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UGANDA PERFORMANCE AND IMPACT EVALUATION FOR LITERACY ACHIEVEMENT AND RETENTION ACTIVITY (LARA) CLASSROOM OBSERVATION STUDY REPORT 2

Prepared under Contract No.: AID-617-C-16-00003

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PHOTO CREDIT

Literacy Hour in P2 Classroom, Ugandan Primary School; by Alicia Menendez

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TABLE OF CONTENTS

I. INTRODUCTION	I
2. BRIEF OVERVIEW OF THE STRUCTURE OF THE LARA PROGRAM	2
 3. STUDY DESIGN AND DATA ANALYSIS. 3.1 MIXED METHODS. 3.2 DATA COLLECTION INSTRUMENTS AND TRAINING. 3.3 DATA ANALYSIS. 	4 5
4. IMPLEMENTATION OF THE LARA LESSON PLANS AND UPTAKE OF	
MATERIALS 4.1 IMPLEMENTATION OF THE LARA LESSON PLANS	6 13 14
5. THE TEACHING AND LEARNING ENVIRONMENT. 5.1 THE PHYSICAL CONDITION OF THE CLASSROOMS. 5.2 THE PRINT RICHNESS OF THE CLASSROOMS. 5.3 CLASSROOM CLIMATE. 5.4 LANGUAGE USE. 5.5 NUMBER OF LEARNERS.	5 5 7 7
 6. INSTRUCTIONAL METHOD 6.1 CONTINUOUS ASSESSMENT 6.2 DIFFERENTIATION 6.3 COLLABORATIVE LEARNING 6.4. PRINT AWARENESS 6.5 SUMMARY INSTRUCTIONAL METHOD 	18 20 20 22
 7. INSTRUCTIONAL CONTENT. 7.1 FIVE COMPONENTS OF LITERACY LEARNING. 7.2 PHONICS AND PHONEMIC AWARENESS. 7.3 VOCABULARY. 7.4 FLUENCY. 7.5 COMPREHENSION	25 25 27 28 30 32
8. TRAINING	34
9. CONCLUSION	35
I0. REFERENCES	36
ANNEX A: DETAILED LESSON STEPS	38
ANNEX B: LARA LESSON/CLASSROOM OBSERVATION TOOLS	41
ANNEX C: LARA TRAINING AGENDA (15-18 OCTOBER 2018)	57
ANNEX D: CONCEPTUAL FRAME FOR DESIGN OF DATA COLLECTION INSTRUMENTS	59
ANNEX E: LESSON TRANSCRIPTION OF CLASSROOM IN SCHOOL C7	64

TABLES

Table I: Conceptual underpinnings of the LARA program	I
Table 2: Similarities and differences in the teacher sample 2017 to 2018	4
Table 3: Implementation of LARA lesson plan components in 15 Treatment classes teaching Literat	су
I Day 1/3	
Table 4: Implementation of LARA lesson plan components in Treatment classes teaching Literacy	
Day 1/3 – 2017	
Table 5: Implementation of LARA lesson plan components in Treatment classes teaching Literacy	
Day 1/3 – 2018	
Table 6: Implementation of LARA lesson plan components in Treatment classes teaching Literacy	
Day 1/3 – 2017 teachers who were observed in 2017 and 2018	
Table 7: Implementation of LARA lesson plan components in Treatment classes teaching Literacy	
Day 1/3 – 2018 teachers who were observed in 2017 and 2018	
Table 8: Implementation of LARA lesson plan components in Treatment classes teaching Literacy	
Day 2/4 2018	
Table 9: Number of Treatment classrooms with the LARA Pupil Book in their possession	
Table 10: Teacher adherence to macro pacing of the program 2017 to 2018	
Table 11: Number of lessons where LARA material was present 2017-2018	
Table 12: Wall displays across number of classrooms 2018	
Table 13: Number of learners present during the lesson in Treatment and Control classrooms	
Table 14: Use of printed material by learners in the lessons, 2018	
Table 15: Dominant text used by learners in the lessons, 2018	
Table 16: Use of print awareness strategies in the lessons 2017-2018	
Table 17: Opportunity to hold and handle (open and use) any books (readers, picture books, LAR/	
Pupil book) during the lesson - 2018	
Table 18: Evidence of the development of phonemic awareness in the classrooms 2017-2018	
Table 19: Number of lessons in which vocabulary development is observed 2017 - 2018	.28
Table 20: Number of lessons in which different types of reading practices were observed 2017 -	
2018	
Table 21: number of lessons in which the reading of different types of text were observed	
Table 22: Number of lessons in which different types of comprehension questions were observed.	
Table 23: 2018 Treatment school teachers who received training in 2017 and 2017/2018	.34

FIGURES

Figure 1: Literacy Day I and Day 3 teaching steps and exemplar representation in LARA Pupil	Book2
Figure 2: Literacy Day 2 and Day 4 teaching steps and exemplar representation in LARA Pupil	Book3
Figure 3: Classrooms considered "Reading Rich:" Treatment vs. Control, 2018	16
Figure 4: Phonics table as given in LARA Teacher Guide	26

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I. INTRODUCTION

NORC at the University of Chicago (NORC) serves as the independent evaluator for the Performance and Impact Evaluation (P&IE) of the USAID/Uganda Literacy Achievement and Retention Activity (LARA) being implemented by RTI International. As part of the evaluation work, NORC conducts classroom observations yearly to obtain important contextual information to measure the uptake and implementation fidelity of the LARA instructional practices in the classroom.

LARA aims to improve the mother tongue and English reading abilities of children in the first four years of primary school through the implementation of an early grade reading program that includes the provision of technical assistance to teachers and high quality, structured materials for use in classrooms. LARA is being implemented over four years from 2016 – 2020.

LARA follows current, international best practice in early grade reading instruction by focusing on the widely accepted five foundational components of literacy instruction, as well as incorporating a set of specific literacy methodologies.

COMPONENTS OF LITERACY INSTRUCTION	BEST PRACTICE LITERACY METHODOLOGY
Phonemic awareness	Collaborative Learning
Alphabetic principle (phonics)	Continuous Assessment
Fluency	Multisensory learning
Vocabulary	Oral Language development
Comprehension	Print Awareness
	Scaffolding
	Differentiation

Table I: Conceptual underpinnings of the LARA program

In 2017, a Classroom Observation (CRO) Study was designed with the purpose of providing an in-depth understanding of the how these different principles shaped practice in classrooms, and to consider the fidelity and quality of the implementation of the LARA program at the classroom level.¹ These observations were conducted in 24 Treatment schools, where the LARA early grade reading program was being implemented, and 7 Control schools where the LARA program was yet to be implemented. In 2018 fieldworkers returned to the same schools during the same period in term 3 to conduct a second round of observations. Again, the purpose was to consider the fidelity and quality of the implementation of the program. In the 2018 round of observations, we were also interested in any changes in the schools that could be discerned between 2017 and 2018. The 2018 study, reported on here, was framed by four research questions:

¹ The first CRO was done at the end of 2017; in term 3 during the month of October.

- a) What was the uptake by teachers of the LARA structured lesson plans in the classroom?
- b) What instructional methods were being implemented in the Treatment schools?
- c) What instructional content, or components of literacy, were being covered in the Treatment schools?
- d) Were there any changes in the implementation of instructional method, coverage of instructional content and uptake of the program between 2017 and 2018?

As in the 2017 study, comparisons are made between the Treatment and Control classrooms. In this report, comparisons are also drawn between observations of the 2017 and 2018 classrooms.

2. BRIEF OVERVIEW OF THE STRUCTURE OF THE LARA PROGRAM

LARA provides a structured literacy program for five days of the week. Day I to 4 consists of a Literacy Hour of which half an hour is directed at reading and half an hour writing. Day 5 focuses on assessment. The focus of the observations for the Classroom Observation Study was the reading half hour on Day I, Day 2, Day 3 and Day 4. The LARA Teacher Guide and the LARA Pupil Book set out a structured set of steps as well as scripted material for the teacher and learners to use for each of these days. Day I and Day 3 follow the same set of steps. Day 2 and Day 4 also have the same set of steps, shown below in Figures I and 2.

Figure 1: Literacy Day I and Day 3 teaching steps and exemplar representation in LARA Pupil Book



Figure 2: Literacy Day 2 and Day 4 teaching steps and exemplar representation in LARA Pupil Book

DAY 2 / DAY 4 STEPS	REPRESENTATION IN THE LARA PUPIL BOOK
 Step 1: Getting Ready (5 minutes) Singing and preparation of lesson material. Step 2: Before Reading – Make Predictions (5 minutes Title, picture discussions and predictions Step 3: Reading the Story (10 minutes) Reading of the story Step 4: After Reading – Comprehension Questions (10 minutes) 	<text><image/><text><text><image/></text></text></text>

Structure and routine form the basis of the scripted lesson plans that are provided to teachers. Appendix A gives further detailed outline of the steps for the program. Across the 24 Treatment classrooms observers watched 15 lessons based on Day 1/3 and six lessons based on Day 2/4 of the LARA program. Three of the Treatment classrooms did not implement the program.

3. STUDY DESIGN AND DATA ANALYSIS

In conducting classroom observation studies, researchers are often faced with a tension: the richness and comprehensiveness of the data versus the number of classrooms observed. In the Classroom Observation Study reported here an attempt was made to reconcile this tension through a novel approach to the collection of data. An observational system was created that entailed a mixed methods approach to data collection and analysis, and collection of both open narrative data and closed-ended data by paired fieldworkers.

The classroom observation was conducted from the 22nd of October 2018 to the 15th of November 2018. We returned to the same 24 treatment schools (12 in each of the two languages examined by the P&IE – Luganda and Runyankore/Rukiga) that were visited in 2017. We also returned to the same seven control schools as in 2017. In each school fieldworkers observed the 30-minute reading section of the LARA Literacy I lesson program. Literacy I is mandated to occur from 9:30AM to 10:00AM every day of the week and instruction is in the local language. In both 2017 and 2018 PI classes were observed.

The comparison between 2017 and 2018 was strengthened methodologically by the fact that fieldworkers were able to return to 19 of the same teachers in the Treatment schools and 3 of the same teachers in the Control schools. In other words, 22 of the original sample of teachers was visited a

second time in 2018. Thus any comment on changes in the uptake of the programme between 2017 and 2018 is strengthened by the fact that in the majority the same teachers were being considered. The table below show the number of teachers that were the same and different in the Treatment and Control schools. Of the 6 new teachers in the treatment school, 4 had been trained to teach the LARA program the previous year, prior to teaching their new class.

	CONTROL	TREATMENT	TOTAL
Same teacher 2017/2018	3	18	21
Different teacher 2017/2018	4	6	10
New teachers trained to teach LARA program in 2017	0	4	4

Table 2: Similarities and differences in the teacher sample 2017 to 2018

3.1 MIXED METHODS

A dominant way of measuring classroom practices at scale is the use of closed-ended schedules that require relatively low inference judgments on a range of features of classroom practice. Often what is included is what can easily be measured – time, presence of resources and coverage, for example. One of the problems with studying pedagogy in this way is that it produces atomistic descriptions that tell us little about the actual pedagogic processes in classrooms, and hence about quality. In other words, a set of inputs are measured, but without an understanding of when, whether and how these inputs combine to produce potential learning. There is emerging consensus about what counts in determining quality instruction. Both meta-analysis of studies in high income countries (Hattie, 2009; Hattie & Yates, 2014) and a recent review of pedagogy in developing country contexts (Westbrook et al., 2013) tells us that *high-quality classroom talk* and reciprocal interactions involving clear *feedback* between teachers and learners is what makes the difference in pedagogy to student outcomes. These are the pedagogical process variables often missed in large-scale studies of classrooms (Alexander, 2014).

Our 2017 and 2018 studies aimed to collect both process and input data by designing a tool that included both closed-ended items and open-ended narrative descriptions of classroom activity. In order to gain a 'thicker' description in the narrative record, two fieldworkers each produced a description of the same lesson. The two descriptions at the point of analysis were then read together. In addition, the closed-ended part of the tool was completed *after* the lesson by *both* fieldworkers. In this way judgments required in the closed-ended items were subjected to a form of inter-rater reliability at the point of data collection. Fieldworkers could also refer back to the written lesson narratives in justifying their judgments amongst each other. The mixed method approach, in summary, was used to obtain a more complete understanding of what was going on in the Treatment and Control classrooms. At the point of analysis, it was used to confirm the quantitative measures with qualitative accounts and to explain some of the quantitative results.

In the 2018 study we included audio recording of eight of the lessons, including four Treatment and four Control schools. The Treatment schools included two Literacy I, Day 1/3 lessons and two Literacy I Day 2/4 lessons. The purpose was two-fold. Firstly, it began a process of instrument validation that will be completed in 2019. We wished to ascertain whether the narrative records of the fieldworkers

reliably captured the lesson processes – especially classroom talk. Secondly, we wished to collect some detailed and precise data on the nature of classroom discourse, given its importance in the potential for learning in classrooms. A precise record in some classrooms would provide more detail on general classroom discourse patterns in the broader sample of classrooms observed. All the audio recordings were transcribed and translated into English from Luganda or Runyankore/Rukiga. Likewise, classroom narratives were written in English although all lessons were conducted in Luganda or Runyankore/Rukiga and observed by native speakers of the local languages.

3.2 DATA COLLECTION INSTRUMENTS AND TRAINING

The two data collection instruments that were used are included in Appendix B. The first instrument consists largely of close-ended items to determine the presence and absence of a range of indicators across classrooms, and requires the recording of an open, detailed narrative of the lesson observed. The instrument also directs fieldworkers to the collection of qualitative image data, including photos of the classroom walls, lesson plans, assessment records and LARA materials utilized. The second instrument includes only the capturing of a lesson narrative. This second instrument is both a check on the first narrative and a supplement to it. In this way two forms of data are collected simultaneously – quantifiable closed-ended data, and rich open-ended qualitative data.

Fieldworker training was intensive. Over a period of five days, non-education specialist fieldworkers were trained in understanding early grade reading, and especially in writing open-ended lesson narratives (using videos of treatment and control classrooms obtained prior to training, classrooms not included in the final sample). Training also included one day of on-site data collection in non-sample schools (the training agenda is included in Appendix C).

To summarize, two fieldworkers watched each lesson, completing two separate open narrative descriptions of the lesson and one closed-ended instrument. A total of 31 Literacy lessons at the P1 level were observed.

3.3 DATA ANALYSIS

A conceptual framework distinguishing between instructional content and instructional method, grounded in LARA's underpinning principles and approaches, informed the quantitative data collected and framed the collection of the qualitative narratives (see Appendix D). The data was analyzed using a convergent mixed methods parallel strategy (Cresswell, 2011). Qualitative data was summarized across the two lesson accounts to provide descriptions of individual lessons. Data relevant to the key conceptual categories from the framework were extracted. In addition, emerging patterns in the data were noted. The quantitative data was analyzed using Stata. The two data sets were then merged as the quantitative data was read in relation to the qualitative data in order to seek explanations for the quantitative findings. Anomalies and points of interest in the quantitative data were also followed up in the qualitative data to shed light on these. In the reporting below, the analysis integrates the quantitative and qualitative data.

Section 4 describes the uptake of LARA materials and lesson plans in the classrooms. Sections 5 describes the teaching and learning environments of the observed classrooms. Section 6 and 7 detail the instructional method and instructional content respectively. Section 8 briefly discusses training, and Section 9 presents conclusions from the analysis.

4. IMPLEMENTATION OF THE LARA LESSON PLANS AND UPTAKE OF MATERIALS

4.1 IMPLEMENTATION OF THE LARA LESSON PLANS

The first stage of the analysis presented below considers the different steps in the Literacy I lesson plans and whether these were implemented in the observed classrooms. This analysis drew on the open-ended narrative data to pinpoint precisely what components of the program were being covered in each of the lessons. Appendix B shows how the steps were spelled out for teachers in the program and the precise directives given. Teachers were observed teaching either a Literacy I Day I/3 Lesson, or a Literacy I Day 2/4 lesson. Brief summaries of these two lesson types are given below.

4.1.1 LITERACY I DAY 1/3 LESSON PLAN

According to the lesson plan for Day 1/3 the teacher would lead the learners in a **song** while the LARA Pupil Book was distributed. The teacher would then point to **new letters** (upper case and small case) being introduced and learners would say 'My name is _. My sound is _'. Learners would then read from a **phonics** review chart pasted or drawn on the board, which would present sounds and syllables made up of one, two and three letter consonant and vowel blends. The teacher would tell the learners the theme and sub-theme for the week and direct them to the picture in the Pupil book. Learners would then **discuss the picture**, and the teacher would guide them to discuss the picture in relation to a **theme discussion**. Learners would then identify syllables in the three key words given in their books. They would '**beat the word**', identifying the number of syllables. Learners would then **read the words**. Finally, they would **read three sentences** given in the book after the teacher.

4.1.2 LITERACY I DAY 2/4 LESSON PLAN

For Literacy I Day 2/4 the page in the LARA Pupil book consisted of a story heading, a picture, a short text and a set of letters for handwriting practice. According to the lesson plan the teacher would lead learners in a song while the LARA Pupil Book was distributed. She would read the heading of the story and ask learners to predict what would occur by looking at the picture. Learners would then read the story from the chalkboard, and then by themselves from their books. They would also read aloud individually from the book while the teacher assessed them. The teacher would then ask them a factual question based on the text and an inferential question. She would ask the learners to predict what would happen next in the story.

From the analysis of the data four lesson types were identified: 16 Treatment classrooms covering content from LARA Literacy I Day 1/3; 5 Treatment schools incorporating LARA content from Literacy I Day 2/4; 3 Treatment classrooms not implementing the LARA lesson plans; and five Control classrooms. It is not clear why fewer classrooms visited were implementing Literacy I Day 2/4. It may be regarded as a more challenging day of the programme by teachers, incorporating as it does extended text and comprehension activities as opposed to the shorter texts and more constrained skills that are the focus of Literacy I Day 1/3. Coverage in each of the lesson types is discussed below.

4.1.3 TREATMENT CLASSROOMS IMPLEMENTING LARA LITERACY I DAY 1/3 LESSON PLAN

Table 3 below shows coverage of the components (or steps) for LARA Literacy I Day I/3 in the I5 classrooms that incorporated this day of the LARA program.

	TRE	ATME	INT C	CLASS	ROO	Μ									
LESSON COMPONENT	ΤI	Т2	Т3	Τ4	T5	Т9	Ξ	TI3	T15	Τ 17	Т19	Т20	Τ22	Т23	Т24
Song & material prep															
New letters up/lower case															
Phonics review chart															
Discuss theme															
Picture discussion															
Syllables in words															
Reading words															
Read sentences															

Table 3: Implementation of LARA lesson plan components in 15 Treatment classes teaching Literacy I Day 1/3

The shaded blocks in Table 3 show the components of Literacy I Day I/3 implemented in the I5 Treatment classes where this day was covered. Components covered in *all* lessons were the song, the phonics review chart and reading words. Only one of the lessons (T20) incorporated all components, but all lessons incorporated most.

The component most commonly left out was the discussion of the theme. Theme discussions occurred in only 3 of the 15 classrooms. The lack of theme discussion is surprising given that the use of the Teacher Guide was evident in most classrooms (15). The Teacher Guide provides teachers with a 'thematic question' for the theme of the week, as well as the theme and the sub-theme. Although the latter were often presented, discussion seldom went beyond stating what they were. This issue is taken up further below in Section 7.6 Oral Language Development.

A discussion of the picture provided in the LARA Pupil book alongside the reading generally substituted for thematic discussion. Learners were asked to name what they saw in the picture, or to point to representations of particular words in the picture. Although the Lesson Plan indicates that these discussions should initially occur in groups, apart from one lesson picture discussions were done with the whole class. Learners were also seldom required, as the program stipulates, to link the picture to the theme.

All the classrooms included reading at the word level, and 9 of the 15 classrooms had learners read sentences.

4.1.4 TREATMENT CLASSROOMS IMPLEMENTING LARA LITERACY | DAY 1/3 LESSON PLAN: 2017 COMPARED TO 2018

Table 4: Implementation of LARA lesson plan components in Treatment classes teachingLiteracy | Day |/3 - 2017

	TRI	EAT⊵	1ent	CLA	SSRC	DOM	2017	,									
LESSON COMPONENT	ΤI	Т2	Т4	T5	Т6	Т9	Η	T12	T13	T15	T16	Τ17	T18	T19	T20	Т22	Т23
Song & material prep																	
New letters upper/lower case																	
Phonics review chart																	
Discuss theme																	
Picture discussion																	
Syllables in words																	
Reading words																	
Read sentences																	

Table 5: Implementation of LARA lesson plan components in Treatment classes teaching Literacy | Day 1/3 – 2018

	TRE	ATME	INT C	LASSI	ROOM	1 2018	3								
LESSON COMPONENT	Ι⊥	Т2	Т3	Т4	T5	T9	TIT	T13	T15	T 17	719	T20	T22	T23	T24
Song & material prep															
New letters upper/lower case															
Phonics review chart															
Discuss theme															
Picture discussion															
Syllables in words															
Reading words															
Read sentences															

Juxtaposing a graphic representation of coverage in 2017 and 2018 gives an indication in change in implementation fidelity between 2017 and 2018. Using a relatively crude measure - calculating the proportion of all components covered in all classrooms - in 2017, 17 classrooms cumulatively covered

57% of the possible components of the program in the lessons. In 2018, across 15 classrooms, 79% of the LARA components were covered. In other words, there was greater adherence to the basic components of the LARA Lesson plans in 2018 than seen in 2017.

4.1.5 TEACHERS IMPLEMENTING LARA LITERACY I DAY 1/3 LESSON PLAN: 2017 COMPARED TO 2018

As a further point of comparison, it is instructive to examine implementation by the 12 teachers who were visited in both 2017 and 2018, and who taught Literacy 1 Day 1/3 on both occasions.

Table 6: Implementation of LARA lesson plan components in Treatment classes teachingLiteracy | Day 1/3 - 2017 teachers who were observed in 2017 and 2018

	TREATMENT CLASSROOM 2017													
LESSON COMPONENT	Ι⊥	Τ4	T5	Т9	TII	T13	T15	T17	T19	T20	Т22	T23		
Song & material prep														
New letters upper/lower case														
Phonics review chart														
Discuss theme														
Picture discussion														
Syllables in words														
Read words														
Read sentences														

 Table 7: Implementation of LARA lesson plan components in Treatment classes teaching

 Literacy | Day 1/3 – 2018 teachers who were observed in 2017 and 2018

	TRE	ATMEI	NT CL	.ASSR0	DOM	2018						
LESSON COMPONENT	ΤI	Τ4	T5	Т9	TII	T13	T15	Τ 17	T19	T20	Т22	Т23
Song & material prep												
New letters up/lower case												
Phonics review chart												
Discuss theme												
Picture discussion												
Syllables in words												

	TRE	TREATMENT CLASSROOM 2018													
LESSON COMPONENT	Τ	Τ4	T5	Т9	TII	T13	T15	Τ 17	T19	T20	Т22	Т23			
Reading words															
Read sentences															

From 2017 to 2018, amongst the same group of teachers, there were clear increases in the amount of reading at the word level, in picture discussion and in identifying syllables in words. The introduction of new letters and their sounds also increased. In all instances, apart from classroom T1 which remained the same, all teachers implemented more of the Literacy I Day I/3 components in 2018 than in 2017.

4.1.6 TREATMENT CLASSROOMS IMPLEMENTING LARA LITERACY I DAY 2/4 LESSON PLAN

Five classrooms taught Literacy I Day 2/4 in 2018. Day 2/4 focuses on the reading of a short text accompanied by a picture. The picture is meant to be used as a source for discussion and narrative prediction. Teachers are required to read a scripted factual question and an inferential question after the reading of the text.

Table 8: Implementation of LARA lesson plan components in Treatment classes teaching Literacy | Day 2/4-- 2018

LESSON COMPONENT	TREATMENT CLASSROOM 2018					
	T21	718	716	Т6	T12	Τ7
Getting ready – song handout books						
Title, picture discussions. Predictions						
Reading of the story						
Comprehension questions						

Implementation of Day 2/4 varied across the five classrooms. While T18, T6 and T7 followed the program closely, asking all the questions and engaging learners in a variety of ways of reading the text, T16 incorporated no comprehension questions and T12 no questions at all. All lessons entailed very repetitive group and whole class reading of the text (more discussion of this below).

Given that a limited number of classrooms implemented Day 2/4 in 2017, comparison between 2017 and 2018 was limited. Two teachers implemented the same day in both years (T7 and T21). Their practice across the two years was very similar, although they possibly asked a few more questions in 2018.

4.1.7 TREATMENT CLASSROOMS NOT INCORPORATING ANY OF THE LARA TRAINING MATERIALS (T8; T10; T14)

There were three Treatment classrooms of the sampled 24 that did not use the LARA materials in the lessons. These were the same three schools where the program was not implemented in 2017. In T10 the teacher was the same, but in T8 and T14 there was a different teacher for the P1 class. As indicated in Section 8 below, there was no relationship between training received and non-implementation of the program.

The lessons in the three treatment classrooms where the program was not being implemented resembled the Control school classrooms in that classroom discourse often devolved into unstructured conversations about learners' own experience. In this way the coherence of the lesson was difficult to retrieve, especially compared to those lessons that followed the LARA lesson plans. An example of the type of conversation is given in Text Box 2 below, where the low level of content for Term 3 in P1 is also notable.

Data Extract I: Non-incorporation of LARA training program in a Treatment classroom (T8)

The learners sing: "My parents got money and put it in my education. I will work hard and make them proud because they are my life"

The teacher tells the learners that today they will do reading. She writes the topic on board: People found in our home. The teacher asks which people are found in a home. Learners answer 'mother', 'father', 'grandparents'. She writes each word up on the board and learners read the words. The teacher then asks learners what the members of the family do in the home. For example, when they come to the grandmother:

Grandmother: Okay, okay so what about the grandmother, what does she do?

Learner: Weed the garden

Learner: Sweep the house.

Teacher: And the children? What do you people do at home?

Learners [shouting out]: fetch firewood; fetch water; play; wash dishes.

Teacher: Okay. Who of the parents do you love most? Mum or Dad?

Learners give a range of answers – both parents; my mother because she cooks for me.

Teacher: Well I think you should love them both because they give you life. Okay? Learners: Yes.

The teacher then tells the learners to stand and they sing a song:

"I love my mummy and daddy because they gave birth to me and pay my fees"

This is sung over and over, about 10 times.

The teacher then tells the learners to close their eyes. She walks around and touches them. As she touches them they have to say a member of a family aloud – 'Father'; 'Mother'; etc.

The teacher then draws four boxes on the board labelled: Mother, Father, Grandma, child. She tells learners to draw a picture of each in their books. She walks around as children do their drawing.

The lessons in Control classrooms and in the Treatment classes where the LARA program was not being implemented were characterized by interactions such as the one above, and by very little reading. Where reading did occur, it consisted of reading single words off the blackboard. The very low level of content introduced was also common across these classrooms. Clear intention and purpose in the lesson was largely absent from these lessons.

4.1.8 COVERAGE IN CONTROL CLASSROOMS

The contrast between what happens in the Treatment and Control classrooms is marked. A very common practice across the Control classrooms was for the teacher to generate a set of words that were written up on the blackboard, and that learners read through in a chant. The lack of discernible purpose and coherence in the lessons, especially in relation to reading, was notable.

In the Control classrooms learners were not exposed to any text longer than a single word. No books were in evidence, and any reading that occurred happened from the blackboard. The discussion stayed at the level of learners' existing knowledge and experience. The content level was rudimentary and very little material was covered over the course of a lesson.

The highly repetitive, low level of content common across Control classrooms is exemplified in the transcription of the lesson observed in C7 in Appendix E. Here learners cover animal sounds and animal movements, through collective chorusing and rhythmic chanting. In these classrooms, the discourse was defined by low level questions, and chanted responses by the whole class. In these activities there was no feedback on what learners said by the teacher. Unstructured discussion was common in these classrooms, where in the exchanges between teachers and learners, learners generally knew the answers to the questions. The questions demanded responses dependent on simple recall of information and it was difficult to see what new learning was occurring. A short example from C6 is given below, showing the repetitive nature of the call and response discursive patterns as well.

Data Extract 2: Classroom discourse patterns (C6)

Teacher: Who can tell me animals we have in the environment? Speak loud I want to hear you. Pupils: goat, Teacher: good Pupils: cow, **Teacher:** I like that **Pupil:** goat, Teacher: good Pupil pig Teacher: excellent. Thank you **Teacher:** We have a dog **Pupils:** We have a dog **Teacher:** Who can tell me the young one of a dog? The young one of a dog is called Puppy. **Teacher:** Puppy x6 **Pupils:** Puppy x6 **Teacher**: Dog x3 **Pupils:** Dog x3 Teacher: Puppy x3 **Pupil:** Puppy x3

4.2 USE OF LARA TEACHING AND LEARNING RESOURCE MATERIAL

A key element of the LARA program is the use of the LARA Pupil Book and the LARA Teacher Guide. The program also requires the preparation of lesson plans and the use of the Continuous Assessment Monitoring (CAM) forms as a system of assessment. Each of these is considered below.

4.2.1 THE LARA PUPIL BOOK AND LARA TEACHER GUIDE

Observers were asked to record how many of the learners had the LARA Pupil book with them on the day of the observation (they were asked to hold these up) in the Treatment classrooms. In 12 Treatment classrooms all the learners had the book. This is lower when compared to 2017 where in 19 classrooms all learners had a book. In addition, in 2018, in nine classrooms some of the learners had the book, and in three classrooms none of the learners had a LARA Pupil Book in their possession. The data shows some decline in the availability and/or use of the LARA Pupil book *by all learners* from 2017 to 2018.

	NUMBER 2017	NUMBER 2018
All learners	19	12
Some of the learners	4	9
No learners	I	3
Total	24	24

Table 9: Number of Treatment classrooms with the LARA Pupil Book in their possession

The LARA Teacher Guide was seen in use in 20 of the lessons in 2018, as opposed to 15 lessons in 2017. Greater use of the Teacher Guide may be linked to stricter adherence to the Lesson Plans in 2018 reported above.

4.2.2 CAM FORM

In 15 of the Treatment classrooms teachers could produce a CAM form (approximately the same as 2017 – 14 classrooms). 12 of the 15 CAM forms included entries for individual learners and all included marks for different components of literacy. All the CAM forms seen used the marking convention suggested by the LARA program (the triangle, with the number of sides indicating the level of mastery). None of the CAM forms were used in the course of the lessons.

4.2.3 LESSON PLANS

Very similar to 2017, across the majority of Treatment and Control classrooms, teachers were able to produce lesson plans, suggesting that it is an entrenched practice across schools. In the Treatment classrooms, 17 of the teachers produced a lesson plan. Of these, 17 of the plans referenced content in the lesson that was observed (16 out of 17 plans were matched in 2017). As in 2017, given that visits were unannounced, this is promising regarding program implementation. Teachers had planned to teach the LARA Literacy I lesson that was observed. However, given that lesson planning and coherence

between plan and lesson was prevalent in the Control schools as well (5 out of 5 teachers produced plans that matched the observed lessons) this is likely not solely a program effect.

4.3 ADHERENCE TO THE MACRO-PACING OF THE LARA TRAINING

The LARA training provides scripted lesson plans for each week of the three terms – 11 weeks for each term. In considering the macro pacing of the program, the analysis focused on whether the week in which the lessons were conducted matched the week specified in the LARA program. In 2018, of the 21 lessons where there was uptake of the training, ten of the lessons were conducted in the LARA-specified week; 6 lessons were one week behind in the program; and 3 lessons were one week ahead of the program. Table 10 shows that overall adherence to the macro pacing of the program was stronger in 2018 than in 2017, given that fewer teachers had fallen behind further than a week in 2018. In 2018, of those Treatment classes implementing the program, almost two-thirds were at the correct stage (week) stipulated by the program or a week ahead.

LARA MATERIAL	2017	2018
At correct week	13	10
One week ahead		3
One week behind	6	8
Two weeks behind	1	
Three weeks behind	1	

Table 10: Teacher adherence to macro pacing of the program 2017 to 2018

4.4 SUMMARY OF THE INCORPORATION OF THE LARA TRAINING IN CLASSROOMS

Table 11 shows the number of Treatment classrooms where the LARA material could be produced at the request of observers. Data from both 2017 and 2018 is shown.

		-
LARA MATERIAL	2017	2018
LARA Pupil Book	23	21

15

14

17

Teacher Guide

CAM form

Lesson plan

In 2018 some or all of the pupils in the majority of lessons (21) had the Pupil Book in their possession
(23 classrooms in 2017). In 2018 the Teacher Guide was also present (20) in the majority of Treatment
classrooms, more so than in 2017 (15 teachers had the Teachers Guide in 2017). Teachers could

20

15

17

produce a CAM form in 15 of the classrooms and a lesson plan in 17 of the classrooms, very similar to 2017. The CAM form was not seen to be used in any of the classrooms.

In 2018, 21 of the Treatment classrooms implemented the LARA program, either Literacy I Day 1/3 or Day 2/4. Four of the lessons covered all the components of the training. The least covered components were the theme discussion and reading sentences. Coverage of Lesson Plan components was higher in 2018 than in 2017. In 2018 most teachers implementing the program covered most of the Lesson plan steps.

Excessive repetition of sounds, syllables, words, sentences and paragraphs defined the pedagogy across all Treatment and Control classrooms. There was, however, a striking difference between Treatment classrooms incorporating the training and Treatment and Control classrooms where the training was not incorporated. There was no text in these classrooms apart from single words written on the blackboard. There was also far less structure and coherence in those classrooms where the training was not being incorporated, and the level of content covered was very low.

In 2018, of the 21 Treatment classes incorporating the program, 10 were at the correct stage (week) stipulated by the program, three were a week ahead in the program and 4 were a week behind the specified program week.

In short, implementation fidelity was high. In the sections below we consider the quality of the implementation and the uptake of the instructional content and instructional methods of the LARA program. First we briefly consider the teaching and learning environment.

5. THE TEACHING AND LEARNING ENVIRONMENT

Data was collected on various aspects of the teaching and learning environment, including the physical condition of the classroom and the display of print on the walls (print richness). Other aspects of the environment of interest were the number of learners present, language use in the classroom and the general classroom climate.

5.1 THE PHYSICAL CONDITION OF THE CLASSROOMS

The physical condition of the classroom was considered in relation to whether there was sufficient seating and light for learners to learn. In all the classrooms observers found there was sufficient light. In almost all the Treatment schools (29) there were enough seats for all learners. In two of the seven Control schools none of the learners had seats. The conditions were similar to 2017, although more learners had chairs in 2018.

5.2 THE PRINT RICHNESS OF THE CLASSROOMS

There is consensus in the field of literacy and language development that the amount of exposure to print will have an important impact on a learners' literacy and language development (National Reading Panel, 2000). This is particularly so in low socio-economic settings where children are unlikely to be exposed to print in their homes (Pretorius, 2014). The print richness of the classrooms was considered by looking at the material displayed on the walls of the classrooms. The table below shows the type of display, and the number of classrooms where these were observed.

DISPLAY TYPE	TREATMENT [N=24]	CONTROL [N=7]
Signs and labels (e.g. cupboard)	12	2
Days of the week / months / seasons	15	3
High frequency word lists / words on flashcards	17	I
Words matched to pictures	17	3
Phonics chart/s	18	3
Alphabet matched to pictures / chart of letters	3	0
News / theme board	2	
Number word chart	14	3
Learners' own work	6	0

Table 12: Wall displays across number of classrooms 2018

There was very little difference in the wall displays between 2017 and 2018. Overall, all classrooms had some display of print, the most common being words matched to pictures and phonics charts. There were more types of print on display in Treatment than in Control schools. The display of learners' own work, considered an important element in motivating children to read and write (Dombey, 2010), was seen in only six of the Treatment classrooms and in none of the Control classrooms.

In 2018, observers were asked to judge whether they considered the classrooms to be 'reading rich', in other words, whether displays were "varied, stimulating and inviting in relation to literacy".





About two thirds of Treatment schools were judged to be 'very or fairly reading rich' and a third hardly or not at all reading rich. Five of the Control classrooms were hardly or not at all reading rich, and two

were fairly reading rich. Examples of what was considered 'very reading rich', and 'not at all reading rich' are provided below.

5.3 CLASSROOM CLIMATE

The general classroom climate was measured through two indicators: whether the teacher was observed to praise, encourage or compliment the learners and whether the teacher gave girls and boys equal chances to answer questions or do activities. Similar to 2017, across both Treatment and Control schools 29 of the 31 teachers praised, encouraged or complimented the learners, and all the teachers gave equal chances to boys and girls.

5.4 LANGUAGE USE

Through the provision of resources, the LARA program promotes local language instruction in Literacy I in the first four grades. The use of language during this period was thus of interest in the observation. As in 2017, in the Treatment schools the local language (either Luganda or Runyankore/Rukiga) was used in 23 of the 24 classrooms all the time, and in one of the classrooms more than half the time. In contrast, in the Control classrooms, although the focus of the observed lessons was Literacy in the local language, 5 of the schools used English between half and all the time. English was not used at all in any of the Treatment schools. This suggests the positive impact of the provision of materials and lesson plans in the local language for the use of that local language in teaching². It may also be an effect of emphasizing the importance of teaching reading in local language in the training as well.

5.5 NUMBER OF LEARNERS

Table 13 below shows the class sizes of the Treatment and Control classes for 2017 and 2018. These reflect the number of learners present during the lesson, not the official class size. In both years, most of the classes (20 and 19 out of the total sample of 31 in 2017 and 2018 respectively) had below 40 learners. There were more classes with over 50 learners in 2018 (9 classes) than in 2017 (6 classes). A considerable amount of research exists in the Ugandan context on class size. Given there is no official class size norm, there is widespread reporting of overcrowding, which undermines the teaching of reading in the early grades (Nagabuko et al, 2008; Kewaza & Welch, 2013). In the classrooms observed for the study in 2018, while most classes (19 or the 31) were below 40 learners, 12 classes had over 50 learners.

Table 13: Number of learners present during the lesson in Treatment and Control classrooms

			2018	
			Treatment	Control
0-19 learners	I	2	I	2

2 Similar findings in Kirwin, J. & Thornton (2015)

	2017		2018	
	Treatment	Control	Treatment	Control
20-29 learners	10		9	0
30 – 39 learners	6	I	6	I
40 -49 learners	3	2	2	I
50 – 59 learners	I		I	I
60 – 69 learners	3	I	3	0
70 - 79	0	I	2	2

6. INSTRUCTIONAL METHOD

The LARA program includes a set of core methodologies underlying its instructional model. These were listed in Table I, and include:

- Collaborative Learning
- Continuous Assessment
- Multisensory learning
- Oral Language development
- Print Awareness
- Scaffolding Differentiation

In this section, the implementation of several of the core instructional methods is considered. Multisensory learning and scaffolding³ are not included in the analysis. Both methodologies were considered too high inference for the study's data collection processes. Multisensory is excluded because it is a complex matter discerning deliberate multisensory activity from conventional classroom activities, such as speaking and listening. Scaffolding is not included because it entails detailed and careful analysis of verbal interaction that would require transcripts from video or audio records.

There is some variation across different LARA documents as to the central program methodologies. Below we report on those that occur across documents: continuous assessment (including I do, we do, you do); differentiation; collaborative learning; and print awareness.

6.1 CONTINUOUS ASSESSMENT

³ Multisensory instruction is instruction that connects learners' visual, auditory, kinaesthetic and tactile senses (Teachers Guide, p.9). Scaffolding is defined as "the idea of moving from the known to the unknown. With scaffolding, learners gain new information that builds from their present understanding" (p.10).

Continuous assessment is a central tenet of the LARA program. Continuous assessment "does not refer to a set of tests or examinations, but a process or an activity carried out by the teacher in order to collect evidence about the performance acquired by a learner" (LARA Facilitator Guide, p. 34). The assessment approach indicates the on-going or continuous measurement of learner competences so that their development may be assessed, and strategies devised for improvement. Continuous assessment was considered using several indicators. The first was whether a learner was seen to read individually with the teacher commenting, correcting or assessing the learner. Secondly, continuous assessment was considered in relation to the 'I do, we do, you do' methodology. Third, data was collected from LARA's assessment reporting system, the Continuous Assessment Monitoring (CAM) form, which is filled and retained by all literacy teachers in their classroom.

ASSESSING INDIVIDUALS READING

Overall, individual learners were seen to read individually with the teacher commenting, correcting or assessing their reading in 23 of the 31 classrooms (compared with 14 in 2017). This was seen in 19 of the Treatment schools and 4 of the Control schools. This represents an improvement from 14 Treatment schools and 2 Control schools in 2017. Although the numbers are very small, individual reading with teacher assessment appeared to be improving across both Treatment and Control schools, and it is not clear whether the increase is an effect of the program. The qualitative data revealed, however, that this feedback was limited. Most corrections amounted to yes or no, wrong or right and in the case of a correct reading clapping or praising the learner. There was an over-reliance on teacher-directed strategies (e.g. telling learners what words were) when learners got stuck on a word when reading, and teachers did not offer any self-correction strategies such as finding semantic and syntactic clues and cues in the text. A similar phenomenon to that seen in 2017 was the very repetitive reading of words, sentences or passages by various individual and groups of learners, until all learners in the class progressively memorized the passage. Thus, although there was more evidence of individuals reading to the teacher, assessment was not observed and feedback was very restricted.

I DO, WE DO, YOU DO

The LARA program has a particular methodology called 'I do, we do, you do'. The idea is that new content is modelled for the learners by the teacher (I do). Then learners and teachers practice the content as a class (we do). Finally, individual learners practice the content on their own (you do). The focus of 'we do' and 'you do' is to assess whether learners are able to produce the given content and identify where support is required. In this regard, teachers are expected to mark down learner performance on tasks. What occurs in practice is a very repetitive practicing (of phonics, words, a passage) by different configurations of teacher and learners. So, although the teacher in several classrooms was seen to model a reading of text, followed by learners reading the text with the teacher and then on their own, the 'I do, we do, you do' method was stripped of its evaluative component. In none of the classrooms were teachers observed to note down learner performances on reading tasks.

What resulted was repetitive reading of the text in a call and response pattern reminiscent of the ritualized chorus exchange found across many similar classrooms contexts⁴.

An example can be found in Appendix F that provides a direct transcription of the reading of text from the Lara Pupil Book in T16. At the beginning of the reading most of the learners are unable to read the passage. The teacher reads the passage with the class in chorus 7 times. She corrects words that are mispronounced. She then asks groups of learners to read, and the passage is read another 4 times. Finally, she selects individuals and then rows to read 11 times. Finally, the passage is read successfully by the whole class with the teacher. The passage is read a total of 23 times, so that by the end the whole class is able to recite the passage. It is likely, however, that those who were unable to read the passage at the start have now memorized the words rather than developed the ability to read the passage.

CAM ENTRIES

The Continuous Assessment Monitoring (CAM) forms which LARA requires for the recording of continuous assessment has different components recommended for teachers to assess in Literacy I: Reads texts with increasing fluency; Identifies letters by name and sound; Reads known syllables with fluency; and Segments words into syllables. No CAM forms were used in the course of the lessons when learners were asked to read individually. It seems unlikely therefore that these are used to record formative assessment of reading on a regular basis.

SUMMARY ASSESSMENT

There was little evidence of continuous assessment across the classrooms. Although teachers were observed listening to individual learners read, the nature of feedback was restricted. One of the crucial methods of reading practice and assessment (I do, we do, you do) potentially contributed to a repetitive, chorused classroom discourse, empty of evaluative potential.

6.2 DIFFERENTIATION

In the 'How to Teach' section of the Teachers Guide considerable attention is paid to 'differentiated activity' providing suggestions for remedial and accelerated activities for learners at different levels. The study assessed whether there was any evidence of differentiation by observing whether the teacher gave all learners the same activity, or whether some learners or groups of learners were given a different activity than the whole class. As in 2017, across all classrooms there was no evidence of differentiation.

6.3 COLLABORATIVE LEARNING

According to the LARA Teacher's Guide, collaborative learning means "working together". Collaborative learning provides opportunities for learners to work with their classmates for regular, short periods during literacy lessons" (p.8). The qualitative narrative data showed that there was pair

⁴ See Chapter 2 of Hoadley (2018) for a recent and comprehensive review of pedagogy across developing country contexts, and see Kewaza and Welch (2013) and Ssentanda (2014) for Ugandan examples.

work in two Treatment classrooms. This, however, did not involve the teacher circulating between groups, assisting and evaluating as suggested by the Teacher Guide. Rather, teachers asked learners to "talk to their neighbor" for a brief period of time before engaging in whole class discussion. Other than these instances there was no evidence of group interaction amongst learners. The only other grouping used in the classroom was for the purpose of reading aloud in groups of five to seven learners. These observations were very similar to 2017, although in 2017 there was more pair discussion (seen in 7 lessons).

6.4. PRINT AWARENESS

Print awareness is developed by learners having both the opportunity to *use* (see and read) written material around them, as well as *handle* written material, especially books.

6.4.1 USE OF WRITTEN MATERIAL

The 2017 Classroom Observation Study recorded all print material that was used by learners during a lesson. In 2018, observers were asked to record all printed material used by learners, plus the *dominant* text used by learners and text used by teachers. Print material refers to text of any length – from single letters to paragraphs.

	TREATMENT	CONTROL
Blackboard	21	7
Textbook		
Reader		
LARA Pupil Book	21	
Worksheet		
Cards	5	I
Enlarged pictures		
Chart	4	
Enlarged text	2	
Material other		I

Table 14: Use of printed material by learners in the lessons, 2018

Similar to learner use in 2017, Treatment classrooms used a greater range of materials (five different types of materials) than Control classrooms (three types). While the range was the same as Treatment and Control lessons in 2017, the number of Treatment classrooms using the blackboard in 2018 had increased from 14 to 21.

The dominant resource used by learners in 2018 was the blackboard in 15 of the Treatment classrooms and all of the Control classrooms. Dominance in the use of the blackboard as the primary text for reading is significant in that it constructs reading as a communal act, which the class generally performs together. This is contrasted with the act of reading constituted as an individual, private act between the book (in this case LARA pupil book) and the learner. This experience of reading as a private, habitual, individual act is crucial for later reading, and learning.

In a third of the Treatment classrooms the LARA learner book was the dominant text used.

DOMINANT TEXT	CONTROL	TREATMENT	TOTAL	
DOMINANT TEXT	NO.	NO.	NO.	
Blackboard	7	15	22	
LARA learner book	0	8	8	
Chart	0	I	I	
Total	7	24	31	

Table 15: Dominant text used by learners in the lessons, 2018

In terms of the teachers' use of printed material, all the teachers in both the Treatment and Control lessons used the blackboard. Teachers in 19 Treatment lessons used the LARA teacher book, and teachers in 8 Treatment lessons used the LARA Pupil Book.

HANDLING OF WRITTEN MATERIAL

The LARA program emphasizes that learners must have the opportunity to handle and interact with books and other printed material. This develops concept of print or 'print awareness' and includes activities such as identifying physical features of a book (cover, spine, contents page), elements of text (the beginning and end of sentences, print moving from left to right, punctuation, capital letters) and appropriate care and handling of books. Observations for these three aspects of print awareness specifically were made. These were the teacher showing learners how to identify or use correct procedures for *handling books* (opening, closing books, turning the page); the teacher guiding learners to use *finger pointing* to indicate text direction; and the teacher assisting learners in developing a *knowledge of print* and printed material (e.g. identify book cover; title of book, author; contents). There was more evidence in 2018 of finger pointing as the most common strategy observed in the Treatment classrooms (21 of 24 classrooms) than in 2017 (13 of 24). There was also more evidence of book handling (observed in 20 classrooms as opposed to 9 in 2017). Knowledge of print was not seen to be developed in any classrooms in either year. In 2018 no print awareness strategies were observed in any of the Control classrooms.

	2017		2018	
	TREATMENT	CONTROL	TREATMENT	CONTROL
Text direction (finger pointing)	13	I	21	0
Book handling	9	I	20	0
Knowledge of print	0	0	0	0

Table 16: Use of print awareness strategies in the lessons 2017-2018

Although children in most classrooms in the Treatment schools had books in their possession, actual reading occurred predominantly from the blackboard (on instruction from the teacher). Dominant use

of the blackboard may partly explain why attention was not drawn to the structure and features of the books, and why knowledge of print was not seen to be developed.

BOOK HANDLING

Total

Above we discussed *teachers*' instructional strategies regarding book handling. But we were also interested in whether learners actually had the chance to hold and handle (open and use) any books (readers, picture books, LARA Pupil book) at all during the lesson, and in 2018 we asked observers specifically to indicate how many learners in a lesson had the opportunity to do this. Book handling is crucial to developing reading and reading habits. By handling books, learners acquire a sense of how to hold books, turn pages and develop a knowledge of print. None of the learners in the Control classrooms used any kind of book. As indicated above, the only reading that took place was from the blackboard, a poster and a chart. In 2018 all or more than half the learners in 17 Treatment classrooms had an opportunity to handle books. Less than half the learners handled books in 3 classrooms and in 4 classrooms no learners handled books. Across the classrooms, the only books that were handled were the LARA Pupil book, highlighting the significance of this resource for learners' literacy development.

, , , , , ,		
	CONTROL	TREATMENT
All the learners	0	12
More than half the class	0	5
Less than half the class	0	4
No learners	7	3

Table 17: Opportunity to hold and handle (open and use) any books (readers, picture
books, LARA Pupil book) during the lesson - 2018

Table 17 shows (and 4.2.1 above elaborates) that only in half (50%) the Treatment classes do *all* learners have books. The program intention is that all learners have an opportunity to handle their own book in learning to read. None of the learners in the Control classrooms had the opportunity to handle books, however.

24

6.5 SUMMARY INSTRUCTIONAL METHOD

Analysis of both the closed-ended and open-ended data from the Classroom Observation Study shows a limited uptake of the methodologies advanced by the LARA program. Differentiation was not observed and very little collaborative learning was evident. Classroom discourse tended to follow traditional patterns of highly repetitive chorused readings of short text. There was very little discussion of text, restricted assessment of the reading of text by the teacher and limited development of print awareness. Some of the recommended instructional strategies of the LARA program appear to have been grafted onto existing practices, as in the possible execution of 'I do, we do, you do' in the form of repetitive readings of text between the teacher and individual or groups of learners.

Some shifts between 2017 and 2018 were discerned. There was more evidence of individuals reading loud to the teacher in 2018. There was also more instruction in finger pointing to indicate text direction and more direction given in book handling. However, there was also more use of the blackboard in 2018, which is either a reversion to prior practices or a function of less classes where *all* learners were in possession of a LARA book.

7. INSTRUCTIONAL CONTENT

7.1 FIVE COMPONENTS OF LITERACY LEARNING

The LARA program is based on the widely-established idea that successful literacy instruction is based on the explicit and systematic teaching of five components of literacy learning: phonemic awareness; alphabetic principal (phonics, or letter sound correspondence); vocabulary; fluency; and comprehension (National Reading Panel, 2000; Snow, 2017). Ideally, these different components are integrated in the course of a literacy lesson and taught simultaneously rather than sequentially. Teale et al (2017) have recently argued that equally important to the development of the five foundational skills listed above is oral language development and the development of background knowledge, especially for comprehension. There is an attempt to incorporate these elements within the LARA program, and in the case of Literacy I this is mostly in the theme and picture discussions, as well as oral comprehension questions. We report, therefore, on the five components of literacy, as well as on oral language development and background knowledge, below. Again, we draw on both closed-ended quantitative data and the open-ended narrative data.

7.2 PHONICS AND PHONEMIC AWARENESS

Phonemic awareness entails the development of an 'ear' for language, how letters sound, and how larger units of sounds at the sentence, word and syllable level can be parsed. Phonics entails understanding letter/s-sound relationships. Three indicators were selected for observation of phonics or phonemic awareness activity in the classroom. These included the teacher guiding the learners to a) focus on the *sounds* that letters and groups of letters make; b) identify *sounds* that make up words (e.g. beginning middle and end sounds); c) and break words into *syllables* or 'beat out' the word (write words by syllables on board e.g. "bro-ken" or clapping the syllables of the word)

PHONEMIC AWARENESS INDICATORS	2017		2018	
	TREATMENT [N=24]	CONTROL [N=7]	TREATMENT [N=24]	CONTROL [N=7]
Focus on the <i>sounds</i> that letters and groups of letters make	18	I	17	I
Identify sounds that make up words	1	0	11	0
Break words into syllables	16	2	18	

Table 18: Evidence of the development of phonemic awareness in the classrooms 2017-2018

As in 2017, in 2018 in almost three-quarters of the Treatment schools there was evidence of phonics teaching and the development of understanding letter-sound relations. Most lessons focused on the identification and practice of two or three letter blends and the addition of a vowel sound. These phonics charts appeared in the LARA Teacher Guide for each Literacy I Day I/3 lesson for each week, an example is given in Figure 8 below.

		а	e	i	0
Cw	cw	cwa	cwe	cwi	сwo
		na	ne	ni	no
		sa	se	si	SO

Figure 4: Phonics table as given in LARA Teacher Guide

A table like the one in Figure 8 was reproduced in most of the classrooms, generally drawn on the blackboard by the teacher. There was extensive repetition of these sounds by the class and by individual learners. Teaching of the syllables was also very mechanical and rote-like in some classrooms. For example, in three of the classrooms the teachers used the oral format for the introduction of lower and upper case letters to introduce syllables, as shown in Data Extract 3 below.

Data Extract 3: Repetition practice in phonemic awareness

Teacher: My name is big 'Mw' and my sound is 'mwa'.
Teacher: My name is big 'Mw' and my sound is 'mwa'.
Learners: My name is big 'Mw' and my sound is 'mwa'.
Teacher: My name is small 'mw' and my sound is 'mwa'.
Teacher: My name is small 'mw' and my sound is 'mwa'.
Teacher and learners: My name is big 'Mwa' and my sound is 'mwa'.
Teacher and learners: My name is big 'Mwa' and my sound is 'mwa'.
Teacher and learners: My name is small 'mwa' and my sound is 'mwa'.
Teacher and learners: My name is small 'mwa' and my sound is 'mwa'.

The mechanical and habitual routine is evident in deploying the frame for 'big' and 'small' letters. This frame makes no sense for the teaching of a 'big' 'Mwa' and a 'small' 'mwa' when it is only the first letter that is capitalized and the sound is identical. The identification of upper and lower case letters was completed much earlier in the program. Rather, and according to the teacher guide (Term 3, Week 8), students should have practiced the phonic blends mwa, mwe mwi, mwo.

Nonetheless, Table 18 shows a shift from 2017 to 2018, where syllables were identified *in words* with greater frequency in 2018. Eleven Treatment lessons in 2018 focused on sounds that different parts of words make, as opposed to one lesson in 2017. Given that Luganda and Rukiga / Runyankore are tonal languages, where syllables within words might be structurally similar but their vowels may differ in tone, syllables per se have no meaning and need to be decoded in the context of words and sentences. (Pretorius and Mokhwesana, p.57). For example, in relation to the sounds mwa, mwe mwi, mwo, the program requires learners to 'beat the words' 'o-mwa-na', 'mwe-ru' and 'mwa-la'. This 'beating out' of the syllables in words was always done collectively, though, and individuals who did not grasp the sound

units would be carried along in the rhythm. The very repetitive, drill-like practice of syllables and sounds very often appeared devoid of meaning and connection to the actual word being beaten out.

The more contextualized teaching of phonics (where they are identified and practiced in words) is also important in agglutinating languages such as Luganda and Rukiga/Runyankore where smaller morphological units are combined in a single word to represent compound ideas. However, when breaking words down into syllables there was no focus on the smaller units of meaning (such as roots, prefixes, and suffixes) in the lessons. This 'morphological awareness' has been shown to be an important contributor to word reading and comprehension skills (Pretorius & Mokhwesana, 2009, p.59). However, as seen in Table 18, the dominant focus in the LARA lessons was rote recitation of syllables and sounds decontextualized from words or sentences.

Singing and rhymes are also ways of developing phonemic awareness, but only if attention is drawn to aspects of sounds, rhyme and rhythm. Although learners sang a song in every class while books were being handed out the singing appeared to be more a classroom management exercise than a learning opportunity. The content of the songs often entailed a moral message around reading. The purpose then was less directed to the development of literacy itself, and more a motivating message about reading. Two examples are given below:

My parents got money and put it in my education. I will work hard and make them proud because they are my life [Kendobo]

Reading, reading Indeed reading is so good I had refused it By ignorance.

7.3 VOCABULARY

The development of vocabulary is crucial in reading instruction as readers cannot understand what they are reading without knowing what most of the words mean. As the National Reading Panel (2000) argued: "Vocabulary knowledge has consistently been linked to successful reading, especially in reading comprehension. Vocabulary knowledge at the start of school has also been found to predict academic performance in the first three years of schooling" (p. 45).

Two indicators were used to measure the coverage of vocabulary as a literacy focus in the classrooms: whether learners were asked to match a picture or action to a vocabulary word in print; and whether the teacher discussed the meaning of vocabulary words. Table 19 below shows that overall there was more vocabulary development observed in 2018 than in 2017. In 2018 in six of the 24 Treatment classrooms learners were asked to match pictures to words, and in nine of the Treatment classrooms learners and the teacher discussed definitions for words.

	2017		2018	
	TREATMENT	CONTROL	TREATMENT	CONTROL
Match picture or action to vocabulary word in print	3	1	6	0
Discuss the meaning of vocabulary words	2	3	9	2

Table 19: Number of lessons in which vocabulary development is observed 2017 - 2018

7.4 FLUENCY

The LARA Teacher Guide defines fluency as "the ability to read text with speed, accuracy and expression" (p. 7). According to the Guide, the more learners interact with text the more likely it is that they will become fluent readers. They recommend a combination of 'echo', 'choral', 'partner' and 'whisper' reading. The first measure of fluency in the Classroom Observation Study was presence or absence of these different types of reading. These are shown for 2017 and 2018 in Table 20 below.

Table 20: Number of lessons in which different types of reading practices were observed	
2017 - 2018	

	2017		2018	
TYPE OF READING	TREATMENT [N=24]	CONTROL [N=7]	TREATMENT [N=24]	CONTROL [N=7]
The teacher reads aloud to the class	23	4	23	6
The whole class reads aloud together with the teacher	11	2	19	3
The whole class reads aloud together without the teacher	23	5	23	6
The whole class reads portions of text after the teacher	19	4	7	3
Learners read aloud together in groups or pairs	17	I	13	2
Learners read individually aloud to the class	22	4	18	4
Learners read individually silently (or whispered) independently	I	0	4	0
Learners read in pairs independently (or whispered)	2	0	0	0

Table 20 shows that a wide range of reading formats was seen across the classrooms. The patterns of reading in 2018 are very like those found in 2017, the only notable difference being that less was seen of the whole class reading portions of text after the teacher in Treatment classrooms between 2017 and 2018 (seen in 19 lessons in 2017 and 7 lessons in 2018). Whole class reading, with and without the teacher, reading in groups and in pairs, and reading aloud individually to the class were all common across all the classrooms. As in 2017, there was very little evidence of learners reading independently,
individually or in pairs. As already noted, reading as a private individual act is not developed in the pedagogy seen.

Observers were asked to record *what* learners read when they did reading in the lesson (from any source, including a book or the chalk board). The table below indicates the number of classrooms where the reading of letters, words broken into syllables, single words, sentences and extended text was observed in Treatment and Control schools between 2017 and 2018:

	2017		2018	
TEXT TYPE	TREATMENT [N=24]	CONTROL [N=7]	TREATMENT [N=24]	CONTROL [N=7]
letters/groups of letters representing sounds	18	2	18	
words broken into syllables	16	2	17	I
single words	8	4	19	7
sentence/s	9	I	12	0
extended text/s	4	0	6	0

Table 21: number of lessons in which the reading of different types of text were observed

Table 21 shows that in 2017 and 2018 Treatment classrooms learners were seen to predominantly read letters and words broken into syllables. In 2018, however, there is an increase in the number of classrooms where learners also read single words. This links to the more rigorous adherence to the program steps represented in Tables 4 and 5. A change in the number of classrooms reading sentences, from 9 in 2017 to 12 in 2018 is also evident. Finally, in 2018, more classrooms have students reading extended text than in 2017. However, given that most classrooms in both years were doing Literacy I Day 1/3 it is expected that they would cover mainly letters, syllables, words and sentences, which form part of the scripted program for that day. Four Treatment classrooms in 2017 and six Treatment classrooms in 2018 were doing Literacy I Day 2/4, hence the corresponding observations reported in the table for each year.

In Control schools, there was no reading of extended text in either year and reading of a sentence in only one classroom in 2017. Learners in Control classrooms focused predominantly on letter sounds and single words. The analysis shows that the existence of LARA Pupil Books which included text at the letter, syllable, sentence and extended text level accounted for learners reading a greater range of text. How much did they read, however?

In both 2017 and 2018 the number of words in Treatment classrooms tended to be three, the number provided in the LARA Pupil book. Likewise, most lessons where sentences were read totaled 3 sentences and the extended text was generally three to four sentences long, all corresponding to the amount of text in the LARA book.

READING OR REMEMBERING?

The form of reading, as shown in extracts above, and in Appendix E, was a very repetitive chorusing of syllables, words, sentences or paragraphs. In the example given in Section 6 above, it appeared that over the course of these repetitions, all learners in the class gradually learnt to recite the text. The notion that learners were in many instances learning to remember rather than read text was confirmed in the commencement of another lesson in T7. The teacher begins the lesson by saying: "Now we shall recap the last story we read about decorating the class. Can we all recite that story?" To which the learners reply "yes" and then go on to recite the previous story from the LARA learner book word for word without looking at the text of the story.

SUMMARY FLUENCY

In 2018, in 18 Treatment classrooms learners read connected text in the form of sentences or a paragraph, which represented 5 more lessons than in 2017. The whole-class, chorused form of reading, however, was generally the same as in 2017. Learners had few opportunities to read individually on their own. Analysis of the observation data raised the question, as it did in 2017, whether through the very repetitive chorusing of text learners were learning to read or remember text.

7.5 COMPREHENSION

Deriving meaning from text, or understanding text, is the purpose of learning to read. The LARA program defines two central kinds of comprehension questions - literal and inferential – that may be asked to assess understanding of text. Literal comprehension refers to the ability to recall facts from a text (like the name of a character or the plot). Inferential comprehension questions ask the reader to understand information not stated directly in the text (like how they thought a character felt, or hypothetical questions, or questions based on prior knowledge). The LARA Teacher Guide usefully calls these 'In the Text' and 'In my Mind' questions, providing examples of each for the teacher to use in the lesson. Two additional kinds of questions were measured during our classroom observations. One was 'retell questions' asking learners to act out or summarize a story they have read or has been read to them (covering the story or plot) (not a program requirement for Literacy I). The other was 'predictive questions', asking learners what they thought would happen in a story by looking at a picture or the title of the story (a requirement for Literacy I). Making predictions while reading supports text comprehension. Table 22 below indicates what kinds of questions were asked of learners in the lessons.

Table 22: Number of lessons in which different types of comprehension questions were observed

	TREATMENT CLASSROOMS [N=24]	CONTROL CLASSROOMS [N=7]
Predictive questions	3	0
Literal questions	8	0
Inferential questions	4	0
Re-tell questions		0

The table shows that none of the question types identified were asked in the Control classrooms. In the Treatment classrooms, the most common type of question asked in 2018 were factual questions. While one of the steps in the program indicate that teachers should ask predictive questions (using the picture or title as a base), teachers generally asked learners to say what they saw in the picture, with no connection to the narrative or meaning of the accompanying text. This was also often the case for open questions that the teachers asked. Although teachers did attempt to get learners to connect the theme of the text to their everyday lives, they didn't assist them to use this knowledge to engage more closely with the text. An example from the T8 classroom is given below. After reading the text the teacher asks two questions, a factual question and an open-ended question:

Data Extract 4: Questioning

Teacher: what the children are doing in the class? Learner: Pupils are making ropes. Teacher: Another Learner: Pupil is making a basket Teacher. Both are right. What handicrafts do you do at your school? Learner: I weave a basket. Learner: I weave balls T: Say 'a ball' and we don't weave balls we roll them Learner: I make mats Teacher: Clap for them; they are right.

The first question – 'what are the children doing in the class?' is retrievable from the picture that accompanies the text. Learners therefore do not have to engage with the text (find words for example) in order to answer the question. The second question, 'what handicrafts do you do at your school?' is an 'in your mind' question, meant to connect with learners' everyday lives. These questions and responses do raise the question of how authentic the classroom discourse is, and whether the children actually weave baskets or make mats at school. There is no opportunity for elaborated discussion in order to allow children to engage meaningfully with the text. And no explicit connection back to the text is made by the teacher following the questions.

There was no discussion of the issue of materials, what they might do with the handicrafts, or what happens when one runs out of materials, etc. The teacher also did not draw attention to specific words in the text to assist learners. The very procedural turn taking without elaborated feedback impedes engagement with meaning in the text. Across the classrooms, the approach to developing understanding generally entailed this form of low-level, restricted questioning. There was little use of imaging, using textual and graphic clues to derive meanings, summarizing or retelling. Only in one classroom, T6, were learners asked to retell the story. This lesson, along with T7 was a standout lesson, one of two in the sample that created coherence between the narrative of the text and the discussion of that text. In the T6 lesson the teacher reads a story about a boy who eats too much and gets a sore stomach. Having read through the passage and asked a number of questions the teacher continues:

Data Extract 5: Retell as comprehension strategy (T6)

Teacher: Now we are going to create our own title instead of "Undisciplined eating". What do you think is another appropriate title for this story? Yes Ibra?
Pupil -Ibra: Bad habits
Teacher: Thank you very much. Ibra is very right because Kizza's eating style portrays bad habits. Agnes tell us.
Pupil- Agnes: Greed (omululu in vernacular)
Teacher: Perfect, Agnes has told us "greed". This means that we can replace the word "Undisciplined eating" with all those words you have mentioned. Let us also replace the first statement of the story with our own words without changing the meaning so we create our own story as a class. Yes Ramathan?
Pupil-Ramathan: Having a greedy stomach.
Teacher: Yes, thank you very much, Ramathan has told us having a problem with the stomach. Tell me the lessons we learn from the story. Yes Bridget?
Pupil- Bridget: Avoiding eating uncovered food.

The teacher leads learners in reconstructing the story in this way retrieving meaning from the text. Both this lesson and T7's lesson were significantly different from most lessons, working between the different components of the lesson plan and making links between the title, picture, vocabulary and meaning of the text. This was very different from the procedural, lock step delivery of the Lesson Plan exemplified in Data Extract 5 above.

7.6 ORAL LANGUAGE DEVELOPMENT AND BACKGROUND KNOWLEDGE

Recent research shows that there is now widespread agreement that learning vocabulary, developing oral language skills, and acquiring background knowledge are as important to learning to read as the tasks of learning letters, sounds, decoding and fluency (Snow, 2017; Nag et al, 2014). As children hear and speak words, phrases and sentences, they build sensitivity to the sound system of language, vocabulary, and critically important listening comprehension and speaking skills (Teale, 2017).

The LARA program also states that "The ability to read words easily comes from well-developed oral language skills. Developing learners' phonological awareness and vocabulary provides a foundation for literacy" (LARA Teacher Guide, p. 9). From an analysis of the open-ended qualitative data there was little evidence of oral language development in most classrooms. The focus was on lower order decoding skills, and much less on vocabulary, engagement in understanding the meaning of text and theme discussions. Where discussion did occur, it was restricted, in the sense that it followed a classic teacher initiation and (often chorused) learner response sequence. It was also restricted in that the content addressed was always very local and familiar to learners. An example is given in the Data Extract below.

Data Extract 6: Restricted classroom discussion

The teacher is directing learners to a page in the Lara Pupil book. **Teacher:** There is a very big picture at the top together with the syllables we have learnt today. First look carefully. Are you seeing anything? We are looking at things we make with our own hands, things we do what? **Pupils:** we make with our own hands **Teacher:** When we look at these pictures we see things we make with our own hands and their uses, so you are going to identify these things by telling me their names and also their uses, okay? Pupils: Okay **Teacher:** So, Collins, what are you seeing? **Pupil:** I am seeing a mat **Teacher:** And what's the use of a mat? **Pupils:** It's for sitting on. **Teacher:** When do you sit on a mat? **Pupils [in chorus]:** When eating, talking, sleeping. **Teacher:** Very good, all that is correct. Now let look on the blackboard. We said this is 'gye'.

At no point were teachers seen to introduce *new* information. In Data Box 7 below we see how the content introduced via the themes and texts in the books is very local and how very little new information or vocabulary is introduced. A rote-like learning of (known) thematic content, as opposed to engagement with ideas, is seen in the following exchange between the teacher and students:

Data Extract 7: Local, everyday content

Teacher: First of all, we are going to mention the importance of things that we make with our own hands, tell me. **Pupil:** Pottery **Teacher:** So what do we use pots for? **Pupils:** To keep in our water. Teacher: From which material do we make pots form? **Pupils:** From clay Teacher: Ahha another one? **Pupil:** Weaving baskets **Teacher:** What do we use baskets for? Pupils: We put food, picking coffee Teacher: What else? **Pupils:** Making ropes **Teacher:** What is the use of ropes? Pupils: Rope jumping, tying goats and cows, animals **Teacher:** What else? **Pupils:** Making mats Teacher: What are the uses of mats and from which material do we make mats? **Pupils:** From papyrus **Teacher:** And where do we find papyrus? Pupils: From swamps.

The importance of invoking children's local community knowledge in getting them to engage with meaning in texts is recognized. However, if the content of texts and classroom discussion is limited to only what is found in the community and what is known by learners, then their potential for gaining broader background knowledge and moving beyond their everyday lives is severely limited. Texts and teachers need to find a way of shifting learners from their experiential knowledge to a broader apprehension of more mainstream society, such that they are not locked out of the possibilities for mobility as well as further learning.

As indicated above, classroom discourse consisted overwhelmingly of the repetition of text on the board or in the LARA Pupil Book. Combined with an emphasis on drill of lower order decoding skills and limited vocabulary development reported on above, the possibilities for the development of learners' oral language was very restricted in the lessons observed.

7.7 SUMMARY INSTRUCTIONAL CONTENT

Of the components of literacy covered, phonics was the dominant content in the observed lessons. The coverage of all components entailed extensive repetition of content – whether at the sound, word, sentence or paragraph level. What emerged from the open-ended qualitative data was a picture of classrooms where in general the steps of the program were delivered in a mechanistic, procedural way through very repetitive chorused routines around sounds, syllables, words and sentences. The different steps that focused on sounds, words and extended text and its meaning were treated in an atomistic way in the pedagogy, so that there was little contextualization of sounds in words, words in connected text and text communicating meaning.

Discussion was truncated and no learner was seen to ask a question or initiate a discussion across the classrooms. Very repetitive readings of text dominated the classrooms, with little time for oral language development. The focus in the texts on local topics and learners' everyday worlds meant that the development of new background knowledge and vocabulary was limited, and learners' understanding of the world was circumscribed to their local environment.

8. TRAINING

In 2018 fieldworkers asked teachers whether they were trained to teach the LARA program in 2017, and whether they had received follow up visits in 2017 or 2018. Table 23 below shows the majority of the teachers in the Treatment schools (19 of 24) had received training in 2017, and 22 teachers had received follow up training in 2017 or 2018.

Table 23: 2018	Treatment school	teachers who	received	training ir	n 2017	and 2017/2018

	TREATMENT	CONTROL
Training in 2017	19	0
Follow up 2017 / 2018	22	0

For the three Treatment classrooms where the program was not being implemented, there appeared no link in the data between training and program uptake. One of these teachers had received both original

training and follow up. One had received neither original training and follow up, and one teacher had received the original training but no follow up.

9. CONCLUSION

From the analysis presented above it is clear that there were shifts in the way in which the program was taken up in 2017 and 2018. Greater fidelity to the program structure was evident in 2018 in terms of pacing and sequencing of the program, where most teachers covered most of the basic steps of the program. In 2018 more of the program was covered, there was more reading aloud individually, more book handling and finger pointing, more focus on syllables in words (contextualized phonics), more vocabulary focus and more extended text covered. On the less positive side, in fewer classes did all learners have the LARA book and the blackboard was used more often than in 2017 as the dominant source for reading text.

Despite these shifts in uptake, classroom discourse patterns had not changed very much and, as in 2017, tended to follow traditional patterns of highly repetitive chorused readings of syllables, words, sentences or short texts. Choral reading predominated, with little opportunity across the classrooms for learners to read individually on their own. The collective and very repetitive reproduction of text on instruction from the teacher meant that it was evident in several classroom settings that learners were learning to *remember* text rather than to *read* it. Individual reading did occur, but no assessment of learners reading was undertaken.

Class discussion took up a minimum amount of time in the lessons. Where discussion was observed the content was very local and known to learners – extension of their vocabulary and background knowledge, crucial for comprehension of text- was not seen. Across all the classrooms no learner was seen to ask a question or initiate a discussion. In short, teachers had not moved beyond excessive repetition to encourage more learner talk, oral language development and engagement with meaning of text.

Teachers tended to follow the LARA lesson plans in a very procedural way, rarely exercising any agency in contextualizing the lesson plans in their classrooms. To work productively with the plan in relation to *their learners*, the teachers would need to be confident in the technical aspects of teaching reading. They would need to understand the complex nature of the different routines that they are undertaking, the phonetic, morphological and semantic aspects of teaching reading. While the LARA approach systematically encompasses all five reading skills to be orchestrated together, the activities of each complicated step are foregrounded rather than the theoretical rationale behind each one.

It was not evident in the observations that the teachers had over time gained an understanding of the rationale behind the steps in the lesson plans over two years of using them. It is likely that the teachers require additional support to the lesson plans, and opportunities to systematically develop their understanding of the different program components and their underpinning principles. This would entail helping them to identify what matters in different themes and topics; consider possible difficulties and confusions learners might face; as well as ways of addressing learner error and difficulty. If teachers are not given access to the principles of their practice, then the very procedural, repetitive routines observed are unlikely to be interrupted.

Having LARA Pupil Books in the lessons supported a greater engagement by learners with text, and offered the possibilities for more work at the sentence and extended text levels. Reading was, however, limited to these books and the number of paragraphs and sentences read in the lessons is strictly circumscribed by the number and length of texts in the books. When compared with the Control classrooms in which *no* texts were found, the strength of the program is evident. But learner exposure to text is limited, and the focus of the text on very local themes that draw on learners' everyday experience also limit their exposure to new vocabulary and general knowledge.

Uptake of the LARA program in classrooms in the schools sampled here has improved over the course of 2017 and 2018. Most teachers were observed to assiduously follow the lesson plan steps. Their understanding of the principles and purpose underlying each of the steps appears to be less developed, and this was evident especially in the reliance on whole class, repetitive, rote drill sequences. Lower order decoding skills rather than vocabulary, theme discussion and engagement in understanding the meaning of texts dominated the pedagogy. A next step for the program would be to provide greater technical assistance to teachers, to support the development of their theoretical understanding of the relationship between different components of the lesson plans and how these components *together* engender learning to read.

10. REFERENCES

Creswell, J. W. (2011). Controversies in mixed methods research. The Sage handbook of qualitative research, 4, 269-284.

Dombey, H. (2010). Classroom interaction and reading pedagogy in the early years of school. In K. Hall, U. Goswami, C. Harrison, S. Ellis & J. Soler (Eds.), Interdisciplinary perspectives on learning to read: Culture, cognition and pedagogy (pp. 219–230). New York: Routledge.

Hattie, J., 2009. Visible Learning: A Synthesis of 800 Meta-Analyses Relating to Achievement. Routledge, London.

Hattie, J., Yates, G., 2014. Visible Learning and the Science of How We Learn. Routledge, London.

Hoadley, U. (2018). Pedagogy in Poverty: Lessons from 20 years of curriculum reform in South Africa. London: Routledge.

Kewaza, S. & Welch, M. (2013). Big class size challenges: Teaching reading in primary classes in Kampala, Uganda's central municipality. US-China Education Review, 3, 15, 283-296.

Kirwin, J. & Thornton, R. (2015). Making the grade: Understanding what works for teaching literacy in rural Uganda. Population Studies Centre research report 15-842.

Nag, Chiat, Torgerson & Snowling (2014) Literacy, Foundation Learning and Assessment in Developing Countries, produced by a collaborative team from the Universities of Oxford and Durham, and City University London with The Promise Foundation (India).

Nakabugo, M. G., Opolot-Okurot, C., Ssebbunga, C. M., Maani, J. S., Byamugisha, A. (2008). Large Class Teaching in Resource-Constrained Contexts: Les-sons from Reflective Research in Ugandan PrimarySchools. Journal of International Cooperation in Education, 11,3, 85 – 102.

National Reading Panel (2000) Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implication for reading instruction, Washington, DC: National Institute of Child Health and Human Development.

Pretorius, E. (2014). Supporting transition or playing catch-up in Grade 4? Implications for standards in education and training. Perspectives in Education, 32, 51–76.

Pretorius, E. & Mokhwesana, M. (2009) Putting reading in Northern Sotho on track in the early years: Changing resources, expectations and practices in a high poverty school, South African Journal of African Languages, 29:1, 54-73, DOI: 10.1080/02572117.2009.10587317

Ssentanda, M. (2014). The Challenges of Teaching Reading in Uganda: Curriculum guidelines and language policy viewed from the classroom. Journal of Applied Language Studies, 8, 2, 1–22.

Snow, C. (2017). Early literacy development and instruction: An overview. In The Routledge international handbook of early literacy education : A contemporary guide to literacy teaching and interventions in a global context, eds. Natalia Kucirkova, Catherine E. Snow, Vibeke Grøver, and Catherine McBride-Chang, 5-13. Abingdon, Oxon; New York, NY: Routledge.

Teale, W., Walski, M., Hoffman, E., Meehan, M., & Whittingham, C. (2017). Early Childhood Literacy: Policy for the coming decade. UIC Research on Urban Education Policy Initiative. Policy Brief Vol. 4, Book 1.

Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., & Boddy, J. (2013). Pedagogy, curriculum, teaching practices and teacher education in developing countries, EPPI education rigorous literature review. London: Institute of Education. World Bank. (1999). Education sector strategy. Washington, DC: World Bank.

ANNEX A: DETAILED LESSON STEPS

LITERACY | DAY 1/3

Teacher Guide directives

a. Sing a song to signal the beginning of the Literacy Hour as selected learners distribute the books. b. Prepare the chalkboard and lesson inputs as learners

sing.

a. Point to the new capital letter on the chalkboard. Say, "My name is big ___." (letter name). "My sound is ___." (letter sound).

b. Ask learners to point to the letter in their books and say the My Name, My Sound phrase with you. Point to the new lower-case letter on the chalkboard.

c. Say, "My name is small _____."(letter name). "My sound is _____." (letter sound).

d. Ask learners to point to the letter in their books and say the My Name, My Sound phrase with you.

e. Call on small groups and individuals to say the My Name, My Sound phrase independently.

a. Say the top row of vowel sounds in the Review Chart as learners listen. Repeat twice.

b. Continue in the same way with each row.

c. Say the first column of sounds/syllables as learners

listen. Repeat twice.

d. Continue in the same way with each column.

e. Point to random boxes. Ask learners to read aloud, first as a whole group then with small groups or individuals.

a. Tell learners the theme and sub-theme for the week.

b. Tell them to discuss the picture in small groups. Ask them to identify what they see in the picture and how it relates to the theme and sub-themes.

c. Move around the classroom listening to their conversations while supporting and guiding learner as needed.

d. Ask learners to share what they discussed in the small group with the whole class. Discuss the Thematic Question as appropriate.

a. Say the first keyword. Ask learners to find it in the picture and point to it.

b. Repeat the keyword word and say, "Listen while I beat the word." Say the word again while clapping the syllables.

c. Ask learners to say the word and clap the syllables with you.

d. Ask learners to identify how many syllables are in the word. Repeat the word a final time.

e. Use your fingers to count the number of syllables together with the class.

f. Repeat Steps a. to e. with the other two keywords.

a. Write the first keyword on the chalkboard. Sound out the word as you write.

b. For one-syllable words, point to each letter as you say each sound aloud slowly. Say the sounds again, but faster. Ask the learners to say the word in chorus. Repeat.

c. For multi-syllable words, point to each syllable as you say it aloud slowly. Say the syllables again, but faster. Ask the learners to say the word in chorus. Repeat.

d. Repeat the above steps with the other two keywords.

e. Point to the three words in random order and ask learners to read the words aloud.

f. Ask learners to read the words in their books in pairs or small groups. Move around assessing learners' ability to read the words independently.

a. Ask learners to watch you read the first sentence on the chalkboard. Point to each word as you read.

b. Repeat I-2 times.

c. Ask learners to read the sentence with you while they point to each word in their books. Repeat I-2 times.

d. Repeat Steps a. and b. with the other two sentences.

f. Ask learners to read the sentences in their books in pairs or small groups. Move around assessing learners' ability to read the sentences independently.

LITERACY I DAY 2/4

a. Sing a song to signal the beginning of the Literacy Hour as selected learners distribute the books.

b. Prepare the chalkboard and other lesson inputs as learners sing.

a. Read the title of the story. (On Day 4 have learners retell what happened on Day 2.)

b. Ask learners to look at the picture and share what they see.

c. Tell learners to predict what the story might be about and share their predictions with their neighbours.

d. Ask learners to share their predictions with whole class. Summarise learners' predictions for the class before reading.

a. Read the story from the chalkboard one time as learners watch and listen.

b. Ask learners if their predictions about the story were correct.

c. Read the story aloud a second time from the chalkboard as learners watch and listen.

d. Ask learners to find the story in their books and point to each word as they read the story with you. Repeat 1-2 times.

e. Ask learners to whisper read as they point to each word. Move around the room observing learners and giving corrective support as needed.

f. Ask 3-5 learners to read the story aloud to the class. Assess their reading and mark in the CAM Form.

a. Ask learners one In the Text Question and one In My Mind Question.

b. Ask learners to predict what might happen next in the story. (You will use these predictions to compose a creative writing story in the Literacy 2 lesson that immediately follows this lesson, so be sure to remember them.)

ANNEX B: LARA LESSON/CLASSROOM OBSERVATION TOOLS

LARA LESSON/CLASSROOM OBSERVATION TOOL #I

School name:

EMIS #:

Teacher name:

Date of observation:

Treatment

Control

Fieldworker name:

INSTRUCTIONS:

- I. Complete Part I of the tool
- 2. Ask the teacher to observe a lesson focused on Literacy I of the LARA program
- 3. Inform the teacher that you will only observe for 30 minutes.
- 4. Complete Part 2 while you wait for the teacher to begin
- 5. Complete Part 3 by writing a detailed narrative report of the lesson
- 6. Complete Part 4 in the classroom
- 7. Make certain that you have taken the required photographs
- 8. Complete Part 5 outside the classroom with the second fieldworker
- 9. Read through your narrative carefully and make any necessary changes / translations
- 10. Label photographs with the school EMIS number and photo label (EMIS_printrichwall; EMIS_lessontext; EMIS_LARAlearnerbook; EMIS_LARAteacher book; EMIS_CAM; EMIS_lessonplan).

PART I: INTRODUCTION AND TEACHER IDENTIFICATION

Complete this part before the lesson begins with information from the head teacher and/or teacher

1.1	Which class is being observed?	Tick appropriate line
А	PI	
В	P2	
С	P3	
D	P4	

1.2	If the classes are ability streamed, indicate what stream is observed	Tick appropriate line
А	Higher achieving learners	
В	Middle achieving learners	
С	Lower achieving learners	
D	Not applicable – no streaming	

1.3	What is the official language used for instruction in PI-P3 in the school?	Tick appropriate line
А	Luganda	
В	Runyankore/Rukiga	
С	Runyoro/Rutooro	
D	Other. Specify	

1.4	Was the teacher of the class that will be observed teaching PI in this school last year (i.e. in October 2017)?	Tick appropriate line
А	Yes	

1.4	Was the teacher of the class that will be observed teaching P1 in this school last year (i.e. in October 2017)?	Tick appropriate line
В	No	

PART 2: CLASSROOM ENVIRONMENT

Complete this part while you wait for the lesson to begin

2.1	How many learners have seats?	Tick appropriate line
A	All the learners have seats	
В	More than half the learners have seats	
С	Fewer than half the learners have seats	
D	None of the learners have seats	

2.2	Is there enough light in the classroom for learners to read?	Tick appropriate line
А	Yes	
В	No	

2.3	Which of the following teaching and learning materials are on display in the classroom, and in what language?	Observed	Not observed
I	Signs and labels (e.g. cupboard)		
2	Days of the week / months / seasons		
3	High frequency word lists / words on flashcards		
4	Words matched to pictures		
5	Phonics chart/s		
6	Alphabet matched to pictures / chart of letters		
7	News / theme board		
8	Number word chart		
9	Learners' own work		

2.4	How much of the wall display material is in the Local Language?	Tick appropriate line
А	All of the material	
В	More than half the material	
С	Less than half the material	
D	None of the material	

2.5	Overall would you describe the environment as 'reading rich'? Are the displays varied, stimulating and inviting in relation to literacy?	Tick appropriate line
A	Very	
В	Fairly	
С	Hardly	
D	Not at all	

2.6	Take a photo of the most print rich wall of the classroom	Tick
	Photo taken	

PART 3: LESSON NARRATIVE

3.1	Complete a record of the lesson in the table below. Record at at least 5 minute
	intervals

Time	What the teacher and learners do

3.2	Take a photo/s of any text used in the lesson, and any work produced by the learners (include text written on the board)	Tick
A	Photos taken	
В	N/A no materials used or produced in the lesson	

PART 4: POST LESSON CLASSROOM OBSERVATION

Complete this part after the lesson is finished.

4.1	Learner presence	Number
А	Learners present in the class during the observation	

4.2	Use of the LARA program material in the lesson. If the book/s are used take a photo of the page/s used in the book/s. Label photos to link the photos to this teacher)	Yes	No	lf yes, page number/s used
A	The LARA learner book is used in the lesson			

	Training. Ask teacher: Were you trained to teach the LARA program in 2017?	Yes	No
A	The teacher was training to teach the LARA program in 2017		

4.4	Training. Ask teacher: Have you received any follow up / support visits from LARA in 2017 or 2018?	Yes	No
A	The teacher received follow up visits in 2017 or 2018		

4.5	Use of the LARA program material in the lesson. If the book/s are used take a photo of the page/s used in the book/s. Label photos to link the photos to this teacher)	Yes	No	lf yes, page number/s used
А	The LARA learner book is used in the lesson			
В	The LARA teacher book is used in the lesson			

4.6	Teacher lesson plan. Ask teacher to see the lesson plan used for the lesson observed. Take a photo of the lesson plan with your tablet and label it so that you can link the photo to this teacher.	Yes	No
А	The teacher is able to produce a lesson plan		
В	There are references to the lesson content (words or ideas) in the lesson plan that was evident in the lesson observed		
С	There are references to sentences or story text in the lesson plan that was evident in the lesson observed		
D	There are references to pictures / drawings in the lesson plan that were used in the lesson observed		

4.7	Continuous Assessment Monitoring (CAM) form. Ask teacher to see the most recent CAM form. Take a photo with your tablet and label it so that you can link the photo to this teacher	Yes	No
A	The teacher is able to produce the CAM form		
В	The CAM form includes inputs for individual students		
С	Different components of reading in the CAM form are filled in (for example, phonics, fluency, vocabulary, comprehension)		
D	If there is a date on the CAM form produced, indicate what it is	Date:	No date

4.8	How many learners have the LARA learner book? Observe in class OR ask learners to hold up a copy of the LARA learner book OR ask teacher to see where the copies of the learner book are stored and do a count	Tick one appropriate line
А	All the learners	
В	Half or more than half the learners	
С	Less than half the learners	
D	No learners	

PART 5: LESSON OBSERVATION

Complete this after the lesson observation. Consult Part 3 where necessary.

5.I	How long does the lesson last?	
А	Time lesson begins	
В	Time lesson ends	
С	Total lesson duration	

INSTRUCTIONAL METHOD

5.2	Indicate which of the following print material learners used or read in the course of the lesson	Observed	Not observed
	Text on blackboard		
	Textbook		
	Reader		
	LARA learner book		
	LARA teacher book		
	Loose photocopied worksheets		
	Flash cards (small cards with single words written on)		
	Enlarged picture		
	Enlarged phonics chart		
	Enlarged text, e.g. with paragraph, poems, songs, rhymes, stories.		
	Other. Specify:		

5.3	Indicate which of the following print material the teacher used or read in the course of the lesson	Observed	Not observed
A	Text on blackboard		
В	Textbook		
С	Reader		
D	LARA learner book		
E	LARA teacher book		

5.3	Indicate which of the following print material the teacher used or read in the course of the lesson	Observed	Not observed
F	Loose photocopied worksheets		
G	Flash cards (small cards with single words written on)		
Н	Enlarged picture		
	Enlarged phonics chart		
	Enlarged text, e.g. with paragraph, poems, songs, rhymes, stories.		
К	Other. Specify:		

5.4	Indicate the dominant text used /read in the course of the lesson by learners (tick only one line)	Observed
А	Text on blackboard	
В	Textbook	
С	Reader	
D	LARA learner book	
E	LARA teacher book	
F	Loose photocopied worksheets	
G	Flash cards (small cards with single words written on)	
Н	Enlarged picture	
	Enlarged phonics chart	
J	Enlarged text, e.g. with paragraph, poems, songs, rhymes, stories.	
К	Other. Specify:	

5.5	How many learners get to hold and handle (open and use) any books (readers, picture books, LARA Pupil book) at all during the lesson?	
А	All the learners	
В	More than half the class	

5.5	How many learners get to hold and handle (open and use) any books (readers, picture books, LARA Pupil book) at all during the lesson?	
С	Less than half the class	
D	No learners	

5.6	Feedback: when individual learners respond to the teacher's questions or conduct a task	To a large extent	To some extent	Hardly at all	Not at all
A	Teacher withholds comment or indication of whether the learner's response is wrong or right.				
В	Teacher makes it clear whether or not learner's response or activity is correct or incorrect (explicitly indicates that an answer is wrong or right).				
С	Teacher follows up on learner's response with clarifying questions / cues / breaking question or task down.				

5.7	When the teacher interacts with the learners, he or she	Observed	Not observed
	Praises, encourages or compliments the learners		
	Gives girls and boys equal chances to answer questions/do activities		
	Gives all learners the same activity across the lesson		
	Gives some learners or groups of learners a different activity to the whole class		
	Gives learners opportunities to ask questions		
	Asks learners to individually answer a question or do a task		

5.8	Teachers use the following language/s in the lesson	All of the time	Half or more than half the time	Less than half the time	Never
A	Luganda				
В	Runyankore/ Rukiga				
С	Runyoro/Rutooro				
D	English				
Е	Other. Specify				

INSTRUCTIONAL CONTENT

5.9	The teacher guides learners to	Observed	Not observed
	See the relation between the sounds that letters and groups of		
	letters make and how they are written		
	Identify sounds that make up words (e.g. beginning middle and end sounds)		
	Break words into syllables (writes words by syllables on board e.g. "bro-ken" or "beats out" the word).		
	Identify or use correct procedures for handling books (opening, closing books, turning the page)		
	Use finger pointing to indicate text direction		
	Develop knowledge of print and printed material (e.g. identify book cover; title of book, author; contents)		
	Match picture or action to vocabulary word in print to clarify meaning		
	Discuss the meaning of vocabulary words		
	Discuss or respond to what they see in a picture in a story or on cover of a book		
	Predict what they think will happen in a story from a picture in a story or title of a story		
	Answer factual questions from a story read in the lesson (in the text questions)		
	Answer open-ended questions about what they have read or what has been read to them (e.g. 'Do you think she was right to?'; 'What would have happened if' 'Have you ever'?) (in the mind questions)		
	Retell, act out or summarise a story they have read or has been read to them (covering the story or plot)		

5.10	When reading happens in class (can be from any source including a book or the chalk board)	Observed	Not observed
	The teacher reads aloud to the class		

The whole class reads aloud together with the teacher	
The whole class reads aloud together without the teacher	
The whole class reads portions of text after the teacher	
Learners read aloud together in groups or pairs	
Learners read individually aloud to the class	
Learners read individually silently (or whispered) independently	
Learners read in pairs independently (or whispered)	
Learner reads individually to the teacher and the teacher comments, corrects or assesses the learner	

5.11	When reading happens in class (can be from any source including a book or the chalk board) learners read	Observed	Not observed
	letters/groups of letters representing sounds		
	words broken into syllables		
	single words		
	sentence/s		
	extended text/s (whole paragraph/s)		

5.12	How many of the following did learners <i>read</i> by the end of the lesson	Place a zero or a number for each line
А	letters/groups of letters representing sounds	
В	words broken into syllables	
С	Single words	
D	Sentence/s	
E	Extended text/s (whole paragraph/s)	

BA LESSON/CLASSBOOM OBSERVATION TOOL #3

LARA LESSON/CLASSROOM OBSERVATION TOOL #2				
School name:				
EMIS #:				
Teacher name:				
Date of observat	ion:			
L				
Treatment			Control	

Fieldworker name:

INSTRUCTIONS:

Complete Part 3 by writing a detailed narrative report of the lesson

- 11. Make certain that you have taken the required photographs
- 12. Complete Part 5 of Tool #1 outside the classroom with the second fieldworker
- 13. Read through your narrative carefully and make any necessary changes / translations
- 14. Label photographs with the school EMIS number and photo label

PART 3: LESSON NARRATIVE

Complete a record of the lesson in the table below. Record at at least 5 minute 3.1 intervals

Time	What the teacher and learners do

Time	What the teacher and learners do

ANNEX C: LARA TRAINING AGENDA (15-18 OCTOBER 2018)

DAY I MONDAY 15 OCTOBER 2017 (9:30AM-3:30PM)

- Introductions
- The LARA program
- Five key components of teaching reading
- LARA Literacy I structured lesson plans
- LARA materials
- Classroom Observation Study methodology
- Video practice

DAY 2 TUESDAY 16 OCTOBER 2017 (9:30-3:30PM)

- Video practice feedback
- The classroom / lesson observation instrument 5 parts
- Observation techniques
- Narrative recording & time intervals
- Video simulation I BREAK
- Feedback and discussion of video simulation I
- Fieldwork procedures for observations

DAY 3 THURSDAY 18 OCTOBER 2017 (9:30AM - 3:30PM)

- Recap the classroom / lesson observation tool
- Recap steps for tool completion
- Video simulation 2 (pairs) BREAK
- Feedback and discussion on video simulation 2
- Final recap fieldwork procedures and any common errors

ANNEX D: CONCEPTUAL FRAME FOR DESIGN OF DATA COLLECTION INSTRUMENTS

PART 3: LESSON OBSERVATION: CONCEPTUAL DESIGN

INSTRUCTIONAL METHOD

2	Teachers and learners use print material	EGR conceptual element
А	Text on blackboard	Print awareness
В	Textbook	
С	Reader	
D	LARA book "My first steps to reading"	
E	Loose photocopied worksheets	
F	Flash cards	
G	Posters or pictures	
Н	Chart/s, e.g. phonics, alphabet chart, weather chart, etc.	
I	Enlarged texts, e.g. with poems, songs, rhymes, etc.	
J	Other. Specify:	

3	Feedback: When <i>individual</i> learners answer a teacher's question or do a task	EGR conceptual element
A	Teacher moves on to the next learner without indicating whether the learners' response or activity is correct or not	Explicit instruction / continuous assessment
В	Teacher makes it clear whether or not learner's answer or activity is correct or incorrect (explicitly indicates that an answer is wrong or right).	
С	Teacher follows up on learner's response with clarifying questions / cues / breaking question or task down.	

4	If the teacher reads to the learners, does he or she	EGR conceptual element
A	handle (open and use) any books (readers, picture books, story books but <u>excluding</u> LARA Teacher Guide/material) during the lesson?	Explicit instruction / continuous assessment
В	get the learners to handle (open and use) any books (readers, picture books, story books but <u>excluding</u> "I can read and write") during the lesson?	
С	demonstrate how to handle and care for books (for example, how to turn pages correctly, store books without damaging them, etc.) including through the care taken in the way s/he hands out exercise or other books	
D	encourage and motivate learners to read (e.g. showing excitement and enjoyment in reading and or giving learners praise for their efforts)	
E	read to learners with intonation and expression? (e.g. to create a sense of anticipation, etc.)	

5	When the teacher interacts with the learners, he or she	EGR conceptual element
A	Praises, encourages or compliments the learners	Classroom climate
В	Gives girls and boys equal chances to answer questions/do activities	Classroom climate
С	Gives all learners the same activity across the lesson	Differentiation
D	Gives some learners or groups of learners a different activity to the whole class	
E	Gives learners opportunities to ask questions and contribute to discussion	Classroom climate
F	Asks learners to individually answer a question or do a task?	Continuous assessment (individualising)
G	Gets learners to actively participate in the lesson without being pushed for response?	Classroom climate

INSTRUCTIONAL CONTENT

I	The teacher guides learners to	EGR conceptual element
A	Focus on the sounds that letters and groups of letters make	Alphabetic principal / phonics
В	Identify sounds that make up words (e.g. beginning middle and end sounds)	Phonemic awareness
С	Break words into syllables (writes words by syllables on board e.g. "bro-ken" or "beats out" the word).	Phonemic awareness
D	Count the number of words in a line of text	Phonemic awareness
E	Identify or use correct procedures for handling books	Print awareness / Fluency
F	Use finger pointing to indicate text direction	Print awareness / Fluency
G	Develop knowledge of print and printed material (e.g. identifies book cover; title, author; turning the page; contents; punctuation)	Print awareness / Fluency
Н	Match picture or action to word in print	Concept of word/ vocabulary
I	Identify and repeat vocabulary words	Vocabulary / form
J	Discuss the meaning of vocabulary words	Vocabulary / meaning
К	Use sentence structure for reading practice / vocabulary	Vocabulary / fluency
L	Discuss or respond to picture in a story or on cover of a book	Comprehension
М	Predict what they think will happen in a story by looking at a picture	Comprehension (predictive)
Ν	Answer factual questions from a story they have read or has been read to them	Comprehension / literal
0	Answer open-ended questions about what they have read or what has been read to them (e.g. 'Do you think she was right to?'; 'What would have happened if' 'Have you ever'?)	Comprehension / inferential
Ρ	Retell, act out or summarise a story they have read or has been read to them (covering the story or plot)	Comprehension

2	When reading happens in class (can be from any source including a book or the chalk board)	EGR conceptual element
A	The teacher reads aloud to the class	Fluency
В	The whole class reads aloud together with the teacher	Print awareness
С	The whole class reads aloud together without the teacher	
D	The whole class chants portions of text after the teacher	
E	Learners read aloud together in groups or pairs	
F	Learners read individually aloud to the class	
G	Learners read individually silently independently	
Н	Learners read in pairs independently	
l	Learner reads individually to the teacher for their comment, correction or assessment	Continuous assessment
J	Learner reads individually to the teacher with no comment, correction or assessment by the teacher	Fluency
		Print awareness

3	When reading happens in class (can be from any source including a book or the chalk board) <i>learners</i> read	EGR conceptual element
A	vowels/letters/syllables/ phonemes	Fluency
В	single words	
С	Sentence/s	
D	extended text/s (whole paragraph/s)	

ANNEX E: LESSON TRANSCRIPTION OF CLASSROOM IN SCHOOL C7
Teacher: Our story title is about playing. Let us all read together

Pupils: [reading chaotically] Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball

Teacher: stop reading. Read well.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: I see some of you are not pointing at the words. Shakira are you pointing at the words with your hands in your pockets? Take your hands out and point at each word we read. All of us together.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: repeat

Pupils: [they read uncoordinatedly again] Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Stop rushing while you read. Why are you rushing? Read patiently.

Pupils: [with the teacher] Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Pupils: [with the teacher] Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Pupils: [with the teacher] Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: When I asked you what this story was about, some of you told me that it was about school and others said it was about playing, so what do you think is the truth about this story?

Pupils: It's about playing

Teacher: It's about?

Pupils: It's about playing

Teacher: It's about playing and playing tools, because the story says children are at school and its play time like you be at break time when you go out and play, some girls are skipping a rope now let me ask you a question, what were the boys doing?

Pupils: They were just standing

Teacher: does it mean they didn't have playing toys. What were the girls doing?

Pupils: they were playing dodge-ball

Teacher: Can we read the story again in groups, let me start with this side.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Then this side in the middle

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Repeat

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: This side

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools [Teacher corrects learners when they make mistakes]

Teacher: Now I want us to read one by one, by show of hands, who can read for us?

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Read for me again

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Why are you reading tool instead of tools. Read again

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Now I want us to read one by one, by show of hands, who can read for us? read for us.

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Shafic.

Pupil-Shafic: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. *(Teacher corrects errors as shafic reads)*

Teacher: Yes Kiyingi, read for us.

Pupil-Kiyingi: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Did Madrine read for us?

Pupils: No

Teacher: Madrine read for us and read louder so that the guests at the back can hear you.

Pupil-Madrine: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Suzan

Pupil-Suzan: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Namirimu

Pupil-Namirimu: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Nasib read for us loud

Pupil-Nasib: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. (*Teacher corrects errors as Nasid reads*)

Teacher: Thank you, now I want that front bench to read for us.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Ahaa, this seat please, read. I can't hear you read loud

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Ahha, gentlemen

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. (*Teacher asks them to reads without rushing*)

Teacher: This side

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Why is that you people are failing to read this statement (some girls)? Read again

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Suzan read for us

Pupils-Susan: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: This side

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: selects another group

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Fahad read while pointing

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Okay, let us all read at once.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

ANNEX F: TRANSCRIPTION OF EXTRACT FROM CLASSROOM IN SCHOOL T16

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Pupils: Page 113 some say 114

Teacher: I want you to open 113. If you are there, I want you to look at that photo/picture and tell me what it's all about, who has not seen the page yet? What is the story in the picture?

Pupil: I see children skipping ropes

Teacher: This one has said that he is seeing children skipping ropes, what are the children doing?

Pupils: They are skipping ropes.

Teacher: Ahha what else are you seeing in our picture?

Pupil: I am seeing a tree

Teacher: You are seeing a tree, where do you think this tree is?

Pupils: At school

Teacher: What else?

Pupils: Children are playing netball

Teacher: Are they playing net ball or dodge-ball?

Pupils: they are playing Dodge-ball

Teacher: Namirimu what do you see?

Pupil-Namirimu: I am seeing children without playing toys/equipments.

Teacher: And those without them, what are they doing?

Pupils: They are just standing.

Teacher: According to what you've seen in the photo/picture, what do you think this story is about?

Pupils: It's about playing

Teacher: Others what do you think?

Pupils: It's about school

Teacher: Since some of you are saying it's about playing and others that it's about school, we are going to read the whole story and at the end of it we are going to know the true story about this picture, okay? Is it clear?

Pupils: Yes

Teacher: First of all, what's the title of the story? By show of hands

Pupils: Me teacher.....

Pupil: Playing

Teacher: Our story title is about playing. Let us all read together

Pupils: reading in a disorganized way.

Teacher: stop reading. Read well.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: I see some of you are not pointing at the words. Shakira are you pointing at the words with your hands in your pockets? Take your hands out and point at each word we read. All of us together.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: repeat

Pupils: they read uncoordinatedly

Teacher: Stops reading while rushing. Why are you rushing? Read patiently.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. X3

Teacher: When I asked you what this story was about, some of you told me that it was about school and others said it was about playing, so what do you think is the truth about this story?

Pupils: It's about playing x2

Teacher: It's about playing and playing tools, because the story says children are at school and its play time like you be at break time when you go out and play, some girls are skipping a rope now let me ask you a question, what were the boys doing?

Pupils: They were just standing

Teacher: does it mean they didn't have playing toys. What were the girls doing?

Pupils: they were playing dodge-ball

Teacher: Can we read the story again in groups, let me start with this side.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Then this side in the middle

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Repeat

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: This side

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools (*Teacher corrects them where they make mistakes*)

Teacher: Now I want us to read one by one, by show of hands, who can read for us?

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Read for me again

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Why are you reading tool instead of tools. Read again

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools

Teacher: Now I want us to read one by one, by show of hands, who can read for us? read for us.

Pupil: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Shafic.

Pupil-Shafic: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. (*Teacher corrects errors as shafic reads*)

Teacher: Yes Kiyingi, read for us.

Pupil-Kiyingi: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Did Madrine read for us?

Pupils: No

Teacher: Madrine read for us and read louder so that the guests at the back can hear you.

Pupil-Madrine: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Suzan

Pupil-Suzan: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Namirimu

Pupil-Namirimu: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Nasib read for us loud

Pupil-Nasib: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. (*Teacher corrects errors as Nasid reads*)

Teacher: Thank you, now I want that front bench to read for us.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Ahaa, this seat please, read. I can't hear you read loud

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Ahha, gentlemen

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools. (*Teacher asks them to reads without rushing*)

Teacher: This side

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Why is that you people are failing to read this statement (some girls)? Read again

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Suzan read for us

Pupils-Susan: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: This side

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: selects another group

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Fahad read while pointing

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

Teacher: Okay, let us all read at once.

Pupils: Children are at school, its play time, some girls are skipping a rope, others are playing dodge ball, Lule and Nagawa don't have playing tools.

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