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USAID/Uganda School Health and Reading Program

The Status of Early Grade Reading and Teaching Reading in Primary School: Cluster 3 Baseline Report

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Acronyms

CCT	Coordinating Centre Tutors
CSR	Center for Social Research
DEO	District Education Officer
DES	Directorate of Education Standards
DIS	District Inspectors of Schools
DQA	Data Quality Assurance
EGRA	Early Grade Reading Assessment
ESS	Education and Sports Sector
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IRR	inter-rater reliability
LLBs	Local Language Boards
M&E	Monitoring and Evaluation
MoESTS	Ministry of Education Science Technology and Sports
NAPE	National Assessment of Progress in Education
NCDC	National Curriculum Development Center
ORF	Oral Reading Fluency
P1	Primary One
P3	Primary Three
PTA	Parent–Teacher Association
PTC	Primary Teacher College
RTI	Research Triangle Institute
SIL LEAD	SIL Language Education and Development
SMC	School Management Committee
TDMS	Teacher Development Management System
TIET	Teacher, Instructor Education and Training (Department)
UNEB	Uganda National Examinations Board
USAID	United States Agency for International Development
UPE	Universal Primary Education
WEI	World Education, Inc.

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USAID/Uganda School Health and Reading Program

Executive Summary

Current reading assessment data consistently point to unacceptably low levels of reading achievement among Ugandan primary school learners. Though the results presented here also show very low levels of reading achievement in the early primary grades, the good news is that there is a high level of motivation and support to rectify this situation and that there are “bright spots” from which to build reading reform efforts. These bright spots include a dedicated and committed Ministry of Education Science Technology and Sports (MoESTS), champions in the districts and schools, a primary school timetable that sets aside one hour (the literacy hour) for reading and literacy learning as well as time for English and Oral Literature, and a thematic curriculum that calls for learning predominantly in local languages in the early years of primary school (Primary 1 to Primary 3). This also includes support provided to the MoESTS by the United States Agency for International Development (USAID) through the USAID/Uganda/School Health and Reading Program, which focuses on improving early grade reading in local languages and the transition to reading in English.

This report summarizes the findings from a baseline assessment that was conducted in February and March, 2015 to determine the current status of reading achievement in the “Cluster 3” schools in which the Program is currently working, as well as achievement in control¹ schools that will be used as a basis for comparison in assessing the effectiveness of the interventions going forward.

The baseline assessment sets out to answer the following questions in an attempt to lay the foundation for and support a national literacy policy and subsequent reading program in primary schools nationwide.

- What is the level of reading achievement among P1 and P3² learners in the local language and in English in Ugandan primary schools?
- What is currently happening in P1 reading lessons?
- How are teachers and schools supported to teach reading?
- What should be the focus of future MoESTS and stakeholder support for reading?

As these schools will be assessed annually for the next two years, the data will serve to track the reading gains in schools that have been supported by USAID/Uganda School Health and Reading Program compared to schools that have not received this support.

¹ The student level results for the control schools are not discussed in this baseline report but in the follow up report and in the impact evaluation which is being conducted by an external evaluation team.

² It should be noted that since the assessment took place in the first weeks of the new school term.

Data collection

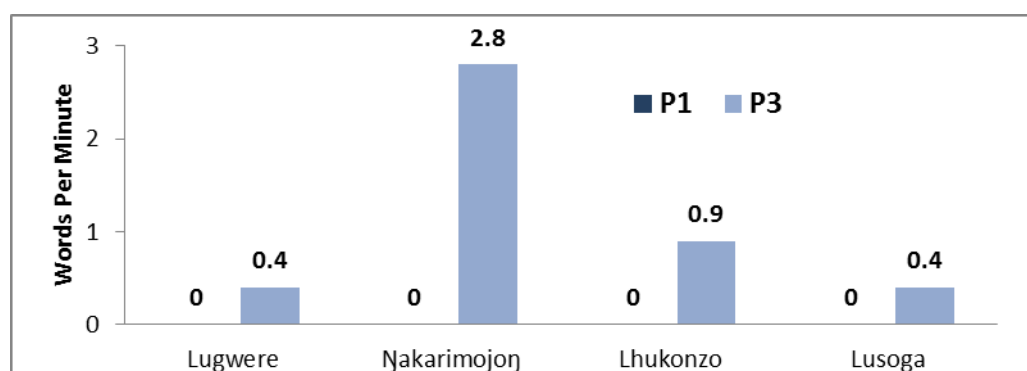
Early Grade Reading Assessment (EGRA) data were collected from 112 randomly selected government primary schools in 9 program districts in Uganda. EGRA data were collected in five languages—Lugwere, Lusoga, Lhukonzo, Ŋakarimojoŋ Ŋakarimojoŋ and English; all learners were assessed in English and in one of the four local languages. Overall, 3,244 Primary 1 (P1) and 1,124 Primary 3 (P3) learners were assessed. In addition to this, 40 P1 reading lessons were observed and 104 teachers and 112 head teachers (or designees in their absence) were interviewed about the support that they provide to teachers in the area of reading.

Findings: Oral reading fluency

Similar to other assessments of reading in Uganda, reading ability was very low. **Figure 1** shows the average local language oral reading fluency rates (words read per minute) achieved by P1 and P3 learners in Program schools at the beginning of the school year. **Since there were no significant differences between girls and boys, only the overall results are shown.** Very low scores at the beginning of the school year for P1 learners are not unexpected, but the scores for beginning P3 learners were also very low.

Little difference was found between reading achievement for boys and girls – where a difference was found, it is noted.

Figure 1. Local Language Oral Reading Fluency (Words per Minute) In School Health and Reading Program Schools by Class and Language

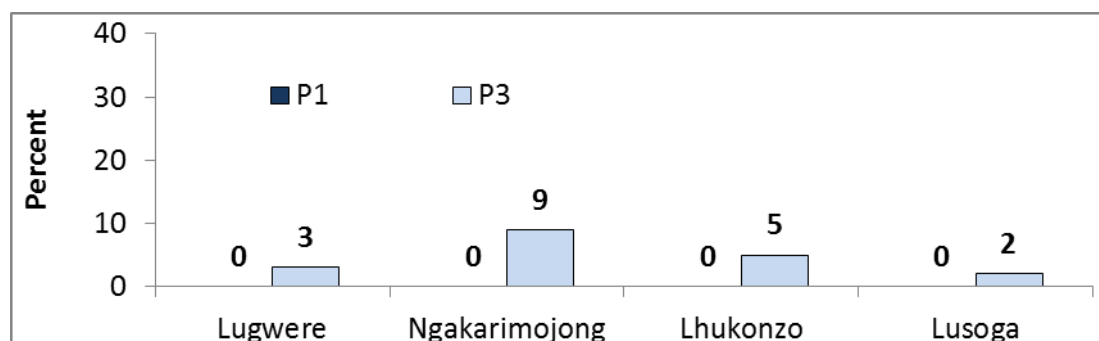


Local language reading fluency was low in all the four languages, and there were almost no differences between P1 and P3; P1 learners could not read any words in all the four languages, while P3 learners could read less than 1 word on average. The scores were slightly better in Ŋakarimojoŋ speaking schools where P3 learners read an average of 2.8 words per minute. Based on any type of “benchmark” these scores are extremely low; a lower bound for an international benchmark for P1 is 20 words per minute, P3 should be reading upwards of 40 words per minute.

Findings: Reading comprehension

Learners need to read with fluency but they also need to be able to understand what they are reading. *Figure 2* shows the percentage of P3 learners who answered at least one comprehension question correctly after reading a story in local language and English.

Figure 3. Percent of Learners in School Health and Reading Program Schools Who Answered At Least One Comprehension Question Correctly



While in P1 no learners could answer a single question, in P3, learners attempted to answer some questions. Three percent of Lugwere learners could answer one or more comprehension questions correctly, 9%, for Nakarimojong 5% of Lhukonzo and 2% of Lusoga learners could answer one comprehension question correctly in their respective local languages.

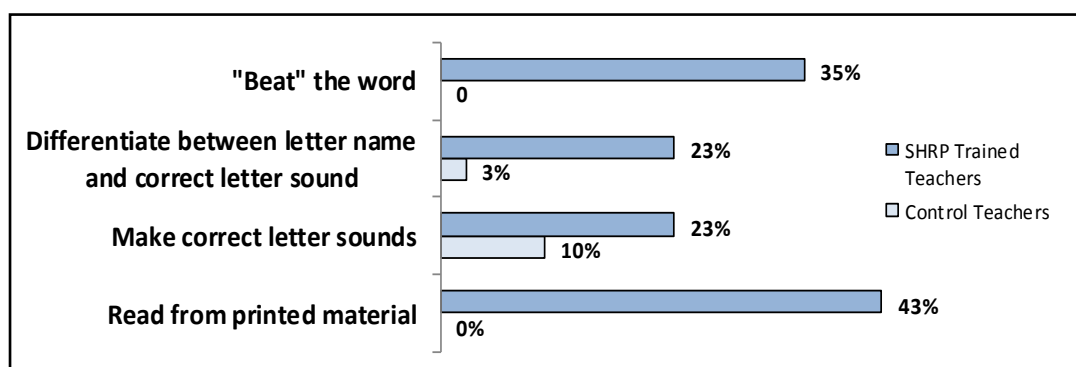
What is happening in the classroom and how are teachers supported to teach reading?

In addition to the EGRA data collected, 40 P1 reading lessons were observed (22 program and 18 control) and 104 teachers and 112 head teachers were interviewed to find out about support received from CCTs and head teachers towards the teaching of reading. Though this is a baseline, a major teacher training effort took place for P1 teachers in January, the month before the EGRA data collection. While we do not expect there to be significant differences in learner performance this early in the school year, it is not unexpected to find differences in teacher classroom behavior after just a few weeks even without materials, and data from the classroom observations did show differences between treatment and control P1 classrooms. Findings indicate that there are many reading supportive actions being undertaken by the teachers in the Program classrooms that are not occurring in control classrooms.

Figure 3 shows the percentage of observed P1 reading lessons where teachers were found guiding learners to undertake reading-promoting behaviors. In 35% of Program P1 lessons observed, teachers were seen guiding learners to “beat the words” (clapping the syllables) to illustrate the concept that words are made up of syllables. This method was not observed in any control classrooms. Program trained teachers

were also more likely to guide learners to differentiate between letter name and correct letter sounds (23% vs. 3%) and make letter sounds (23% vs. 10%).

Figure 3. Teacher Guides Learners to....



Support for teachers to teach reading

Besides training, a crucial component of teacher support is ongoing school based observation of teaching and feedback. Fifty one percent of teachers interviewed³ reported that they were observed once every two weeks and 29% said they were observed every month by someone at the school (head teacher or designee). While 11% reported that they were observed only once a term, 10% were never observed. The ideal is for teachers to be observed teaching at least once per week (while they are getting used to the new methodology) by school based staff. External support from the Coordinating Centre Tutor (CCT) is also important. While the ideal is for CCTs to observe teachers twice per term (over a 3 month period), 22% of the surveyed teachers reported that that in the previous year, their class had **never** been observed by a CCT. Thirty-seven percent of the teachers reported that a CCT had observed their class once every term and an additional 23% were observed once in the previous school year. Fourteen percent of the teachers reported that they were observed once a month. Only 5% reported that they were observed once every two weeks.

Recommendations for improving the teaching of reading and reading achievement in Ugandan primary schools

Given the very low levels of reading achievement in both local languages and English and the situation in schools and classrooms, the following recommendations for moving forward in the area of support for reading reform in primary schools in Uganda include:

Materials: Teachers need materials that will help them bridge the gap between the thematic curriculum and the teaching of reading in the classroom. The teachers' guides linked to learner materials being developed and utilized under the Program will help fill this gap.

³ Treatment and control teachers are both included here as they were asked about CCT support in the previous school year before the beginning of the intervention.

Teacher training: Teachers need to be trained on the explicit teaching of reading, how to utilize the teaching materials and guide learners on the use of the learner materials. Teachers also need to be given guidance on regularly assessing learner progress in foundational reading skills.

Teacher Support: Teachers need more support for teaching reading in the classroom. Even if trained, they need continued follow-up support. This support includes observation of classroom teaching and feedback as well as continuous professional development. Who is best placed to provide this support? All sources of potential support, including head teachers; peers; CCTs; and local government including the district education officer, district inspectors, and even associate assessors⁴ need to be brought “on board” to support teachers to teach reading.

Early Grade Reading in Uganda and the USAID/Uganda School Health and Reading Program

The reading context and challenge in Uganda

The Government of Uganda has led the way in the promotion of Education For All with the implementation of free Universal Primary Education (UPE) introduced in 1997. Ten years later, the focus had shifted from getting children into school to increasing the quality of learning. A major effort towards improving the quality of education was the introduction of the Thematic Curriculum in 2007, which promoted another groundbreaking intervention: the introduction of mother tongue instruction in the early grades of primary school. The use of the mother tongue, or local language as is used in this report, as the medium of instruction for the first three years of schooling is associated with enhanced quality of learning when accompanied by appropriate complementary inputs such as materials and teacher training. Indeed, research has shown that children learning in a familiar language perform better than those who learn in the national (if unfamiliar) language.

The inability to read affects learners’ performance in all academic areas, as reported in National Assessment of Progress in Education (NAPE, 2010), and MoESTS acknowledges that reading failure limits prospects for educational, as well as social and economic, achievement later in life.

Current reading assessment data consistently point to a reading crisis in Uganda. Recent NAPE (2014) data show that only 64.2% of the P3 learners assessed demonstrated reading proficiency in English; 38.3% reached this level of proficiency in English literacy in P6. This means that 35.8% of the P3 learners and 61.7% of P6 learners are not proficient in reading in English. An EGRA undertaken in 2010 found that 51% of P2 learners in the central region and 88% of learners in the Leblango region could not read a single word in English or a local language. School Health and Reading Program EGRA’s undertaken in 2013 and 2014 also show learners reading

⁴ Associate assessors have been recruited and trained by the Directorate of Education Standards to be available for district level support to schools.

levels to be low – reading less than 10 words per minute in P3. Uwezo Annual Learning Assessment data (2012) show that 91% of P3 learners could not read a P2 level text. And the 2013 Early Grade Reading Assessment from program Cluster 1 languages found that 60% of beginning P3 learners could not read a single word of a P2 level text in English.

The MoESTS 2003/4 Curriculum Review found that children were not learning to read due to a gap within the current primary curriculum in the area of foundational literacy skills and the lack of appropriate teacher training. Though the teaching guide that accompanies the P1 curriculum includes a discussion of literacy (phonic, syllabic, and whole word approaches) and even includes a model for a typical literacy hour (including group and silent reading), the daily training scheme presented offers suggestions such as “name things found in the home and their uses” or “read 8-15 words related to food” for competencies under the learning area of literacy—without discussing early reading skills or more specific competencies that learners should master (such as knowing the sounds that letters make).

Other partial explanations for the reading challenges facing Uganda’s primary school children include: inconsistent application of the language policy; inconsistent application of reading instruction methodology; lack of harmonization between the teacher education curricula and the primary education curricula; lack of relevant and adequate reading materials; and a lack of capacity for effective monitoring and support-supervision. EGRA (2010) research attributes the poor performance to teachers’ failure to develop basic foundational skills in reading acquisition in learners, which in turn is linked to the gaps in the primary curriculum and inadequate teacher preparation and support.

MOESTS efforts to improve reading: The USAID/Uganda School Health and Reading Program

Given this backdrop of primary school learners underperforming in reading, the MoESTS has partnered with USAID to support early grade reading efforts under the USAID/Uganda School Health and Reading program. This is a five-year initiative implemented by RTI International in collaboration with World Education (WEI), SIL Lead (SIL), the Center for Social Research Uganda (CSR), Africa Development Corps and Voluntary Service Overseas (VSO).

Underlying the overall goal of the program, “Increasing Literacy and Health Seeking Behaviors,”⁵ is the result “Improved Early Grade Reading and Transition to English,” which supports the Government of Uganda in developing, implementing, assessing, and bringing to scale a successful approach to reading instruction and delivering the MoESTS’s stated goal of producing a Ugandan led “reading policy.” Specifically, the Program will support MoESTS to (1) strengthen policies and strategic planning related to reading; (2) develop local language and English pedagogy and materials to support early grade reading; (3) develop and support teacher training and support

⁵ The program results and activities in the area of “health-seeking behavior” and the support of HIV/AIDS activities is not discussed in this report.

supervision to promote reading; (4) increase advocacy and support for reading at all levels; and (5) generate and use data for programmatic decision making.

In its initial year, the program worked in four local languages and English in ten districts identified by the MoESTS. In the second year of implementation, the program supported reading activities in four additional local languages and eleven additional districts while continuing to support the schools and districts from Year 1. In 2015, another four languages and 9 districts were supported under the program. The four cluster 3 languages that are the focus of this baseline report are Lugwere, Lukhonzho, Lusoga and Dakarimojoŋ as listed in *Table 1*. Ultimately, the program will develop reading programs in 12 local languages and provide direct support to approximately 30 districts and 3,300 government primary schools.

Table 1. Districts and Languages Supported by the USAID/Uganda School Health and Reading Program

Cluster	Year starting Program	Languages and Districts	Number of Schools
Cluster 1	2013	<ul style="list-style-type: none"> • Ateso (Kumi, Katakwi, Serere) • Leblango (Apac, Kole, Lira) • Luganda (Gomba, Wakiso) • Runyankore/Rukiga (Kiruhura, Kabale, Bushenyi (2014)) 	1,400
Cluster 2	2014	<ul style="list-style-type: none"> • Runyoro/Rutooro (Masindi, Kabarole, Kyenjojo) • Lebacholi (Gulu, Pader, Kitgum) • Lugbarati (Arua) • Lumasaaba (Mbale, Sironko, Manafwa) 	900
Cluster 3	2015	<ul style="list-style-type: none"> • Lugwere (Budaka, Pallisa, Kibuku) • Dakarimojoŋ (Nakapiripirit, Napak, Moroto) • Lukhonzho (Kasese) • Lusoga (Iganga, Kumuli) 	1,000

The EGRA Baseline Assessment

The purpose of the assessment

The purpose of the EGRA baseline assessment is to determine the current status of reading ability and school and teacher inputs related to the teaching of reading prior to the implementation of the Program⁶, as well as provide data on basic educational inputs found in primary schools. EGRA data and other school level information will be collected annually in October 2015 and 2016 in randomly selected program and control schools in order to gauge increases in reading achievement and reading

⁶ As mentioned earlier, teacher training took place one month before data collection so this is not a true baseline as far as teacher behavior is concerned. It is believed it provides a true baseline of learner achievement however (and differences between treatment and control detected will be addressed during data analysis) since teaching had only started at the time of data collection (in some cases, it had not yet formally begun).

supportive behaviors (among teachers, head teachers and CCTs, for example) associated with the intervention.

To this end, data were collected from 112 primary schools in 9 districts. In addition to administering individual oral assessments of students, head teachers and teachers were interviewed, school and classroom resources were inventoried, and reading lessons observed.

Questions expected to be answered included:

- What is the level of reading achievement among P1 and P3 learners in the local language and in English in Ugandan Government primary schools?
- What is currently happening in P1 reading lessons?
- How are teachers and schools supported to teach reading?
- What should be the focus of future MoESTS and stakeholder support for reading?

Data collection will follow the schedule shown in **Table 2**. Baseline data is collected for each program “cluster” at the beginning of the school year in February and March and follow up data in October (the end of the school year).

This report focusses on data collected for the cluster 3 baseline, shaded dark blue in **table 2**.

Table 2. Early Grade Reading Assessment Data Collection Schedule

2013		2014		2015		2016
Feb/Mar	Oct	Feb/Mar	Oct	Feb/Mar	Oct	Oct
C1 Baseline	C1 Follow up	C2 Baseline	C1, C2 Follow up	C3 Baseline	C1, C2, C3 Follow up	C1, C2, C3 Follow up

Overview of the EGRA

Why assess early grade reading?

The ability to read and understand a simple text is one of the most fundamental skills a child can acquire. Without basic literacy there is little chance that a child can escape the intergenerational cycle of poverty. Yet in many countries, students enrolled in school for as many as six years are unable to read and understand a simple story. Recent evidence indicates that learning to read both *early* and at a sufficient *rate* are essential for learning to read well. Acquiring literacy becomes more difficult as students grow older, as the reading gap between early readers and nonreaders increases over time. A substantial body of research documents the fact that students can learn to read by the end of grade 2, and indeed need to be able to read by this time to be successful in school. Students who do not learn to read in the early grades (grades 1–3) are likely to fall behind in reading and other subjects, repeat grades, and eventually drop out of school.

Local and international literature shows that for learners to become competent individual readers, they must be able to decode words by using their knowledge of letter sounds. This must be combined with their ability to identify common words quickly (though this is more important in English than in many Ugandan languages). In addition, children must have enough language skills in the language that they are reading to be able to make meaning from the words that are being decoded and to have the necessary reading comprehension skills. The lack of formal instruction on these key skills contributes to the low reading outcomes in Uganda.

What the EGRA measures

The EGRA instrument is composed of a variety of subtasks designed to assess foundational reading skills that are crucial to becoming a fluent reader. EGRA is designed to be a method-independent approach to assessment—that is, the instrument does not reflect a particular method of reading instruction (i.e., “whole language” or “phonics-based” approach). Rather, EGRA measures basic skills that a child must have to eventually be able to read fluently and with comprehension—the ultimate goal of reading.

These foundational reading skills are described below.

Phonemic awareness is the ability to notice, think about, and work with the individual sounds in spoken words. Before children learn to read print they need to understand that words are made up of speech sounds (phonemes).

Alphabetic principle refers to the recognition and understanding that a letter or sequence of letters in a written word represents sounds in a spoken word.

Oral reading fluency is the ability to orally read connected text with speed, accuracy, and proper expression. Reading fluency is considered critical for comprehension, because rapid, effortless word-identification enables the reader to focus on the text and its meaning rather than decoding, or sounding out the words.

Vocabulary is the ability to understand the words that are used in conversation and print.

Reading comprehension, considered the goal of reading, refers to the ability to construct meaning from texts that are read. Comprehension is complex and requires mastery of oral language, background knowledge, attention, ability to decode, fluency, and motivation.

EGRA measures each of these foundational reading skills through individual “subtasks.” The subtasks included in the Ugandan EGRA instrument are described below.

In Cluster 3, additional pre-reading skills were also assessed based on program findings on the very low levels of reading readiness found in the earlier 2 clusters of schools.

EGRA subtasks used in Uganda

The subtasks used in this baseline assessment, how they are measured, and how the learner demonstrates the task during the assessment are outlined below in **Table 3**.

Table 3. EGRA Subtasks Summary Table

EGRA Subtask and How Measured	Foundational Reading Skill	How Learner Demonstrates
Orientation to Print	Print directionality	Learner points to the place to begin reading on a page and where to read next (top left, left to right)
Letter identification	Knowledge of letters	Learner writes a letter that is dictated to them
Letter sound knowledge <ul style="list-style-type: none"> Correct letters per minute (clpm) 	Alphabetic principle	Provide SOUND of upper & lowercase letters in random order; “what is the sound of this letter?”
Segmenting <ul style="list-style-type: none"> Individual sounds (phonemes) in English and syllables Lugwere, Lusoga, Dakarimojon, Lhukozo Leb Acoli, Lugbarati, Lumasaaba and Runyoro, Luganda, Ateso, and Runyankore-Rukiga, reflecting structure of orthography 	Phonemic awareness	Segments words into phonemes or syllables; “What are the sounds/syllables you hear in this word?”
Oral reading passage with comprehension <ul style="list-style-type: none"> Correct words per minute (cwpm) and number of questions answered correctly 	Oral reading fluency and comprehension	Reads a passage with accuracy and speed and answer questions correctly
Listening comprehension (local language only) <ul style="list-style-type: none"> Number of questions answered correctly 	Comprehension	Learner responds correctly to questions asked about a passage read to him/her
Oral vocabulary (English only)	Knowledge of vocabulary	Receptive language, point to body parts, objects & show direction (“place the pencil behind you”)

Baseline Data Collection

In February and March 2015, data were collected from 112 randomly selected government primary schools in 9 districts in Uganda. EGRA data were collected in five languages: Lugwere, Lusoga, Lhukonzo, Dakarimojon, and English—all learners were assessed in English and in one of the four local languages. Overall, 3,173 P1 and 1,100 P3 learners were assessed. In addition to this, 40 P1 reading lessons were observed and 104 teachers and 112 head teachers were interviewed.

Data collection instruments

As mentioned above, EGRA is comprised of subtasks that measure foundational reading skills. The subtasks were adapted from EGRA instruments used to collect data on reading skills and achievement throughout the world. The subtasks selected for the Ugandan context were adapted into the four local languages in a weeklong workshop that included primary school teachers, language board members, CCTs, and MoESTS staff.⁷ During this workshop the instruments were piloted in each of the four language areas. A learner context instrument was also adapted and piloted during this workshop. The learner context instrument includes information on learners' preschool attendance,⁸ possessions in the household, support for reading in the home and other learner background characteristics believed to be associated with reading.

Supplementary data collection instruments, including a teacher interview, head teacher interview, school inventory, and classroom observation form were also developed. Both the teacher interview and the head teacher interview included questions about teachers support to teach reading in the classroom (training, supervisory support). The classroom observation tool instructed trained observers to assess a reading lesson and record basic information on the classroom environment and the lesson itself in the areas of instructional content, teaching methods, learner assessment, and materials used. The availability of materials was also observed. The school inventory asked and looked at basic infrastructure (water source and electricity) as well as the presence and use of a school library. Other questions investigated the presence of learners with special needs and SMC activity, which will inform other aspects of the School Health and Reading Program.

Assessor training

Over 56 potential assessors started an eight-day training program, and the highest-performing 48 were selected for the final data collection. Assessors were selected based on inter-rater reliability tests (IRR) that were given throughout the week as well as interpersonal and leadership skills. Technical training was undertaken by School Health and Reading Program staff (RTI and CSR). The training included one day in a school administering the tool to learners and teachers. Trainees were first trained to administer the tools on paper and then introduced to electronic data collection on Nexus tablets so that they could be prepared for both circumstances.⁹ Four Data Quality Assurance (DQA) Officers who also acted as assessor trainers were given extra training on the classroom observation instrument, including undertaking an observation in an actual classroom.

Schools and Learners Sampled

Data were collected from 112 randomly selected government schools: 56 program (or treatment) schools and 56 control schools from non- intervention coordinating

⁷ The adaptation workshops were held in August, 2014.

⁸ Though not all of the data is presented in this baseline report, it will serve to inform the impact evaluation.

⁹ In the end, no assessments were done on paper.

centres. From each school, 30 P1¹⁰ and 10 P3 pupils were randomly selected (half boys and half girls) and one P1 teacher and one head teacher were interviewed. In total, 3,173 P1 (1,627 males and 1,546 females) and 1,100 P3 (579 males and 521 females) learners were assessed, 104 P1 teachers and 112 school heads were interviewed, and 40 reading lessons observed. **Table 4** shows the number of schools and learners by language area and gender.

Table 4. Number of Schools and Learners by Class and Gender*

Language Group	Schools	P1 Learners		P3 learners	
		Male	Female	Male	Female
Lugwere	28	424	422	140	138
Dakarimojon	28	387	299	158	102
Lhukozo	28	410	413	140	141
Lusoga	28	406	412	141	140
Total	112	1627	1546	579	521

*This includes all treatment and control schools and learners, see Annex 1 for a breakdown of treatment vs. control. For the student reading results presented in this report, only learners in treatment schools were included.

Data collection

Data were collected from February 23 through the first week of March, 2015. Forty eight assessors in teams of four (each of these teams included one supervisor) were deployed to the four language areas. Each of the four language area teams was supported by a DQA officer. The DQA officer was responsible for overseeing all aspects of data collection deployment, observing assessors and providing feedback and support, ensuring data were uploaded from the electronic tablets every evening, and observing the reading classes. Uploaded data were checked regularly and any issues arising communicated to DQAs to be addressed. Besides the team supervisors and the DQA officers, data collection was overseen by staff from the Uganda National Examinations Board, Program Staff, and staff from the external evaluation team from NORC.

Oral Reading Fluency and Reading Comprehension in Ugandan Primary Schools

Oral reading fluency (ORF) is an important index of reading competence as it measures the skill and speed with which learners translate letters into sounds, decode unfamiliar words, recognize known words, and simultaneously make sense of the text's meaning. To measure ORF, learners were asked to read a narrative passage of

¹⁰ Some schools did not have 30 P1 learners present on the day of the assessment.

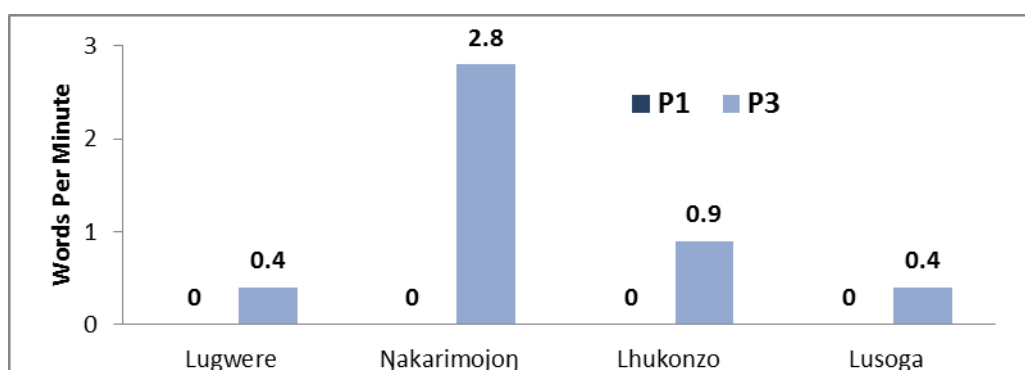
local relevance within one minute. The score for this subtask was the number of words from the passage that students could correctly read in one minute.

After learners had read the assigned passage for one minute (they were stopped early if they read no words correctly in the first line), they were asked questions about the story. Although there were a total of five questions associated with the story, students were asked only those questions that corresponded with the portion of the story that they were able to read within the time limit; learners who didn't read any words correctly were not asked any questions. Questions were both literal, requiring learners to directly recall information from the story, and inferential, requiring students to combine information from the story with their background knowledge to derive a correct answer. Reading comprehension is measured here by the percent of learners answering at least on question correctly.

Though subtask results for the 4 language groups are presented side by side, caution needs to be taken when comparing learning acquisition across language groups as some languages are more complicated and difficult to learn than others. This being said (and given the relatively low reading levels at baseline among P3 learners in these language groups) some language groups do appear to be lagging in the development of basic and higher-level basic reading skills.

Local Language Oral Reading Fluency: Similar to other assessments of reading in Uganda, reading ability was very low. **Figure 5** shows the average local language oral reading fluency rates (words read per minute) achieved by P1 and P3 learners in School Health and Reading Program schools at the beginning of the school year. **Since there were no significant differences between girls and boys, only the overall results are shown.** Very low scores at the beginning of the school year for P1 learners are not unexpected, but the scores for beginning P3 learners were also very low.

Figure 5. Local Language Oral Reading Fluency (Words Per Minute) in School Health and Reading Program Schools by Class and Language

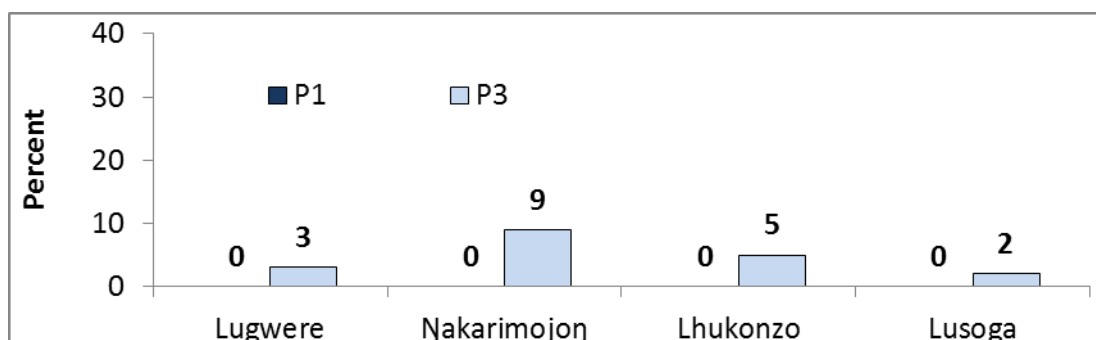


Local language reading fluency was low across the four languages, and the difference between P1 and P3 was minimal; P1 learners could not read any words in the four languages, while P3 learners could read less than 1 word on average. The scores were

slightly better in Dakarimojon speaking schools where P3 learners on average read 2.8 words per minute. Based on any type of “benchmark” these scores are extremely low; a lower bound for an international benchmark for P1 is 20 words per minute.

Reading Comprehension: Learners need to read with fluency but they also need to be able to understand what they are reading. *Figure 7* shows the percentage of P3 learners who answered at least one comprehension question correctly after reading a story in local language.

Figure 7. Percent of Learners in School Health and Reading Program Schools Who Answer At Least One Comprehension Question Correctly in the Local Language



While in P1 no learners could answer a single question, in P3, learners attempted to answer some questions. Three percent of Lugwere learners could answer one or more comprehension questions correctly, 9%, for Nakarimojon 5% of Lhukonzo and 2% of Lusoga learners could answer one comprehension question correctly in their respective local languages.

Emergent and Beginning Reading Skills: Results from EGRA sub-tasks

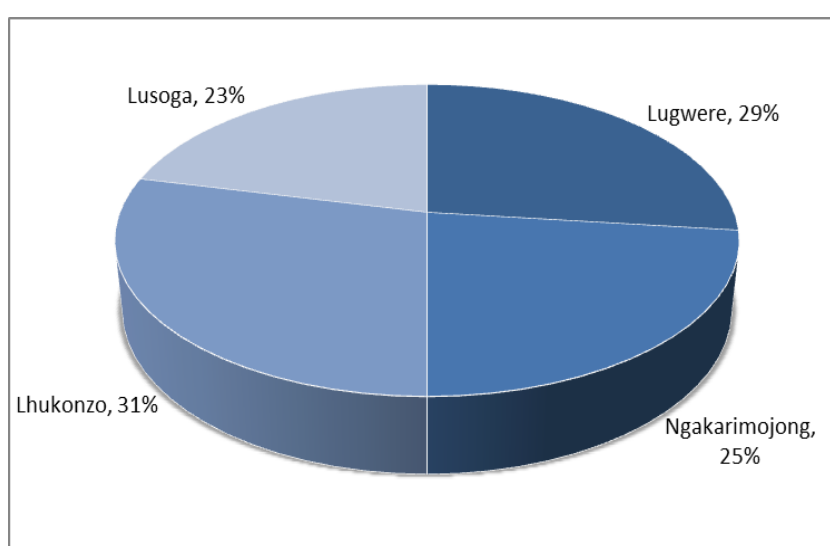
Before we see changes in reading fluency or comprehension, it is expected that we would see improvements in pre-reading or foundational skills—before a learner can read words, they need to know the sounds of the letters, for example. The skills that the EGRA subtasks¹¹ measure are acquired in phases and though the timing of these phases may vary, the phases themselves are predictable. Being able to identify sounds in words or is a very early, emergent literacy skill as is listening comprehension. Letter sound identification and non-word reading are considered the next stage of beginning reading.

¹¹ These sub-tasks are described in detail in Table 3 above.

Emergent Literacy: Orientation to Print, Letter Writing and Listening Comprehension

Orientation to print is an emergent pre-reading skill. In order to assess this skill, P1 learners were given a local passage and asked to use their finger to point to where they would begin to read from (upper left corner of the paragraph) and which direction they would then read (left to right). Thirty one percent of learners in Lhukonzo speaking schools knew where to begin to read. This was followed by learners in Lugwere and Ngarimojong speaking schools with 29% and 25% respectively. Only 23% of P1 Lusoga learners knew where to begin to read.

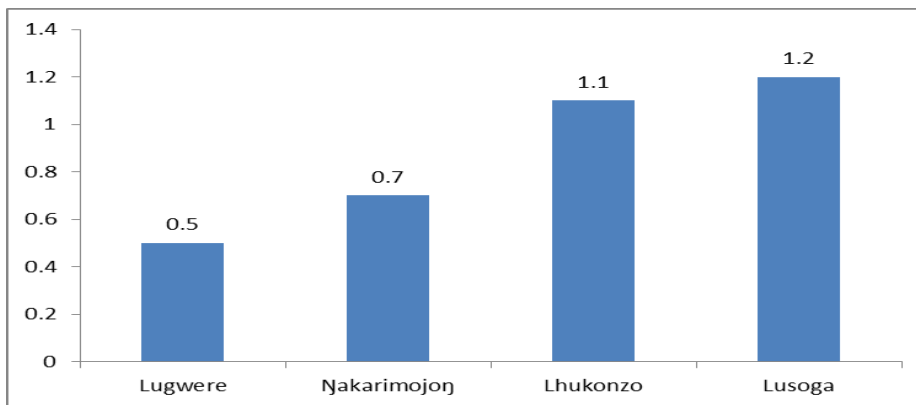
Figure 8. Percent of Learners in School Health and Reading Program Schools Who Knew where to begin to Read



After learners were given a chance to demonstrate where to start reading, if they did not get this right, their fingers were directed to the upper left corner of the paragraph and they were asked where they would read next. Only 8% of Lugwere learners knew which direction to read. The figure was 16% for learners in Lusoga, 19% for Ngarimojong and 25% for Lhukonzo.

Letter identification is also a pre-reading skill. The letter writing task required P1 learners to write down letters after they were dictated to them by assessors. Five letters were read out to learners-one at a time and they were given five seconds to write a letter before proceeding to another. Learners could write either capital or lowercase letters. The letters included; o, m, s, t and b.

Figure 9: Average P1 score on the letter writing subtask

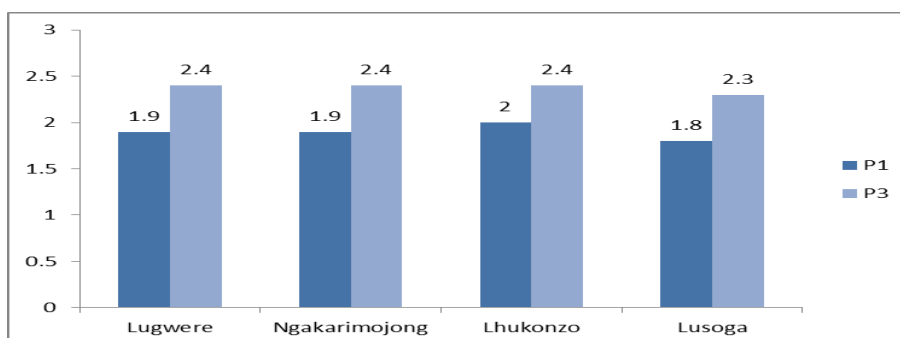


Scores for this task were highest among learners from Lusoga speaking schools with a mean score of 1.2 letters and lowest among learners in Lugwere speaking schools whose mean score was 0.5 letters. Learners in Nkarimojon and Lhukonzo speaking schools had mean scores of 0.7 and 1.1 letters correspondingly. There was no significant difference between boys' and girls' performance on this subtask across the four local languages.

Listening comprehension is a pre-reading or emergent reading skill. The listening comprehension assessment involved the assessor reading a story to the learner in local language and then asking the learner questions (both factual and inferential) related to the story. Poor performance on the listening comprehension task suggests that the learner does not have a good foundational level of vocabulary and comprehension in the language.

Figure 10 shows the number of questions answered correctly by P1 and P3 learners in SHRP schools out of a total of 3 questions asked. On average, P1 learners were able to answer at least half of the questions correctly in all language groups. In Lugwere, and Nkarimojon P1 learners were able to correctly answer 1.9 questions, in Lhukonzo 2 questions, and 1.8 questions correct in Lusoga. The range for P3 learners was between 2.3 (Lusoga) and 2.4 for all 3 other groups. There were no significant gender differences.

Figure 10. Number of Local Language Listening Comprehension Questions Answered Correctly (Out of Possible 3)



The fact that the scores were greater than zero in listening comprehension even at baseline in P1 suggests that it is possible to assess P1 learners contrary to the notion that they are simply too young to undergo external evaluation.

Beginning Reader: Letter Sounds

As mentioned earlier, before a learner can read words, they must be able to identify letters and the sounds the letters make.

Table 5 shows the average number of correct letters per minute for P1 and P3 learners in both Local Language and English for each language group. For P1 learners, the average number of letters that they could sound out correctly is between 0 for English among Lugwere learners to 1.6 in Local Language among Lhukonzo learners. The pattern is the same for P3 with Lugwere the lowest (1.5 correct letter sounds in English) and Lhukonzo the highest (6.5 correct letter sounds in Local Language). The average number of letters correct is higher in Local Language than English for all P1 and P3 across the four language groups. The only significant gender difference was among P3 Dakarimojon learners where boys scored higher than girls (7.2 correct letter sounds compared to 4.9) and Lusoga P3 learners where girls scored higher than boys (3.4 correct letter sounds compared to 1.6).

Table 5. Letter Sounds: Correct Letters Per Minute, P1 and P3 by Language

	P1		P3	
	Local Language	English	Local Language	English
Lugwere	0.4	0	2.7	1.5
Dakarimojon	1.4	0.8	6.1	3.1
Lhukonzo	1.6	0.8	6.5	4.2
Lusoga	0.5	0.8	2.5	2.5

What Is Happening in the Classroom? Reading Lesson Observations

To what extent are USAID/Uganda School Health and Reading Program trained teachers using new reading supportive teaching methods and good teacher practices in the classroom? To help answer this question, as part of the Early Grade Reading Assessment classroom observations were undertaken in 40 P1 classrooms¹² from different schools. A basic classroom observation tool was used that relied on observation of obvious/objective teaching behaviors (“beating the word” or segmenting a word into syllables) and evidence of other behaviors (looking through lesson plans, assessment records and pupil exercise books for example). This tool is

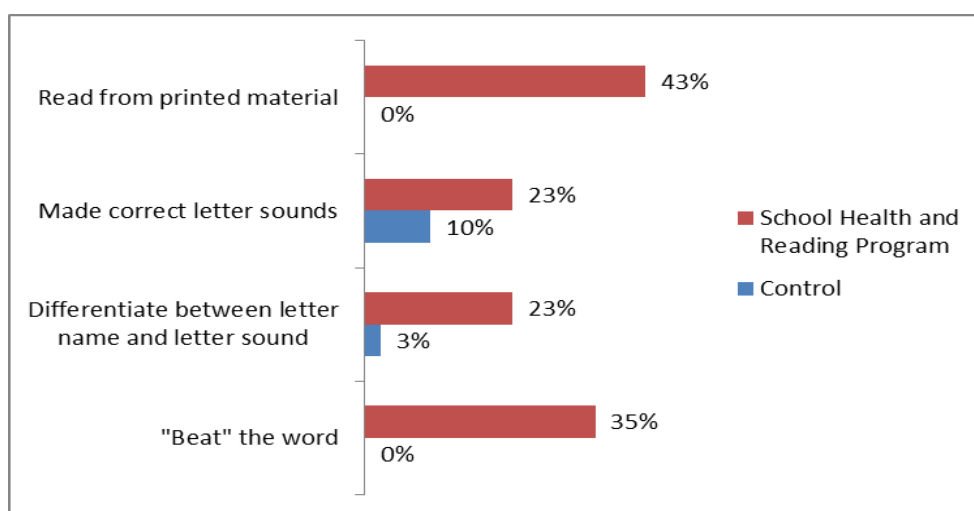
¹² This analysis includes data from 22 program/treatment and 18 control classroom observations.

based on the classroom observation tool currently being used by the program and MoESTS colleagues to undertake support supervision of teachers in the classroom.

Findings indicate that there are many reading supportive actions being undertaken by the teachers in the Program classrooms that are not occurring in control classrooms.

Figure 11 shows the percentage of observed P1 reading lessons where teachers were found guiding learners to undertake reading-promoting behaviors that are part of the SHRP reading methodology. In 35% of SHRP P1 lessons observed, teachers were seen guiding learners to “beat the words” (clapping the syllables) to illustrate the concept that words are made up of syllables. This method was not observed in any control classrooms. SHRP trained teachers were also more likely to guide learners to differentiate between letter name and correct letter sounds (23% vs. 3%) and make correct letter sounds (23% vs. 10%).

Figure 11. Teacher Guides Learners To...



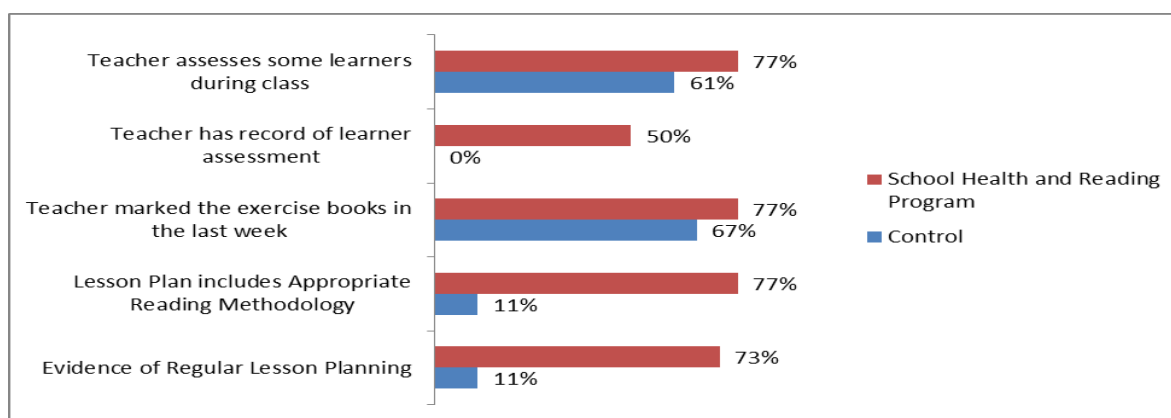
Time on task is very important in reading acquisition: how much classroom time is devoted to teaching reading? The thematic curriculum requires 30 minutes of reading (literacy 1) and 30 minutes of writing (literacy 2) making up the literacy hour every day. Of the P1 reading lessons observed, lessons observed in SHRP classes lasted on average 36 minutes (the shortest was 11 minutes); in control schools, the average was 29 minutes (the shortest lasting 10 minutes). Seven minutes per reading lesson per day translates into 35 more minutes per week or reading instruction – equal to one extra reading lesson per week!

SHRP P1 reading lessons lasted 36 minutes on average, reading lessons in control classes lasted only 29

Other important aspects of the USAID/Uganda School Health and Reading Program Early Grade Reading (EGR) methodology (and good teaching practice in general) are: consistent lesson planning; incorporation of appropriate reading methodologies in lessons and lesson planning; regular learner completed exercises (consistently reviewed by the teacher) and regular learners assessment. **Figure 12** shows that while SHRP P1 teachers observed were more likely to incorporate appropriate reading

methods into their lesson planning (77% vs. 11%) and both have records of learners assessment (50% for SHRP teachers and 0 for control) and be observed assessing learners during class (77% SHRP vs. 61% for control) they are no more likely to have marked learner exercise books in the past week (77% for SHRP teachers compared to 67% for control). There was more evidence of regular lesson planning among SHRP teachers than those in control schools (73% SHRP vs. 11% for control). SHRP teachers were, also more likely to have a lesson plan for the observed lesson and teaching from that plan: 67% of SHRP teachers had a lesson plan compared to 33% of control teachers.

Figure 12. Percent of P1 Teachers Using Reading Promoting Behaviors in the Classroom



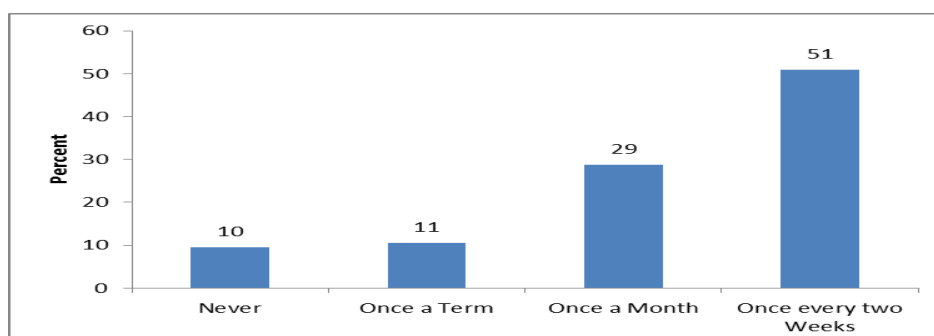
Support to Teachers to Teach Reading

Findings from teacher interviews

Teacher interview data were collected from 104 P1 teachers. Teachers were asked about support they receive for teaching of reading in the classroom. Support reported on here includes reading lesson observation and lesson plan review.

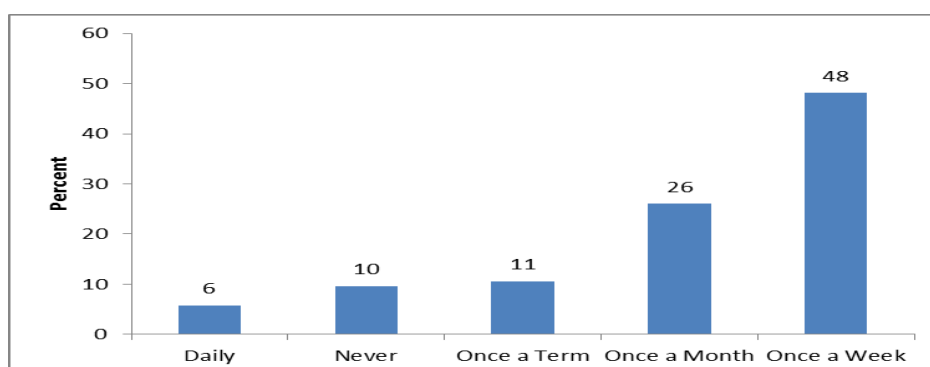
Head teachers (or deputy head teachers, directors of studies or other school based support staff) make up a part of the existing support structures whose mandate includes supervising teachers and observing what they are doing in the classroom in order to provide constructive feedback aimed at improving teaching and learning. When teachers were asked how often the head teacher, deputy head, or subject head observed their teaching (*Figure 13*), 51% said that they were observed once every two week, 29% said they were observed every month, 11% reported that they were observed once a term (every 3 months) and 10% were never observed.

Figure 13. How Often Teachers Observed in the Classroom (According to Teachers)



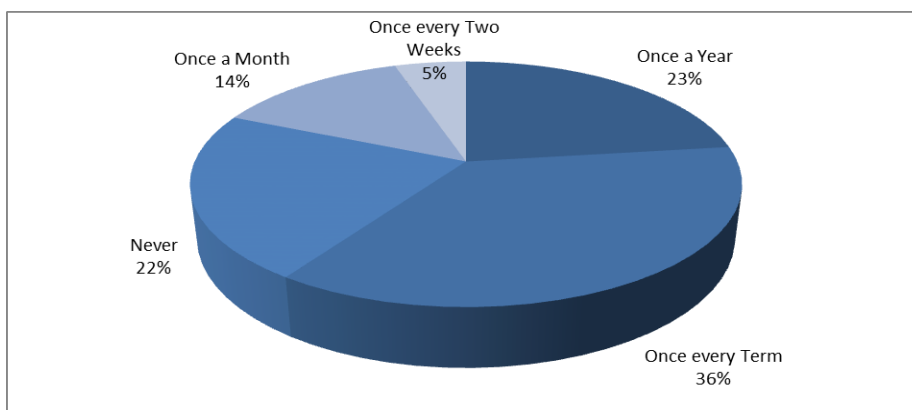
Teacher lesson planning is an integral part of providing quality teaching. Teachers should have daily lesson plans that are followed in the classroom. Another form of support that should be provided to teachers by head teachers and other school-based staff is the routine review of these plans and the majority of the teachers (93%) reported that someone at their school reviewed their lesson plans. 6% of teachers reported that their lesson plans were reviewed daily, 48% had their plans reviewed once a week; 26% had their plans reviewed once a month and 11% of the teachers had their lesson plans reviewed once per term. 10% of teachers reported that there was no one at the school assigned to review their lesson plans or that they were never reviewed.

Figure 14. How Often Lesson Plans Reviewed (According to the Teachers)



CCTs are a central feature of the Teacher Development Management System (TDMS) and source of external school and teacher support in the area of teaching and learning; thus they feature prominently in MoESTS/School Health and Reading Program planned interventions to support early grade reading. And while 23% of teachers reported that they were observed by a CCT once in the previous year, almost the same number, 22% reported that their class had **never** been observed by a CCT (*Figure 15*.) 37% of the teachers reported that a CCT had observed their class once every term, which amounts to the minimum level of CCT support that should be expected, or more often once a month. An additional 14% were observed once a month and 5% were observed once every two weeks.

Figure 15. Frequency of Lesson Observation by CCT



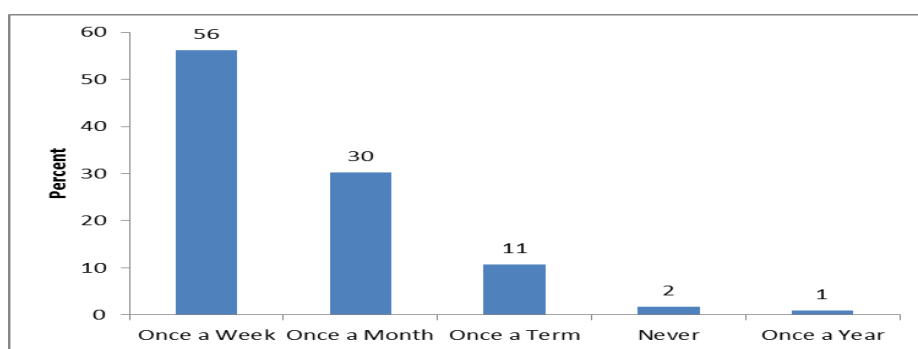
When asked what kind of support would be most useful to help them improve their ability to teach reading, 85% said materials (88 of the 104 teachers mentioned this), the next most commonly mentioned input was training (mentioned by 47% of teachers).

Findings from head teacher and head of school interviews

Besides P1 teachers, 83 head teachers, 20 deputy head teachers, and 9 other school staff in charge on the day of the assessment were interviewed regarding their preparation and support for the teaching of reading in their schools. In the vast majority of schools (72%) it was reported that the responsibility for reviewing teacher's lesson plans fell to the head teacher. In 17% of schools this task fell to the deputy head teachers and in 11% of the schools it was the director of studies or a shared responsibility among the head teacher and other school staff.

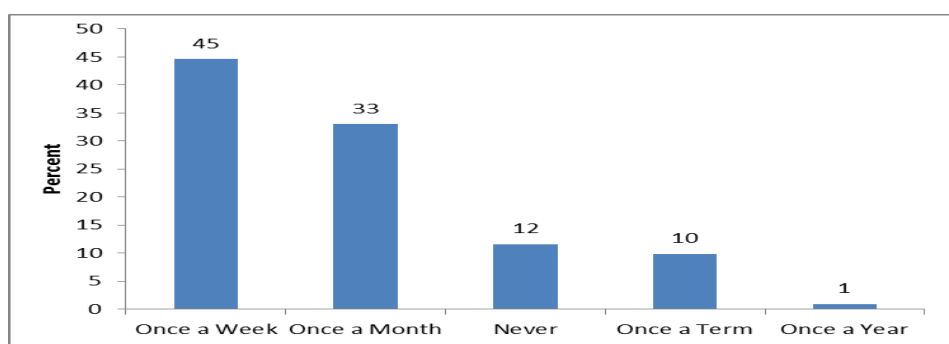
Figure 16, shows how often teachers' lesson plans are reviewed according to the heads of school. School leaders reported that teacher lesson plans were reviewed once a week in 56% of the schools, in 30% of the schools plans were reviewed once a month, and in 11% plans were reviewed once every term. It was reported that lessons plans were never reviewed in 2% of the schools and in 1% plans were reviewed once a year. This is not very different from what was reported by the teachers themselves as far as the frequency of lesson plan review.

Figure 16. How Often Lesson Plans Reviewed (According to School Heads)



In the majority of schools (69% of the schools) it was the responsibility of the head teacher to observe teachers in the classroom, followed by the deputy head in 16% of the schools. While in 11% of schools, it was the duty of the directors of studies and class teachers/coordinators to observe teachers in the classroom, in 5% of the schools, no one was responsible for conducting this task. The school heads reported that teachers were observed in their classrooms once a week in 45% of the schools, and once a month in 33% of the schools. In 10% of the schools, teachers were observed once a term and in one school (1%), teachers were observed once a year. In 12% of the schools, teachers were never observed.

Figure 17. How Often Teachers Observed in the Classroom (According to Head Teachers)



Recommendations for Improving the Teaching of Reading and Reading Achievement in Ugandan Primary Schools

Given the very low levels of reading achievement in both local language and English and the situation in schools and classrooms, the following recommendations for moving forward in the area of support for reading reform in primary schools in Uganda can be made.

Teacher and Learner Materials: Teachers need materials that will help them bridge the gap between the thematic curriculum and the teaching of reading in the classroom. The teachers' guide that accompanies the thematic curriculum (which was not seen in use in the majority of reading classes observed) provides methodological guidance on

literacy (presenting letters and developing a scope and sequence for teaching reading), but this guidance is not carried over in the discussion of the themes on which teaching plans are based. So, in the theme “weather,” an example of a scheme of work for literacy includes “interpreting pictures about weather” or “reading words, e.g., clouds, wind,” but there is no bridging between the methodology and the scheme of work; learners should read weather-related words, but how do they actually learn how to read? There is no explicit inclusion of sounding out particular letters or combining them to make syllables or sounds. Also, since the guides are not available in the local language in most cases, the teachers need to do the translation as they are going along.

The teachers’ guides being developed under the School Health and Reading Program will help fill this gap. These guides are being developed in local languages—not simply translated from English (the Luganda word for sun “*enjuba*” is more complex than its English equivalent and may be taught at a different level for example).

Learners need print materials in the local language linked to the teachers’ guides. Learners need to be able to have contact with the materials: the ideal is for a learner to be able to point his or her finger from letter to letter or word to word so to more easily make the connection between letters and sounds (alphabetic principle). Illustrations also make reading easier and more enjoyable.

Teacher Support: Teachers need support for adopting a new methodology for teaching of reading in the classroom. Many teachers know in theory about sounding out letters, blending letters to make sounds, and assessing learner achievement (in fact many remember this as being the way they themselves were taught), but they need support in the way of training and follow-up supervision and feedback in order to improve their ability, skills, and practice. Teachers do not know how to turn their knowledge of how to teach reading (which currently includes teaching names of letters perhaps more literally than the sounds they should be teaching in order for learners to logically combine them to make sounds and words) into practice in the classroom. They need to be trained in a systematic methodology that has relevant, local language materials associated with it (which provide a bridge between the thematic curriculum and the reading methodology). But beyond that, they need continued follow-up support.

Who is best placed to provide this support? All sources of potential support, including head teachers; peers; CCTs and local government including the district education officers, district inspectors, and even associate assessors, need to be brought “on board” to support teachers to teach reading. The PTAs or SMCs could play other roles such as ongoing monitoring of classroom teaching and continual feedback on performance.

Appendix 1: Total number of learners assessed

Language	P1				P3			
	Treatment		Control		Treatment		Control	
	Male	Female	Male	Female	Male	Female	Male	Female
Lugwere	212	214	212	208	70	68	70	70
Dakarimojoj	201	165	186	135	76	62	82	40
Lhukonzo	203	200	207	213	70	70	70	71
Lusoga	204	201	202	211	71	70	70	70
Total	820	780	807	767	287	270	292	251