



South Sudan Teacher Education Program (SSTEP) Early Grade Reading Assessment Report



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Submitted by Education Development Center, Inc.

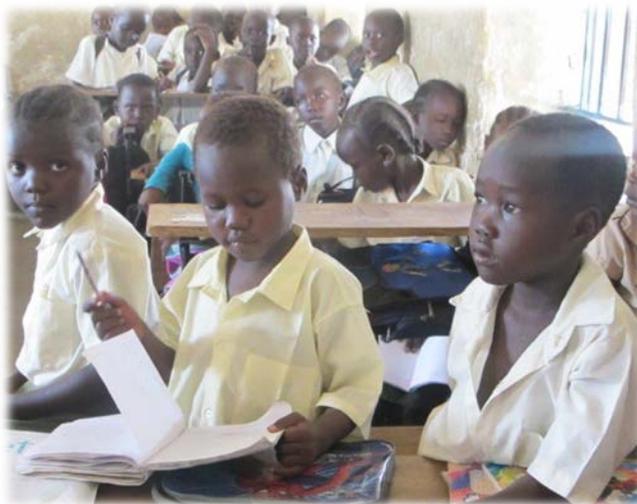
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Executive Summary

Decades of underdevelopment, war, famine, drought and flood, have caused dire economic, political and social destruction to institutions and infrastructure in the newly independent South Sudan. Access to and provision of education services has been severely affected and South Sudan faces serious constraints and challenges in its efforts to rebuild. Nearly eighty-five percent of the population still cannot read or write, and polls consistently place education as the number one priority for the people of South Sudan. The quality of teaching and learning in



South Sudan is severely compromised by a number of factors, including limited opportunities for professional development for teachers, few qualified teachers, challenging teaching conditions, and an incomplete professional development curriculum and framework. Although the Republic of South Sudan (RoSS) employs over 26,000 primary teachers¹, only 13% of them are qualified.

SSTEP began providing high quality training to 2000 South Sudanese in-service teachers (largely with P8 qualification) using the revised Unified Curriculum training system, with a specific focus on improving teachers' skills in teaching literacy and numeracy. SSTEP intended to focus on two groups of teachers: 1) those who are enrolled in or who have completed some of the MDTF program and 2) teachers from a sample of schools (100 total over two years) where the project was intending to pilot its approach to the teaching of literacy through a holistic approach. The project developed teaching and learning materials to support teacher training and classroom instruction, with a particular focus on literacy. Teachers were



also supposed to receive training to improve their English language proficiency.

Because violence erupted around South Sudan in the fall of 2013, in early 2014 USAID decided to terminate SSTEP, along with a number of other USG-funded projects. Therefore, SSTEP did not have an opportunity to fully implement the intervention. The original project evaluation design included three student assessments, implemented cross-sectionally, to measure changes in student reading skills attributable to the project activities. At the

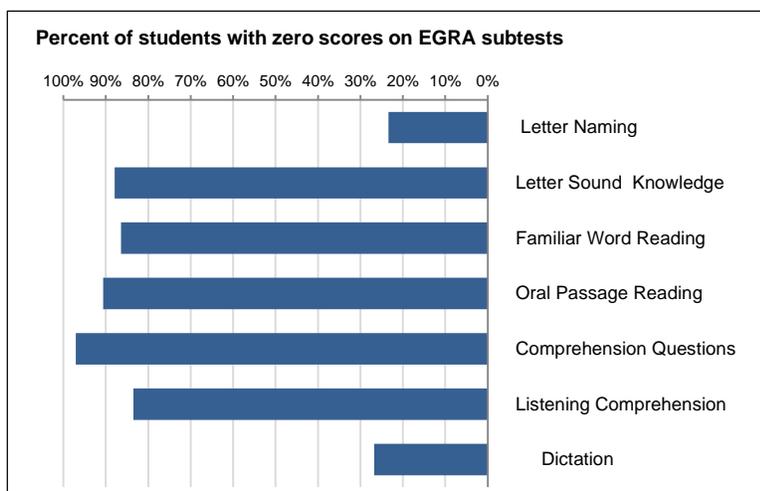
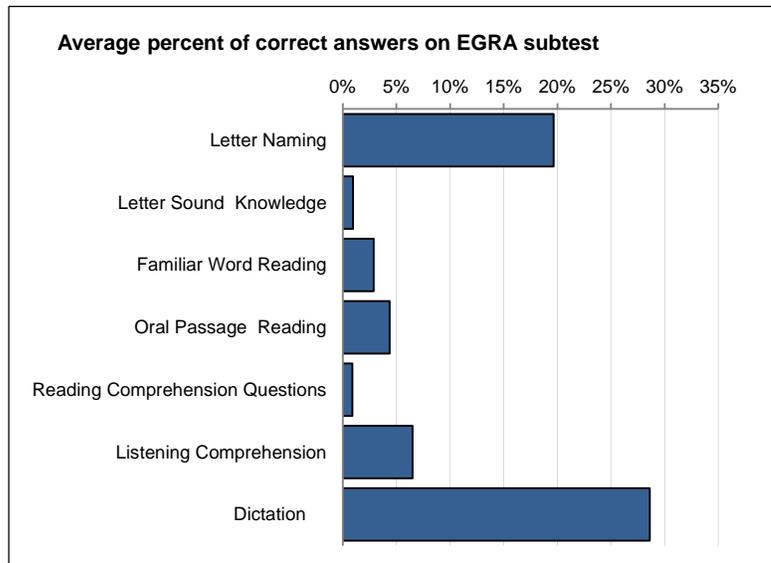
time of project termination, only the baseline assessment had been conducted; this was the Early

¹ EMIS 2010 data: 9% diploma, 36% enrolled in in-service or pre-service training, 28% untrained, 28% unknown.

Grades Reading Assessment (EGRA) which was implemented in July of 2013. The data collection was conducted by EDC in four states targeted by the project: Central Equatoria, Eastern Equatoria, Jonglei and Lakes, with 522 second grade students assessed across these four states. Student assessment was implemented in English by trained data collectors. In addition to measuring students' literacy level, the data collectors conducted a student context survey, designed to collect information on literacy support that students receive at home, quality of instruction at school, and the socio-economic background of the sampled students. The data from the context survey was used to construct composites for home literacy support, school quality and socio-economic background of students. These composites were used to better understand realities of learning to read for South Sudanese early grade students, and better understand EGRA findings.

The assessment found very poor performance on nearly all literacy subtests among tested students, particularly among girls and students from Central and Eastern Equatoria. Nine out of ten students could not read a single word from the word list

or a grade level passage. Although most students could recognize letters of the English alphabet, the majority could not identify the sounds those letters make. Finally, both reading and listening comprehension subtest results showed that students did not possess the vocabulary to understand grade level text.



One subtest on which three-quarters of the tested students performed relatively well was dictation. The majority of students demonstrated some familiarity with the conventions of text, such as the direction of the written text. About half of the tested students could spell at least one out of four words correctly. Dictation results were found to be positively associated with the school quality composite.

A subtest that was found to have moderate association with home literacy support, school quality and socio-economic background of the student was listening comprehension. Listening comprehension measures student's vocabulary and ability to pay attention to the story and recall details to be able to

answer comprehension questions. Although the overall performance on this subtest was poor with over 80 percent of students scoring zero on comprehension questions, positive correlation between the subtest results and literacy supports in child's environment supports current research on literacy that emphasizes the importance of such supports for the oral language development. Targeted programming to develop both home and school literacy supports will ensure learning gains among South Sudanese children.

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those who are enrolled in or who have completed some of the MDTF program and 2) teachers from a sample of schools (100 total over two years) where the project planned to pilot its approach to the teaching of literacy through a holistic approach. The project developed teaching and learning materials to support teacher training and classroom instruction, with particular focus on literacy. Teachers were also supposed to receive training to improve their English language proficiency.

Because violence erupted around South Sudan in the fall of 2013, in early 2014 USAID decided to terminate SSTEP, along with a number of other USG-funded projects. Therefore, SSTEP did not have an opportunity to fully implement the intervention. The original project evaluation design included three student assessments, implemented cross-sectionally, to measure changes in student reading skills attributable to the project activities. At the time of project termination, only the baseline assessment had been conducted; this was the Early Grades Reading Assessment (EGRA) that was implemented in July of 2013. The data collection was conducted by EDC in four states targeted by the project: Central Equatoria, Eastern Equatoria, Jonglei and Lakes. Student assessment was implemented in English by trained data collectors. This report presents findings from this assessment.

Methodology

The assessment was intended to be part of the outcome evaluation of SSTEP. Results of the baseline were supposed to be compared with the results of the endline to determine the extent to which SSTEP was successful in improving student achievement of reading skills of second grade students. The results of the EGRA were supposed to be triangulated with the data on teacher practices.

Design

The unit of analysis for learner performance was the student. We assessed students in grade 2. The table below presents sampling parameters:

Table 1. Baseline Sample for Measuring Impact on Student Reading Performance³

Statistical test: Independent t-test, one-tailed, medium effect size (d=.5), alpha= .05			
	Male	Female	Male and Female
Central Equatoria	70	70	140
Eastern Equatoria	70	70	140
Jonglei	70	70	140
Lakes	70	70	140
Total	280	280	560
Power	90%	90%	90%

³ Sample computed using G*Power 3.1.3 statistical software.

We randomly selected boys and girls for testing in each school. Schools were selected in the states where SSTEP was operating. Schools had already been selected to receive SSTEP programming, and thus were not selected randomly.

The assessment was administered electronically using netbooks and EDC-developed eEGRA software. Electronic administration standardizes the process of assessment and eliminates data processing time and expense. All testing was done orally one-on-one.

Student Assessment Tool

Assessment took place during July of 2013. Ten assessors, trained and supervised by SSTEP staff, participated in data collection. All assessors were trained in data collection procedures, including random selection of boys and girls from the classrooms for the student assessment. No disruptions of the data collection process were reported.

Early Grade Reading Assessment (EGRA) adapted for South Sudan was used in the baseline⁴. EGRA is an assessment instrument designed to assess the foundation skills for literacy acquisition for the early grades. The assessments included the following subtests:

1. *Listening comprehension* is considered to be an important skill for reading comprehension. In this subtask, the test administrator read a passage to children. Children were then asked five questions about that passage.
2. *Letter naming* subtest assessed children's knowledge of the letters of English alphabet. Children were presented with a random mix of 100 upper case and lower case letters of the alphabet, and asked to name those letters. The test was timed at 60 seconds; the result of the test was a number of letters named correctly.
3. *Letter sounds* subtest assessed children's knowledge of the sounds that the letters of English alphabet make. Children were presented with a random mix of 100 upper case and lower case letters of the alphabet, and asked to identify what sounds those letters make. Only letter sounds, not letter names, constituted correct answers. The test was timed at 60 seconds; the result of the test was a number of letters pronounced correctly.
4. *Familiar word reading* assessed children's skill at reading high-frequency words. Recognizing familiar words is critical for developing reading fluency. In this timed subtask, children were presented a chart of 50 familiar words. Children were asked to read as many words as they could. The subtest was timed within 1minute and yielded a score of correct words per minute.
5. *Oral passage reading* assessed children's fluency in reading a passage of a simple text aloud and their ability to understand what they had read. The passage was 41-words long and children had 60 seconds to read it. Data collectors marked the accuracy of reading, and the time was captured automatically by the eEGRA software.

⁴ The eEGRA tool is found in Annex 2.

6. *Reading comprehension*: After the children finished reading the oral reading passage, or the minute ended, the passage was removed and children were asked six questions about specific facts in the passage they just read.
7. *Dictation* section was designed to assess children’s skill at spelling and basic writing rules, such as capitalization, punctuation, text direction, and spacing between words. The data collector read a short sentence to the children and children attempted to write the sentence. The data collector scored the dictation results after the child was finished with the test.

Table 2 summarizes test subtests with the number of tasks and whether they were timed.

Table 2. EGRA Subtest Summary

#	Description (Instrument)	Tasks	Data reported	Timed
1	Listening Comprehension	5 questions	Percent correct: number correct/5*100	No
2	Letter Naming	100 letters	Percent correct	Yes (60 sec.)
3	Letter Sound Knowledge	100 letters	Percent correct	Yes (60 sec.)
4	Familiar Word Identification	50 words	Percent correct: number correct/50*100	Yes (60 sec.)
5	Passage Reading	41 words	Percent correct: number correct/ 41*100	Yes (60 sec.)
6	Oral Reading Comprehension	6 questions	Percent correct: number correct/6*100	No
7	Dictation (spelling): 8 words, each up to 2 points	8 words, up to 16 points	Percent correct: number correct/16*100	No

Student Assessment Reliability Analysis. A statistical analysis of test reliability is used to describe an internal consistency of the test, and is based on the correlations between different items (subtests). Internal consistency of the test is measured with Cronbach’s alpha which is the result of pairwise correlations between items. Chronbach’s alpha ranges from zero to 1, where zero denotes an absence of any correlation across items on the test, and 1 denotes a perfect correlation across items. A typical and acceptable range for Chronbach’s alpha is above .8. A good internal consistency of a literacy assessment means that a child who scores higher on some items would also score higher on other items in the test.

A reliability analysis of EGRA found that the test reliability was moderate, with the Cronbach’s alpha of .736, which is just a little below the recommended .8 or above. The item level analysis showed that listening comprehension did not correlate well with other items. If we remove it from the test, the

Cronbach’s alpha will go up to .752. Another poorly correlated item was letter sounds. Removing letter sounds from the test would increase test reliability to .748 Remaining items correlated well with the rest of the test.

Table 3. EGRA Reliability

EGRA Subtests	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. Listening comprehension	.263	.752
2. Letter naming	.614	.660
3. Letter sound knowledge	.252	.748
4. Familiar word reading	.657	.680
5. Oral passage reading	.620	.661
6. Reading comprehension	.520	.720
7. Dictation	.603	.680

Data Analysis

All collected data were cleaned by EDC research and evaluation staff, and analysed using standard statistical techniques such as univariate and bivariate statistics, as needed for different analytical purposes. The results were disaggregated by sex and state, as appropriate. Central tendency analysis (e.g. mean, median) were conducted for continuous demographic variables. Comparison of means statistical tests (independent samples *t*-test) were conducted to estimate differences between groups such as state and gender, where appropriate. Bivariate statistical analyses (e.g., correlations) were conducted to examine the relationship between different variables.

Limitations

The biggest limitation of the assessment is non-random selection of schools. The schools from which the assessment participants were drawn were selected to receive SSTEP intervention. The selection of these schools was non-random; schools were selected based on their accessibility, as well as their willingness to participate in the intervention. Thus, the extent to which the student population of the study schools is representative of the wider population of the four states where the assessment took place is unknown.

Description of Baseline Participants

Demographic characteristics of study participants

The baseline study included 522 students randomly selected from second grade classrooms in 33 schools (11 in Central Equatoria, 8 in Eastern Equatoria, 9 in Jonglei, and 6 schools in Lakes). As the graph below demonstrates, more participants in the sample came from Central Equatoria and from Jonglei than from Eastern Equatoria and Lakes. Gender balance was in place.

Figure 1. Study participants, by state

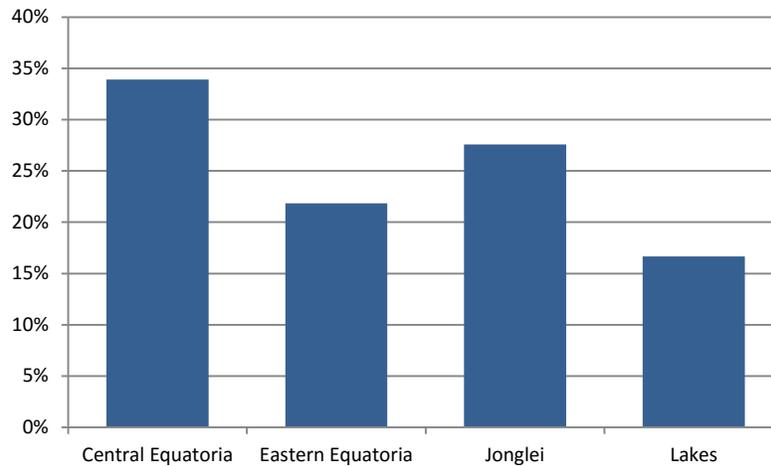
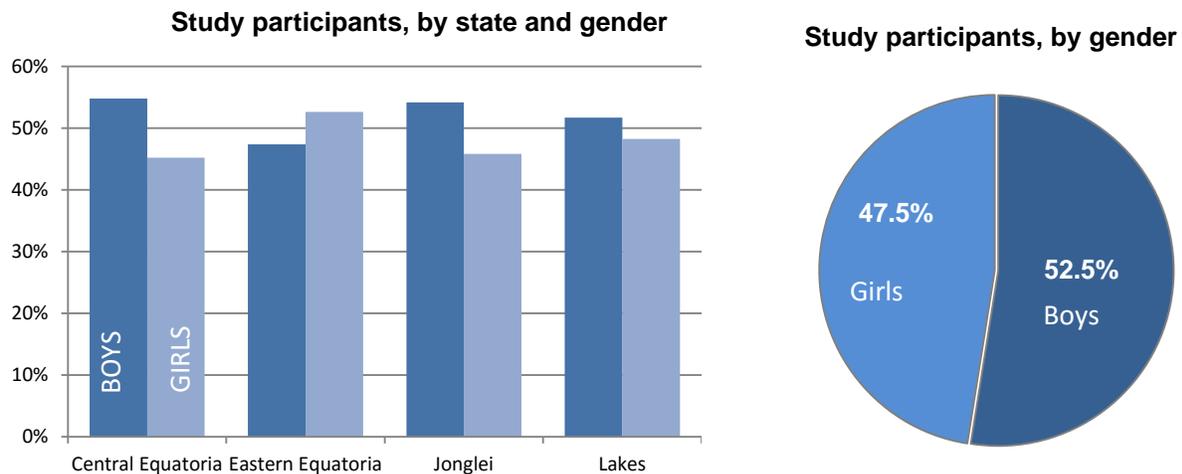


Figure 2. Study Participants by state and gender (n = 522)

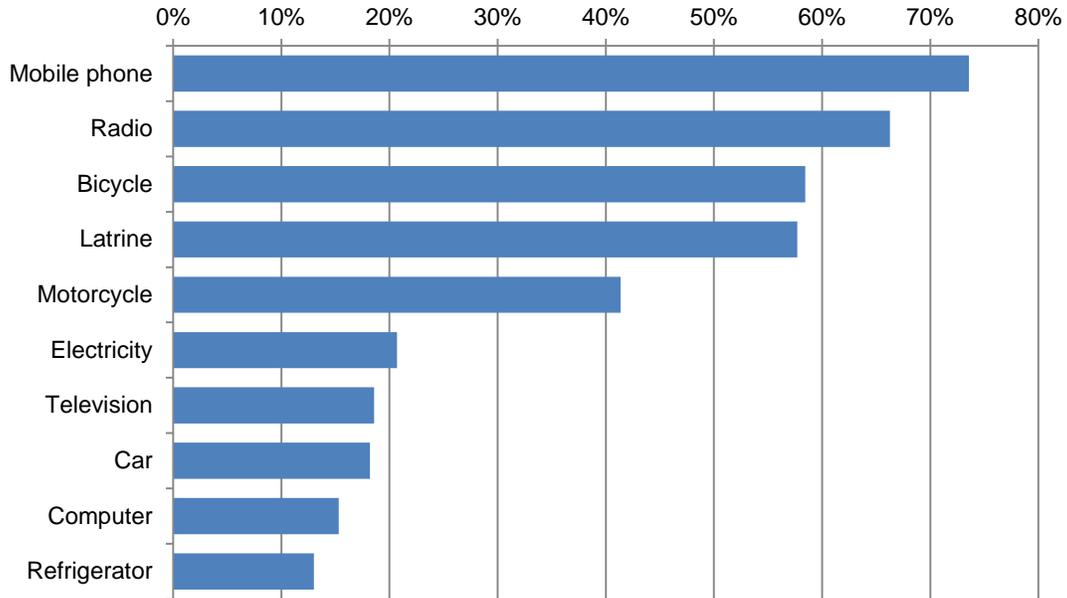


Although all students were selected from the second grade, students ranged in age from five to 19 years old. The median age for both boys and girls was 10 years old.

Socio-economic status of families of participants

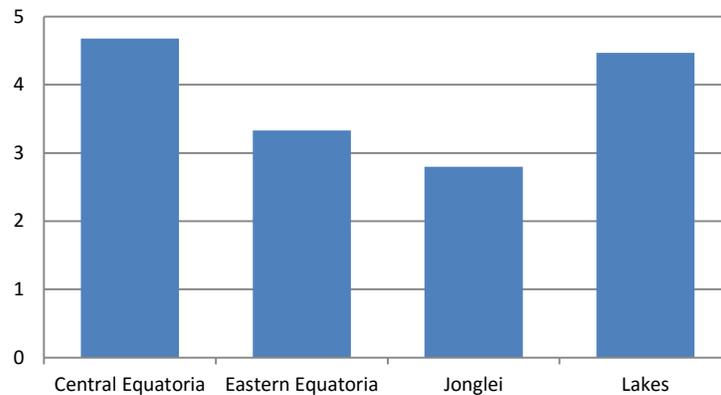
Following the assessment, students were asked a series of questions about assets at home, language spoken at home and school, and about literacy support they receive at home⁵. Reports of household items are commonly used as a proxy for the household income as well as an overall socio-economic status. A mobile phone and a radio were most frequently reported as household possessions by participating students.

Figure 3. Does your family have a...?



Students from different states reported having different number of items from the list. Students from Jonglei reported having about 40% fewer assets at home compared to students from Central Equatoria and Lakes.

Figure 4. Average Number of Household Items (from the list of 10)



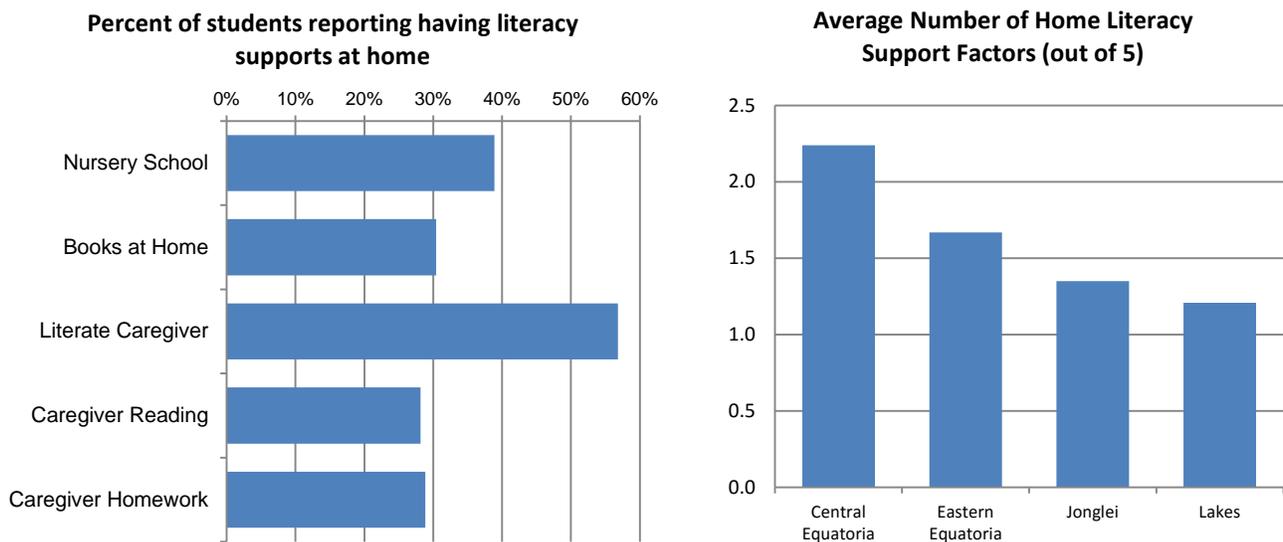
⁵ The context survey is found in Annex 2.

Home support for literacy

Home support for literacy is widely regarded as one of the main predictors for student success with reading. Early exposure to print as well through a preschool is also associated with academic achievement. Therefore, the context questionnaire asked whether students went to nursery schools, whether their parents were literate, if they had books at home, and if their caregivers were ever reading to them or helping them with homework.

Overall, the survey found that fewer than one student in three said they had books at home and their caregivers were reading to them and helping them with homework. Over half of students said they had a caregiver who was literate. Nearly 4 out of 10 students said they attended a nursery school prior to going school. Disaggregation by state found that students from Central Equatoria and Eastern Equatoria reported more home literacy support factors than students from Jonglei and Lakes.

Figure 5. Literacy support factors at home (n=522)

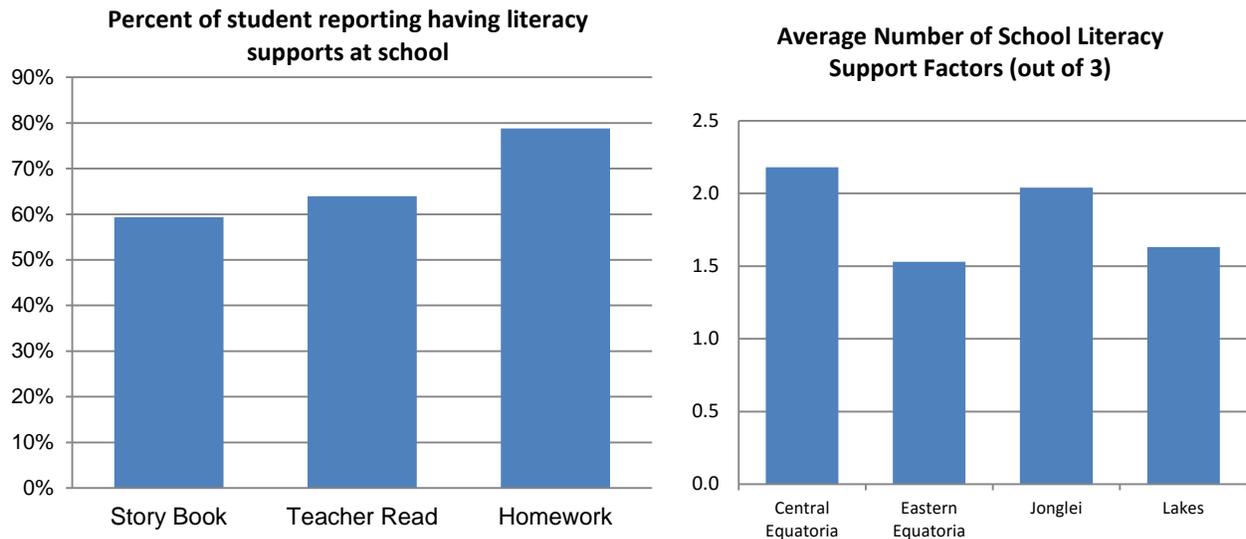


School quality

Finally, the student context questionnaire asked about student experiences while at school, whether they have access to story books in their class, whether teachers ever read story books to them, and if teachers give them homework. Six out of ten students said they have access to story books in school, and that teachers read stories to them, and nearly 80 percent of students said they get homework.

Disaggregated by state, the data shows no dramatic differences across states, although the average number of school literacy support factors reported by students from Central Equatoria and Jonglei was a little higher than the average number of literacy school factors reported by students from Eastern Equatoria and Lakes.

Figure 6. Literacy support factors at school (n=522)



The composites for each of three sections of the context survey were created. Composites for socio-economic status, home support for literacy and school quality were computed by adding the values for each variable in the range of questions relating to the area. All variables were given the same weight.

The composite for the socio-economic status included questions about 10 assets in the student’s family possession. The composite for the home support for literacy included five questions about literacy of the primary caregiver, books at home, caregiver reading to student at home, caregiver helping with homework, and attending nursery school. The composite for the school quality included three question about the availability of story books to read at school, teacher reading stories, and teacher giving homework.



Data analysis found moderate to significant correlations between socio-economic status composite, the home literacy support composite, and school quality composite. The correlations are statistically significant at $p < .001$ level. The following table shows the correlation values.

Table 4. Correlations between literacy support variables and socio-economic status (n=522)

	School quality	Home support	Socio-economic status
School quality	1		
Home support for literacy	.384	1	
Socio-economic status	.271	.340	1

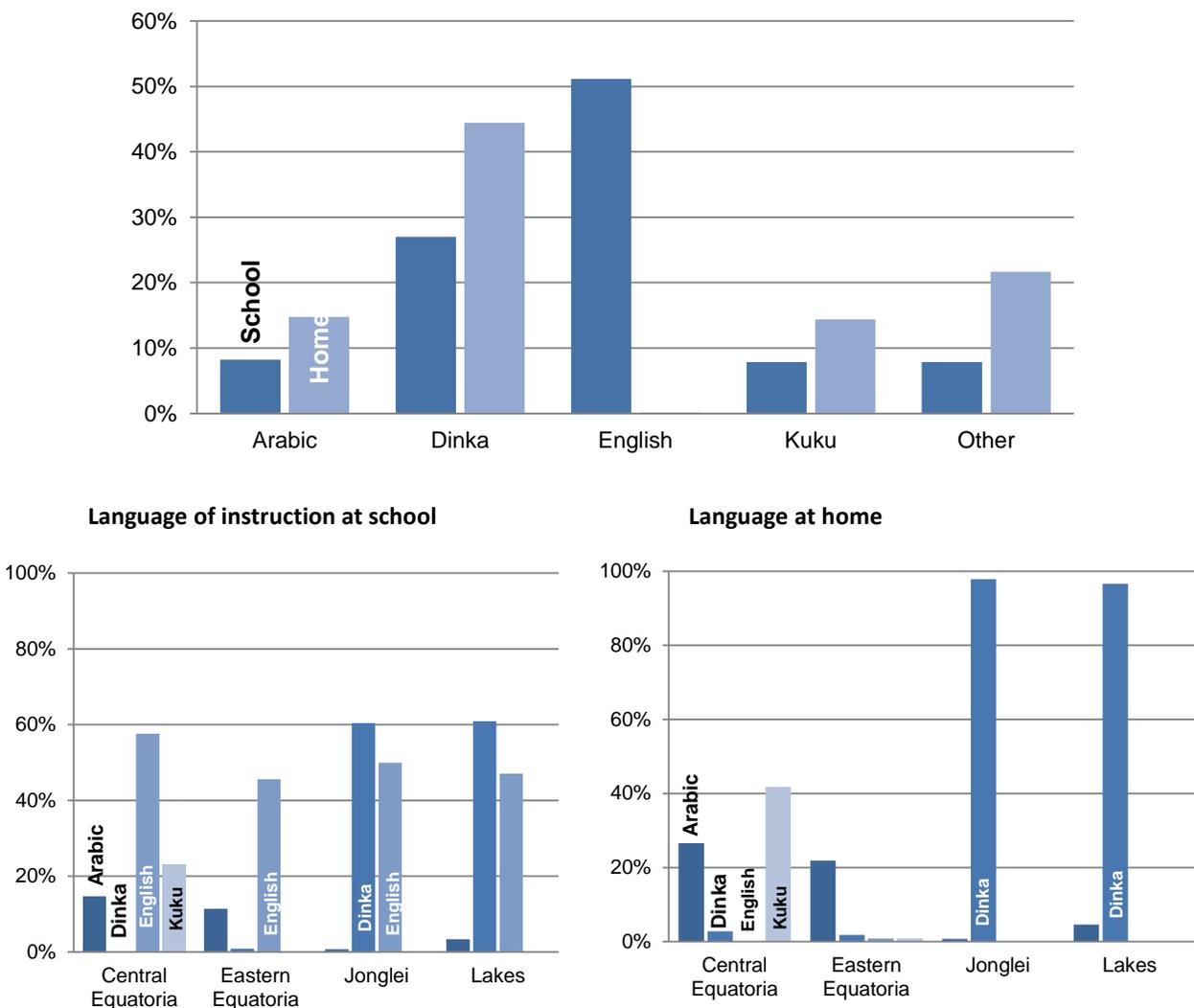
These correlations suggest that families with higher level of literacy have more assets in their possession, and they also send their children to schools that are better equipped to teach students literacy.

Language

Students reported using different languages at home and at school. While over half said that English is spoken at school, only one student said they also speak English at home. More students spoke Arabic, Dinka, and Kuku at home than in school.

Disaggregation by state showed that student in different states reported speaking different languages at home and at school.

Figure 7. Languages spoken at home and at school



Students also indicated other languages spoken both at school, including Bari, Logoiyo, Lulubwa, Acholi, and Madi. Additional languages spoken at home included Madi, Nuer, Lotuko, Utoku, Kakwa, and Moro. Many children indicated more than one language spoken at school and at home.

Nearly a quarter of schools in Eastern Equatoria had other languages of instruction, including Madi, Acholi, and Langu. In the same state, half of the sampled students said they spoke a language at home other than Arabic, Dinka, English or Kuku. Those languages were Otuho, Acholi, Lango, Lotuko, Ukuto, and Madi. Students in Central Equatoria speak predominantly Arabic, English and Kuku. Both Jonglei and Lakes have predominantly Dinka-speaking population, and the instruction in school occurs in both English and Dinka.



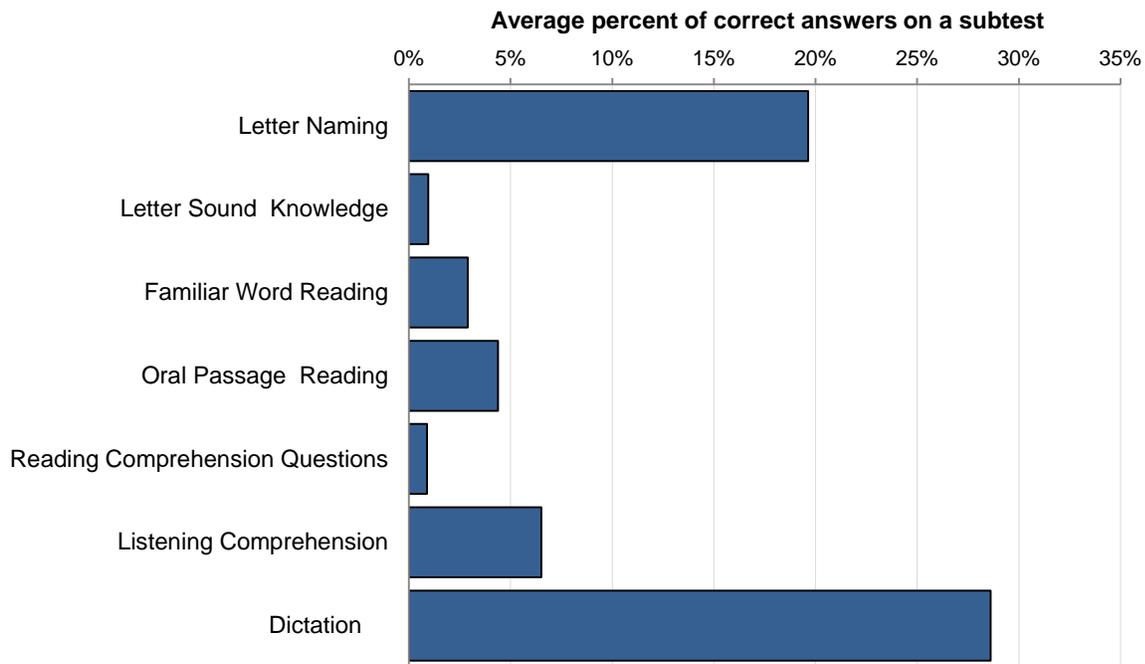
EGRA FINDINGS

Overall Findings

As part of the study, 522 second grade students were tested in basic literacy skills using an adapted Early Grades Reading Assessment (EGRA), administered in English by trained assessors. The data analysis showed higher achievement in some EGRA subtests, and lower achievement in subtests that have not been traditionally a part of the reading curriculum in South Sudan. The figure below shows that dictation and letter naming had the highest proportion of correct responses. Students demonstrated very low achievement on all reading and comprehension subtests, as well as letter sound knowledge.

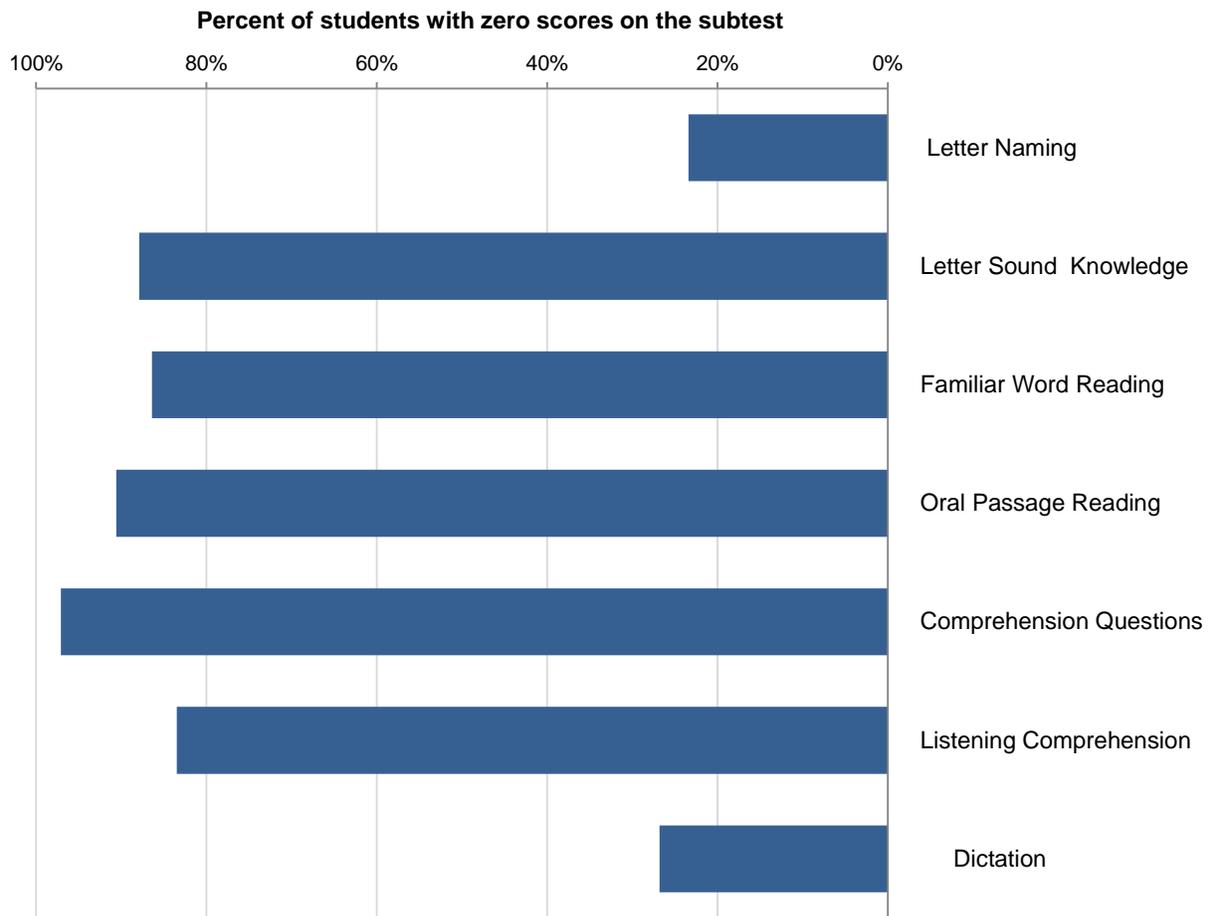
The results presented in Figure 8 shows the average percent correct achieved by tested students on each of the seven EGRA subtests.

Figure 8. Overall EGRA Results (n=522)



The vast majority of students had zero scores on most subtests. The two subtests where fewer than 30 percent of students scored zero were letter naming and dictation. Over 80 percent of students scored zero on the remaining five subtests.

Figure 9. Percent of students with zero scores on EGRA subtests (n=522)

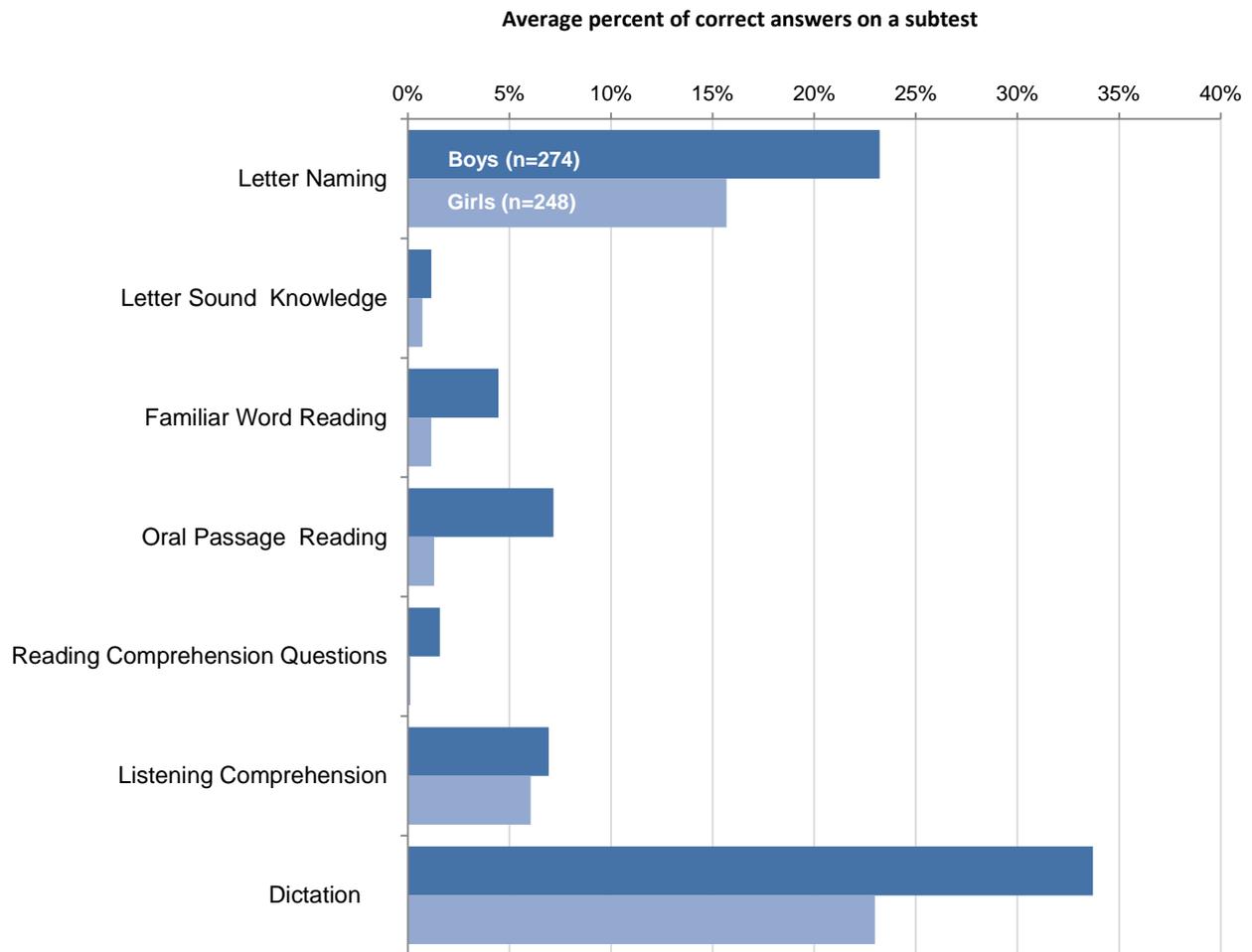


The Annex contains tables with details of the descriptive analysis of EGRA subtest data, including percentage of students with zero and non-zero scores, and EGRA results for students with non-zero scores. It also includes disaggregation by gender and state.

Summary of Findings by State and Gender

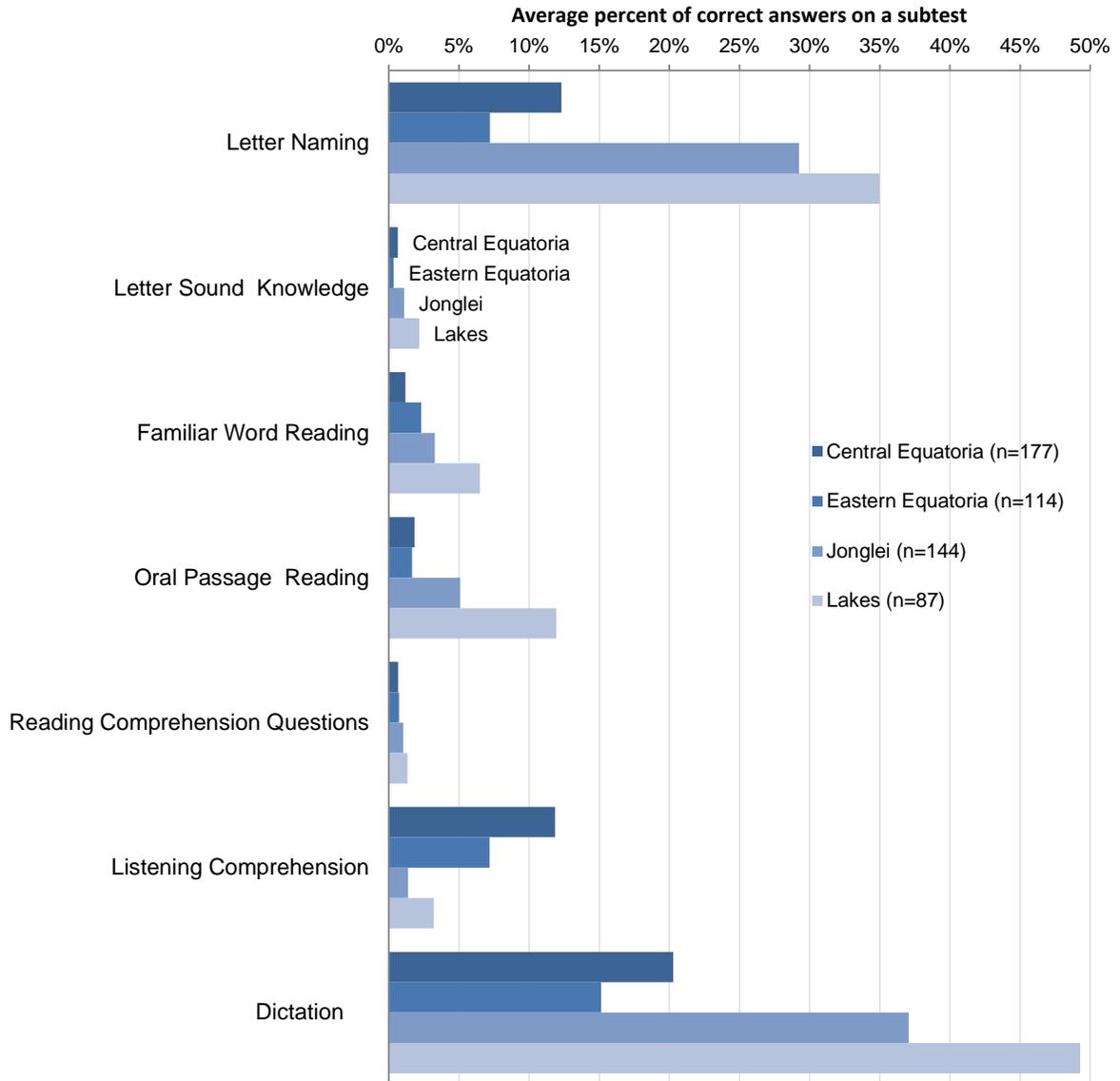
Boys on average demonstrate better results than girls. The difference is statistically significant at $p < .001$ level for all tests but two: in listening comprehension and in letter sound. Across five other tested areas, boys demonstrated, on average, significantly better proficiency than girls.

Figure 10. Overall EGRA results, by gender



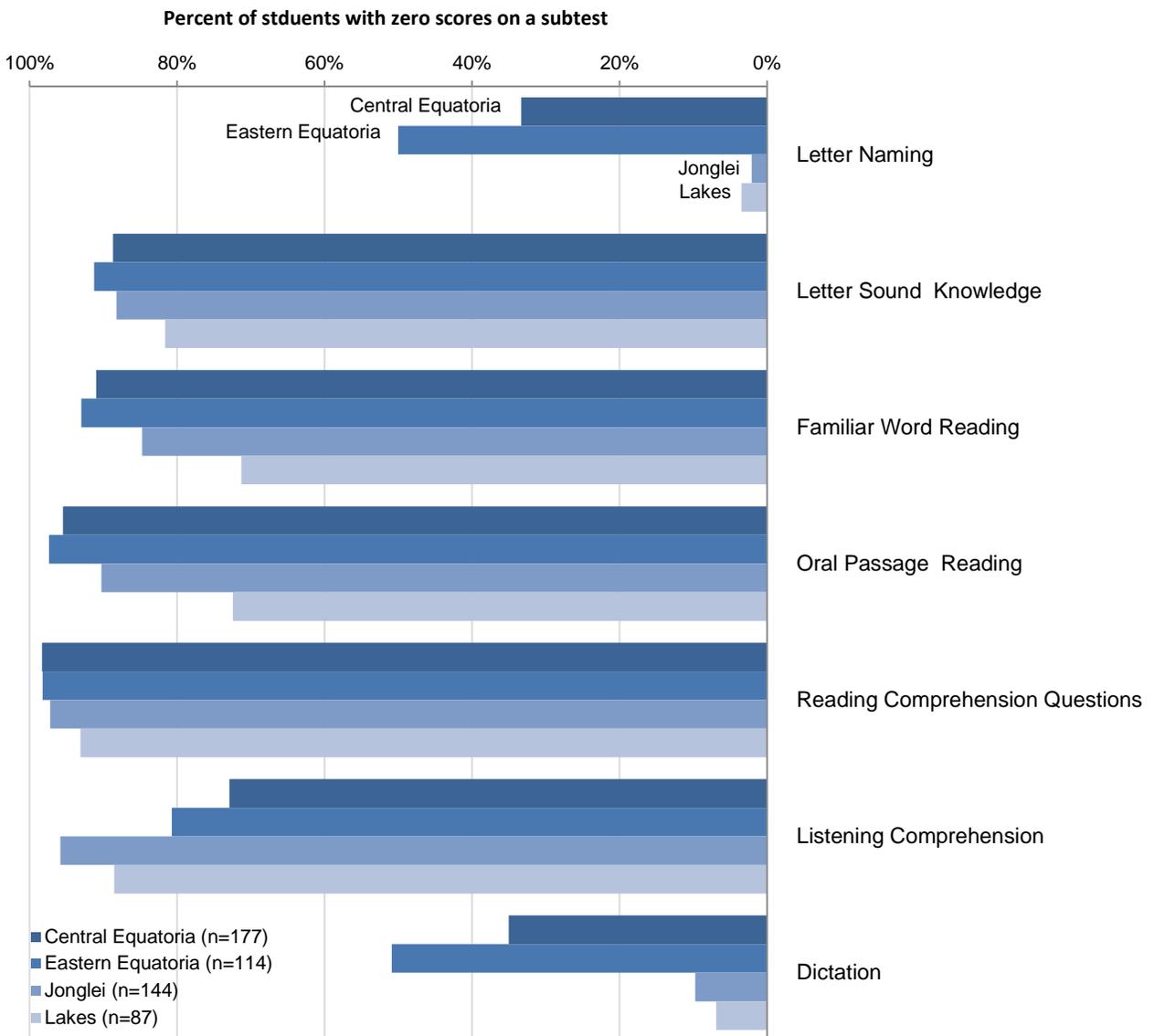
Students from different states demonstrated varied degrees of proficiency. Students from Lakes performed better than student from other states, and students from Eastern and Central Equatoria scored lowest on all subtests except one: listening comprehension. On most other subtests students from these two states averaged just above zero. Dictation was one exception: students averaged between 15 and 50 percent correct.

Figure 11. Summary EGRA results, by state



Proportion of students with zero scores was rather similar across the four project states, but generally fewer students from Lakes had zero scores:

Figure 12. Percent of students with zero scores on EGRA subtests, by state



To help better understand the patterns of student achievement, the next sections of the report present results for each of the subtest, as well as disaggregation by gender and province for each subtest.

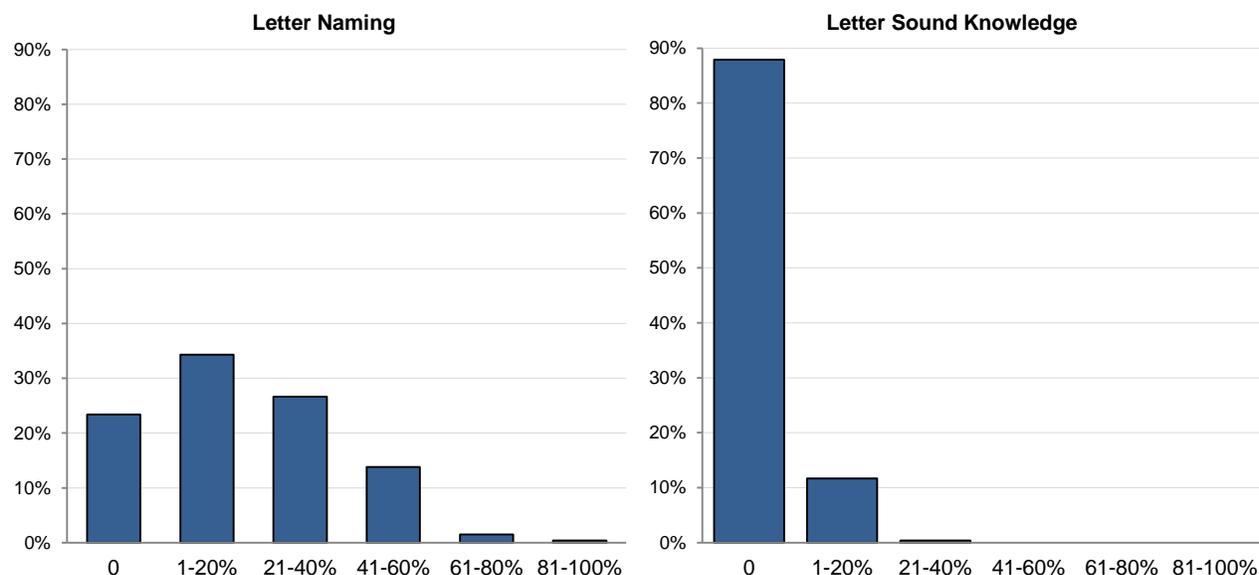
Letter Naming and Letter Sound Knowledge

To identify how well students are familiar with the English alphabet, students were asked to read the letters of the alphabet, presented out of order (100 letters total). Some letters were upper case letters, and some were lower case letters. The number of correct letters named ranged from zero to 99, with the mean of 19.6. Fluency of letter naming per minute ranged from zero to 103.8, with the mean of

19.7. As the graph below shows, over half of the students named correctly fewer than 20 percent of the letters on the test.

On the **letter sounds subtest** (total 100 letters), number of correct answers ranged from zero to 22 letters sounded correctly, with a mean of 1 letter. Nearly 9 out of 10 students failed to identify correctly a single letter sound. These results show that students, by and large, are unfamiliar with this skill.

Figure 13. Letter Sound Subtest Results (n = 490)

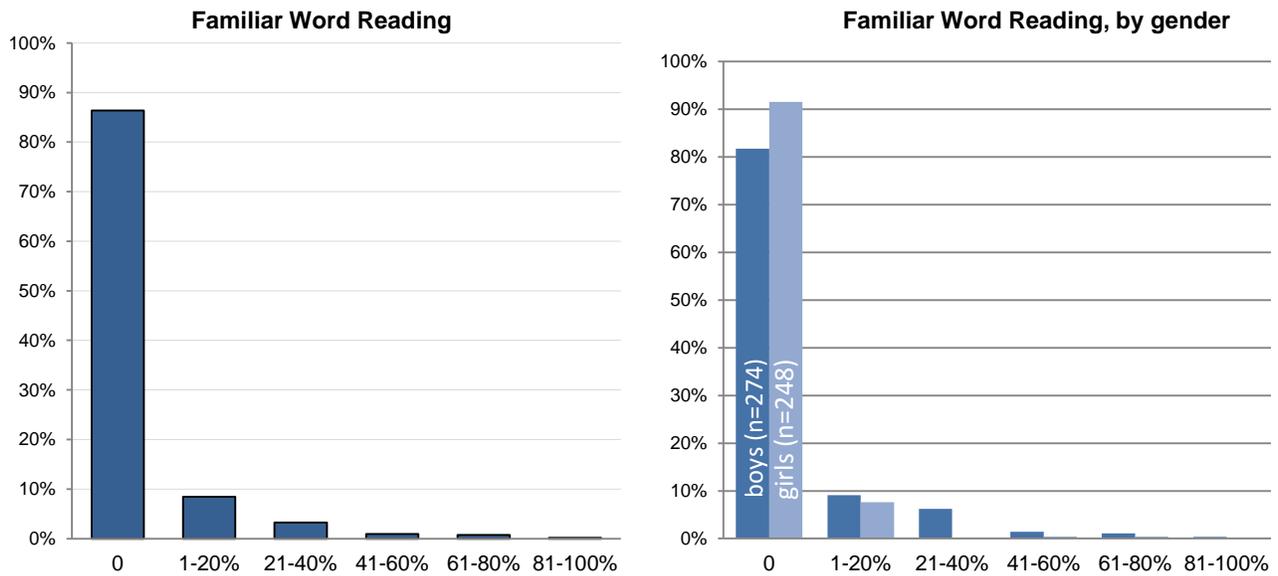


Familiar Word Identification

On the **familiar word identification** (total possible 50 words), responses ranged from zero to 44 familiar words read correctly with a mean of 1.4 words. The graph below shows that the distribution of scores. Students were timed on the responses. Since all students used up the entire minute, the fluency of correct familiar words read per minute is as the same as the mean – 1.4 word per minute.

Disaggregation by gender showed that 10 percent more girls had a zero score on this subtest, compared to boys.

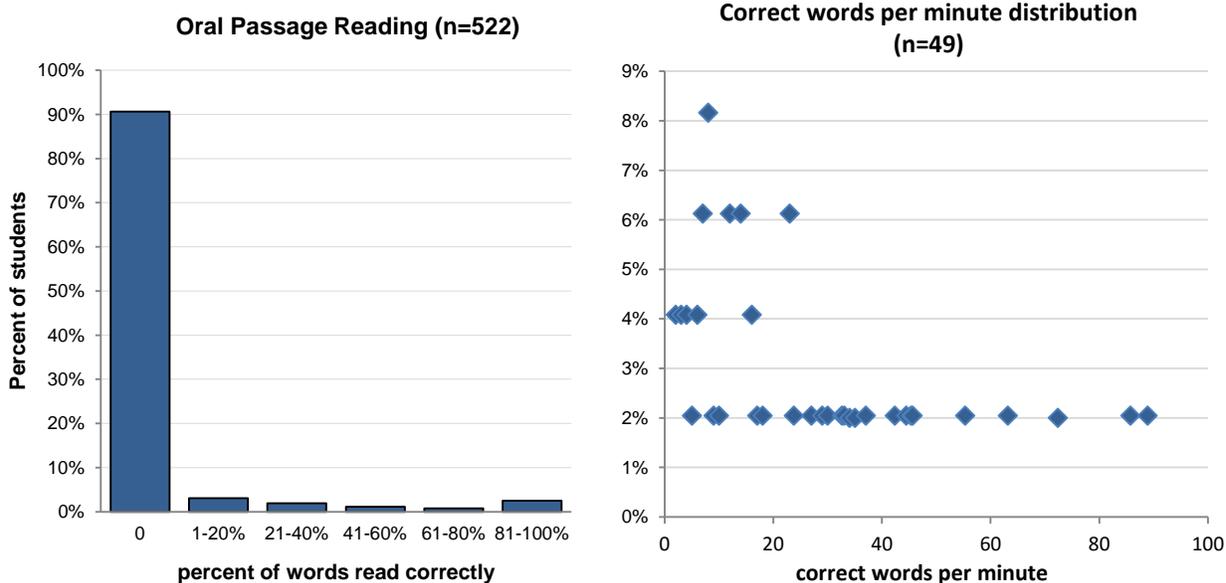
Figure 14. Familiar Word Identification Subtest Results (n = 490)



Oral Passage Reading and Comprehension

On the **passage reading and comprehension**, students were scored on the words they read correctly in a grade level passage (total possible 41) and on their reading comprehension (total possible 6). Student responses ranged from zero to 41 (100 percent correct), with a mean of 1.7 words. Students were timed on the responses. The amount correct was divided by the seconds it took to answer and then multiplied by 60 seconds to find the letter sounds correct per minute. This ranged from zero to 88.9 words per minute, with a mean of 2.19 words correct per minute. The results presented in the graph below show that over nine in ten students could not read a single word in the passage within the allocated one minute. The results of the fluency analysis among students with non-zero scores showed that only 15 out of 522 tested students (2.9 percent of the sample) could read fluently (over 30 correct words per minute) and with accuracy, and only three of the 15 were girls.

Figure 15. Oral Passage Reading Subtest Results

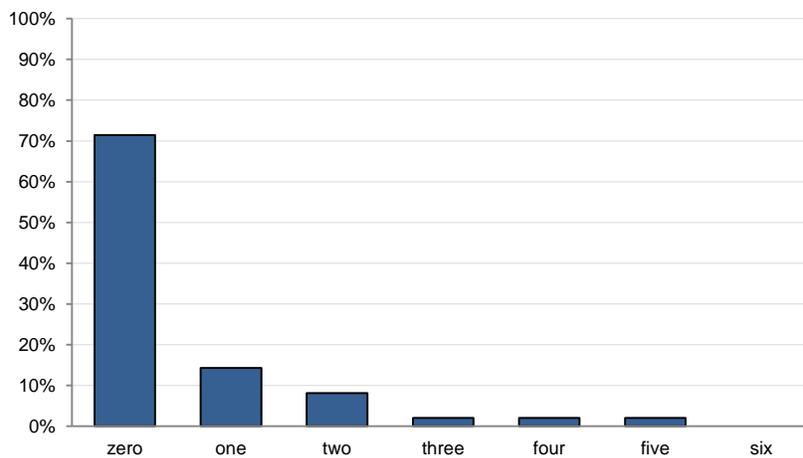


Reading Comprehension

Students who were able to read at least one word of the oral reading passage were asked six questions about the passage they read to check for comprehension. The total number correct ranged from zero to five, with a mean of .5 (9.1%).

Only 13 students read 80 percent of the text or more. Among those, the mean of the correct reading comprehension answers was 1.2 out of 6 (19.2%). Seven students (all girls) failed to answer a single question, one student answered 1, three students answered 2 questions, 1 student answered 3 questions and 1 student answered 5 questions. Not a single student answered all six comprehension questions.

Figure 16. Reading comprehension results among students who read at least one word (n = 49)

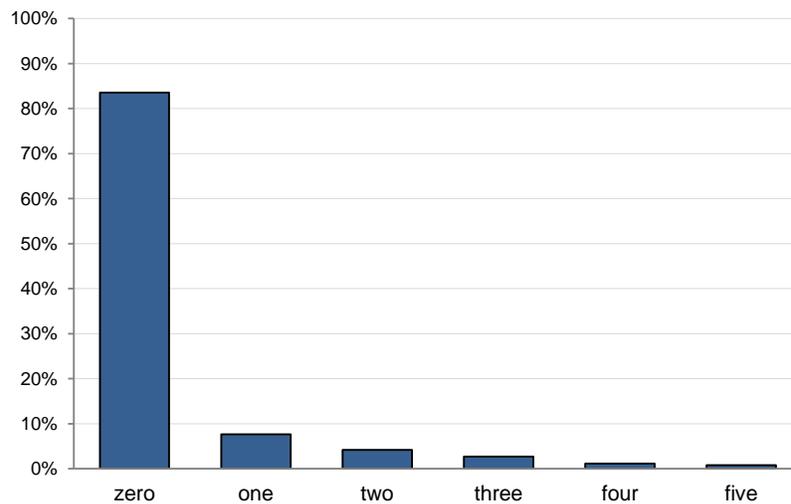


Reading comprehension results were found to be positively correlated ($r=.127$) with the socio-economic status composite that included ten assets in family possession and served as a proxy for family income. The correlation was found to be statistically significant at $p<.01$ level.

Listening Comprehension

On the **listening comprehension subtest**, students were read a passage and asked five comprehension questions. Total number correct ranged from zero to five, with a mean of .3. More than four in five students did not answer a single question. The results for the listening comprehension were similar across both genders.

Figure 17. Listening Comprehension Results



Listening comprehension results were found to be positively correlated with school quality composite ($r=.271$), home support for literacy composite ($r=.265$), and socio-economic status composite ($r=.237$). All correlations were found to be statistically significant at $p<.001$ level. This finding is consistent with the general research on literacy that finds that print-rich environment and explicit focus on oral language development such as reading stories at school or at home are associated with higher vocabulary among students.

Dictation

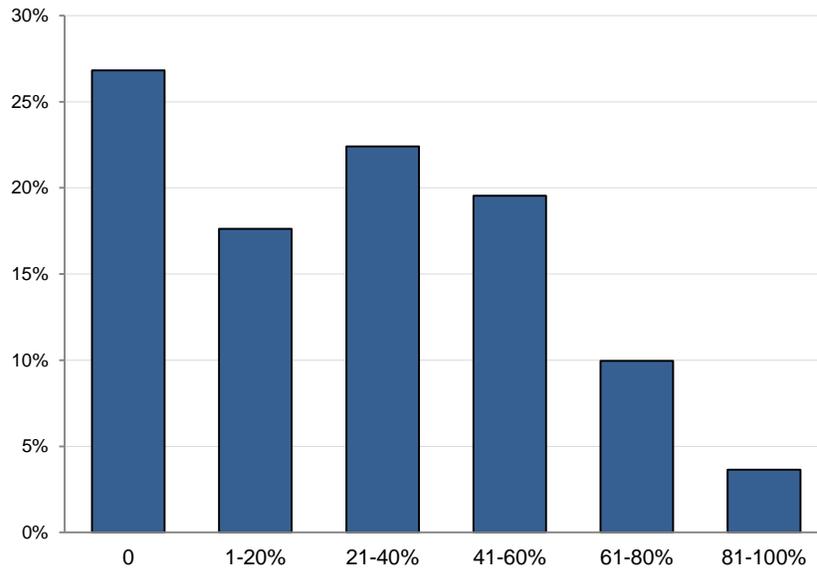
On the **dictation** (total possible 16 points), students were read a short sentence (“Look at the cow and the dog by the river.”) and asked to write the sentence on a piece of paper. The administrators read the sentence again in short parts after the first reading, to help the students remember what to write, and then again to help students check their work. Students wrote the words on the paper. Dictation scores were broke up into two subtests:

- Number of words spelled correctly, our of four (“look”, “cow”, “dog” and “river” (total possible 8 points)

- Other items relating to conventions of text in writing included spacing, text direction, capital letter in the word “Look”, and a full stop (total possible 8 points).

Number of correct answers for the dictation subtest ranged from zero to 16, with a mean of 4.6 (28.6%).

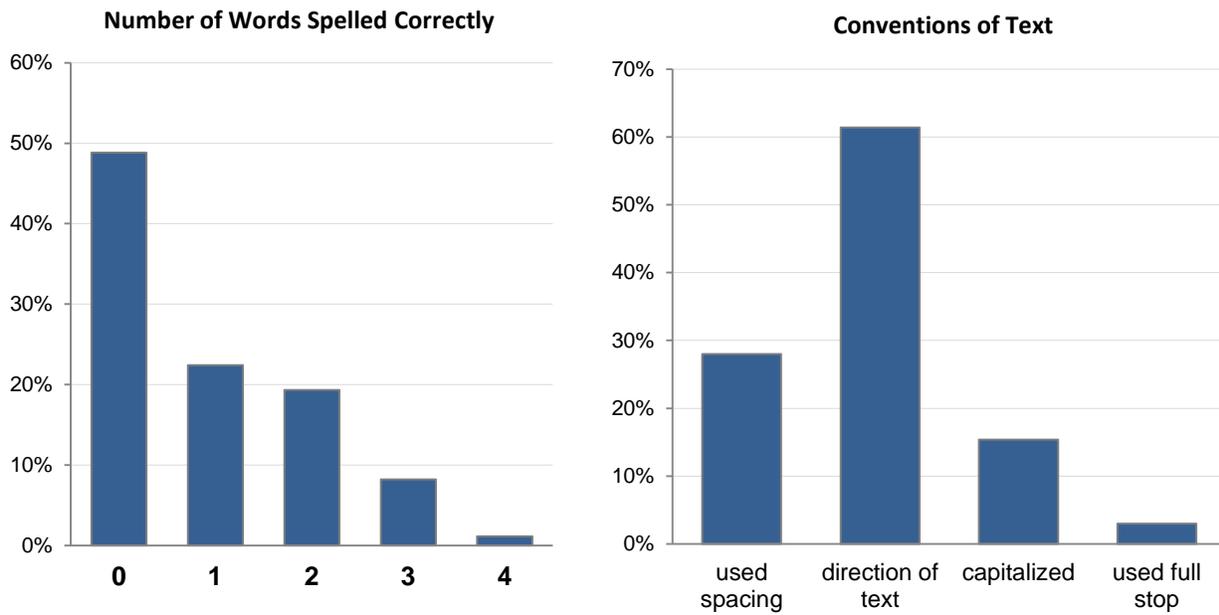
Figure 18. Dictation Subtest Results (n = 522)



Scores for spelling (total possible 8) ranged from zero to 8. The graph below shows the distribution of the number of words with correct spelling that received full points. Only four words in the sentence were scored. Students did the best spelling words “cow” and “dog”. A third of tested students did not spell any words correctly.

Finally, with regard to the conventions of text, most students used spacing and the direction of the text correctly. However, only 15 percent of students capitalized correctly, and very few students used the full stop at the end of the sentence.

Figure 19. Dictation Subtest Results: Spelling and Writing (n = 522)



Dictation results were found to be positively correlated with the school quality composite that included availability of story books, teacher reading stories and teacher giving homework ($r=.127$). The correlation was found to be statistically significant at $p<.01$ level.

Conclusion

The assessment found very poor performance on nearly all literacy subtests among tested students, particularly among girls and students from Central and Eastern Equatoria. Nine out of ten students could not read a single word from the word list or a grade level passage. Although most students could recognize letters of the English alphabet, the majority could not identify the sounds those letters make. Finally, both reading and listening comprehension subtest results showed that students did not possess the vocabulary to understand grade level text.

One subtest on which three-quarters of the tested students performed relatively well was dictation. The majority of students demonstrated some familiarity with the conventions of text, such as the direction of the written text. About a half of students could spell at least one out of four words correctly. Dictation results were found to be positively associated with the school quality composite.

A subtest that was found to have moderate association with home literacy support, school quality and socio-economic background of the student was listening comprehension. Listening comprehension measures student's vocabulary and ability to pay attention to the story and recall details to be able to answer comprehension questions. Although the overall performance on this subtest was poor with over 80 percent of students scoring zero on comprehension questions, positive correlation between the subtest results and literacy supports in child's environment supports current research on literacy that emphasizes the importance of such supports for the oral language development. Targeted programming to develop both home and school literacy supports will ensure learning gains among South Sudanese children.



Annex 1. Detailed Results for EGRA Subtests

Descriptive statistics for EGRA subtests (n=522)					
Subtest	All students		Percent of students with zero scores	Students with scores above zero	
	Mean	SD		Mean	SD
Letter Naming	19.64	18.60	23.37	25.57	17.29
Letter Sound Knowledge	0.95	3.25	87.93	7.43	5.88
Familiar Word Reading	2.89	10.37	86.4	20.38	20.14
Oral Passage Reading	4.38	16.71	90.61	44.00	32.79
Comprehension Questions	0.89	6.22	97.13	29.17	21.52
Listening Comprehension	6.51	17.41	83.52	39.53	23.16
Dictation	28.62	25.20	26.82	39.10	21.38

Descriptive statistics for EGRA subtests, by gender						
Gender	Subtest	All students		Percent of students with zero scores	Students with scores above zero	
		Mean % correct	SD		Mean % correct	SD
Boys (n=274)	Letter Naming	23.22	20.17	20.44	29.19	18.35
	Letter Sound Knowledge	1.16	3.58	85.77	7.95	5.88
	Familiar Word Reading	4.46	12.73	81.75	24.44	20.12
	Oral Passage Reading	7.17	20.66	85.04	45.72	31.15
	Comprehension Questions	1.58	8.29	94.89	28.89	22.24
	Listening Comprehension	6.93	17.21	81.39	37.25	21.55
	Dictation	33.71	27.70	24.09	44.41	23.12
Girls (n=248)	Letter Naming	15.69	15.83	26.61	21.26	14.87
	Letter Sound Knowledge	0.73	2.83	90.32	6.67	5.92
	Familiar Word Reading	1.15	6.46	91.53	11.92	17.75
	Oral Passage Reading	1.30	9.94	96.77	35.77	40.81
	Comprehension Questions	0.13	2.12	99.6	33.33	0.00
	Listening Comprehension	6.05	17.65	85.89	42.86	25.27
	Dictation	22.98	20.76	29.84	32.76	17.12

Descriptive statistics for EGRA subtests, by state						
State	Subtest	All students		Percent of students with zero scores	Students with scores above zero	
		Mean % correct	SD		Mean % correct	SD
Central Equatoria (n=177)	Letter Naming	12.32	15.14	33.33	18.47	15.17
	Letter Sound Knowledge	0.64	2.28	88.70	5.65	4.3
	Familiar Word Reading	1.18	4.91	90.96	11.56	11.09
	Oral Passage Reading	1.83	9.79	95.48	40.55	24.84
	Comprehension Questions	0.66	5.72	98.31	38.89	25.46

	Listening Comprehension	11.86	23.19	72.88	43.75	24.29
	Dictation	20.27	21.5	35.03	31.20	19.23
Eastern Equatoria (n=114)	Letter Naming	7.2	12.75	50.00	14.16	14.9
	Letter Sound Knowledge	0.33	1.79	91.23	3.17	4.8
	Familiar Word Reading	2.3	10.75	92.98	29.11	27.46
	Oral Passage Reading	1.67	11.51	97.37	38.05	44.86
	Comprehension Questions	0.73	5.61	98.25	41.67	11.79
	Listening Comprehension	7.19	17.87	80.70	37.27	23.34
	Dictation	15.13	19.18	50.88	30.80	16.25
	Jonglei (n=144)	Letter Naming	29.24	16.35	2.08	29.86
Letter Sound Knowledge		1.1	3.38	88.19	8.32	5.25
Familiar Word Reading		3.28	11.65	84.72	21.45	22.72
Oral Passage Reading		5.1	18.47	90.28	48.94	34.42
Comprehension Questions		1.04	7.69	97.22	37.50	31.55
Listening Comprehension		1.39	8.07	95.83	33.33	24.22
Dictation		37.07	22.44	9.72	41.06	19.82
Lakes (n=87)	Letter Naming	34.98	16.18	3.45	36.23	15.01
	Letter Sound Knowledge	2.17	5.29	81.61	11.81	6.22
	Familiar Word Reading	6.51	14.28	71.26	22.64	18.71
	Oral Passage Reading	11.94	25.92	72.41	43.29	33.11
	Comprehension Questions	1.34	5.22	93.10	16.67	9.62
	Listening Comprehension	3.22	9.58	88.51	28.00	10.32
	Dictation	49.28	25.39	6.90	52.93	22.30

Annex 2. eEGRA Tool

Microsoft Excel - eEGRA_English_2 01 Sudan Version -06172013 Final [Read-Only]

EDC develops, delivers, and evaluates programs to address urgent challenges in **education, health,** and **economic development.**



building communities

Exit

eEGRA: English Version 2.02

SECTION I: BACKGROUND

Pupil Name First: Last:

Pupil Info. ID: Class: Age:

Gender Male Female Consent Provided

Teacher Name* First: Last:

School Location* State: County:

School:

EGRA Administrator* First: Last:

Date Started Day: Month: Year:

Start Time Hour: Minute: am pm

Supplemental Reporting Codes Label:

Component 1: Listening Comprehension



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 you can. Do you understand?

Mary is hungry. Mary has no food. Mary walks to the market to buy food. Mary drops her money in the market. The money is lost. She cries. She tells her auntie. Auntie gives Mary some food. Mary is happy.

	correct	incorrect	no response
1. Where does Mary go to buy food? [<i>market</i>]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. How does Mary lose the money? [<i>drops it</i>]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Why did Mary cry? [<i>She lost the money / She was hungry / She could not buy food</i>]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Who gave Mary food? [<i>auntie</i>]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Why did Auntie give food to Mary [<i>any reasonable answer</i>]	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Component 2: Letter Name Knowledge



Here is a page full of the alphabet. Please tell me the NAMES of as many letters as you can-not the SOUNDS of the letters, but the names.

For example, the name of this letter [point to A] is "A"

Let's Practice: tell me the name of this letter [point to V]:

*if the child responds correctly say: **Good, the name of this letter is "VEE."***

*if the child does not respond correctly, say: **The name of this letter is "VEE."***

Now try another one: tell me the name of this letter [point to L]:

*if the child responds correctly say: **Good, the name of this letter is "ELL."***

*if the child does not respond correctly, say: **The name of this letter is "ELL."***

Do you understand?

When I say "Begin", name the letters as quickly and carefully as you can. Start here and continue this way. [Point to the first letter on the row after the example and draw your finger across the first line]. If you come to a letter you do not know, I will tell it to you. Otherwise, I will keep quiet and listen to you. Ready? Begin.

6. Total letters read:

7. Number of incorrect letters read:

8. Time remaining (number of SECONDS):



Component 2 Status: Discontinued

Not attempted

Component 3: Letter Sound Knowledge



Here is a page full of the alphabet. Please tell me the SOUNDS of as many letters as you can-not the NAMES of the letters, but the SOUNDS.

For example, the sound of this letter [point to A] is /æ/ as in "APPLE" or /eɪ/ as in "AGE".

Let's Practice: tell me the sound of this letter [point to V]:

*if the child responds correctly say: **Good, the sound of this letter is /v/.***

*if the child does not respond correctly, say: **The sound of this letter is /v/.***

Now try another one: tell me the sound of this letter [point to L]:

*if the child responds correctly say: **Good, the sound of this letter is /l/.***

*if the child does not respond correctly, say: **The sound of this letter is /l/.***

Do you understand?

When I say "Begin", sound the letters as quickly and carefully as you can. Tell me the sound of the letters, starting here and continuing this way. [Point to the first letter on the row after the example and draw your finger across the first line]. If you come to a letter sound you do not know, I will tell it to you. Otherwise, I will keep quiet and listen to you. Ready? Begin.

9. Total letters sounded:

10. Number of incorrect letters sounded:

11. Time remaining (number of SECONDS):



Component 3a Status: Discontinued

Not attempted

Component 4: Familiar Word Reading



Here are some words. I would like you to read as many words as you can. Do not spell the words, but read them. For example, this word is: "cat".

Let's practice: Please read this word [point to the word "sick"]:

*[If the child responds correctly say]: **Good, this word is "sick".***

*[if the child does not respond correctly, say]: **This word is "sick".***

Now try another one: Please read this word [point to the word "made"]:

*[If the child responds correctly say]: **Good, this word is "made".***

*[if the child does not respond correctly, say]: **This word is "made".***

When I say "begin", read the words as quickly and carefully as you can. Read the words across the page, starting at the first row below the line. I will keep quiet and listen to you, unless you need help. Do you understand? Ready? Begin.

12. Total words in connected text read:

13. Number of incorrect words read:

14. Time remaining (number of SECONDS):



Component 4 Status: Discontinued

Not attempted

Component 5: Oral Passage Reading



Here is a short story. I want you to read it aloud quickly, carefully, and with understanding. When you have finished, I will ask you some questions about what you have read. Do you understand? 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.

Peter is dirty. Peter does not bath. Peter does	9
not like cold water. Peter goes to school dirty.	18
Teacher sends Peter home. Mother is angry with Peter.	27
Mother bathes Peter with cold water. Peter is clean.	36
Peter goes back to school.	41

15. Total words in connected text read:



16. Number of incorrect words read:

17. Time remaining (number of SECONDS):

Component 5 Status:

Discontinued

Not attempted

Component 6: Reading Comprehension



Now, I am going to ask you a few questions about the story you just read. Try to answer each question as well as you can.

	correct	incorrect	no response
18. Why is Peter dirty?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Why doesn't Peter bath?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Why did Peter's teacher send him home?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. What did Peter's mother do?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. Why does Peter go back to school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. Why is mother angry with Peter?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Component 7: Dictation (Not scored with child present)



I am going to read to you a short sentence. Please listen carefully then write the sentence on the sheet of paper in front of you. I will read the whole sentence once. Then I will read it in parts so you can write what you hear. I will then read it again so that you can check your work. Do you understand?

'Look at the cow and the dog by the river.'

	two points	one point	no points
24. Wrote "look" correctly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Wrote "cow" correctly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. Wrote "dog" correctly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. Wrote "river" correctly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Used spacing between words.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	correct (two points)	incorrect (no points)
29. Used appropriate direction of text.	<input type="radio"/>	<input type="radio"/>
30. Used capital letter for the word "Look".	<input type="radio"/>	<input type="radio"/>
31. Used full stop (.) at end of sentence.	<input type="radio"/>	<input type="radio"/>

STOP

Pupil Context Interview

Ask each question verbally to the child, as in an interview. Do not read the response options aloud. Wait for the child to respond, then circle the code of the option that corresponds to the child's response. If there is no special instruction to the contrary, only one response is permitted.

1. At home, do you have: (check all that apply)

- Radio
- Mobile phone
- Electricity
- Frige
- TV
- Computer
- Latrine
- Motorcycle
- Bicycle
- Car/motor vehicle

2. What language do you speak at school?

3. What language do you speak at home?

4. Did you go to nursery school before you started going to school?

- Yes
- No

5. Do you have story books to read at school?

- Yes
- No

6. Does your teacher read [stories] aloud to you in class?

- Yes
- No

7. Do you have story books at home?

- Yes
- No

8. Does your mother, father, uncle or aunty know how to read?

- Yes
- No

9. Does you mother, father, uncle or aunty read stories aloud to you at home?

- Yes
- No

10. Does your teacher give you homework?

- Yes
- No

(If yes) Does your mother, father, uncle or aunty help you to do your homework?

- Yes
- No

Thank you!

Submit to Database