stop" begins with a different sound.**

[If incorrect:] **"train", "trip", "stop". "stop" begins with a different sound than "train" and "trip."**

Do you understand what you are supposed to do?

Pronounce each set of words **once slowly** (about 1 word per second). If the child does not respond after 3 seconds mark it no response and move on.

Early stop rule: If the child gets the **first 5 sets** of answers **incorrect or no response,** draw the line through each of the 5 first rows, discontinue this exercise, check the box at the bottom of this page and go on to the next exercise.

Which word begins with a different sound? [repeat each set ONCE]										
1	boy	ball	cat	[cat]	☐	Correct	☐	Incorrect	☐	No Response
2	man	can	mad	[can]	☐	Correct	☐	Incorrect	☐	No Response
3	pan	late	pin	[late]	☐	Correct	☐	Incorrect	☐	No Response
4	back	ten	tin	[back]	☐	Correct	☐	Incorrect	☐	No Response
5	fish	fat	cat	[cat]	☐	Correct	☐	Incorrect	☐	No Response

6	boat	bit	coat	[coat]	☐	Correct	☐	Incorrect	☐	No Response
7	day	bag	dot	[bag]	☐	Correct	☐	Incorrect	☐	No Response
8	can	girl	cold	[girl]	☐	Correct	☐	Incorrect	☐	No Response
9	run	race	sand	[sand]	☐	Correct	☐	Incorrect	☐	No Response
10	leg	make	lay	[make]	☐	Correct	☐	Incorrect	☐	No Response

☐ ***Exercise was discontinued as child had no correct answers in the first five sets of words.***

Task 4. Familiar Word Identification

Show the child the sheet of words on the second page of the student assessment. Say,

Here are some words. I would like you to read me as many words as you can (do not spell the words, but read them).

For example, this word is: "CAT".

1. Now you try: [point to the word "mat" and say **]please read this word:**

[If correct]: **Good, this word is "mat."**

[If incorrect]:**This word is "mat."**

2. Now try another one: [point to the word "top"**] please read this word :**

[If correct]: **Good, this word is "top."**

[If incorrect]: **This word is "top."**

Do you understand what are you supposed to do? When I say "begin," read the words as best as you can. I will keep quiet and listen to you, unless you need help. Ready? Begin.

Start the timer when the child reads the first word. Follow along with your pencil and clearly mark any incorrect words with a slash **(/).** Count self-corrections as correct. **Stay quiet,** except when providing answers as follows: if the child hesitates for 3 seconds, read the word, point to the next word and say "**Please go on**." Mark the word you read to the child as incorrect.

WHEN THE TIMER REACHES 0, SAY, *"stop." Mark the final word read with a bracket (⌋).*

Early stop rule: *If the child gives no correct answers on the first line, say, "**Thank you!**", discontinue this exercise, draw the line through the words in the first row, check the box at the bottom of the page, and go on to the next exercise.*

but	time	in	the	also	5
make	no	its	said	were	10
came	very	do	after	long	15
water	as	all	for	even	20
her	was	three	been	more	25

that	must	can	around	it	30
another	words	back	called	work	35
could	an	him	on	see	40
than	get	not	where	what	45
you	if	their	through	when	50

Time on stopwatch if student completes in LESS than 60 seconds: _____

☐ Exercise was discontinued as child had no correct answers in the first line.

Task 5. Simple unfamiliar nonword decoding

Show the child the sheet of nonwords on the third page on the student form. Say,

Here are some made-up words. I would like you to read me as many made-up words as you can (do not spell the words, but read them).

For example, this made-up word is: "ut".

1. Now you try: [point to the next word: "dif' and say] **please read this word**

[If correct]: **"Very good: dif"**

[If incorrect]:**This made-up word is "dif."**

2. Now try another one: [point to the next word: mab and say] **please read this word**.

[If correct]: **"Very good: mab"**

[If incorrect]:**This made-up word is "mab."**

Do you understand what you are supposed to do? When I say "begin," read the words as best as you can. I will keep quiet and listen to you, unless you need help. Ready? Begin.

Start the timer when the child reads the first word. Follow along with your pencil and clearly mark any incorrect words with a slash **(/).** Count self-corrections as correct. **Stay quiet,** except when providing answers as follows: if the child hesitates for 3 seconds, provide the word, point to the next word and say "**Please go on**." Mark the word you provide to the child as incorrect.

WHEN THE TIMER REACHES 0, SAY, *"Stop." Mark the final word read with a bracket (⌋).*

Early stop rule: *If the child gives no correct answers on the first line, say "**Thank you!**", discontinue this exercise, draw the line through the words in the first row, check the box at the bottom of the page, and go on to the next exercise.*

loz	ep	yat	zam	tob	5
zom	ras	mon	jaf	duz	10
tam	af	ked	ig	el	15
tig	pek	dop	zac	ik	20
uf	ral	ep	bab	vif	25

lut	sig	zop	zar	jaf	30
ruz	huf	wab	ak	jep	35
wub	dod	ik	vus	nux	40
pek	zel	bef	wab	hiz	45
wof	ib	dek	zek	vok	50

Time left on stopwatch if student completes in LESS than 60 seconds: _____

☐ Exercise was discontinued as child had no correct answers in the first line.

Task 6. Passage reading and Comprehension.

Show the child the story on the last page of the student form. Say,

> **Here is a short story. I want you to read this aloud. When you finish, I will ask you some questions about what you have read.**
>
> **Do you understand what are you supposed to do? When I say "begin," read the story as best as you can. I will keep quiet and listen to you,**
>
> **unless you need help. Ready? Begin**.

 **Set the timer on 1 minute. Start the timer when the child reads the first word.** Follow along with your pencil and clearly mark any incorrect words with a slash (/). Count self-corrections as correct. **Stay quiet,** except when providing answers as follows: if the child hesitates for 3 seconds, provide the word, point to the next word and say "**Please go on**."

Mark the word you provide to the child as incorrect. **WHEN THE TIMER REACHES 0, SAY,**, "**stop**." Mark the final word read with a bracket (⌋). If the child gets the entire first line incorrect, discontinue this exercise – both reading and comprehension questions -, check the box below and go on to the next exercise.

STOP THE CHILD AT 0 SECONDS AND MARK WITH A BRACKET (⌋).

Take **the text away** from the child after they read it. Read instructions to the child. Then read each question slowly and clearly. After you read each question, give the child at most 15 seconds to answer each question. Mark the answers to the questions as correct or incorrect.

> **Now I am going to ask you a few questions about the story you just read.**
>
> **Try to answer the questions as best as you can.**

Kemah lives near the big river.	*6*	**Where does Kemah live?** [near the big river] ☐Correct ☐Incorrect ☐ No Response
There is a big tree by the river where Kemah lives. Kemah likes to sit in the tree.	*24*	**Where does Kemah like to sit when she goes to the river?** *[in the tree, in the big tree near the river]* ☐*Correct* ☐*Incorrect* ☐ *No Response*
Every day after school, she stops by the tree and looks for a place to sit. She climbs the tree and sits on a branch.	*49*	**What does Kemah do after she climbs the tree?** [she sits on a branch, she finds a place to sit in the tree] ☐Correct ☐Incorrect ☐ No Response
She looks at the fish in the river.	*57*	**What does Kemah do when she sits in the tree?** [she looks at the fish in the river, looks at fish] ☐Correct ☐Incorrect ☐ No Response
Kemah is happy.	*60*	**Why is Kemah happy when she sits in the tree?** [she likes to look at fish in the river, she likes the tree] ☐Correct ☐Incorrect ☐ No Response

Time left on stopwatch: _____

Test Discontinued because child read NO words on the first line: ☐

Task 7. Listening Comprehension

This is NOT a timed exercise and **THERE IS NO STUDENT SHEET.** The administrator reads aloud the following passage **ONLY ONE TIME**, slowly (about 1 word per second). Say,

> **I am going to read you a short story aloud ONCE and then ask you some questions. Please listen carefully and answer the questions as best as you can.**
>
> **Do you understand what are you supposed to do?**

Musu goes to the Bong Town School every day on a motor bike. One day, Musu could not get a motor bike to take her to school because it was raining and they were all busy. Musu did not want to get wet. Then, one old man said, "You can have my son's raincoat." Musu was happy. She did not have to be wet at school.

1. **How does Musu usually get to school?**

   [On a motorbike] ☐Correct ☐Incorrect ☐No Response

2. **Why did the old man give Musu a coat?**

   [Because it was raining] ☐Correct ☐Incorrect ☐No response

3. **Why was Musu happy at school that day?**

   [Because she did not have to be wet at school] ☐Correct ☐Incorrect ☐No Response

Student Context Interview

Say to the child: *Thank you very much. Now, I am going to ask you some questions about your family and about reading.*

S1	What language/dialect does your family speak most often at home?	English = 1 Others = 2 **[Specify main one]**_____ Don't know = 88 Refuse/No Answer= 99	
S2	What language/dialect do your parents read or write in?	Cannot read and write = 0 English = 1 Others =2 **[Specify main one]**_____ Don't know = 88 Refuse/No Answer = 99	
S3	Do you have any reading books at home? (If no, skip to S5.)	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S4	If answer to S3 is Yes, in what language/dialects?	English = 1 Other = 2 **[Specify main one]**_____	
S5	Does anyone read aloud to you at home? (If No, skip to S7.)	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S6	If answer to S5 is Yes, in what language/dialects do they read to you?	English = 1 Other = 2 **[Specify main one]**_____	
S7	Do you practice reading aloud to someone at home? (If No, skip to S9.)	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S8	If answer to S7 is Yes, in what language(s) do you read?	English = 1 Other = 2 **[Specify main one]**_____ Don't know = 88 Refuse/No answer = 99	
S9	Have you ever repeated a grade? If yes, which ones? (**CIRCLE** the grades repeated.)	No = 0 Yes, Grade 1 = 1 Yes, Grade 2 = 2 Yes, Grade 3 = 3 Don't know = 88 Refuse/No answer = 99	
S10	Does your current teacher ever practice letter sounds with you? [Give student example of /k/ and /m/].	Never = 0 Often = 1 Always = 2 Refuse/No answer = 99	
S11	Does your teacher ever read aloud to you?	Never = 0 Often = 1 Always = 2 Refuse/No answer = 99	
S12	Did you eat lunch at break time at school yesterday [or last school day]?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S13	Did you miss any school days last week?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	

S15	The last time you did not do well on a test or assignment in school, did your parent(s) find out? If yes, what did s/he do? (**CIRCLE** all that apply. Do not read the choices to the child.)	No/Never learned about it = 0 Learned but did nothing = 1 Helped/encouraged me to do better = 2 Punished me physically = 3 Criticized me verbally = 4 Discussed with the teacher = 5 Argued with the teacher = 6 Other (Don't specify) = 7 Don't know = 88 Refuse/No answer = 99	
S16	The last time you did well on a test or assignment in school, did your parent(s) find out? (If No, skip to S18.)	No/Never learned about it = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S17	If the answer to S16 is Yes, what did your parent(s) do?	Learned but did nothing = 0 Congratulated or encouraged me = 1 Other = 3_____	
S18	Do you have a library at your school?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S19	Do you watch television at home?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S20	Do you listen to radio at home?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S21	Do you have electricity/current at home?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S22	Did you eat before coming to school today?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S23	Do you have books at school that you can take home to read?	No = 0 Yes = 1 Don't know = 88 Refuse/No answer = 99	
S24	Does your teacher make you practice silent reading in class?	Never = 0 Often = 1 Always = 2 Refuse/No answer = 99	
S25	Does your teacher make you practice reading out loud in class?	Never = 0 Often = 1 Always = 2 Refuse/No answer = 99	
S26	Does your teacher assign reading for you to do at home?	Never = 0 Often = 1 Always = 2 Refuse/No answer = 99	
S27	Does your teacher ever make you re-tell a story during class?	Never = 0 Often = 1 Always = 2 Refuse/No answer = 99	

Thank the student by shaking his/her hand!

THE EGRA ASSESSOR CHEAT SHEET

SUBTASK 1 – LETTER NAME KNOWLEDGE

Remain quiet, except if the child hesitates for **3** seconds. Then point to the next letter and say, **"Please go on."** Mark the skipped letter as incorrect.

Stimuli REQUIRED - TIMED

- Auto-stop = No correct responses in the first line (10 letters)
- Skipped Letter – is marked incorrect. If the child self-corrects, mark as correct
- Skipped Row – If the child skips an entire row, the entire row is marked incorrect

SUBTASK 2 – PHONEMIC AWARENESS

- Read the prompt and then pronounce the words, but do not overemphasize the beginning sound of each word
- Pronounce each word only once
- Remain quiet, except if the child hesitates for 3 seconds. Then, mark the item as no response

NO Stimuli - NOT Timed

Auto-stop = No correct responses in the first 5 items

SUBTASK 3 – FAMILIAR WORD IDENTIFICATION

Remain quiet, except if the child hesitates for **3** seconds. Then point to the next word and say, **"Please go on."** Mark the skipped word as incorrect.

Stimuli REQUIRED - TIMED

- Auto-stop = No correct responses in the first line (5 words)
- Skipped Word – is marked incorrect. If the child self-corrects, mark as correct
- Skipped Row – If the child skips an entire row, the entire row is marked incorrect

SUBTASK 4 – SIMPLE UNFAMILIAR NONWORD DECODING

Remain quiet, except if the child hesitates for **3** seconds. Then point to the next word and say, **"Please go on."** Mark the skipped word as incorrect.

Stimuli REQUIRED - TIMED

- Auto-stop = No correct responses in the first line (5 words)
- Skipped Word – is marked incorrect. If the child self-corrects, mark as correct
- Skipped Row – If the child skips an entire row, the entire row is marked incorrect

SUBTASK 5A - ORAL READING FLUENCY

- Remain quiet, except if the child hesitates for **3** seconds. Then point to the next letter and say, **"Please go on."** Mark the skipped word as incorrect
- After the child has finished, REMOVE the passage from in front of the child

Stimuli REQUIRED - TIMED

- Auto-stop = No correct responses in the first 6 items
- Skipped Word – is marked incorrect. If the child self-corrects, mark as correct
- Skipped Row – If the child skips an entire row, the entire row is marked incorrect

SUBTASK 5B – ORAL READING COMPREHENSION

- Mark the child's response and continue to the next question
- Give the child **15** seconds to answer the question. Mark the child's response and move on
- Mark as correct only responses that are same or similar in meaning to the answers provided

NO Stimuli - NOT timed

Answers – In comprehension questions potential answers are found in parenthesis below each question. Be careful not to read these answers to the pupil. If the pupil responds in a local dialect or language, ask the pupil <u>one time</u> if they can answer in English

SUBTASK 6 - LISTENING COMPREHENSION

- Read the entire passage out loud to the child ONE TIME ONLY. Read slowly (about 1 word per second) with expression.
- Ask all of the questions. Do not allow the child to look at the passage or the questions
- If the child hesitates for **15** seconds, mark as incorrect and move on to the next question

NO Stimuli - NOT timed

Answers – In comprehension questions potential answers are found in parenthesis below each question. Be careful not to read these answers to the pupil. If the pupil responds in a local dialect or language, ask the pupil <u>one time</u> if they can answer in English

Administration Procedure Reminders

- Examples – Always read instructions and conduct examples before starting
- Timed tasks – 1) start the timer when learner begins to read the first letter or word, 2) When timer ends, mark the final letter or word with]
- Pronunciation – Dialect. EGRA is a reading test, not a pronunciation test. If children in a particular area pronounce a word in their regular speech differently than everywhere, they should not be marked incorrect. This is not a reading error
- Testing Materials – Hold the tablet out of view of the child. The pupil stimuli is blank side up except when the child is reading it. Have materials easily accessible from the start
- Pupil interview – It should be administered verbally. Do **NOT** read aloud any responses unless protocol prompts to do so when text is in **<u>ALL CAPS</u>**
- Vertical Reading – If the child begins to read vertically, immediately stop the child from reading and point with your finger to show the child that they should read from right to left. Restart the exercise.

What is Tangerine?

Tangerine is an Android-based app designed to collect data electronically for a variety of types of surveys. It was designed specifically to conduct the Early Grade Reading Assessment. These training materials have been adapted from the Tangerine users' guide developed by RTI as well as the Galaxy Tab 4 user manual.

Rules of Tablet Use

Each enumerator has received a tablet after signing a tablet user agreement. Here are the rules outlined in the signed agreement:

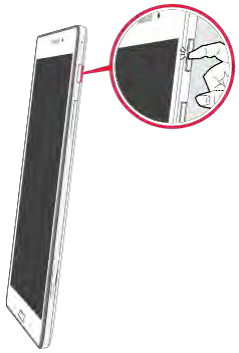
- Use materials and equipment correctly and only as directed. In particular, this includes use of a tablet and all accessories (stylus, charger and cord).
- Sign the tablet "out" and "in" each day.
- Keep the device in a safe place at all times. The tablet is the sole property of NORC and should not be removed from the training venue.
- Maintain the tablet and accessories in good working condition and keep them in a safe place at all times.
- Take care not to drop the device.
- Save and upload data as directed.

Each enumerator takes responsibility for any damages to, or loss of, the tablet during the time that the enumerator uses the tablet.

Tablet Basics

Here are basic instructions about how to operate the Samsung Galaxy Tab 4.

Turning your device on: Press and hold the Power/Lock Key.



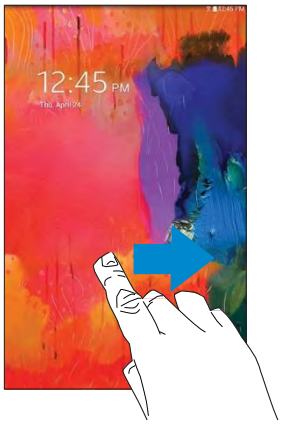
Turning your device off:

1. Press and lock the power/lock key.
2. On the Device options menu, touch **Power Off → OK.**

Securing Your Device

By default, the device locks automatically when the screen times out or you can lock it manually. Unlock the tablet by swiping your finger across the screen.

Unlocking the Device



Press the Power/Lock Key. The Lock screen displays. Swipe across the screen as shown.

Battery

The Battery icon in the Status Bar shows the battery power level. When battery power is 15% or less, your device prompts you to charge the battery. If you continue to operate the device without charging, the device powers off.

Battery full Battery charging Battery low

Opening Tangerine

To open the Tangerine application, find the Tangerine icon on the tablet screen and touch it.

Logging into Tangerine on tablets

When Tangerine opens, the login screen appears. Notice there are two tabs in the login screen: **Login** and **Sign Up**. Login is for users who have already registered a user account on the tablet on the device and on the most up-to-date version of Tangerine that is currently installed.

How to Sign Up: New users should tap the 'Sign Up' tab to establish an account on the tablet. It is best to create user names and passwords that are simple to remember. Keep a record of your username

and password in a safe place. It is best to choose a username that can be associated with an individual. Typically, it will require enumerators' usernames to consist of the first letter of their first name, followed by their surname. Therefore, user John Smith's username would be **jsmith** and his password would be something simple and easy for him to recall.

Login: Users who have already signed up on the tablet (and on the version of the app that is installed) can enter their credentials to login. If a user has lost or forgotten the username or password, they can simply create a new login with the 'Sign Up' tab. All data from all users on each tablet is uploaded – there is no data lost when a user needs to create a new account.

Managing Instruments on Tablets

After you have logged on to Tangerine, you will see all of your active assessments from your online Wizard group listed on the home screen. The Tangerine app home screen may look like this:

Under "Assessments", the enumerator is able to see the different assessments that can be run. Clicking the "Run" button will start the assessment. The "Results" button will bring the enumerator to a screen that shows the data collected thus far, and allows the option for interrupted assessments or surveys to be resumed.

Entering data on tablets

Launch your assessment. Before entering data, you must open the assessment that you wish to conduct.

Click the run icon to begin collecting data on any given instrument.

Types of input. Input in Tangerine will either be done by tapping response items or entering text. Once you have mastered the types of input per each item in your instrument, each subtest should be simple to administer. Below are descriptions of the different types of input.

1. **Buttons:** Most input is done through buttons. To use a button, simply touch the button in the center and release with a short tap or a firm, but short, press. Tangerine buttons are used to:

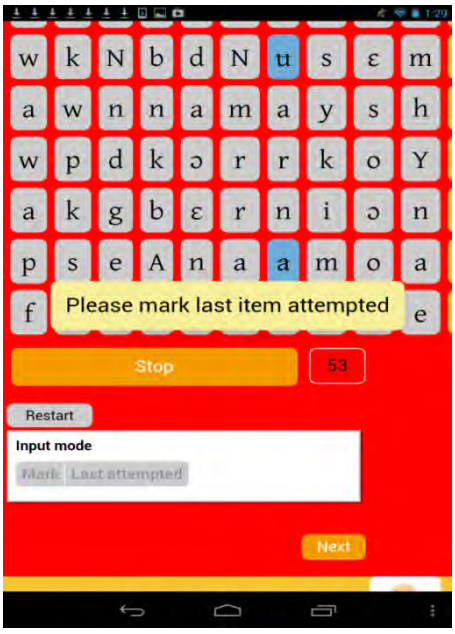
- Advance from screen to screen with the "Next" button
- Assign a student ID
- Start or stop the timer
- Indicate incorrect items in an assessment grid

2. **List selection.** The school name field is an example of an automated list selection input type. Enumerators must select items from drop-down menus.

3. **Automatically generated fields.** Certain field values are automatically filled in. These are the date and time fields, which are generated according to the date and time that the device is set to when the assessment begins; and the unique student ID field, which is filled in when the enumerator presses the "Generate" button.

Timed subtests. On a timed grid page, you will not see the grid items until you press "Start." When you press "Start," the timer will start counting down, and you will see the items appear in the grid (see screenshot shown at right). Once you have started you should not stop and restart except for exceptional circumstances. If a restart is needed, there is a button at the bottom of the page for that purpose.

Auto-correction: By default, all grid items are "correct." Mark items "incorrect" by tapping on that item, causing a line to be struck through that grid item. If a student first answers incorrectly, but then corrects himself or herself, mark the answer as correct. You can re-mark an incorrect answer as correct by tapping the button a second time.



Marking an entire line as incorrect: Use the asterisk button on the right-hand side of the grid to mark a whole row incorrect. Re-tap the line wrong icon to correct the line all at once.

Ending a subtest: There are three ways to end a timed subtest:

1. **Autostop:** The subtest may end automatically if a student answers a pre-determined number of questions at the beginning of the test incorrectly. If this occurs, the screen will flash red, and a message will appear that says "Autostop activated. Discontinue test." The next step for the enumerator is to press "Next" to move to the next exercise.

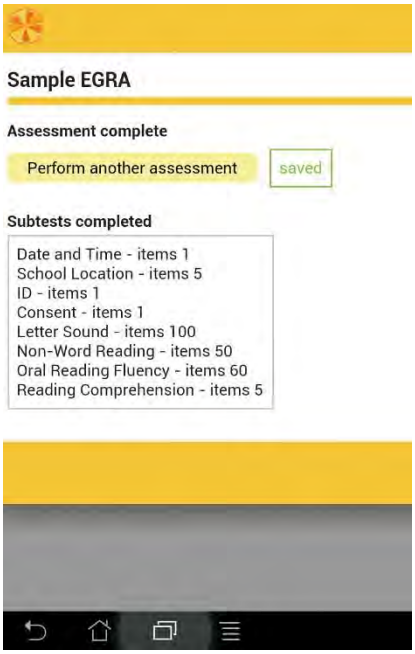
2. **The timer runs out:** If the timer runs out while the child

is still reading, the screen will flash red, and a message to "select the last item read" will appear (see below). The enumerator should ask the child to stop reading, then touch the last item attempted by the child when the timer went off. If it is necessary to mark the last item read as incorrect, use the "mode" feature (see below). Otherwise, the next step for the assessor is to press the "next" button.

3. **The enumerator clicks the stop button:** If a child completes all of the grid items before the allotted time runs out, the assessor will stop the timer by using the "stop" button. This will automatically place the 'Last Item Read' bracket around the final grid item, as the timer should only be stopped when the child has attempted the final grid item. If need be, the 'Last Item Read' bracket could be moved away from the final grid item.

Input mode: The "Input mode" feature (above, at right) exists because buttons behave differently depending on what "mode" the application is in. When the timer has started, the buttons are in the "Mark" mode that expects a click to mean "mark this item incorrect." After the timer is stopped, the mode automatically changes to "Last attempted" and the application expects that the next click will mean "mark this as the last item read" (above). In some cases, the last item read is both the last item AND an incorrect item. Therefore, the enumerator must toggle between modes in order to mark the button accordingly.

Completing an assessment. Upon reaching the end of the assessment (after the last subtest or interview question), you will see a confirmation page that the test has been completed, and an overview of results for each subtest (select the details button on "Subtests completed"). This is for the enumerator's benefit as a way to verify that all of the subtests were completed.



Enumerators should press 'Save Result' to finalize their entry. This button will then become "Perform another assessment." You can either press this button to begin assessing another child on the same instrument, or you can use the Tangerine icon button in the upper-left hand corner to get back to the list of available tests and start a new assessment.

To check the number of assessments collected, return to the list of assessments. Click on the data/results icon located to the right of any assessment and you will see a list of assessments conducted by that assessor for that test. Click on each assessment to see details.

Key Reminders

- At the end of each test, make sure to click "Save Results" on the **Results** screen.
- To stay in the Tangerine application, NEVER click on any of the buttons on the tablet, including the Home button, back key, and recent key on the bottom, because doing so brings the user to the home screen of the tablet and aborts ongoing processes in Tangerine.
- While conducting an assessment, YOU CANNOT navigate pages using the Back button at the bottom of the tablet.

Troubleshooting

Question: What should I do if a subtest doesn't respond when I'm in the middle of conducting an assessment or survey?

Answer: It is possible to resume the assessment. To do so, follow these steps:

1. Touch the Tangerine icon in the upper left hand corner of the tablet. You will return to the assessments page.
2. Press the data/results icon located to the right of the assessment you were conducting.
3. Find the assessment you were conducting. Press "details" and then "resume." You will then go to the subtest at which you left off.

Question: What happens if the steps above do not work because the Tangerine application is frozen?

Answer: Exit the application by touching the home key at the bottom of the tablet. Go to **Settings > Apps**, then swipe right-to-left to get to a listing of Apps under "All." Select Tangerine and then "**Force Stop."**

Question: What should I do if I accidentally stop a timed subtest?

Answer: If the child is still answering questions when the timer is stopped, tell the student to stop and to resume the test from the beginning when you say to start. Also, tell the student that he or she has to resume the test because of a mistake you made.

Question: What if I mark an answer incorrectly, and the time runs out before I can correct my mistake?

Answer: It is possible to correct a mistake even if time has run out. After the timer stops and you mark the last letter attempted, switch input mode at the bottom of the grid from "last attempted" to "mark," and then correct your mistake.

TEACHER Instrument

Verbal Consent

My name is _____. I work with the Ministry of Education in Liberia.

- **We are trying to understand how children learn to read. Your school was selected through the process of statistical sampling. We would like your help in this. But you do not have to take part if you do not want to.**
- **Your name will not be mentioned anywhere in reports based on this survey. Results of this survey will be presented in an aggregated format so that your specific responses will not be identifiable The information acquired through this instrument will be shared with the Ministry of Education in the hopes of identifying areas where additional support may be needed.**
- **Your responses will NOT affect you in any way. They will not have any impact on your employment or your pay.**
- **If you agree, I would ask you some questions regarding your normal activities at school, including your interactions with school staff, Ministry office staff, students, and parents.**
- **Then, with your assistance, I would randomly select 16 students in Grade 2 to assess their reading. I would also ask these students about some of their normal school activities, school assets, language use, and reading practices at home, as well as home asset ownership. Selected students need only participate if they wish. I will spend about 40 minutes interviewing each child. My interview with you will take 15 to 20 minutes.**
- **Are you willing to participate? Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.**

Can we get started?

Check box if verbal consent is obtained : ☐ ***YES*** ☐ ***NO***

(If verbal consent is not obtained, thank the teacher and select the next one)

Section 1. Teacher Interview

SC1	School Name		
SC2	School Code		
T1	Interviewer Name		
T2	Interviewer Code		
T3	Starting Time of Interview	____:____AM	
T4	Ending Time of Interview	____:____PM	
T5	Interview Date (dd/mm/yyyy)	Day:_____Month:_____Year:_____	
T6	Interview Status	Refused =1 Partially Completed = 2 Complete = 3	
T7	[Is the teacher male or female?]	Male=0, Female=1	
T8	Teacher name (make sure the same name is used in the questionnaires of the children who are taught by this teacher, so the questionnaires can be linked)		
T9	What type of teaching certificate do you have?	C Certificate = 0 B Certificate = 1 AA Certificate = 2 Other =3 Don't know = 88 Refuse/No Answer = 99	
T10	What is your highest level of education?	Elementary=0 Junior High School =1 Senior High School =2 Associate = 3 Certificate C = 4 Certificate B = 5 Certificate AA = 6 Bachelors Degree = 7 Masters degree or other = 8 Other (Do not specify) = 9 Don't Know = 88 Refuse/No Answer = 99	
T11	How many years of teaching experience do you have (Enter number)		
T12	Have you attended any in-service training or professional development sessions such as workshops in the last year?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T13	Have you *ever* received training on how to teach reading?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T14	If the answer to T13 is Yes, did you receive training for *this school year*?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	

T15	If the answer to T14 is Yes, about how many hours? (Enter the hours)		
T19	Have you received support visits at school this past year on how to teach reading?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T20	What grade or grades do you teach in this school year? [**CIRCLE** all that apply]	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6	
T21	Have you been teaching the same class since the beginning of the school year?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T22	Do you keep an attendance record of students?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T23	How often do you develop lesson plans?	Daily = 1 Weekly = 2 Bi-weekly = 3 Monthly = 4 Don't Know = 88 Refuse/No Answer = 99	
T24	Where do you develop lesson plans?	Home = 0 School = 1 Don't Know = 88 Refuse/No Answer = 99	
T25	Do you have a written lesson plan for today?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T26	Could I please see it?	Was not able or willing to show it = 0 Could show it but it did not look very good = 1 Was able to show it and it looked pretty good = 3	
T27	Do you have any scheduled time during the school day for lesson planning?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
I'm going to ask you about different activities you might do with your students. Think about the last 5 school days and tell me how frequently the following activities took place			
T28.1	The whole class repeated letters or words that you said first, when teaching reading skills	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
T28.2	Students sounded unfamiliar words they are learning	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	

T28.3	Students read aloud to teacher or another student	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
T28.4	Students learned the meaning of new words	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
T28.5	Students had to retell a story that they read during the week	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
T28.6	Students were assigned reading to do on their own in school time	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
T28.7	Students were assigned reading to do at home	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
Now we are going back to some questions about your overall work.			
T29	Do you use the official reading curriculum in your classroom lessons?	Never = 0 Sometimes = 1 Frequently = 2 Everyday = 3	
T30	Do you have teacher guides?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T31	If answer to T30 is Yes, "How useful do you find them?"	Not very useful = 0 Moderately useful = 1 Very Useful = 2 Don't Know = 88 Refuse/No Answer = 99	
T32	How frequently does your principal observe (your) classes when they were in session?	Never = 0 Once a year = 1 Once every 2-3 months = 2 Once every month = 3 Once every two weeks = 4 Once every week = 5 Daily = 6 Don't Know = 88 Refuse/No Answer = 99	
T33	Within the last year, did you receive an external inspection or support visit from Education Officers?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	

T34	How do you measure your students' progress? [Do not read options and **CIRCLE** those mentioned.]	Written tests = 1 Oral evaluations = 2 Their portfolios and other projects = 3 Their homework = 4 End of term evaluations = 5 Other (Do not specify) = 6	
T35	What reading skills should your children have at the end of school year? [Do not read options. Just **CIRCLE** the number for those mentioned.]	Read grade level stories = 1 Sound out words they don't know = 2 Understand stories that they read = 3 Know letter names = 4 Other (Do not specify) = 5	
T41	Do students take books from school to read at home?	Never = 0 Almost never = 1 Sometimes = 2 Almost always = 3 Always = 5 Refuse/No Answer = 99	
T42	Do the teachers at this school work together as teams to solve problems related to teaching?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T43	Have you made any special efforts to improve reading at your school this past year?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T44	If the answer to T43 is Yes, ask "Why did you do that?" Do not read the answers, just **CIRCLE** the ones that apply.	We saw other schools doing it = 1 We thought it might be important because the children were tested = 2 The Ministry told us to do it = 3 An NGO told us to do it = 4 Teachers got teacher training that showed them how to teach reading better = 5 Other = 6 (Do not specify)	
T45	If the answer to T43 is Yes, ask "How much more effort did you make that in a normal year?"	A little = 1 Some = 2 A good bit = 3 A lot = 4 Refuse / No Answer = 99	
T48	Are you a volunteer teacher?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	
T49	If Yes to T48, ask: 'Will you continue teaching in September 2011?	No = 0 Yes = 1 Don't Know = 88 Refuse/No Answer = 99	

THANK YOU VERY MUCH

General Impression _____

Principal Instrument

Verbal Consent

My name is _____. I work with the Ministry of Education in Liberia.

- **We are trying to understand how children learn to read. Your school was selected through the process of statistical sampling. We would like your help in this. But you do not have to take part if you do not want to.**
- **Your name will not be mentioned anywhere in reports based on this survey. Results of this survey will be presented in an aggregated format so that your specific responses will not be identifiable The information acquired through this instrument will be shared with the Ministry of Education in the hopes of identifying areas where additional support may be needed.**
- **Your responses will NOT affect you in any way. They will not have any impact on your employment or your pay.**
- **If you agree, I would ask you some questions regarding your normal activities at school, including your interactions with your staff, Ministry office staff, students, and parents.**
- **Then, I would randomly select 16 students in Grade 2 to assess their reading skills. I would also ask these students about some of their normal school activities, school assets, language use, and reading practices at home, as well as home asset ownership. Selected students need only participate if they wish. The entire interview process for all 16 students will last around 4 hours (40 minutes per each child). My interview with you will take 15-20 minutes. Finally, I would spend about 15-20 minutes interviewing the Grade 2 teacher.**
- **Are you willing to participate? Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.**
- **Can we get started?**

Check box if verbal consent is obtained: ☐ ***YES*** ☐ ***NO***

(If verbal consent is not obtained, thank the principal and terminate the exercise in this school)

Section 1. Principal Interview

	School Name		
	School Code		
	Principal Name		
	Interviewer Name		
	Starting Time of Interview	_____:_____AM/PM	
	Ending Time of Interview	_____:_____PM/PM	
	Interview Date (dd/mm/yyyy)	Day:___Month:___Year:_____	
	Interview Status	Refused = 1 Partially Completed = 2 Complete = 3	
	What is your position at this school? (circle all that apply)	Principal = 1 Vice Principal = 2 Teacher = 3	
	[Is the principal male or female?]	Male = 0 Female=1	
	How many years have you been a principal? Enter years:		
	What is your highest level of education?	Elementary=0 Junior High School =1 Senior High School =2 Associate = 3 Certificate C = 4 Certificate B = 5 Certificate AA = 6 Bachelors Degree = 7 Masters degree or other = 8 Other (Do not specify) = 9 Don't Know = 88 Refuse/No Answer = 99	
	What grades are taught at this school this year? (Enter the first grade taught and the last grade taught.)	First grade taught	
		Last grade taught	
	Have you received special training or taken courses that prepared you to teach reading or support teachers to teach reading ?	Yes No Don't know Refuse/No Answer	
	At what grade do you expect all of your students to read fluently? (Enter the grade:)		
	Think about first and second grade teachers, does anyone review those teachers' lessons plans?	Yes No → *skip to question* Don't know → *skip to question* Refuse/No Answer → *skip to question*	

	Who is the main person that reviews the teachers' lesson plans?	Principal = 1 Vice Principal = 2 Other Don't know (DK) Refuse/No Answer	
	If other person, specify	_____	
	How often are these plans reviewed?	Once per year Once every term Once every month Every week or more often Don't Know (DK) Refuse/No Answer	
	In your school, does anyone observe Grade 1 and Grade 2 teachers' lessons in their classrooms?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Who mostly observes those teachers' practices in the classrooms?	Principal = 1 Vice Principal = 2 Other Don't know Refuse/No Answer	
	If other person, specify	_____	
	If yes, ask how often:	Once a year = 1 Once every 2-3 months = 2 Once every month = 3 Once every two weeks = 4 Once every week = 5 Daily = 6 Don't Know (DK) = 88 Refuse/No Answer = 99	
	Within the last year, did you receive an external inspection or support visit from Education Officers?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Do you have a feeding program at school?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Does your school observe student dress code?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Do you have sufficient resource materials/ textbooks for Grade 1?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	

	Do you have sufficient resource materials/ textbooks for Grade 2?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Do you have a library or reading room?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Do you hold regular PTA meetings?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	If answer to HT20 was Yes, how many parents come to the PTA meetings	Few = 1 Some = 2 Most = 3 All = 4	
	In one year, how often do you send teachers for in-service teacher training, on average?	Less than 5 = 1 5 to 10 times = 2 More than 10 times = 3	
	Do you have lockable book storage at your school?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	Do you keep records of teachers' attendance?	No = 0 Yes = 1 DK= 88 Refuse/No Answer = 99	
	If answer to HT24 is Yes, say "Could I see the attendance records please?"	Was not able or willing to show = 1 Was able to show but badly kept (out of date, incomplete) = 2 Was able to show and in good shape = 3	
	Have you made any special efforts to improve reading at your school this past year?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	If the answer to HT31 is Yes, ask, "Why did you do that?" Do not read the answers, just **CIRCLE** the ones that apply.	We saw other schools doing it = 1 We thought it might be important because the children were tested = 2 The Ministry told us to do it = 3 An NGO told us to do it = 4 Teachers got teacher training that showed them how to teach reading better = 5 Other = 6 (Do not specify)	
	Does your school implement the Accelerated Learning Program (ALP) or Non Formal Education Program (NFE)	No = 0 Yes = 1 DK= 88 Refuse/No Answer = 99	
	Are you currently teaching in this school?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	If answer to HT35 is Yes, "Ask: 'What grades are you teaching? [CIRCLE all that apply]	Grade 1 Grade 2 Grade 3 Grade 4 Grade 5	

		Grade 6	
	Are any of your teachers (other than you) also principals or vice-principals?	No = 0 Yes = 1 DK = 88 Refuse/No Answer = 99	
	How many Grade 1 teachers does your school have?	[write the number]	
	How many Grade 1teachers are currently volunteer teachers?	[write the number]	
	How many Grade 2 teachers does your school have?	[write the number]	
	How many Grade 2 teachers are currently volunteer teachers?	[write the number]	

THANK YOU VERY MUCH

General Impression _____

Baseline Enumerator Training Manual

USAID/Liberia Impact Evaluation for the Read Liberia Activity

NORC at the UNIVERSITY of CHICAGO

APRIL 2017

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FOREWORD

On behalf of the United States Agency for International Development (USAID), NORC is serving as an independent evaluator for the Read Liberia! project administered in the counties of Lofa, Bong, Grand Bassa, Nimba, Margibi, and Montserrado. Read Liberia! is a 5-year intervention aimed at improving the reading skills of students in grades one and two through: (1) increased government commitment to, and support of, evidence-based reading instruction (Result 1); (2) improved early grade reading classroom instruction (Result 2); (3) improved service delivery systems in early grade reading (Result 3); and (4) increased parent, community and private support for early grade reading.

NORC is serving as the independent evaluator of this program, and will conduct the impact evaluation of the Read Liberia! activity.

To evaluate the impact of Read Liberia! we are conducting a randomized controlled trial, where schools are assigned randomly to treatment and control groups. The details of the program intervention are still being developed, but the general research questions of interest are:

- What is the impact of early grade reading (EGR) activities on reading performance and retention rates?
- What is the total impact that Read Liberia! activities have on reading performance and retention rates?

The May 2017 data collection will support the evaluation of these questions and will establish baseline data on early grade reading skills of students. This data collection will also collect background information on the students, teachers, and principals in order to develop a more complete picture of the schools sampled at baseline, before any intervention activities occur.

This document has been prepared to serve as a guide to interviewers and supervisors, who will help to interview teachers, principals and students for evaluation purposes.

NOTE ON CONFIDENTIALITY

We wish at the beginning of this manual to emphasize the confidential nature of your task as an Enumerator. The success of the survey depends on the willingness and cooperation of the respondents. This in turn depends in large part on whether the respondents believe that the information they give will be kept confidential.

You must know the provisions made by NORC, STS and TKG to keep information confidential. In this manual, the subject of confidentiality will be raised several times. Study these passages carefully and resolve from the outset that you will in no way breach the confidentiality provisions.

Pledge of Confidentiality

Every person involved in data collection, data entry and data analysis is required by NORC to sign a pledge of confidentiality. As an enumerator, supervisor, or quality control officer, you must therefore sign this pledge as well. During training, we will read this document together and you will be asked to sign it. If you

decide not to sign the pledge of confidentiality, you will be unable to participate in data collection activities for this project.

As an **enumerator**, you are **TKG's** representative in the field. You are required to handle all documents carefully, and conduct your work in a manner that will ensure confidentiality. Remember you have taken an oath of security. Legal action could be taken against you if you release or disclose any information on the survey.

a. Handling of Electronic Data during Interview:

You must follow all safety procedures related to using the tablet outlined during this training. Do not share passwords with anyone, or send data to another party.

b. Reference to Other Respondents:

Do not refer to names and answers obtained from respondents while interviewing another respondent. Do not let a respondent see a completed questionnaire of another respondent.

c. Keeping of Survey Materials at Home:

Keep your tablet, along with field control sheets, in safe and secure places. Preferably, keep them in boxes or cup-boards with locks when not in use.

d. Keeping Survey Data from Members of Family and Friends

Do not discuss survey data with members of family nor friends. You must not permit any unauthorized person, not even a member of your family, to see a completed questionnaire. You must not solicit for, or accept assistance from non-survey personnel in your enumeration duties.

1. Training Program

Welcome to the Read Liberia! IE Baseline Survey training! This manual outlines the information needed by Enumerators, Supervisors, and Quality Control Officers for this project. It is to be used as a training guide as well as a reference manual for you to review your duties and to enhance efficiency and effective data collection.

As a field staff member of the Read Liberia! IE Baseline Survey, you will be involved in a data collection activity to support the development of a detailed impact evaluation. By conducting this survey completely and with integrity, you will play a pivotal role in this program and, ultimately, in decisions that are made regarding the future of the program.

Training Program

Training comprises both classroom and field practice. You should study the training program and take note of the topics covered each day. Before each training session, study the manual and write down any questions you may have. Ask the questions during the training sessions and make sure you understand all terms used and the procedures to be followed.

High Standards Expected of You

When you are carrying out the enumeration, you will deal with all kinds of people who will expect you to be professional and, in particular, be knowledgeable about the purpose of the survey and about the questionnaire. This manual and training course will adequately prepare you for that. It is therefore important that you pay attention during training in order to learn the survey concepts and procedures.

Training Continues in the Field

Formal training provides you with basic knowledge and information regarding the survey, the questionnaires, and field procedures. Continued observation and supervision during the field work builds on this. As you encounter situations which you did not cover in training, discuss them with your supervisor. Your experience may alert us (NORC and TKG) to a new aspect of the survey and may assist with the interpretation of data.

Your training as an enumerator does not end when the formal training period is completed. Each time your supervisor meets with you to discuss work in the field, your training is being continued. While in the field, take every opportunity you can to improve your skills as an enumerator to ensure we collect the highest quality data.

Full Training Agenda

Day 1 – Tuesday, April 24, 2017	
8:30 - 9:00	Arrival and registration of participants
9:00 - 9:30	Introduction of participants and objectives of the training
9:30 - 10:30	Client introduction and Overview of Project
10:30 - 11:00	Tea Break
11:00 - 11:30	Overview (continued)
11:30 - 13:00	Overview of the enumerators' manual, principles of data collection
13:00 - 14:00	Lunch
14:00 - 14:45	Ethics Overview – Cofidentiality, Anonymity, and Field Staff Responsibilities
14:45 - 15:30	Interviewing Children: Ethics and Special Consisderations
15:30 - 15:45	Tea Break
15:45 - 16:45	Interviewing Children: Theory and Practical Techniques
16:45 - 17:00	Closing
Day 2 – Tuesday, April 25, 2017	
8:30 - 9:00	Arrival and registration of participants
9:00 - 9:30	What is EGRA? Importance of quality education, why early grade, why reading
9:30 - 10:30	Overview of the enumerators' manual, principles of data collection
10:30 - 11:00	Tea Break
11:00 - 11:30	Overview (continued)
11:30 - 13:00	Overview and Intent of Teacher, Principal, and Student Background Surveys
13:00 - 14:00	Lunch
14:00 - 15:00	EGRA Administration Principles
15:00 - 15:45	Distribution of Tablets and EGRA Verbal Assent and Biographical Info
15:45 - 16:00	Tea Break
16:00 - 16:45	Initial practice with consent and tablets
16:45 - 17:00	Closing
Day 3 – Wednesday, April 26, 2017	
8:30 - 9:00	Arrival and registration of participants
9:00 - 9:30	Recap of day 1 Day 2 Agenda
9:30 - 10:30	Task 2 Phonemic Awareness
10:30 - 10:45	Tea Break
10:45 - 12:00	Task 1 Letter Name
12:00 - 13:00	Task 3 Familiar Word
13:00 - 14:00	Lunch
14:00 - 15:00	EGRA practice in pairs
15:00 - 15:45	Task 4 Non-Word Decoding
15:45 - 16:00	Tea Break
16:00 - 16:45	Task 5 Oral Reading Fluency/Reading Comprehension
16:45 - 17:00	Closing

Day 4 – Thursday, April 27, 2017

8:30 - 9:00	Arrival and registration of participants
9:00 - 9:30	Recap of day 2 Day 3 Agenda
9:30 - 10:15	EGRA Task 6 Listening Comprehension
10:15 - 10:30	Tea Break
10:30 - 12:00	EGRA practice in pairs, small groups and modeling in plenary
12:00 - 13:00	EGRA review in group
13:00 - 14:00	Lunch
14:00 - 15:00	Assessor Accuracy Test #1
15:00 - 15:45	Student Questionnaire
15:45 - 16:00	Tea Break
16:00 - 16:45	Student Questionnaire practice
16:45 – 17:00	Closing
Day 5 - Friday, April 28, 2017	
8:30 - 9:00	Arrival and registration of participants
9:00 - 9:30	Recap of Day 3 Day 4 agenda
9:30 - 10:15	Assessor Accuracy feedback
10:15 - 10:30	Tea Break
10:30 – 12:00	EGRA practice in pairs, small groups and modeling in plenary
12:00 - 13:00	Assessor Accuracy Test #2
13:00 - 14:00	Lunch
14:00 - 15:00	IRR Protocol in the Field
15:00 - 15:45	EGRA practice in pairs, small groups and modeling in plenary
15:45 - 16:00	Tea Break
16:00 - 16:45	EGRA Jeopardy! Game
16:45 - 17:00	Closing
Day 6- Saturday, April 29, 2017	
8:30 - 9:00	Arrival and registration of participants
9:00 - 9:30	Recap of Day 4 Day 5 agenda
9:30 - 10:30	Assessor accuracy feedback
10:30 - 10:45	Tea Break
10:45 - 11:45	Teacher Questionnaire
11:45 - 13:00	Principal Questionnaire
13:00 - 14:00	Lunch
14:00 - 15:00	Tangerine Troubleshooting
15:00 - 15:45	EGRA practice in pairs, small groups and modeling in plenary
15:45 - 16:00	Tea Break
16:00 - 16:45	Assessor Accuracy Test #3
16:45 - 17:00	Closing
Day 7 – Monday, May 1, 2017	
7:00 - 15:00	Full Pilot Day – School Visit
Day 8 – Tuesday, May 2, 2017	

8:30 - 9:00	Arrival and registration of participants
9:00 – 10:30	Recap of Pilot Day
10:30 – 10:45	Tea Break
10:45 – 13:00	Selection of enumerators and supervisors; break into teams and discuss logistics
13:00 – 14:00	Lunch
14:00 – 15:45	Paper EGRA protocol for select enumerators; roles of supervisors during training
15:45 – 16:00	Tea Break
16:00 – 16:45	Paper EGRA practice / roles of supervisors (cont.)
16:45 – 17:00	Closing

2. Background and Objectives

2.1 WHO WE ARE

NORC at the University of Chicago is an independent research organization that collaborates with government agencies, foundations, educational institutions, nonprofit organizations, and businesses to develop enduring knowledge that supports evidence-based decisions. NORC applies academic excellence, innovative and rigorous methods, and a collegial philosophy to the most pressing and complex global issues in fields such as health, education, economics, crime, justice, energy, security, and the environment. NORC's 70 years of leadership and experience in data collection, analysis, and dissemination—coupled with deep subject matter expertise—provides the foundation for effective solutions. For more information, you can visit: www.norc.org.

NORC is running the impact evaluation of the Read Liberia! program. NORC designed the evaluation, and is working with STS and TKG to collect data from respondents in Liberia. Once data is collected, NORC will analyze the data and report on the impact of the Read Liberia! program.

School-to-School International (STS) is a non-profit organization based in the San Francisco Bay Area. STS specializes in providing technical services in education in three main areas: (1) research and evaluation, (2) curriculum and training, and (3) policy and planning. For over a decade, they have partnered with individuals, government ministries, non-governmental organizations, private foundations, and research institutions to improve educational outcomes. Currently, STS is operating in 19 countries across the globe.

STS will serve as a technical specialist on EGRA assessments and EGRA-related data collection for the baseline survey. STS will provide EGRA training to data collection enumerators, and carry out data collection oversight of EGRA.

The Khana Group (TKG) is a research organization that was founded in 2008 and conducts over 20 research projects annually, including about 4 large nationally representative surveys (1000+). TKG recruits and trains over 300 data collectors/researchers annually, manages multiple development projects/programs and provide support to various projects/programs.

TKG is in charge of collecting the data needed for the impact evaluation, including arranging logistics for data collection, helping NORC make sure the instruments are appropriate for the Liberian context, overseeing the quality of data collection, and hiring staff like you to collect the data! You work for TKG, but are part of the entire Read Liberia! Evaluation team.

2.2 OUR CLIENT

The **United States Agency for International Development** is the lead U.S. Government agency that works to end extreme global poverty and enable resilient, democratic societies to realize their potential. Working with the Liberian Government, cooperating partners, and the people of Liberia, USAID's work in Liberia focuses on creating more effective, accountable, and inclusive governance; providing sustained, market-drive economic growth to reduce poverty; improving the health status of Liberians; and ensuring Liberians are better education.

USAID is funding both the intervention itself, and the evaluation study of the Read Liberia!

2.3 HOW DO WE ALL WORK TOGETHER?

It is important that you understand how all these organizations and stakeholders work together so you can best represent TKG/NORC while in the field. These are the things you should remember:

1. USAID engaged NORC to do the data collection for this survey and analyze the data. NORC in turn engaged TKG to implement the data collection in the field.

2. While TKG and NORC work together to implement data collection, you are an employee of TKG. NORC, STS and TKG are conducting this training together but when you are in the field, you will be wearing TKG name tags. In order to avoid confusing respondents, you will tell them that you are from TKG.

3. Our client is USAID. In the end, we will deliver the dataset and analysis to USAID.

2.4 THE INTERVENTION UNDER STUDY

In order for you to feel confident talking to the respondent and conducting the interview, it is very important that you are as familiar as possible with not only the questionnaire but also the education intervention under study.

Read Liberia! is a 5-year USAID-funded initiative to improve reading skills for public primary students in first and second grade as emergent literacy skills for kindergarten students in the six targeted counties in Liberia. Read Liberia! will work through the Government of Liberia and in collaboration with other partners, and will concentrate on four results: (a) increased government commitment to, and support of, evidence-based reading instruction; (b) improved early grade reading classroom instruction; (c) improved service delivery systems in early grade reading; and (d) increased parent, community and private support for early grade reading.

2.5 OUR SURVEY

Our objective is to collect baseline data (prior to the implementation of the Read Liberia! intervention) for the evaluation of the Read Liberia! project. For this baseline, we will be collecting 3 types of data:

1. **Early Grade Reading Assessment:** Collects data on the reading levels of young learners.

2. **Teacher Survey:** Collects information on the learner's teacher, such as level of education and professional qualifications.

3. **Principal Survey:** Collects information on the school, such as the size of the school and the quality of the resources.

2.6 BASELINE DATA COLLECTION

The purpose of collecting data from learners, teachers, and principals is to understand the reading levels of students prior to the beginning of the program. Your team in May 2017 will be speaking to learners, teachers, and principals to understand how learners in Liberia are taught to read, the home environments of the learners, and the school characteristics. The data you collect will help us answer the research questions in the evaluation.

We will visit again the same schools at endline to interview students, teachers and principals. Comparing baseline and endline data provides us with a "before" and "after" snapshot of respondents, and allows us to better understand how reading scores and practices have changed over time, if at all.

3. Methodology

3.1 WHERE WILL OUR SURVEY BE CONDUCTED?

Our survey will be conducted in villages that are located in the counties of Monteserrado, Margibi, Bong, Grand Bassa, Nimba, and Lofa. We will be visiting 90 schools. We are interviewing 16 Grade 2 students, one teacher, and one principal in each school—for a total of 1,440 students, 90 teachers and 90 principals.

We randomly chose the 90 schools in order to have a representative sample.

The study we are conducting is a randomized controlled trial—this means half of the schools will receive the Read Liberia! intervention (called the treatment group), and the other half will not receive this particular intervention at this time (called the control group).Each school has an equal chance of being assigned to a treatment or control group. The assignment into treatment or control groups will not happen until after the baseline assessment is complete, which means nobody knows which schools will be assigned to these two groups right now. For this reason, it is extremely important that you do not say anything to teachers, principals, or even students about what will happen with the program in their school. If you are asked by the schools staff about the program intervention in general or about specific activities of the program, it is important to let them know that at this point your team is only conducting the baseline research and that you do not have answers to those questions at this time. The answers to those specific questions will be developed by USAID and the Ministry of Education over the coming months as they develop additional details for this program intervention.

3.2 SAMPLE SIZE

The term "sample size" refers to the number of respondents that we will survey. Our target sample size is approximately 1,440 students—16 for each school, in addition to the 90 teachers and 90 principals—one for each school.

The sample has been selected so that it best *represents the population* under study. Each learner or each teacher represents 100's and sometimes 1000's of other learners or teachers in Liberia who would answer in the same way. It is therefore very important that we reach that target number and that we do not substitute the selected respondent for someone else since it might misrepresent the population and bias the results. Later in the training, we will talk about the importance of gaining cooperation and avoiding refusals.

3.3 HOW WILL OUR QUESTIONNAIRES BE STRUCTURED?

The Early Grade Reading Assessment is an assessment administered to learners to measure their reading levels in English. The EGRA is broken down into several subtasks, presented below:

Subtask	Description
1	ORIENTATION TO PRINT
2	LETTER NAME KNOWLEDGE
3	PHONEMIC AWARENESS
4	FAMILIAR WORD IDENTIFICATION
5	NONWORD DECODING
6	ORAL PASSAGE READING
7	LISTENING COMPREHENSION

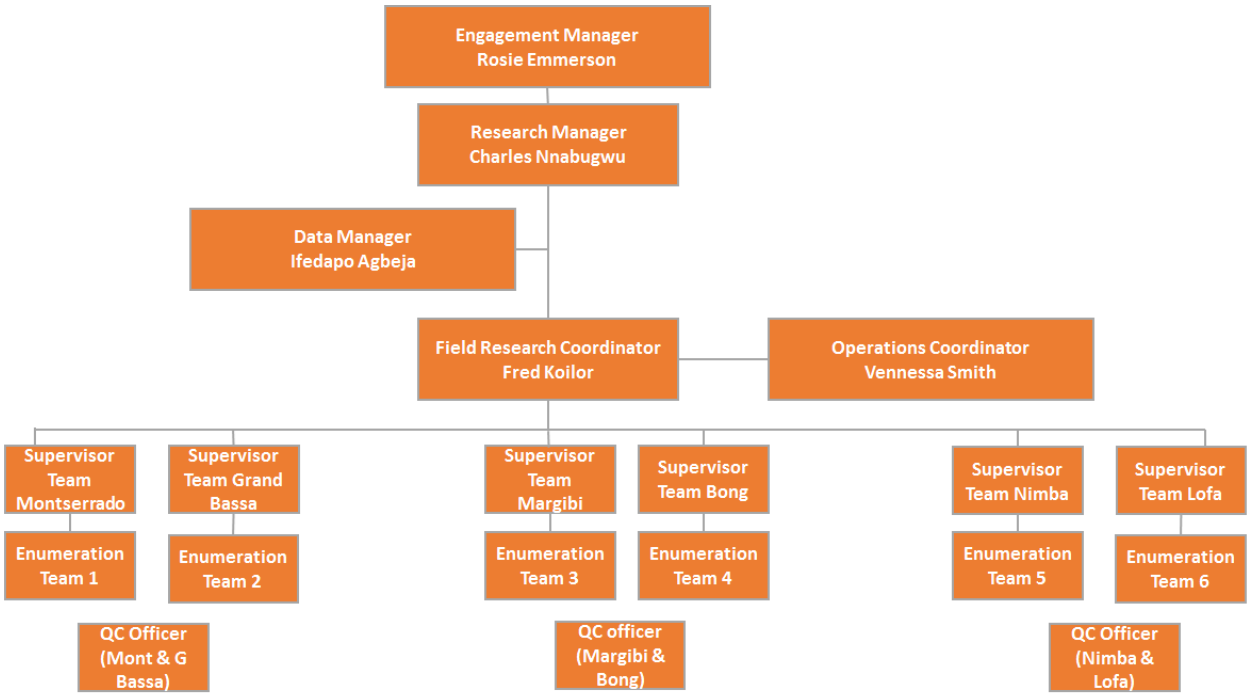
Our ***student questionnaire*** is short (10 minutes) but collects detailed information about learners' reading practices at home, availability of print materials, socioeconomic status, and other topics. Our ***teacher questionnaire*** is also short (20 minutes), and collects detailed information about teachers' backgrounds, education levels, teaching credentials, and other information. Our ***principal questionnaire*** *(also 20 minutes)* collects information on principals' background, interaction with teachers and the school characteristics.

Lastly, per the guidance from the University of Liberia ethics committee we must collect written consent from the school principal to for the school to participate in the study.

4. General Overview

4.1 TEAM STRUCTURE

There will be a total of 6 Supervisor-led teams, with 1 supervisor and 3 enumerators on each team. The TKG structure for this project is outlined below with each of the 6 teams being led by a supervisor.



4.2 ROLES AND RESPONSIBILITIES

4.2.1 ENUMERATOR – 3 PER TEAM

The most important role of the enumerator is to collect data so the researchers can analyze it and produce the statistics used by scientists, policy makers, academics, corporate executives, government officials and others. Enumerators must precisely follow the guidelines presented in this manual so that we can maintain a high level of accuracy. Sampling procedures must be followed exactly in order for the information to accurately represent the designated population. Finally, it is essential for the accuracy of data that the enumerator does not introduce any bias into the survey (techniques to remain neutral and avoid bias will be covered later in the training).

As an enumerator, it is your responsibility to:

- **Follow Instructions:** It is your responsibility to clearly understand the manual and follow instructions on the questionnaires and the manual. It is necessary that each enumerator ask the survey questions the same way, and use identical definitions and procedures. Instructions must be thoroughly learnt and strictly followed.

- **Maintain Confidentiality:** It is your responsibility to keep the information you collect confidential. Your tablets at all times be kept in a secure place, used discretely, locked, and password protected. Once you have checked all questionnaires, you should let your team's Supervisor know so that he or she can perform validation checks to ensure data is accurate.

- **Complete Your Assignment:** You are expected to work hard and complete the area assigned to you in good time. In case you become ill or incapacitated while working on the survey you should report immediately to your supervisor so that he/she can arrange a replacement.

The enumerator is responsible for carrying out the following tasks:

- Home study prior to and during training, which may require reading and completion of exercises
- Administering/fielding the Read Liberia! Baseline Survey and managing the case load so that all appropriate schools, students, and teachers are surveyed in the allotted time
- **T**ravelling to respondent's schools, during the school day
- Gaining the cooperation of the respondent and reassuring those who are skeptical or reluctant so they feel comfortable and agree to participate.
- Documenting the status of particular cases and assigning disposition codes.
- Routine communication, as specified by the project, with the supervisor to report progress on the assignment, set goals, and discuss strategies in approaching difficult cases.
- Accommodating respondents as well as changes in project guidelines.
- Document any refusals in the tracking sheet
- Support team supervisors to make first contact with the school
- Be available for daily start up and end-of day meetings with the rest of the team
- Correctly filling out the tracking sheet and survey tool

The process of becoming a good enumerator requires both discipline and commitment. We count on you for collecting the highest quality data possible!

What you can NOT do

The continuation of your appointment is conditional on your satisfactorily carrying out the duties of an enumerator and maintaining a high standard of professionalism and work ethic. In this respect, keep in mind that you are representing NORC and TKG and your behavior could also have an impact on our client, USAID. Your conduct must therefore be professional at all times.

Note that NORC/TKG relies on the goodwill and cooperation of respondents. Any enumerator who is aggressive or disrespectful will be dismissed from the survey. Other grounds for dismissal include:

- **Performing Other Activities During Enumeration**: You are prohibited from engaging in activities such as petty trading, political or religious propaganda during enumeration. People who are in employment elsewhere cannot take part in the fielding of the survey.

- **Allowing Unauthorized Persons to Help You in Your Work:** You are not permitted to delegate your work to anyone. No one can help you except your supervisor or another enumerator as directed by your supervisor.

- **Discussion of Survey Work with Unauthorized Persons:** You are not to discuss your work with anyone except your supervisor or an authorized Survey staff. It is fine to discuss the general purpose of the survey and the nature of your job with your family members or friends but you must not discuss the respondent's data that you will be collecting.

- **Absenteeism:** Any person who is absent from the training or enumeration without prior approval from the survey project manager or his/her supervisor will be dismissed from the survey.

- **Disruptive Influence:** Any enumerator who creates a disruptive influence will be dismissed from the survey.

- **Breach of Confidentiality:** Disciplinary proceedings will be taken should you breach the confidentiality requirements of the survey. In addition, you may face legal prosecution.

If you break any of the above rules disciplinary action such as withholding of allowance, or summary dismissal will be taken against you.

DO NOT MAKE EMPTY PROMISES TO RESPONDENTS

During data collection, you will visit many schools. It is of the utmost importance that you introduce the study in the same manner to all schools and that you do not promise to any respondent that any specific activity will take place. As a research firm, we must make sure that we do not set expectations in order to avoid potential conflicts and resistance of respondents to participate in future studies.

of

- Introducing/explaining the purpose of the data collection to a responsible member of the community before work commences—in this case, likely the principal and a village head.

- After introduction lead the process of setting up appoint ents with schools

- Giving out daily assignments to enumerators and ensuring that daily data collection activities run smoothly

- Coordinating and integrating the teams driver into the process of data collection and inform driver of pick-up and drop off time and location.

- Tracking and reporting on field issues to TKG's research coordinator, and following their instructions as you solve any problems related to finding the listed villages, understanding the concepts in the questionnaire, or with difficult respondents

- Administering one teacher and one principal survey at each school
- Performing 10% direct observations of the team's interviews to ensure that enumerators are conducting interviews in the right manner, properly recording results, and interpreting concepts correctly.
- Conducting 15% random spot-check—where you randomly pop in and out while interviews are being conducted to make sure they are being conducted correctly
- Coordinating with Quality Control Officers to ensure they are able to locate you and your team at your school each day.
- Cooperate and assist Quality Control Officers so they are able to perform direct observations of at least 10% of your team's interviews and 15% spot check (these are in addition to the direct observations conducted by yourself of your team, as described above)
- Assigning disposition codes to each case
- Completing the central office receipt control sheets
- Meeting with the enumerators on a daily basis to discuss performance and challenges
- Reporting to assigned research coordinator daily
- Ensure enumerators have functional, fully-charged tablets and other survey materials
- Communicate with TKG if there become a need to replace a school
- At the end of field work, develop a report of field activity, documenting challenges, success and lessons learned.
- Review all completed questionnaires for completeness

4.3 QUALITY CONTROL

NORC and TKG consider rigorous quality control crucial to conducting superior survey research. Over the years, our field supervisors, enumerators and Central Office staff have shared efforts to produce data of consistently high quality and we are proud of this cooperation. High quality begins with training and continues throughout all our work. Listed below are some of the protocols we have implemented to ensure high quality standards.

Quality control begins with training: All supervisors, quality control officers, data managers and enumerators will participate in survey training to familiarize themselves with the survey and all of its procedures.

- Questionnaire mock interviews and assessments: Each enumerator will be required to complete several practice interviews and assessments during training before going out into the field.

- In-training pilot test: The full teams will conduct one day of pilot testing of the EGRA in the field during training. This will be followed by a day of team debriefing, and subsequent modifications of instruments or protocols (if required) before the full data collection process begins.

- Data review: All data that is transmitted from you will be reviewed by your Field Supervisor and Central Office staff for completeness and accuracy. Overall, the data review process will entail employing software for monitoring interviews and data, daily observations of enumerators by the team leaders, and review of raw data for consistency as it arrives.

- Quality control is a two-way street. If you find errors, have difficulties with the survey, or are unclear about procedures at any time during the field period, please bring them to your supervisor's attention right away. Enumerators have sharp eyes for problems we did not anticipate, and we value your comments. If you are encountering a problem, chances are others are as well and the sooner your supervisor is notified, the faster the problem can be addressed for everyone on the field team.

More detailed data quality control procedures will be described later in this manual.

5. Basic Interviewing Techniques

5.1 GAINING COOPERATION

Successful interviewing is an art and should not be treated as a mechanical process. Each interview is a new source of information; so we have to make it interesting and pleasant. The art of interviewing develops with practice but there are certain basic principles which are followed by every successful enumerator. In this section we will review a number of general guidelines on how to build rapport with the respondent and conduct a successful interview.

Your role as an enumerator is vital to the success of this study. This section focuses on gaining respondent cooperation and then discusses techniques to use once an interview has started.

How Gaining Cooperation Is Accomplished

Gaining cooperation is a combination of many factors of behavior and sensitivity toward the individual or individuals with whom enumerators make contact. The successful enumerator is organized, prepared logistically and mentally, and LISTENS in order to know exactly what to say based on the circumstance of the contact.

Here are some rules to follow that will help you gain cooperation:

- **Be Organized**
- **Be Prepared Logistically:** Have all materials at hand**.**
- **Be Prepared Mentally:** Before making any respondent contact, review your materials, especially data relating to the study. This would include this Training Manual, advance letters, the questionnaire and QxQs (Question by Question Specifications). Be prepared to answer any questions you may be asked from the respondent or questions you may need to ask the respondent.
- **Know The Facts:** About NORC, STS, TKG, USAID, and social science research.
- **Know The Study**
    - Who is sponsoring the research
    - The reason it's being conducted
    - The uses of the data
    - Why we need the respondent's cooperation
- **Be Sold On The Study:** You must believe in the survey's value yourself; otherwise, you'll be unable to convey the value of the study to the respondent

- **Assume a good attitude**: Your attitude directly impacts the respondent.
- **Be Confident:** Sound interesting and be interested.
- **Be Professional, But Balance That With Some Friendliness**
- **Be Assertive, But Not Pushy**
- **Let Human Qualities Show Through**
- **Be Flexible**
- **Smile!**

5.1.1 GAINING COOPERATION TECHNIQUES AND FREQUENTLY ASKED QUESTIONS

In order to gain cooperation, it is important to set the right tone from the first contact with a potential respondent. Your supervisor will also be meeting with the principal when you arrive in a new school in order to facilitate entry and gain cooperation from target schools.

Your efficiency is important. We want to disrupt the school day as little as possible!

a. Introducing yourself and building rapport

You will be working with pupils and with teachers. They do not know you so it is important to give a good impression and establish good rapport from the get-go by being courteous and professional.

1) When introducing yourself to the teacher you can say:

> "My name is …. I am with TKG, a research organization from Monrovia. We are conducting a survey to better understand how children in Liberia learn to read and their reading practices and we need YOUR help."

Never adopt an apologetic manner, and try to avoid sentences like "could you spare a few minutes?" or "would you mind answering some questions?" Ours is an important national assignment, there is no need to be apologetic. On the other hand, don't try to be over bearing. For example, say "I would like to ask you some questions" or "I would like to talk to you for a moment." rather than "You *must* answer the following questions."

2) When working with a child it is very important that you build a positive rapport with the pupil you are assessing. When a pupil feels at ease with you, the pupil will be more motivated to continue the assessment and more likely to demonstrate his or her best efforts. The following list offers useful guidelines about the rapport-building period:

Spend approximately 1–2 minutes developing rapport. Less could be too short to make the child comfortable with you and longer will delay the assessment too much.

Be self-assured and positive about the experience. Do not apologize for taking the pupil to do an assessment. Many pupils find the assessment like a game and have fun doing it. Present it this way in a smiling and relaxed manner. Pupils will take their cue from you regarding what the experience will be like.

Be positive and warm all through the test regardless of the learner performance. Avoid facial expressions, impatience, or comments about the responses. You want to encourage the child to keep on completing the assessment. Compliment the effort and not the correct answers.

Interacting with children Dos and Don'ts

DO:

- Set a friendly tone
- When introducing yourself tell the truth while talking about things which are relevant for a young child
- Listen to the child carefully, look at him/her when they talk
- Answer the child's questions in a nice but concise way
- SMILE!

DON'T:

- ❖ Do not rush through questions if the child has not understood what you are asking them to do
- ❖ DO not talk about issues that are difficult to understand by a young child ("I have a diploma in public accountancy" might be a difficult concept; you might want to say "I finished university/college")
- ❖ Do not talk with the child without looking at him/her
- ❖ DO not use harsh words!
- ❖ Do not make comments on the child's answers (both in EGRA and when administering the questionnaire) – remain neutral in your responses to the child

b. Listen attentively to what the respondent is saying

If either the teacher or the learner have questions, please **listen attentively and answer to their questions.** Always remember to thank the respondent for his or her time and to make the appropriate notes on the questionnaire.

c. If the respondent does not seem to want to participate

Stress the Importance of the Respondent and the Survey

Stress that the respondent is providing his/her information so that others might learn from him/her. An effective psychological tool in gaining cooperation is to give the respondent a vested interest in this study by impressing on the respondent that he/she cannot be replaced and that he/she represents many others like himself/herself. He/she represents many other people in Liberia. Make the respondent feel a sense of importance because he/she has been selected to participate and emphasize the importance of his/her opinions. This will require that you are familiar with the survey (see FAQ below). For example you could say:

> "Your answers are very important in order to give policy makers the information they need to make informed decisions about the future of children in Liberia. We are asking you to participate in the survey so that your voice can be heard and so that we may learn more about individuals similar to you."

Empathize

For example, if the teacher or principal is concerned about the amount of time required for the interview, explain that you understand how difficult it is to manage all of the time demands he/she is under. Ask if there is a better time for you to come back.

Don't Argue!

Even if the respondent does not want to participate, maintain a pleasant, friendly attitude and stress the positive. Stress how important the survey is and how important it is for each respondent to participate. Make the respondent feel very special and important. A useful technique is getting the respondent to say "yes" to something, like "Do you remember why you were asked to join in this survey?" or "Do you remember what the study is about?" Once a respondent says "yes" to a question, he or she is much more inclined to continue cooperating.

d. Know the study

Practice, Practice, Practice

- Become very familiar with the study, the questionnaire, and the uses of the data.
- Anticipate respondent's questions and/or concerns.
- Practice your answers out loud in front of a mirror. It really works.
- Ask a family member to listen to your explanation of the survey (but do not discuss the respondent's data)
- Review your points with your Field Supervisor.
- Learn all you can about confidentiality and the handling of respondent data.

5.1.2 FAQ

These are questions that the respondent might ask you. You should be prepared to answer them at any time.

Q: What is the study about?

A: The study is collecting baseline data on children's reading knowledge and practices to understand how to improve children's reading performance in Liberia.

Q: Who is financially supporting the study?

A: The study is financially supported by the USAID which has recruited TKG to conduct the interviews.

Q: What will you do with the data? Will my data be kept confidential?

A: We will compile all of the data from all the assessments and interviews we are conducting and then analyze it. The data is therefore in aggregated form. This means that we will NOT identify you in any of our reports and your data will always be kept confidential. If you feel hesitant about responding to any questions, you may choose to skip the question.

Notes: In order to reinforce what you are saying about confidentiality, it is important that you keep your tablet secure. It is also important that you do not mention the names of other respondents that you've already interviewed. Your careful handling of questionnaires will do much to build up the respondent's confidence.

Q: What is the survey about? How long is the survey?

A: We will ask you questions about your teaching experience, about teaching early grade reading, things teachers do during class, school characteristics, and how often the pupil reads in class. The survey should take about 20 minutes to complete.

Notes: If the respondent is not comfortable with the length of the interview, try to stress the importance of the information we are collecting.

Q: Will I get anything if I participate?

A: The answers that you provide are very important since they will help us understand the well-being of different types of individuals. These answers will inform future decisions made by policy makers regarding programs that might help your community and the rest of Liberia.

Q: Who can I contact if I have any questions about the survey?

A: You may contact Charles Nnabugwu at TKG. His phone number is +231-770-431-133.

5.2 CONDUCTING THE INTERVIEW

In this section, we will review some tips and information to keep in mind once you have gained respondent cooperation and have begun an interview.

5.2.1 INFORMED CONSENT

In order to protect the rights of respondents it is essential to first allow them to consent to the interview. The following text must be used when introducing the survey as it has been approved by NORC's Institutional Review Board (our board of ethics) and the University of Liberia's Institutional Review Board.

We want to know if:

- The participant is **willing to participate in the survey**

Survey Participation

First, we ask the respondent if he or she wants to participate in the survey. In the case of learners, you will read out the following text:

My name is _____. I work with The Khana Group.

- **We are trying to understand how children learn to read. You were picked by chance, like in a raffle or lottery.**
- **We would like your help in this. But you do not have to take part if you do not want to.**
- **We are going to play a reading game. I am going to ask you to read letters, words and a short story out loud.**
- **Using this stopwatch, I will see how long it takes you to read.**
- **This is NOT a test and it will not affect your grade at school.**
- **I will also ask you questions about your family, like what language your family uses at home and some of the things your family has.**
- **I will NOT write down your name so no one will know these are your answers.**
- **Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.**

You will then ask the pupil the following:

Do you have any questions? Can we get started?

In the case of teachers, you will read out the following text:

My name is _____. I work with The Khana Group in Liberia.

- **We are trying to understand how children learn to read. Your school was selected through the process of statistical sampling. We would like your help in this. But you do not have to take part if you do not want to.**

- **Your name will not be mentioned anywhere in reports based on this survey. Results of this survey will be presented in an aggregated format so that your specific responses will not be identifiable The information acquired through this instrument will be shared with the Ministry of Education in the hopes of identifying areas where additional support may be needed.**

- **Your responses will NOT affect you in any way. They will not have any impact on your employment or your pay.**

- **If you agree, I would ask you some questions regarding your normal activities at school, including your interactions with school staff, Ministry office staff, students, and parents.**

- **Then, with your assistance, I would randomly select 16 students in Grade 2 to assess their reading. I would also ask these students about some of their normal school activities, school assets, language use, and reading practices at home, as well as home asset ownership. Selected students need only participate if they wish. I will spend about 40 minutes interviewing each child. My interview with you will take 15 to 20 minutes.**

- **Are you willing to participate? Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.**

Can we get started?

And for principals, you will read the following text:

My name is _____. I work with The Khana Group in Liberia.

- **We are trying to understand how children learn to read. Your school was selected through the process of statistical sampling. We would like your help in this. But you do not have to take part if you do not want to.**

- **Your name will not be mentioned anywhere in reports based on this survey. Results of this survey will be presented in an aggregated format so that your specific responses will not be identifiable The information acquired through this instrument will be shared with the Ministry of Education in the hopes of identifying areas where additional support may be needed.**

- **Your responses will NOT affect you in any way. They will not have any impact on your employment or your pay.**

- **If you agree, I would ask you some questions regarding your normal activities at school, including your interactions with your staff, Ministry office staff, students, and parents.**

- **Then, I would randomly select 16 students in Grade 2 to assess their reading skills. I would also ask these students about some of their normal school activities, school assets, language use, and reading practices at home, as well as home asset ownership. Selected students need only participate if they wish. The entire interview process for all 16 students will last around 4 hours (40 minutes per each child). My interview with you will take 15-20 minutes. Finally, I would spend about 15-20 minutes interviewing the Grade 2 teacher..**

- **Are you willing to participate? Once again, you do not have to participate if you do not wish to. Once we begin, if you would rather not answer a question, that's all right.**

Can we get started?

DO NOT PROCEED UNTIL THE RESPONDENT SAYS "YES"

The respondent must *explicitly* answer "yes" to this last question before you are allowed to proceed with the interview. You will find this same text at the beginning of our questionnaire with space to mark the respondent's consent. You *must* mark down that the respondent answered "yes" before conducting the interview.

5.2.2 INTERVIEWING TECHNIQUES

a. Basic Rules

Remain Neutral

When interviewing the respondent, you must be disciplined in your reaction to the information you are given. Do not by your expression or your reply register disbelief in the data he has given you. Be calm and neutral whenever you need to indicate that the data is inconsistent with other data previously given. Later, we will talk about the different types of bias that should be avoided and techniques for remaining neutral.

Don't Estimate for the Respondent

In many cases we will be asking respondents to make estimations. For example, we will ask how many times the principal observes the Grade 2 teacher lessons. In such cases you can tell the respondent 'Please give me your best estimate' or 'I understand you might not know the exact number, we are still interested in your best estimate though.' Remember it is the respondent who is to make the estimate, not you. Earlier respondents may have given you very different answers; we are interested in what each respondent thinks, regardless of the correctness or incorrectness of the answer.

- If a respondent cannot answer a certain question, for example how many times a week they spend reading with the students, ask them to provide an estimate or guess
- Unless we say that multiple answers are accepted, there is just one single answer per person

It is also possible that the respondent thinks that more than one answer is appropriate to a single question, encourage the respondent to choose the one response that is most appropriate or the one response that is more important.

If the respondent refuses to answer a question, reassure the respondent that his/her answers are confidential and emphasize how important it is that s/he tries to answer all of the questions. Do not try to determine an answer based on a statement that a respondent made on a previous response. There is a fine line between encouraging the respondent to answer and being too pushy. As an enumerator, you have to provide the respondent with the opportunity to answer, but you also should not force them to answer if you truly feel that they do not want to. If the respondent truly does not know the answer to a question or does not want to answer, skip this item and proceed to the next one.

Three key traits of a good enumerator:

1. Being Professional: Enumerators perform a delicate balancing act between being congenial with a respondent and maintaining a professional distance. Maintaining a distance is essential to avoid biasing the interview.

2. Being Non-Judgmental: Enumerators must be non-judgmental, show no emotion or reaction to a respondent's answer and not lead the respondent toward a possible response. It is never appropriate to comment on an answer to a question.

3. Keeping Control: Occasionally a respondent will enjoy giving his/her opinions, which may ultimately lead to taking control of the interview to tell stories. If this should occur, the enumerator must tactfully, in an assertive manner, regain control.

Do Not Change the Sequence of the Questions

Questions should be asked in the order they appear on the tablet-based survey application. Ensure that the respondent has answered a question sufficiently before trying to move to the next. Moreover, all answers should be noted on the survey itself at the time of the interview. Do not take notes on a pad and transcribe them to the survey later.

Don't Allow the Respondent to Hurry the Interview

Respondents sometimes try to hurry the interview. Politely say that you have to get answers to each question, and calmly proceed with the interview. If you get lost or stumped, take your time to read any instructions or to find your place. Don't hurry. Let the respondent know what you are doing. Once you have completed the interview, it will be difficult to go back and correct errors or edit.

In Summary:

- Always be polite and patient
- Never show disbelief with the respondent's answers
- Never argue. Be professionally persistent.

b. Additional Techniques and Concerns

To supplement the best practices for interviewing, here are tips for good in-person interviewing:

- Appropriate eye contact during the interview is very important to establish comfort and trust with the respondent. Use your best judgment as eye contact with elders and gesturing with your left hand may also be considered rude in Liberia.
- There are some questions that a respondent may hesitate to answer if other people are present. Use your common sense, tact, and ingenuity to avoid/elude nosy neighbors, fussy children, curious friends or spouses, and other such annoyances. For example you could say to the third party: "I am interviewing [respondent name] for an important survey conducted by TKG. It is important that I conduct this interview in private. Would you mind coming back at a later time when we are done with the interview?" If all else fails and you cannot rid yourself of a third party, try again to request privacy when you come to a sensitive question. With luck, the third party will become bored and will leave on his or her own.
- In some cases the teacher or principal may request help from another person in answering a question. This is okay in instances where the question is factually based and someone else in the school may have more accurate information.
    - For example, if you ask the principal "In one year, how often do you send teachers for in-service teacher training, on average?" it is possible there is an administrative assistant in the school who has more knowledge (perhaps they keep a record) of the number of days teachers take part in these trainings. It is fine for the principal to consult with the administrative assistant in order to get a more accurate response to a question like this.

- However, if you ask an opinion question or a question that relates to a respondent's behaviors or activities, you should encourage the respondent to share THEIR opinion on the question.
    - For example, if you ask a teacher "What reading skills should your children have at the end of the school year?" we are interested only in THEIR opinion on the topic. If they consult with someone else on a question like this, you should politely remind them "for this, we are just interested in your opinion. There are no right or wrong answers, so please just tell me how you personally feel about this."
- For students, especially when they are being administered the EGRA, it is NOT alright for them to get assistance because we are specifically testing the student's abilities and we do not want anyone to provide any assistance to ensure we are getting an accurate measure of that student's skills. And for the student context questions, it is unlikely that anyone else can better answer questions about the students' homes than the students themselves, so you should again encourage the student to give THEIR best answer.

5.2.3 BIAS

While you are conducting an interview, it is very important that you are aware of how you approach the interviewee. Enumerators collect data reflecting the attitudes, opinions, and behaviours of our respondents. Because of this, you should be aware of the ways in which you might influence respondents' answers. There are *three* main types of bias:

- style
- nonverbal
- verbal

a. Style bias

Style bias is a bias by first impression. Tone of voice, facial expression, appearance, actions, and attitudes will influence the respondent's welcome.

It is important to present a pleasant but neutral appearance. You do not want to scare a potential respondent by presenting yourself in a way that offends or possibly belittles the respondent. You should always be aware of the image conveyed by your appearance and attitude and how respondents of different social and economic backgrounds might react to this.

b. Nonverbal bias

Nonverbal bias is revealed in body language and facial expressions.

Nonverbal bias might influence a respondent's answers through body language or facial expressions. It could be just a raised eye brow or physically pulling back when the respondent answers or asks a question, such as showing surprise or shock. Even a knowing smile can influence the way the respondent will react to further questions. As an enumerator, you must maintain

self-awareness, keep a neutral face, and avoid reacting to respondent's answers throughout the interviewing process to avoid nonverbal bias.

c. Verbal bias

Verbal bias is influencing the respondent through your words.

Verbal bias can happen during the first few seconds of your introduction, when the respondent is trying to decide if he/she wants to participate in the study. In this case your words may influence the respondent's willingness to participate in the study or not. Verbal bias can also happen during the actual interview as you influence a respondent's responses. During the interview, you should read questions as written, stressing only indicated words.

As such, you should verbally practice introducing the study to become familiar with correct pronunciation, the flow of the words and the intent of the study. And you should never make any side comments about the respondent or the respondents' answers.

5.2.4 PROBING

What is a probe?

A probe is a question or comment by the enumerator which encourages a clearer or more complete response without biasing the answer. A good probe is always controlled and non-directive or neutral and helps the respondent focus on the question.

When is it necessary to probe?

- For clarity
- For completeness
- For relevance - to return to the point of the question
- To elicit more information from a "Don't know" response

Six basic types of probes

1. The silent probe: pausing

A silent probe is often effective. Simply stop writing and look expectantly at the respondent.

2. Re-reading the question

Focus on the specific needs of the question. Stress key words.

Example: When asking a pre-coded question the responses are included in the question and the enumerator is to code one of the predetermined options. A respondent may answer a pre-coded question with a term that is not one of the given options included in the question. The enumerator then must train

the respondent to select one of the given options. The best probe is to re-read the entire question, including the answer options.

3. Asking for more information

- "Please tell me more."
- "What else?"
- "What else do you mean that?"

4. Stressing generality

"In general, would you say..." -- then repeat the question.

5. Stressing subjectivity

- "In your opinion, [...]"
- "What is your best estimate?"

6. Zeroing in

- "What was the season?"
- When the response is a range of numbers, the enumerator needs to zero in for a precise response.
- When the response is in units other that what the question calls for, the enumerator needs to zero in for the correct units. For example: The question asks for the amount of time spent reading in minutes and the response is hours.

Probing Don't Know Responses

The NORC policy is to probe all "don't know" at least once. There are 3 basic reasons why people use "don't know" as a response:

1. The respondent is thinking over his/her reply and says, "I don't know" to fill the silence. *Silent probe:* The best probe is to pause and wait expectantly while the respondent comes up with a codeable answer.
2. The respondent is unsure and reluctant to answer for fear of giving the wrong response. *Stressing subjectivity:* The best probe is to assure the respondent that there is no right or wrong answers and we would like his opinion or best estimate. The respondent is very likely to come up with a codeable response.
3. The respondent truly does not know how to respond and cannot give an answer under any circumstances. If an enumerator determines this to be the situation after probing once, it is

acceptable to record the response as "don't know" (codes for "refused" and "don't know" will be discussed later).

DO NOT PROBE DURING EGRA SUBTASKS!

5.2.5 ASKING QUESTIONS

Survey questions and introductory or transitional statements are to be read exactly the way they are written with no changes in wording. Each question is carefully composed and tested so that most people will understand the meaning. Even small changes in the way questions are worded may have significant effects on the way questions are answered. Questions are written so as not to suggest answers and lead to biased results.

It is important that you practice reading aloud the questions many times prior to the first interview. During training, the opportunity is presented to practice through several mock interviews to learn the questionnaire and rehearse reading the questions. Questions should be read slowly and in a conversational tone emphasizing the appropriate words. Remember, this is the respondent's first exposure to the questions and it is important that he/she hears it correctly the first time.

Read all questions the way they are written

Every question must be read to the respondent even though it may have already been answered in the context of a previous question or in general conversation. It is appropriate to acknowledge the previous information with a comment such as: "You may have answered this question earlier but I need to ask it at this time. I want to make sure I have it right." Another question may ask about something that seems obvious to you by observation, such as asking if the respondent has a bicycle and you can see one. DO NOT ASSUME. The bicycle may have been borrowed.

Occasionally a respondent may ask you to define a word. When this happens, don't try to explain the meaning in your own words: simply reread the question. There is danger in trying to interpret and summarize meanings. If hundreds of interviewers each give their own version, the results could be similar to those in the old-fashioned game of "telephone" or "gossip", where the last person repeating the original sentence gives a hilarious statement which bears little resemblance to the first.

Four Types of Questions

For this survey, you will encounter 4 main types of questions:

1. Numeric

How many years have you been a principal?

Some questions in our survey ask for a numeric value. You will be given a field such as:

in which the number will be entered on your tablet.

2. Pre-coded (read out response options)

> Think about the last 5 school days and tell me how frequently your students learn the meaning of new words
>
> Never = 0
> Sometimes = 1
> Frequently = 2
> Everyday = 3
> Don't know = 88
> Refuse/No Answer == 99

The choice of responses is included in the text of the question and you have to read the response options to the respondent. Researchers have defined the range of possible responses. No verbatim is required. The appropriate answer is simply coded by the enumerator.

3. Field-Coded (do NOT read out response options)

The choice of responses is not part of the question but there are code categories to select. Researchers have some idea of the range of possible answers, and list them in the questionnaire. The enumerator then enters the code that corresponds the closest to what the respondent answered.

The enumerator may need to probe to zero in on the right category.

> Why have you made special efforts to improve reading at your school this past year? *Do not provide response options. Tick all that apply.*
>
> 1. We saw other schools doing it
> 2. We thought it might be important because the children were tested
> 3. The Ministry told us to do it
> 4. An NGO told us to do it
> 5. Teachers got teacher training that showed them how to teach reading better
> 6. Other_____

3. Verbatim (Open-ended)

When the respondent gives an answer that is not one of the pre-coded answers, you will have to enter verbatim (word for word) what the respondent says. For all of these "other" options, you must specify exactly what the respondent says.

For example:

What reading skills should your children have at the end of the school year?

01 Read out grade level stories
02 Sound out words they don't know
03 Understand stories that they read
04 Know letter names
05 Other_____

5.2.6 RECORDING RESPONSES ON TABLETS

Different questions ask for various kinds of information and several recording techniques are used.

Because we are using tablets to collect data, we have put in controls so that you do not accidentally type in letters when you were supposed to type in numbers, or do not select more than one response.

PAY ATTENTION to what you click on!

1. Open-ended responses (Other: Specify)

If the question calls for a response to be recorded verbatim (i.e., exactly as said), type exactly what the respondent says word for word. The question option will not be available for you on the tablet, and instead you will need to type the answer down. You should not paraphrase or summarize the respondent's answer.

Because most people speak faster than most enumerators can type, you need to develop comfortable techniques to handle verbatim situations. Here are some acceptable techniques:

- Begin to record as soon as the respondent begins to answer.
- Tell the respondent what you are doing.
- Repeat the answer as you record it.
- Slow down the respondent if you get lost. Read aloud where you left off and let him/her take it from there.
- Use standardized abbreviations.

2. Reserve Codes

Reserve codes are included with every applicable question. These codes will be answer choices at the bottom of every page of your questionnaire for

- "Don't know" – the respondent does not know the answer to the question, after you have tried to probe
- "Refused/No Answer"—the respondent does not want to answer the question, after you have tried to probe
- These response types are not to be offered to the respondent, but only used if respondent gives them in return to a question!

5.2.7 CHECKING FOR INTERNAL CONSISTENCY

As an enumerator you must also use your common sense and periodically conduct consistency checks. It is your job to record the respondent's answer exactly as he/she communicates them but not necessarily to *blindly* do so. While we have stressed the importance of remaining neutral, not estimating for the respondent and not arguing with the respondent, you must also remain alert in order to catch blatant errors or inconsistencies in the respondent's answers.

Here is an example of an inconsistency:

10) How many years have you been teaching overall?

| 5 | YEARS **INTERVIEWER: Enter a number from 0 to 99.**

11) How many years have you been teaching as a trained teacher?

| 7 | YEARS **INTERVIEWER: Enter a number from 0 to 99.**

It looks like the teacher has been teaching for 5 years overall, but then spent *more* time teaching as a trained teacher. This does not make sense, since you would expect the answer to #11 to be less than or equal to the answer to #10.

The respondent's answers raises questions in terms of logic and consistency. In these cases, what should you do as an enumerator?

What to do in case of inconsistencies/illogical answers?

Repeat the question

The first thing you want to do is repeat the question to make sure that the respondent heard and understood the question correctly (this is probe type #2).

Re-reading the answers to the respondent

If repeating the question does not help, you may want to re-read the answers to the respondent to make sure that *you* understood the respondent's answers correctly (only if the question allows the enumerator to read out answers).

The conversation may go like this:

- ENUMERATOR: "Let me make sure that I understood your answers correctly – you said that you have been teaching for 5 years?

- RESPONDENT: "Yes, that's correct"

- ENUMERATOR: "And you've been teaching as a trained teacher for 7 years?"

- RESPONDENT: at this point, the respondent may be re-thinking his answers and realizing that the answers do not make sense. If the respondent just says "yes it's correct", then record the answers as stated and make a note that the answers are inconsistent but that you did probe.

RECAP: INTERVIEWER TECHNIQUES AND QUESTIONNAIRE EDITING

- Remain neutral, do NOT estimate for the respondent, and do NOT argue
- Avoid bias (style, verbal and nonverbal)
- Use probes when needed (there are 6 basic types of probes)
- Ask questions the way they are written
- Respect skip patterns
- Check for internal consistency
- Use reserve codes

Your Supervisor will also review your questionnaire for internal consistency and completeness. He or she may come to you with questions if some answers appear illogical.

6. Field Procedures

6.1 PREPARATION BEFORE GOING TO THE FIELD

Before leaving to conduct interviews, make sure you have the following:

- Your TKG identity card
- Principal consent forms (enough for 1 per school plus extras as backup)
- Letter of introduction from MOE and ethical approval from UL-PIRE
- Your tablet—FULLY CHARGED!
- A charger for the tablet
- Sample list
- One extra tablet per team
- A backup copy of the questionnaires (1 P, 1 T, and 16 EGRAs) to be used in case technology fails
- 2 pens
- 1 pencil, 1 eraser, 1 sharpener, 2 clipboards
- Tracking sheets (One tracking sheet per school)
- Your instruction manual and EGRA reference documents
- Cell phone, fully charged and switched to silence during interviews, with supervisor and field manager numbers programmed
- Sufficient phone credit for the day
- Bag to carry all materials

Your Appearance

Everybody on the survey team should be neatly dressed. You should not wear fancy clothing. You should be cheerful, polite and confident. Remember that your appearance can influence the success of an interview (style bias).

6.2 WHOM TO INTERVIEW AND CONTACTING STRATEGY

A total of 1,440 pupils and 90 teachers and 90 principals will be asked to interview for this project in 90 schools. Interviews will be conducted on school grounds. In each school, there are 16 pupils, 1 Second Grade teacher, and 1 principal that we need to interview.

6.2.1 CONTACTING STRATEGY

We have the names of school, GPS coordinates, and contact information for the principals in advance, which we gather during baseline preparations. You will be provided with this information prior to going to the field.

Step 1

Call the school at least 2 days in advance to schedule a time to meet with them and to obtain consent for student survey and assessment. We will go through a detailed script later in the training for conducting this call.

If no one answer the phone, you can leave the following message in the local language:

Hi, my name is [YOUR NAME] from TKG. Your school has been selected to participate in a study aimed at understanding children's reading performance and practices in Liberia. You may remember us contacting you earlier. I will be in your school on ___DATE___. Can I interview you then? What time? Can we meet at the school?

When you have a response, record down the date and time.

6.3 TABLETS

Aside from information you will record on your tracking sheet, responses to questions will be recorded on tablets. Tablets are a great way to collect data—they help you do your job quickly and more accurately, instead of having to record everything on paper and pencil. However, tablets are expensive—TKG and NORC are trusting you to take good care of the tablets while you are out in the field, and to not abuse your access to these tablets.

6.3.1 RULES OF TABLET USE

Be very careful with the tablets

- Protect tablets from dirt, sun, water, and rain
    - If it begins to rain during your interview, **move under a roof immediately** so the tablet does not get wet
    - This will also protect the tablet from the sun
- Keep the tablet **in a bag and out of sight to protect it from theft**
- Never remove your tablet from its case
- Dropping your tablet will damage it
- If you notice any anomalies, report them to your supervisor immediately

Supervisors are in charge

- Supervisors are responsible for distributing and collecting tablets every day.
    - In the morning, the supervisor will give your tablet to you.
    - At the end of the day, return your tablet to your supervisor.

- Supervisors will transmit all data to central office and charge all tablets for the next day.

Prohibited Uses

- You are **prohibited** from using the tablets for anything other than this project.
- For example, you **cannot** use your tablets to:
  - **Text**
  - **Make personal phone calls**
  - **Use social media (Facebook, Twitter)**
  - **Check email**
  - **Surf the web**
  - **Play video games**
  - **Install other applications than the one already provided in the tablet**
  - **Take pictures with the tablet's camera**

6.3.2 TABLET SETTINGS

Tablet settings are important for many reasons. Most importantly, proper settings help conserve battery power. Tablet settings should be monitored constantly by both enumerators and supervisors to ensure that the proper settings are always applied. Using improper settings will shorten the battery life of the tablet and impair your ability to complete your assignments.

Display

The display consumes the most power of any component:

- Turn **OFF automatic brightness**
- Keep brightness as low as possible (brighter screens consume more power)
- Conduct interviews in the shade so that you can set the screen to a lower brightness.
- A roof can also provide shade, which will also protect the tablet from rain!

GPS

- Like the display, the GPS consumes a lot of power. **To conserve battery power, always keep the GPS turned OFF whenever not in use.**
- You may turn the GPS on/off by swiping down on the status bar.

- The **GPS is only needed on the Supervisor's tablet.** It will be recorded on the Teacher and Principal interviews and those recordings of coordinates will provide us with the location of the school, which will be used to verify the team was in the correct school that day.

WiFi

- You do not need WiFi while in the field.
- **Proper WiFi setting** – WiFi should remain OFF at all times.
- Only supervisors are allowed to turn on WiFi when necessary to upload data (i.e. when there is no cell coverage)

6.4 DATA SECURITY

6.4.1 CONFIDENTIALITY

Throughout the whole data collection period, you must do your best to protect the respondent's confidentiality. This means that you cannot discuss respondent's answers with anyone outside the team, and disclose the name of respondents whom you've interviewed to other respondents. This also means that you must handle the paper questionnaires very carefully.

Do not discuss survey data with members of family nor friends. You must not permit any unauthorized person, not even a member of your family, to see a completed questionnaire. You must not solicit for, or accept assistance from non-survey personnel in your enumeration duties.

6.4.2 TABLET SAFETY

Keep all survey materials, especially documents, the tablet in safe and secure places when traveling. Preferably, keep them in a closed satchel when not in use to avoid unwanted attention.

6.5 VALIDATION (DIRECT OBSERAVTIONS AND SPOT-CHECKS)

In addition to the data quality control procedures which have already been described (consistency checks, reserve codes, disposition codes), the data review process will entail:

- 10% direct observation of interviews from start to finish by supervisors;
- 15% spot-checks of partial interviews by supervisors;
- 10% direct observation of full interviews by Quality Control Officers (for EGRA/student, principal and teacher interviews);
- 15% spot-checks of partial interviews by Quality Control Officers.

These validation checks serve 2 purposes: (1) ensure that the interview did take place, (2) verify the quality of the collected data.

Every day, the supervisor will randomly select at least 10% of all EGRA student assessments to observe from start to finish (ideally, each supervisor should directly observe two full interviews each day). The supervisor will follow along throughout the interview to make sure the enumerator is asking every question, following protocols around timing of tasks, coding correctly, and following all other rules and guidelines related to proper administration of the interviews. Each QC officer will also select two different interviews to observe within the school each day. These will follow the same protocols and the combination of Supervisor and QC Officer checks will result in at least 20% of all interviews being directly observed and evaluated throughout the sample.

In addition to the direct observation of full interviews, both Supervisors and QC officers will also spot check at least 15% of interviews each day. For these, the Supervisor or QC officers can observe a few minutes of an interview to make sure protocols are being properly followed. These will ensure that every enumerator is observed, either through a full observation of their interview or for a portion of an interview during a spot check, at least once every day by their supervisor and/or their QC Officer.

Each Quality Control Officer will be assigned two teams to monitor throughout the field period. Depending on the locations of their teams, we understand that in some cases the QC Officer may only be able to visit one of their teams in a given day. However, whenever it is logistically possible, the QC Officer should attempt to visit both of their teams each day.

7. Our Questionnaires

7.1 LANGUAGE

All of the surveys will be conducted in English.

7.2 CONCEPTS AND DEFINITIONS

Acronyms

For your reference, below is a list of acronyms that are commonly used throughout the questionnaire and this training manual:

Acronym	Definition
TKG	The Khana Group
USAID	United States Agency for International Development

7.3 QUESTIONNAIRE OVERVIEW

The key topics of interest for the current survey are: child reading skills, the teacher's attitudes and practices about teaching the child to read.

The current survey will provide data to aid in answering the question of whether the Read Liberia! Intervention leads to increases in reading outcomes among project beneficiaries.

7.3.1 QUESTIONNAIRE NUMBER CODES

On your sample sheet, NORC/TKG will provide sampled schools with ID numbers already assigned for all schools, you should use this code exactly as it is. Make sure to choose the proper school and code from the drop-down menu in the tablet and ***double-check*** that you have entered it in correctly prior to proceeding with the questionnaire.

We will also provide a student ID, a teacher ID, and a principal ID: these will be auto-generated by the tablet.

Here is a description of the different kinds of identifying information and corresponding codes that we will be using in our questionnaire:

School ID: Each learner is associated with a school. Copy the school's name and unique ID onto the Field Control Sheet exactly as it is.

Student ID: Each learner has an ID generated in Tangerine. Copy this information down onto the Field Control Sheet exactly as it is displayed on the tablet.

Teacher ID: Each learner is also associated with a teacher, who will also have an ID generated in Tangerine. Copy this information down onto the Field Control Sheet exactly as it is.

Principal ID: Each learner is also associated with a principal, who l also have an ID generated in Tangerine. Copy this information down onto the Field Control Sheet exactly as it is.

7.3.2 LOOK OUT FOR THESE COMMON MISTAKES

Review these tips to help you avoid common mistakes and more accurately record responses. Make sure to double-check these points as you fill out the survey:

- ***Pay attention to categorizing responses.*** Oftentimes, the codes you enter are field-coded, meaning you have to listen for the respondent's answer, then refer to the questionnaire to select the appropriate response. When you do this, be careful to record the correct response. For Yes/No answers, this may be easier than more complex answers where we ask you to listen to the respondent and select the appropriate response.

- ***Pay attention to units of measurement:*** If the respondent provides the answer "2" to the question "How long have you been a teacher?", you should ask what unit they are referring to. Months? Years? PAY ATTENTION to what we are asking for—which, in this case, are the number of years, not months.

    - In this case, confirm with the respondent: "Ok, so 6 hours is half a year"

- ***Pay attention to timeframes.*** Often, we ask respondents "how often" they read, or their child reads. The options we give are:

    - FOUR **DAYS** A WEEK OR MORE

- TWO OR THREE **DAYS** A WEEK
- ONE **DAY** A WEEK
- ONCE OR TWICE A **MONTH**
- LESS THAN ONCE A **MONTH**
- NEVER

If a teacher says "every Thursday", then that means they read one day a week. Make sure you understand whether or not the teacher is referring to days, weeks, or months. Repeat back the response to the respondent as you categorize the responses.

- ***If it does not seem right, probe!*** Trust your instinct—if a response does not make sense follow-up with respondents.

ANNEX IV: SOURCES OF INFORMATION

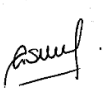
FIELD IMPLEMENTATION SCHEDULE

Read! Liberia EGRA Baseline Team Schedule				
County	**# schools**	**Position**	**Name**	**Movement Pattern (Districts)**
Montserrado Margibi Grand Bassa	**28**	**QCO**	**Decontee Peters**	
Bong Lofa	**36**	**QCO**	**Anita S.K. Marshall**	
Nimba	**26**	**QCO**	**J.Momolu Paasewe**	
Bong	17	Supervisor	King Dennis Wolokoluwuo	Suacoco, Kokoyah, Panta Kpai, Zota, Sanoyea, Salala,
		Assessor A	Wilhemina Y. Harris	
		Assessor B	Tiangay J. Williams	
		Assessor C	Samuel Paye	
Grand Bassa & Margibi	15 (8 Grand Bassa & 7 Margibi)	Supervisor	Allison M. Paye	District 1, District 2, District 3, District 4, District 5, kakata, Gibi, Marshal
		Assessor A	Edwin W. Deshield	
		Assessor B	Georgina C. Davis	
		Assessor C	Henry W. Scott	
Lofa	19	Supervisor	William N. Kpoto	Salaye, Zorzor, Kolahun, Vahun, Foya,
		Assessor A	Paul Sahr Johnson	
		Assessor B	Mac Kornorboi	
		Assessor C	Romeal P. Burton	
Montserrado	13	Supervisor	Arthurline S. Joloe	Greater Monrovia 1, Greater Monrovia 2, MCSS, Todee, Caresburg, Right Bank, Left bank
		Assessor A	Momsieh.B. Mallet	
		Assessor B	Dweh N.Nyenmoh	
		Assessor C	Edwin M Bonar	
Nimba 1	13	Supervisor	Jokua Gbassie	Bain Garr, Sanniquelle-Mah, Gbehle-geh, Tuah river, Z
		Assessor A	Joseph N. Davis	
		Assessor B	Emmanuel J.King	
		Assessor C	Priscillia D. Chae	
Nimba 2	13	Supervisor	Benjamin Y. Everett	Saclepae 1, Saclepae 2, Yarwin-Mensonah, Buu-Yao,
		Assessor A	Samuel O . Moore	
		Assessor B	Clarence F. Wordsworth	
		Assessor C	Prince O. Gboneh	

ANNEX V: DISCLOSURE OF ANY CONFLICTS OF INTEREST

Name	Alicia Menendez
Title	VP International Projects
Organization	NORC at the University of Chicago
Evaluation Position?	X Team Leader ☐ Team member
Evaluation Award Number *(contract or other instrument)*	AID-OAA-M-13-00010 – Impact Evaluation of READ Liberia Project
USAID Project(s) Evaluated *(Include project name(s), implementer name(s) and award number(s), if applicable)*	USAID/Liberia Read Liberia Impact Evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☐ X No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* *1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* *2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* *3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* *4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* *5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* *6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	8/16/2017

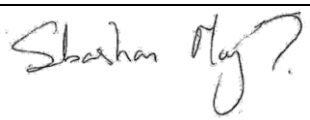
Name	Varuni Dayaratna
Title	VP International Projects
Organization	NORC at the University of Chicago
Evaluation Position?	☐ Team Leader ☒ Team member
Evaluation Award Number *(contract or other instrument)*	AID-OAA-M-13-00010 - Impact Evaluation of READ Liberia Project
USAID Project(s) Evaluated *(Include project name(s), implementer name(s) and award number(s), if applicable)*	USAID/Liberia Read Liberia Impact Evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* 1. *Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* 2. *Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* 3. *Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* 4. *Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* 5. *Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* 6. *Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	8/16/2017

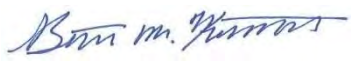
Name	Sebastian Monroy-Taborda
Title	Senior Research Analyst
Organization	NORC at the University of Chicago
Evaluation Position?	[ ] Team Leader [X] Team member
Evaluation Award Number *(contract or other instrument)*	AID-OAA-M-13-00010 - Impact Evaluation of READ Liberia Project
USAID Project(s) Evaluated *(Include project name(s), implementer name(s) and award number(s), if applicable)*	USAID/Liberia Read Liberia Impact Evaluation
I have real or potential conflicts of interest to disclose.	[ ] Yes [X] No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* 1. *Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* 2. *Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* 3. *Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* 4. *Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* 5. *Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* 6. *Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	8/16/2017

Name	Brian Kirchhoff
Title	Research Scientist
Organization	NORC at the University of Chicago
Evaluation Position?	☐ Team Leader **X** Team member
Evaluation Award Number *(contract or other instrument)*	AID-OAA-M-13-00010 – Impact Evaluation of READ Liberia Project
USAID Project(s) Evaluated *(Include project name(s), implementer name(s) and award number(s), if applicable)*	USAID/Liberia Read Liberia Impact Evaluation
I have real or potential conflicts of interest to disclose.	☐ Yes **X** No
If yes answered above, I disclose the following facts: *Real or potential conflicts of interest may include, but are not limited to:* *7. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated.* *8. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation.* *9. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project.* *10. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated.* *11. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated.* *12. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.*	

I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.

Signature	
Date	8/16/2017

ANNEX VI: FULL REGRESSION RESULTS

VARIABLES	Correct Familiar Word per min.	Oral Reading Fluency	Reading Comp.	Listening Comp.
Girls	-2.647***	-2.891***	-0.123	-0.025
	(0.666)	(1.091)	(0.090)	(0.060)
Rural	-3.929***	-6.639***	-0.426***	-0.209
	(1.316)	(2.287)	(0.116)	(0.130)
Student Age	1.440	0.849	-0.240	0.027
	(1.327)	(2.012)	(0.212)	(0.129)
Student Age Squared	-0.049	-0.030	0.009	-0.002
	(0.050)	(0.076)	(0.008)	(0.005)
Do you practice reading aloud to someone at home?	3.793***	5.992***	0.247**	0.151**
	(0.836)	(1.285)	(0.113)	(0.074)
Does anyone read aloud to you at home?	-1.400**	-0.898	-0.092	-0.099
	(0.692)	(1.235)	(0.094)	(0.069)
Language Home: English	0.561	1.421	0.159	0.190***
	(0.845)	(1.339)	(0.108)	(0.071)
Parents cannot read/write	-0.752	-1.695	-0.104	-0.143*
	(0.884)	(1.360)	(0.125)	(0.079)
Do you watch television at home?	-0.124	-0.519	-0.177	-0.112
	(1.066)	(1.794)	(0.123)	(0.084)
Do you listen to radio at home?	-0.309	-1.348	-0.166	0.039
	(0.811)	(1.456)	(0.119)	(0.079)
Do you have electricity/current at home?	0.357	1.262	-0.071	0.038
	(1.029)	(1.713)	(0.106)	(0.089)
Did you eat before coming to school today?	-0.209	-0.806	-0.059	0.073
	(0.663)	(0.998)	(0.089)	(0.065)
Female Teacher	1.064	0.230	-0.038	0.005
	(1.351)	(2.406)	(0.135)	(0.119)
Volunteer Teacher	1.023	-0.037	0.165	-0.059
	(1.404)	(2.213)	(0.138)	(0.162)
Teacher's years of experience	0.346*	0.589**	0.025	0.000
	(0.182)	(0.294)	(0.023)	(0.024)
Teacher's years of experience squared	-0.007	-0.015*	-0.001	0.000
	(0.005)	(0.008)	(0.001)	(0.001)
Teacher received training teach reading	0.588	0.303	-0.035	-0.189
	(1.260)	(2.109)	(0.115)	(0.120)
Teacher has lesson plan available	-0.094	-1.558	-0.028	-0.072
	(1.060)	(1.666)	(0.106)	(0.114)
Teacher has High School Degree	0.302	-1.766	0.233	-0.433**
	(1.948)	(2.358)	(0.177)	(0.206)
Teacher has Certificate Degree	-1.056	-3.758	0.152	-0.335

VARIABLES	Correct Familiar Word per min.	Oral Reading Fluency	Reading Comp.	Listening Comp.
	(1.956)	(2.356)	(0.164)	(0.206)
Teacher has BA Degree	-3.987	-8.875**	-0.542**	-0.330
	(2.798)	(3.615)	(0.244)	(0.233)
Sufficient materials/ textbooks for Grade 2?	2.788	4.049	0.097	0.143
	(2.171)	(3.425)	(0.194)	(0.235)
Do you have a library or reading room?	1.273	3.316	0.243*	0.104
	(1.244)	(2.057)	(0.123)	(0.134)
Constant	-0.013	12.311	2.446*	2.205**
	(9.167)	(13.998)	(1.291)	(0.842)
Observations	1,418	1,418	713	1,345
R-squared	0.082	0.086	0.070	0.049

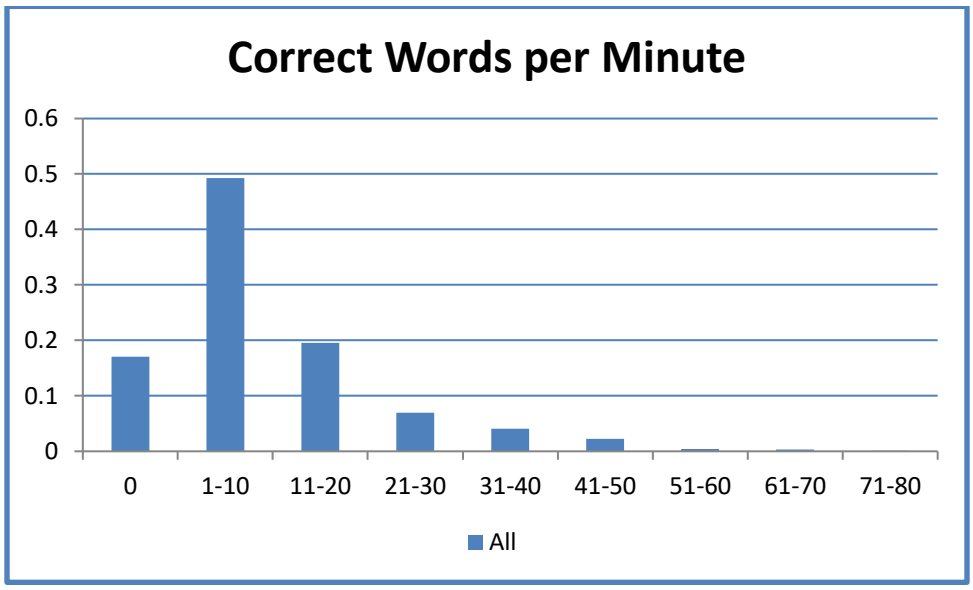
OLS regressions. Standard errors are clustered at School level, and are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1

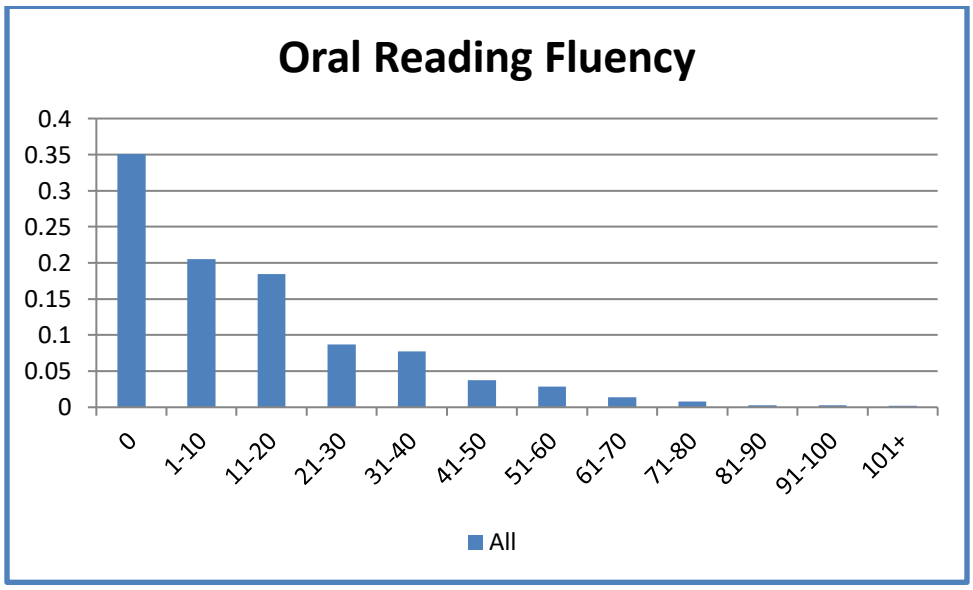
VARIABLES	Correct letter names per min.	Correct NonWord per min.	Orientation to Print	Phonemic Awareness
Girls	-4.552***	-1.215***	-0.116**	-0.221*
	(1.370)	(0.203)	(0.054)	(0.118)
Rural	-9.995***	-0.714*	-0.143	-0.349
	(3.337)	(0.375)	(0.163)	(0.256)
Student Age	9.351***	0.123	0.295**	0.595**
	(2.188)	(0.471)	(0.130)	(0.254)
Student Age Squared	-0.313***	-0.006	-0.011**	-0.021**
	(0.086)	(0.017)	(0.005)	(0.010)
Do you practice reading aloud to someone at home?	7.635***	1.083***	0.016	0.341**
	(1.575)	(0.207)	(0.068)	(0.136)
Does anyone read aloud to you at home?	0.816	-0.188	-0.058	-0.137
	(1.522)	(0.251)	(0.071)	(0.143)
Language Home: English	0.772	0.241	0.119	0.290**
	(1.529)	(0.300)	(0.077)	(0.141)
Parents cannot read/write	-2.918	0.015	0.047	0.053
	(1.821)	(0.332)	(0.081)	(0.152)
Do you watch television at home?	1.903	0.247	-0.112	-0.138
	(1.644)	(0.372)	(0.090)	(0.187)
Do you listen to radio at home?	-1.749	-0.015	-0.084	0.190
	(1.429)	(0.303)	(0.064)	(0.175)
Do you have electricity/current at home?	-1.073	-0.050	0.026	-0.153

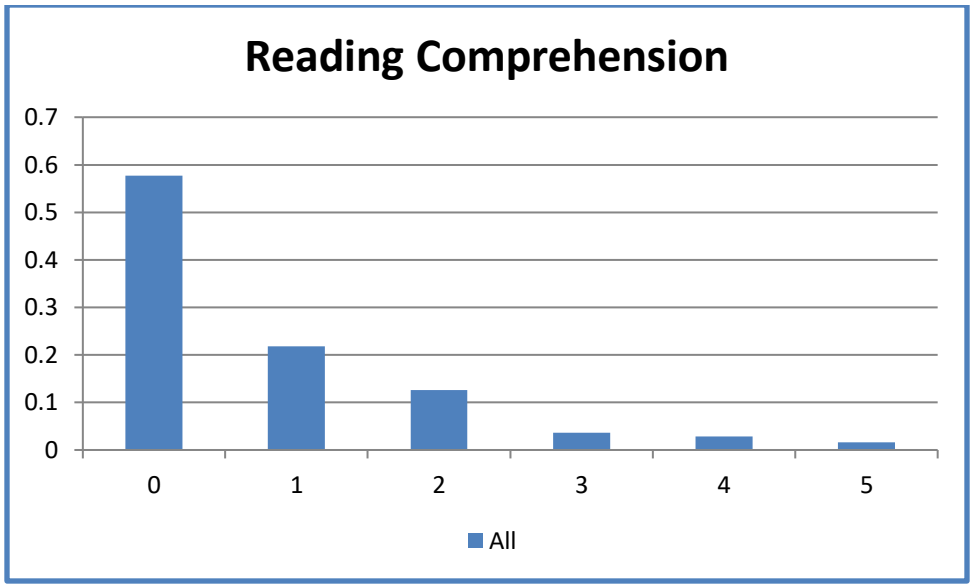
VARIABLES	Correct letter names per min.	Correct NonWord per min.	Orientation to Print	Phonemic Awareness
	(1.883)	(0.314)	(0.091)	(0.177)
Did you eat before coming to school today?	1.520	0.205	0.004	-0.058
	(1.315)	(0.219)	(0.065)	(0.143)
Female Teacher	2.055	-0.139	-0.083	0.103
	(2.657)	(0.399)	(0.143)	(0.249)
Volunteer Teacher	5.477*	0.350	0.252	0.026
	(3.210)	(0.451)	(0.170)	(0.315)
Teacher's years of experience	0.666	0.069	-0.031	-0.021
	(0.439)	(0.053)	(0.025)	(0.040)
Teacher's years of experience Squared	-0.013	-0.002*	0.001	0.001
	(0.011)	(0.001)	(0.001)	(0.001)
Teacher received training teach reading	2.897	0.795**	0.082	0.260
	(2.412)	(0.369)	(0.137)	(0.218)
Teacher has lesson plan available	-1.857	-0.392	-0.068	0.278
	(2.376)	(0.308)	(0.116)	(0.203)
Teacher has High School Degree	-2.931	1.178***	0.066	-0.302
	(3.234)	(0.421)	(0.170)	(0.433)
Teacher has Certificate Degree	-0.640	0.351	0.285*	-0.205
	(2.686)	(0.430)	(0.153)	(0.404)
Teacher has BA Degree	-2.446	-0.854	-0.179	-0.166
	(5.421)	(0.658)	(0.182)	(0.534)
Sufficient materials/ textbooks for Grade 2	6.336	-0.055	0.257	-0.187
	(4.593)	(0.425)	(0.208)	(0.230)
Do you have a library or reading room?	2.131	0.136	-0.039	0.342
	(2.667)	(0.359)	(0.124)	(0.216)
Constant	-0.505	-0.175	0.491	-0.083
	(14.932)	(3.183)	(0.949)	(1.811)
Observations	1,415	1,418	1,396	1,405
R-squared	0.116	0.074	0.059	0.031

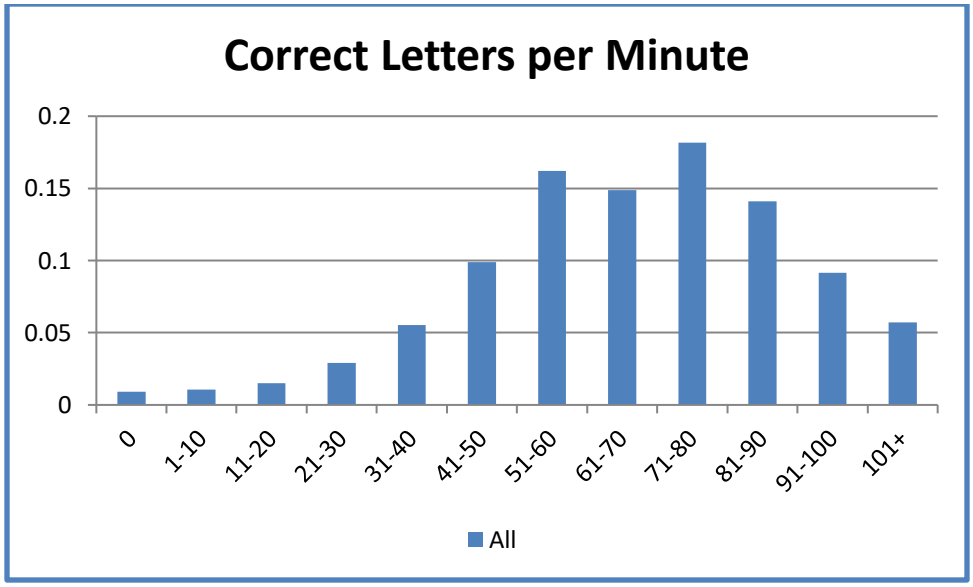
OLS regressions. Standard errors are clustered at School level, and are presented in parentheses. *** p<0.01, ** p<0.05, * p<0.1

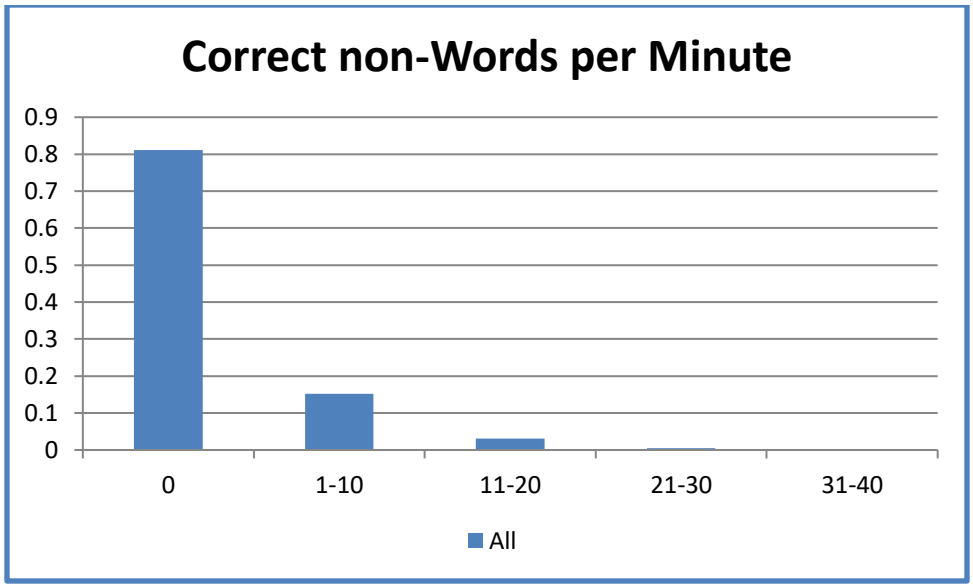
ANNEX VII: EGRA SUBTASKS DISTRBUTION GRAPHS

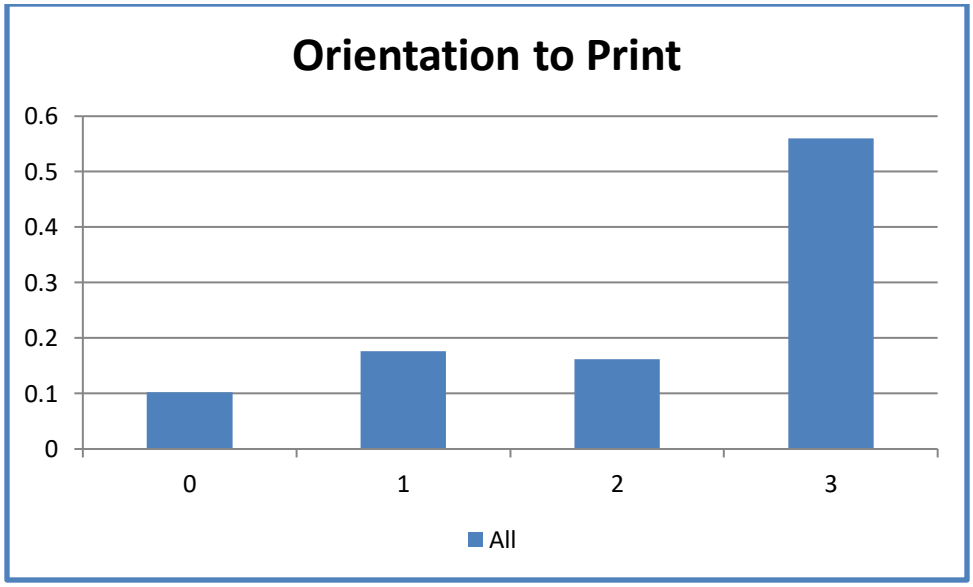


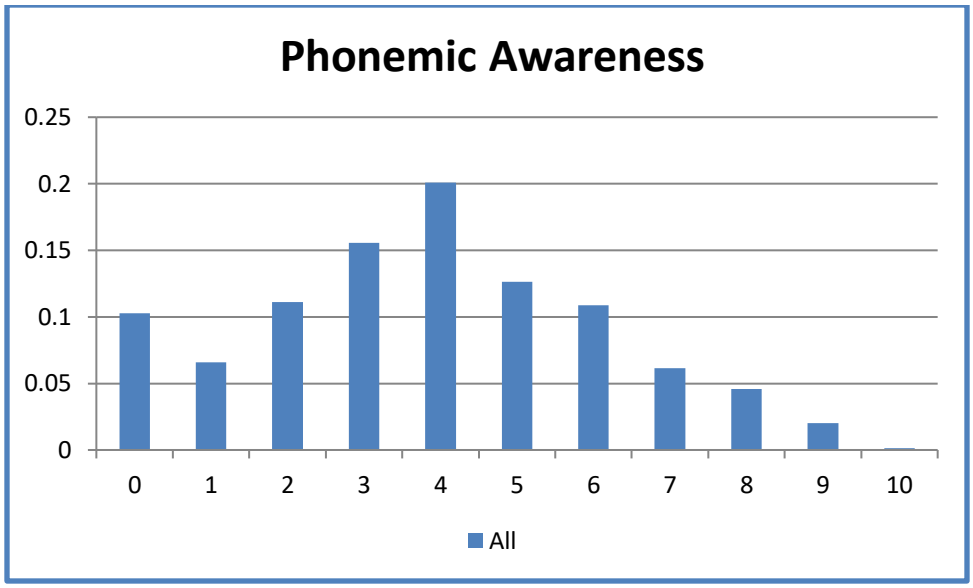


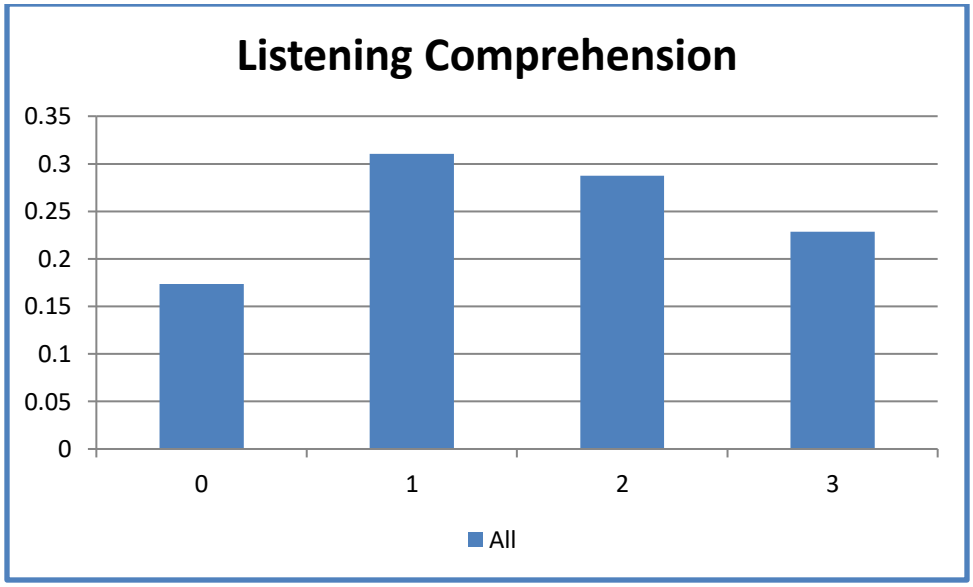

Reading Comprehension
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1
2
3
4
5
All

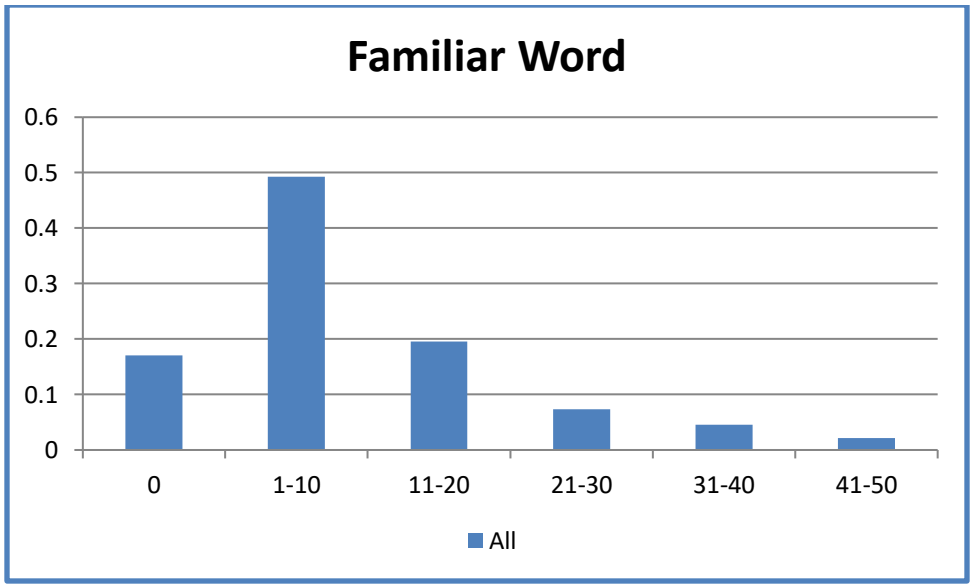

Correct Letters per Minute
0.2
0.15
0.1
0.05
0
0
1-10
11-20
21-30
31-40
41-50
51-60
61-70
71-80
81-90
91-100
101+
All

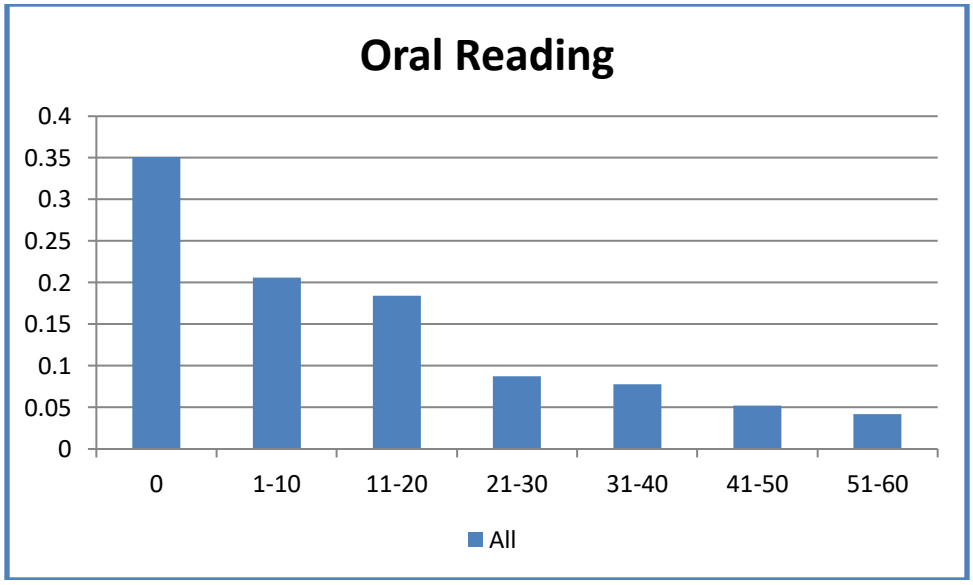

Correct non-Words per Minute
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1-10
11-20
21-30
31-40
All

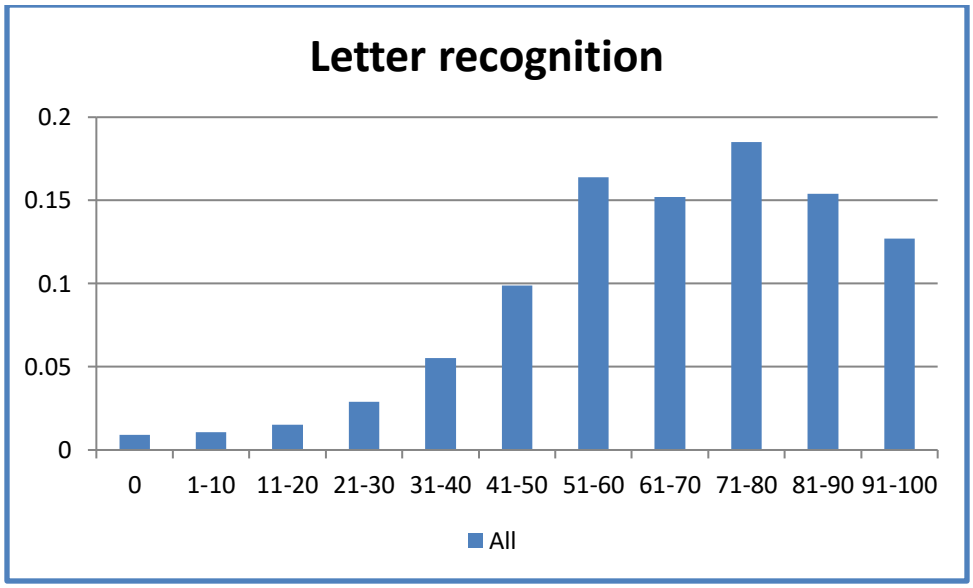

Orientation to Print
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1
2
3
All

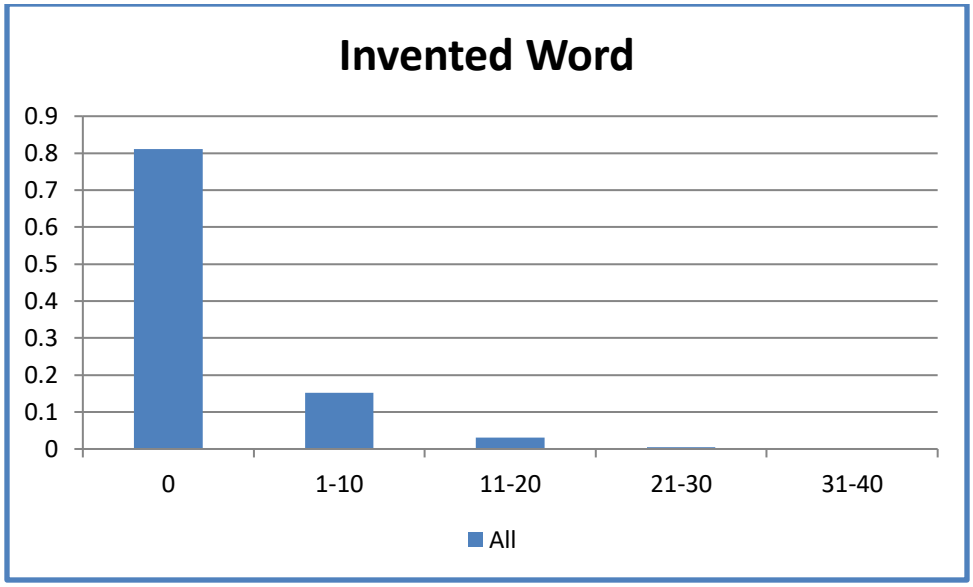

Phonemic Awareness
0.25
0.2
0.15
0.1
0.05
0
0 1 2 3 4 5 6 7 8 9 10
All


Listening Comprehension
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0 1 2 3
All


Familiar Word
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1-10
11-20
21-30
31-40
41-50
All


Oral Reading
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
0
1-10
11-20
21-30
31-40
41-50
51-60
All


Letter recognition
0.2
0.15
0.1
0.05
0
0
1-10
11-20
21-30
31-40
41-50
51-60
61-70
71-80
81-90
91-100
All


Invented Word
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
1-10
11-20
21-30
31-40
All

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