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EVALUATION

EdData II Task Order 7

NALAP Formative Evaluation Report, Ghana

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Task Order 7

NALAP Formative Evaluation

Report

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Introduction

This EdData II task focused on creating data for decision-making usable for both the Ghana Education Service (GES) and the USAID/Ghana mission. The National Literacy Acceleration Programme (NALAP) formative evaluation described in this report was designed to be a micro-level assessment of the current status of NALAP in Ghana. NALAP is a ground-breaking literacy intervention, unique in both Ghana and sub-Saharan Africa. While several countries have recently moved toward local language policies focused on ensuring that children learn to read in the language that they speak at home, many of these country policies are impeded by the lack of high-quality pedagogical material to support them, and fewer have careful designs for the transition to a language of broader communication, such as English. The NALAP program was designed to provide the education system with the materials and training to properly implement a mother tongue policy, using locally developed reading materials and teachers' guides to help teachers do the relatively difficult task of revising how they teach reading. EdData II's evaluation strategy was to obtain in-depth data for GES and USAID while limiting the sample to a manageable size. This report is a summary of the evaluation's activities and basic findings.

The National Literacy Acceleration Program (NALAP), a joint initiative by the Ghana Education Service (GES) and USAID, focuses on improving literacy learning through mother tongue instruction in kindergarten through third grade with an early transition to English. The origin of this activity was a pilot program implemented by the GES and USAID in 2004 utilizing the Molteno Program Breakthrough to Literacy (BTL) series. The mother-tongue program served as the foundation of English in all of the test schools, and the Molteno Trainers worked closely with GES circuit supervisors and teachers in the pilot schools for the duration of the pilot.

BTL made its mark on the learners and teachers in all the pilot schools with 70% of learners making good to excellent progress, and the motivation level was high with both students and staff. Because of this, the GES became determined to scale up this pilot to the national level and requested USAID assistance in developing a Ghanaian biliteracy program. Following several years of program and materials development, the NALAP program was initiated in Ghana in early 2010. NALAP has three major components. These are: the development of teaching and learning materials in eleven Ghanaian languages, the publishing and distribution of over 5 million textbooks, and the training of 80,000 teachers. These components have been completed and NALAP has been implemented nationwide.

Now that NALAP has been implemented for almost an entire school year, USAID required a relatively informal, yet conceptually rigorous (in terms of the constructs examined), formative evaluation that was oriented at how NALAP is being implemented at this point, whether the pedagogical approaches used by teachers are effective, and more importantly the use that teachers are making of the NALAP teaching and learning materials. The following brief reports on the methodology, findings, and recommendations for improved implementation and sustainability based on the data collected.

Methodology

The evaluation employed a mixed methods research design. The tools employed in the study included pupil literacy assessment, associated pupil interviews, interviews with teachers and head teachers, and structured classroom observations investigating the quality of NALAP implementation.

Ghana Oral Assessment of Literacy Skills

Pupils' literacy skills were assessed using an oral individual standardized measure including five tasks. The Ghana Oral Assessment of Literacy Skills measures early literacy skills essential for becoming a successful reader. The skills measured are based on international research on how students learn to read in English. The measure assesses pupils' knowledge of letter/sound correspondence, fluency with reading isolated words and connected text, and comprehension. Three of the tasks were timed so as to capture a measure of fluency. Reading fluency has been found to relate closely to comprehension in that pupils who are able to read words fluently can concentrate more of their working memory on remembering words and making meaning.

Because NALAP is a program that teaches students to read first in their mother tongue and then transitions pupils to reading English, the literacy assessments were conducted in three Ghanaian languages: Fante, Dagbani, and Akuapem Twi. In each language the measure included the following five tasks:

1. Letter Sound Knowledge: Ability to recognize and say the sounds of the letters of the alphabet accurately, without hesitation and naturally. This is a timed test that assesses automaticity letter sound correspondence—measured in letters per minute.
2. Familiar Word Fluency: Ability to read high-frequency words. This assesses whether children can process words quickly—measured by words read per minute.
3. Oral Reading Fluency: Ability to read a passage, about 60 words long, that tells a story—measured by words read per minute.
4. Reading Comprehension: Ability to answer several comprehension questions based on the passage read—measured by percent correct out of five comprehension questions.
5. Listening Comprehension: Ability to follow and understand a simple oral story. This assesses a child's ability to concentrate and focus to understand a very simple story of three sentences with simple noninferential (factual) questions and two inferential questions. It is considered a pre-reading skill. Measured by percent correct out of five comprehension questions.

EdData II developed the instruments through a process of analyzing Ghanaian language texts produced for NALAP, consulting with local language experts, and field testing. The NALAP reading textbooks for grade P2 were used to generate letter and word frequency lists. These lists were used to develop items for the Letter Sound Knowledge task and the Familiar Word Fluency task. Language experts from the Winneba University reviewed the items for appropriateness. The local language experts worked with RTI reading experts to design the Oral Reading Fluency,

Reading Comprehension, and Listening Comprehension tasks. Instructions given by the assessors to the pupils were translated directly and revised for appropriateness. See Annex A for literacy assessment protocols.

Interview Protocols

Three interview protocols were developed for this evaluation. Pupils, teachers, and head teachers were interviewed at each school visited. Pupil interviews were conducted directly following the literacy assessment and included questions on literacy activities in and out of school as well as their beliefs about reading. Teacher and head teacher interview protocols were based on interview protocols used in a previous NALAP evaluation study conducted in May 2010 with some updating to help account for any changes in program implementation and the attitudes of teachers and head teachers over time. See Annex B for interview protocols.

Classroom Observation Protocol

Observations of classroom instruction were conducted in each school by a local data collector and an international evaluator. A full 90-minute NALAP lesson was to be observed, although in some schools observations were less than 90 minutes given that some NALAP lessons did not cover the entire allotted period.

This protocol asked observers to assign a score on several aspects of instruction based on a rubric created for each, and the longitudinal nature of the study allowed comparison with data from 2010. Aspects assessed were: Lesson Planning, Use of Classroom Time, Managing Learner Task Related Behavior, Arrangement of Learners, Classroom Displays, Learner Engagement, Learner Interaction, Gender Sensitivity, Use of Teaching and Learning Materials, Thinking Skills, Feedback, and Oral and Written Communication in Ghanaian Language and English. See Annex C for the protocol.

Sample

Due to time and budget limitations, the sample for this evaluation was small and informal. The design allowed a case study investigation of current NALAP implementation in three different regions of Ghana. Data collection took place in Takoradi/Sekondi, Kwahu West, and Tamale Districts, located in the Western, Eastern, and Northern regions. Three schools in Takoradi/Sekondi, three in Kwahu West, and two in Tamale were sampled. Given that the NALAP design assumes that all pupils in P2 are able to read with some measure of fluency, and that data collection took place near the end of the academic year, P2 was the target year of the NALAP assessment. Table 1 below shows the breakdown of pupils who were sampled for the pupil assessment.

Table 1. Pupils Tested, by Language and Gender

Language	Female	Male	Total
Akuapem	24	28	52
Dagbani	8	15	23
Fante	26	31	57
Total	58	74	132

Along with pupil assessments and interviews, 8 head teachers, 11 P1–P3 teachers, and 12 P1–P3 classroom observations were conducted. Table 2 shows the numbers and grades of teacher interviews and classroom observations.

Table 2. Teacher Interviews and Classroom Observations, by Grade

Instrument	P1	P2	P3	Total
Head Teacher Interview				8
Teacher Interview	3	2	6	11
Classroom Observation	1	7	4	12

Findings

In this section we present the findings from analysis of the various data that were collected including outcomes from the literacy assessment, classroom observations, and teacher and head teacher interviews.

Literacy Findings

Results of the literacy assessment are presented in Table 3 below disaggregated by language and gender. They present the per minute averages for letter/sounds, familiar words, and oral reading fluency, as well as the average percent correct for reading comprehension and listening comprehension. The findings show that P2 pupils, in each of the languages, are having major difficulties in reading acquisition and are in general not learning to read with fluency and comprehension. For example, the average child assessed in Akuapem Twi read 11.0 words per minute and answered 7.7% of comprehension questions correctly. None of the Dagbani pupils could read a single word, and therefore, the average comprehension score was 0% correct. In Fante, the average fluency score was 4.7 words per minute, with reading comprehension at 7.3% correct. Overall scores across all of the measures in all three regions were very low. Pupils' scores indicate that they knew few letter sounds and often gave the English letter name (rather

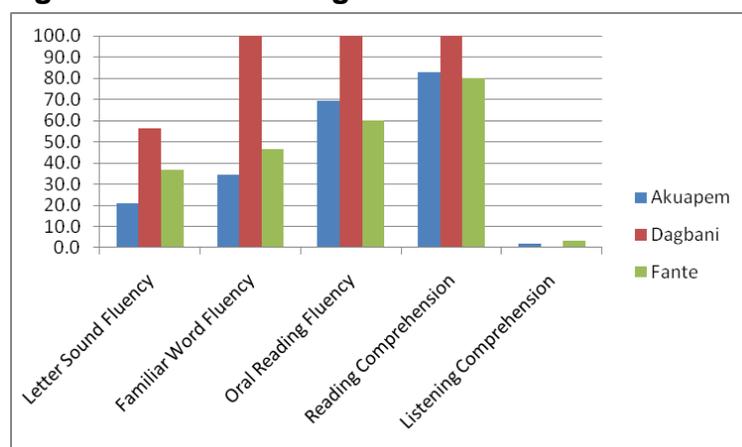
than local language letter sound) as a response. Unfamiliarity with letter sounds of the language in which they are learning to read means that pupils will not be able to read words they have not memorized. Note that the scores for listening comprehension were relatively high. This suggests that the extremely low results were due not to pupils' discomfort with the language (as they clearly understand the words), but to their inability to decode words to derive meaning from text.

Table 3. Means by Task, Language and Gender

	Akuapem			Dagbani			Fante		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Letter Sound Knowledge	15.3	21.7	18.3	1.2	8	3.6	10.3	7.4	8.6
Familiar Word Reading	9.1	13.2	11	0	0	0	6	2.2	4.1
Oral Reading Fluency	10.3	11.8	11	0	0	0	6.7	2.8	4.7
Reading Comp. (%)	8.6	6.7	7.7	0	0	0	11.6	3.1	7.3
Listening Comp. (%)	56.4	65	60.4	84.4	68.8	80	54.8	51.5	53.7

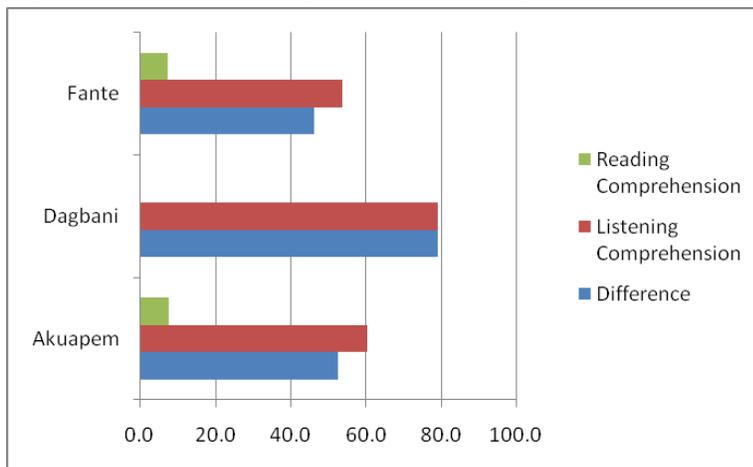
Figure 1 below presents the findings another way. It highlights the low scores of children in the assessment by showing the percentage of pupils who scored 0 on each of the tasks in each language. The figure shows that all pupils in Dagbani scored 0 on the Familiar Word Reading, Oral Reading Fluency, and Reading Comprehension tasks. Percentages of zero scores were also very high among speakers of Fante and Akuapem. Note that very few pupils scored zero on listening comprehension. This points to the importance of improving NALAP implementation, to extend the skills that children have in understanding the spoken language to their skills in understanding written text.

Figure 1. Percentage of Zero Scores



Looking closer at the comprehension tasks, Figure 2 compares the reading and listening comprehension scores and shows the difference between the two scores. The red bars show the listening comprehension scores, the green bars the reading comprehension levels, and the blue bars the difference between the two. This shows that the gaps between pupils’ oral language skills and reading skills are very large, and highest in Dagbani. In all regions, the gap is more than 40%.

Figure 2. Reading and Listening Comprehension Comparison



These differences highlight two important findings. First, as discussed above, pupils’ understanding of the local language is quite high. This supports the need for mother tongue instruction and the appropriateness of the policy situation in which NALAP is embedded, which maximizes the possibility that NALAP will be successful. Second, students are learning what they are being taught. By this comment, we connect to the results of the classroom observation, which revealed that the majority of teachers observed spent significant amounts of time reading stories aloud to children and asking pupils questions about the story. As a result, pupils are being taught listening comprehension skills, but far less frequently are they taught reading comprehension and decoding skills. In any case, the findings indicate that pupils can learn what they are taught, and given proper NALAP implementation, it is highly likely that children could learn to read.

Instructional Findings

Classroom Observation

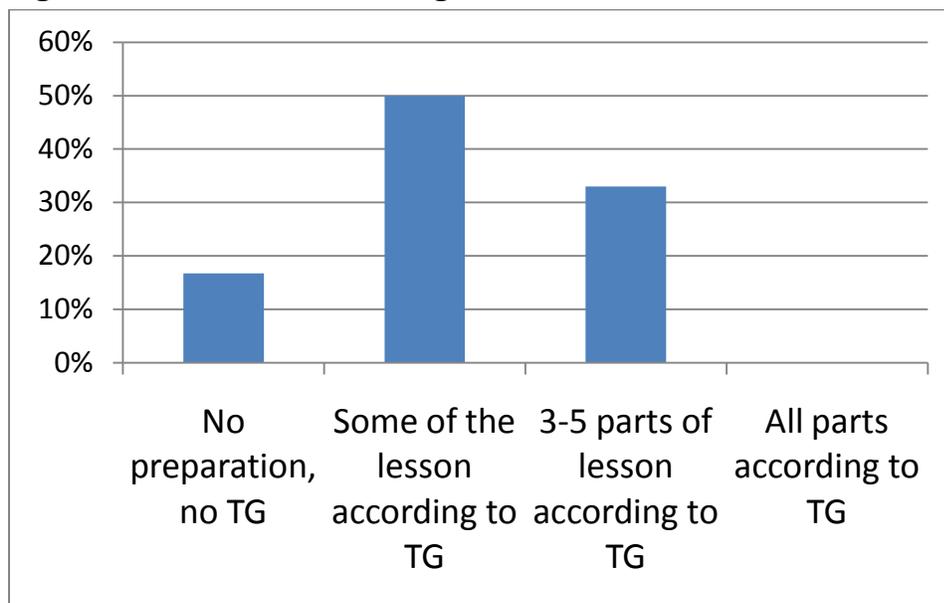
The findings from the structured classroom observations show clearly that teachers followed some parts of the NALAP lessons, but did not adhere very closely to the scripts in the Teacher’s Guide (TG). Instruction seemed to be based on teachers reading aloud the story from the reader, or in the case of English activities, from the chalkboard, while pupils either sat quietly listening or repeated the stories sentence by sentence. This did not require that students engage with the

text, themselves. In the observation data collected, there were no instances of instruction on letter sound correspondence or breaking apart a word in order to sound it out. While the observations showed instruction at the word level, it was largely focused on teachers reading a word and having pupils repeat the word; and in some instances this included discussion of word meaning. Observation notes showed that teachers were far more focused on teaching the content of the story (My Family, The Festival, etc.) than on supporting children’s reading of the story. For example, teachers focused on teaching *what happens* in a family, the relationships between family members, and the names of family members. This is opposed to using familiar concepts and vocabulary as a means of engaging pupils and activating background knowledge in order to teach pupils how to read the words and understand the stories.

The observational protocol rated instruction across a variety of metrics. Results for each aspect of instruction can be seen in the PowerPoint presentation in Annex D. Some of the key aspects are explained below. These aspects are the ones most related to the pupil results seen above.

In Figure 3, the results from the observational analysis on lesson planning are presented. The figure shows that the largest percentage of observations, a full 50%, indicated that only small portions of the lesson adhered to the Teacher’s Guide. Combined with the percentage of observed classrooms that did not utilize the Teacher’s Guide at all, two thirds of the lessons observed did not relate to the Teacher’s Guide substantially.

Figure 3. Lesson Planning



In Figure 4 below, one of the major benefits of NALAP is exhibited: in 75% of observed classrooms, most or all learners were engaged. This is one of the hypothesized benefits of NALAP, that children will be more heavily involved in the lesson because they are taught in a language that they understand. This was clearly the case in the observed classrooms, and is a very positive finding for NALAP.

Figure 4. Learner Engagement

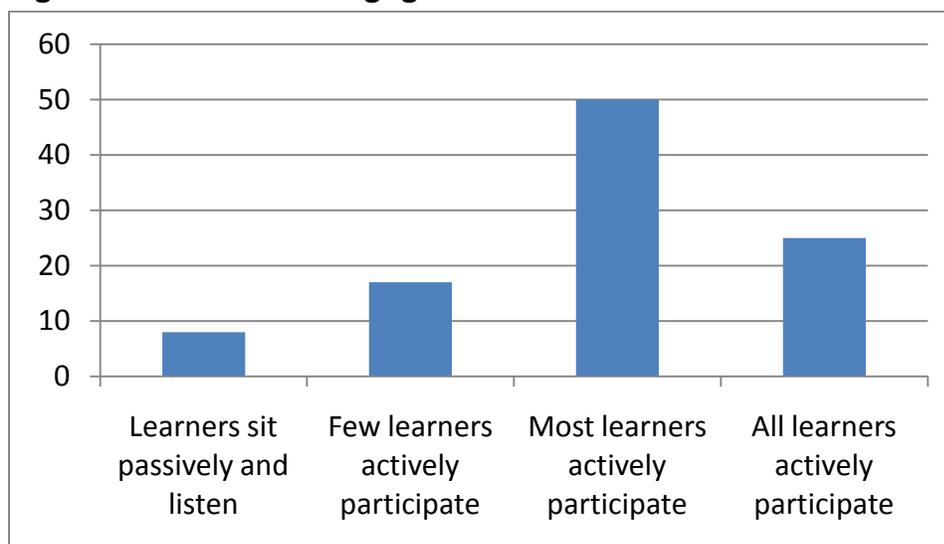
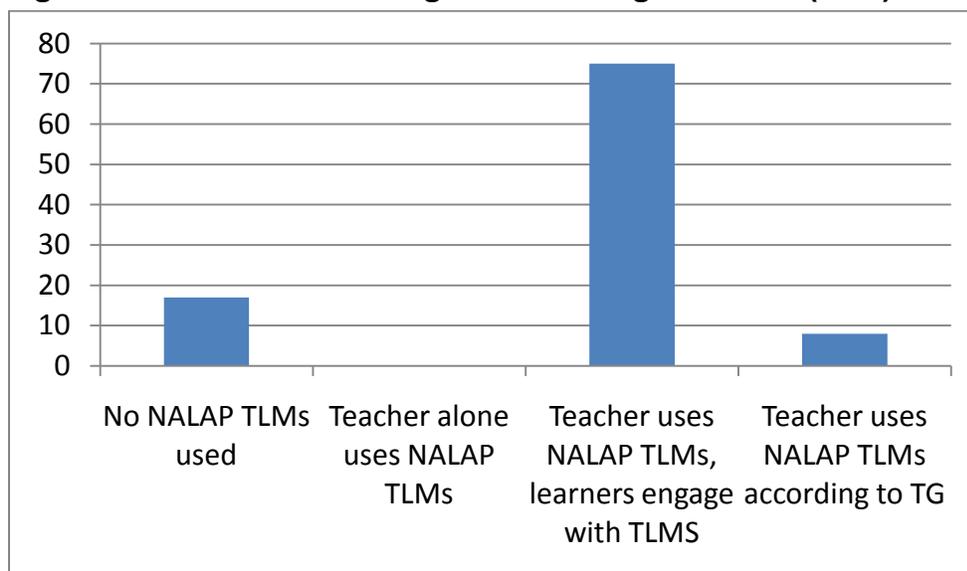


Figure 5 below shows the remarkable finding, given similar mother tongue projects across sub-Saharan Africa, that more than 80% of classrooms had pupils’ books and materials that were in students’ hands. Our observations revealed that the majority of children had books, which research has shown is a key variable in whether literacy interventions work. However, this figure also shows that in 75% of classrooms observed, teachers did not use the books in the way that the Teacher’s Guide specified, which limited the ability of the high-quality materials to have their effect on student outcomes.

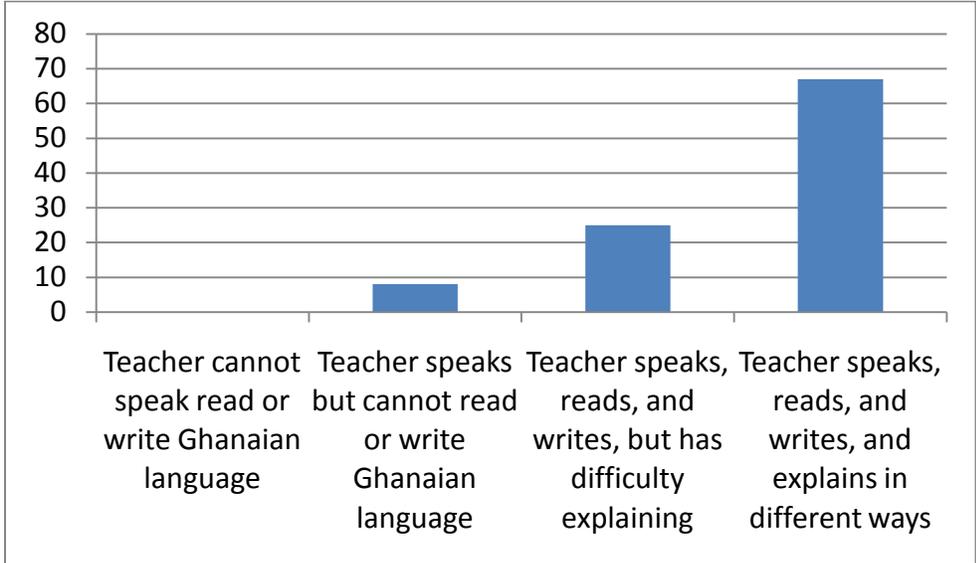
Figure 5. Use of Teaching and Learning Materials (TLM)



This figure and Figure 6 below present findings regarding whether and how teachers could employ the two languages in use in NALAP. Impressive results were found for the Ghanaian

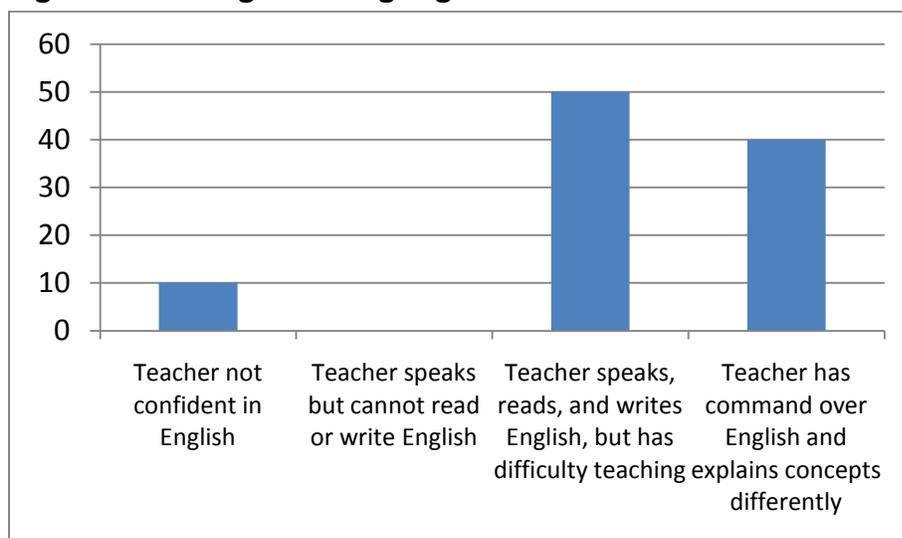
language, at least in the small sample for this study, where nearly 70% of observations revealed that the Ghanaian language was written, spoken, and read correctly, with enough mastery of the language that teachers could vary their explanations. We understand, however, that there are significant percentages of teachers assigned in schools and grades that do not have sufficient facility with the mother tongue to teach reading in that language. That appears to be a significant issue for the teacher deployment structure to keep in mind, such that teachers are assigned to the schools that use their languages skills for NALAP implementation. This is a much better solution than trying to “train” teachers without the language to use the language, since such short-term trainings are no substitute for years of language development. In any case, the issue for NALAP is not only proficiency in the language of the school, but more important, and quite differently, understanding how to teach reading in that language. Many teachers who are fluent in a language are not well prepared for teaching the unique and specific area of reading in that language.

Figure 6. Ghanaian Language



Related to Figure 6 above, Figure 7 below presents the findings of whether and to what extent teachers were capable of teaching in English. The findings show that a full 60% of the teachers were not completely comfortable teaching in English. This is an essential area of concern, given that the NALAP program promises not only to teach children to read in the mother tongue but also to transfer those literacy skills to English, successfully and quickly, while not losing the mother tongue skills.

Figure 7. English Language



The advantage of using the same protocol in this study (March 2011) as was used in the previous (May 2010) study, is that we could compare the results of the program implementation over time. The results show clearly that the implementation of NALAP, in sampled schools, seems to have declined. Table 4 shows the overall change from May 2010 to March 2011. A comparison was made on each aspect of the protocol. If scores were higher in 2011, schools were given a 1; if they were lower, -1; and if no change, a 0. Scores were tallied and then disaggregated by region. The table indicates that the Eastern region showed the most negative change since 2010. The Northern region, where students performed the lowest, also declined in its implementation. On the other hand, the Western region showed a slight positive change.

Table 4. Comparison of Observations Results, May 2010 and March 2011

Region	Change
Eastern	-8
Northern	-3
Western	+3

The relative decline in NALAP implementation since 2010 is not surprising, as some teachers observed and interviewed had not been trained in NALAP implementation. The teachers who were trained reported that they had received little to no follow-up support after the initial training. The lack of training and support under NALAP makes it less likely that teachers will be

able to fully implement the NALAP lessons, and more likely that they will revert to their previous instructional methods that require less work and change.

Interview Findings

Interviews with teachers and head teachers showed findings that triangulated the data from the observations. Teachers and head teachers responded positively to questions concerning their opinions of the program and the materials. Teachers and head teachers both noted that the NALAP instructional methods motivated students, making them excited to learn and more engaged. Several teachers said that the stories in the NALAP readers were too long for the students, in P2 particularly. This makes sense considering the outcomes of the literacy assessment. Pupils who are not yet fully in command of letter-sound correspondence and word decoding skills will have a difficult time reading paragraphs and stories, and making meaning from them.

Teachers' responses to questions concerning instruction in letter sounds and word reading showed a general lack of understanding of phonics instruction and the role it plays in learning to read. Teachers were asked how children learned about letters and sounds, and what activities are effective for teaching letter-sound correspondence. Most teachers responded to these questions with some reference to phonics and relating sounds to letters. However, other teachers mentioned activities such as repeating after the teacher or pronouncing words. When asked the same questions about instruction and activities to sound out and read words, teachers mentioned using picture cards, singing, or repeating after the teacher. Only one teacher mentioned activities such as blending and segmenting. These data show that while teachers were aware of how to teach letters, they exhibited little understanding that word reading requires the use of and attention to letter sounds and how they are put together to make a word. For some teachers, there seemed to be no relation between teaching letter sounds and teaching word reading. This may explain why classroom observations lacked attention to sounding out words even though key words were being taught prior to reading a new story and this skill was part of the Teacher's Guide. NALAP only includes instruction in letter sounds in KG1–P1 classrooms for Ghanaian language; thus, P2 teachers would not be expected to teach letter sounds. However, as the literacy assessment results showed, direct instruction in letter sounds and word reading is clearly necessary.

Implications and Recommendations

Pedagogical Improvements

NALAP's accomplishments thus far are impressive. The program and materials are, in many ways, a model for sub-Saharan African countries with similar language-of-instruction policies. Tweaking some pedagogical aspects of the program could make significant improvements in student outcomes. For instance, emphasizing that the Teacher's Guide should replace conventional instruction and be strictly followed would ensure pupils receive sufficient

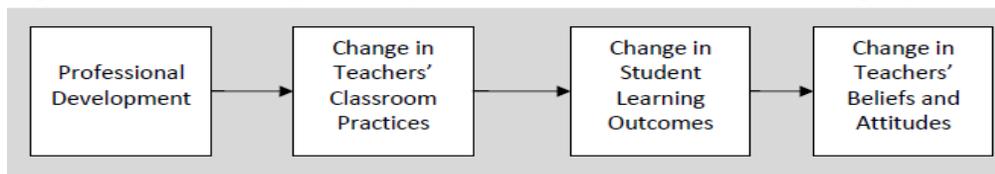
opportunities to learn reading skills and comprehension strategies. Following the Teacher’s Guide exactly, rather than using it as a supplement to traditional approaches, would also ensure that the reading text from NALAP would be a medium for teaching reading instead of content. Close adherence to the Teacher’s Guide would focus instruction more towards reading and understanding. A focus on phonics and decoding in grades one through three would ensure that pupils are learning how to read new words as they get more and more complex. Along with an emphasis on decoding words, instruction in meaning making (reading comprehension) is imperative. Comprehension instruction should focus on how words put together in text make meaning, using questions of varying types and difficulty, including literal questions, those that require the use of background knowledge, and inferential questions. Considering new ways to set up incentives for teachers that would motivate the effort and change required is vital for NALAP success.

Refresher Course

The findings clearly show a need for further training on NALAP implementation. The initial 2010 training gave teachers a five-day introduction to the implementation of the program. According to the teachers interviewed, there had been little to no follow up support. For logistical reasons, not all teachers were trained and new teachers started teaching after NALAP start-up. A refresher course that trains all KG1–P3 teachers on NALAP methods is therefore essential.

The training modality is an important consideration for the refresher course. NALAP is asking teachers to make a very large and fundamental change in their pedagogy. Research on teacher change has shown this type of change to require more intensive types of training that refer to how teachers think and are motivated. Figure 8 below shows that teachers’ behavioral change requires several steps. First, teachers need professional development in new methods. Second, teachers need to “try out” the new methods in their classrooms. Third, teachers need to evaluate for themselves whether the change in methods improves outcomes. Finally, and only if the teacher is convinced that the new methods improve outcomes enough to be worth the effort, do teachers change their attitudes and beliefs. This is the process necessary to lead to sustained change in behavior. And unless NALAP training methods reflect this process of teacher change, NALAP training is likely to follow the same path as other fundamental reforms. Given the loosely coupled nature of classrooms in sub-Saharan Africa, without a change in teachers’ behavior and attitudes, traditional training is unlikely to touch the instructional core of the relationship between teachers and students in the classroom.

Figure 8. Guskey Theory of Teacher Behavioral Change (Guskey, 2002)



Using this theory of teacher change in the design of the refresher course would be wise. Such a refresher course would benefit from a staggered approach. This approach could bring teachers together for a shorter training (hopefully to focus on phonics skills, initially) where they could see model lessons and discuss classroom instruction with other teachers. Then they would return to their classrooms to put into practice what was learned with support and reflection with other teachers. It is essential that teachers, after receiving the new information from the training, have coaching support from an instructional specialist. Ideally, after this first round of brief training, teachers would be observed in their attempts to implement the new methods, and then have pedagogy-based discussions with the instructional specialist, or coach (on a particular classroom observation) and with other teachers (on the group's attempts to implement the new method). Following this would be a second round of training where teachers would have a chance to reflect and refine their newly acquired skills, and add to the basic training new ideas and content.

Having focused support in the classroom throughout the school year, but especially immediately following training, is a key recommendation for successful teacher change. With NALAP, it is fair to say that teachers are being asked to change everything they know and do about teaching pupils to read. Teachers would therefore benefit from increased support of more knowledgeable experts such as supervisors and District Teacher Support Teams (DTSTs), who also must be specially trained to observe, model, and give feedback. They themselves must acquire expertise in teaching reading. Focusing the job of supervisors and DTSTs on NALAP implementation would help structure their work, as well as help focus the teachers in ongoing growth for using NALAP. Involving the Colleges of Education in this refresher course would be one way to decrease cost and increase capacity in the country for in-service training. This would require, of course, a closer integration between the courses provided at the Colleges and NALAP, supervised by GES. It will take some time to revise the curriculum and train tutors so that they acquire a deep understanding of reading, reading pedagogy, reading in local languages, and ways to teach pre-service teachers effectively.

Use of Data in NALAP

The use of data as part of NALAP could provide a powerful tool to teachers, head teachers, districts, and the GES for monitoring progress and making decisions about revisions or changes that would further the success of the program. Opportunities to use data already exist within the current system. For example, NALAP has built in pupil assessments throughout the curriculum, given on the fifth day of each unit. Teachers and head teachers could be trained in how to use the information gained from these assessments to make decisions about reteaching certain skills to the whole class or small groups. In addition, Ghana's existing school and district report card system could be utilized (at low cost) to inform the implementation of NALAP in an ongoing manner. Districts could use the report cards to follow progress of schools and arrange for extra support to schools whose pupils are struggling.

Additionally, more evaluation could be added at a national level that would support and inform the NALAP program. Ghana already has the National Education Assessment (NEA), which is intended to be administered on a consistent basis. Assessing in mother tongue under NEA would

allow for a more rational assessment system (based on current policy) and support the system in implementing NALAP over time. In addition to this, scheduling regular evaluations of NALAP that include student outcomes as the essential piece of data would allow for the tracking of program impact as well as opportunities to make revisions and policy level changes regularly. In order to know that NALAP is responsible for any improvements in literacy outcomes, causal research designs using differences-in-differences or regression discontinuity could be utilized. Another potential low-cost policy reform that could support NALAP implementation would be to make involvement in NALAP activities—both in frequency and in quality (as measured by the increased observations suggested above)—an essential part of the teacher evaluation system. Tying advances in the teacher career ladder to NALAP implementation would give teachers non-monetary incentives for changing practice that is both difficult and inconvenient to change. This is also something that could become part of the recertification and upgrading programs in place already. Since the GES is investing so much to pay teachers more for additional education, it stands to reason that those courses should be related to whether and how the teachers can implement the core NALAP reform, which stands at the center of improving primary education in Ghana.

NALAP Material Revisions

Considering some revisions to materials and lessons throughout the NALAP program would help to alleviate the issues that were found across schools. As explained previously, several teachers noted in interviews that the stories were sometimes too long for the pupils, particularly in P2. This observation is logical considering the low literacy assessment findings. Pupils do not seem to have enough letter sound and word reading knowledge to read the short passage in the literacy assessment. Thus long passages represent even greater challenge.

Currently the NALAP sequence across grades assumes that students are fully proficient in letter/sound correspondence and word reading by P2, and thus the first page of the student reader for P2 begins with a full-page story. Students who have not fully learned these skills or who have suffered some loss of schools during the long break are likely to fall far behind very quickly. One way to avoid this would be to add some review of letter/sounds and word reading strategies at the beginning of the P2 materials. P2 and even P3 pupils would benefit also from instruction in word reading strategies throughout the year, particularly given the low results identified here. Adding some work on word parts as well as word attack skills would be useful as the language in the texts increases in complexity. The activities could replace some of the time spent repeating key words. While repetition is useful for learning proper pronunciation, that is extraneous to teaching reading. Repetition does not teach students how to look at a word and break it into smaller pieces in order to be able to read the word. Replacing most of the word repetition seen in classrooms with word level reading instruction would help students be able to read text independently. Shortening passages and reviewing the appropriateness of the level of the words used in the text would also benefit pupils' ability to read and be successful early on. Our understanding of NALAP material suggests that materials were prepared in English and then adapted to the other languages. This process is likely to create stories that do not carefully

increase in complexity across time, using controlled introduction of letters and blends. An alternative method of preparing materials would use software that would help the GES to more precisely organize when and how letters and words are introduced in the different languages, based on the frequency of the occurrence of sounds. Finally the consideration of an activity or workbook that could supplement the already useful materials would give pupils more opportunities to practice skills as they learn them. At present, activities are outlined in the Teacher Guide. However, teachers were not observed using the activities appropriately.

Social Advocacy

A social marketing campaign was conducted in advance of NALAP's introduction into schools. However, continuing to solicit support from parents and the community for NALAP is key to its success. This support could be built through a combination of social advocacy activities and programs. An essential issue with the community is that NALAP utilizes local languages in the lower grades and uses research-based strategies for transitioning the children to English fluency. Some communities are wary of NALAP because they are focused on early English acquisition as the essential element to examination success at the end of primary school. Because NALAP addresses teaching literacy in a way that is not familiar to most parents, making an explicit deal with them that pupils will be better readers overall and better readers of English specifically because of NALAP would give parents and the community at large incentive to support their children's participation in NALAP. Currently it appears that some resistance to NALAP emanates from the perspective that there is an either/or choice between local language and English. If NALAP's promise of ensuring better outcomes in both local language and English continue to be made clear, and if NALAP were to deliver on that promise, then resistance might be overcome. Community education on how early mother tongue instruction leads to better English outcomes later is essential to accomplish this.

There appear to be some reading contests in place already. Expanding the use of reading contests, both to create and expand the literate culture and to show off how much NALAP can increase outcomes, is a strategy that has been helpful elsewhere. Expanding reading contests and using them as a platform for social advocacy would allow communities to rally behind pupils and give them a sense of pride and ownership to the successes NALAP is producing. Promoting a culture of reading and writing in mother tongue not only would produce more reading material for students but also would lend importance and legitimacy to being able to read in local languages, raising the status of pupils' mother tongue reading skills. However, results are the best advocates for the NALAP program. Sharing success stories either at the pupil or school level and releasing data from school report cards would help ensure an informed community and accountability between the community and the system.

Use of Existing Resources

Considering the recommendations explained above, it is useful to look at how existing institutional structures can be used to make improvements to further the success of NALAP.

Institutional Support (instruction)

Instructional support should be considered in two ways. First, teachers are working within a loosely coupled system. Once they are alone in their classrooms, there is little accountability or oversight of what they are doing or teaching. Thus, giving teachers real incentives to implement NALAP in close adherence to the Teacher's Guide is crucial. One way to do this would be to ensure that Guskey's model of teacher change is followed during the refresher training. Using this model, teachers would be more likely to have implicit motivation to follow the Teacher's Guide strictly. Head teachers and supervisors should regularly be in classrooms to support instruction and also to provide some amount of accountability. Knowing that the head teacher and circuit supervisors were likely to visit would give teachers a reason to be prepared to teach the lessons as they are supposed to be taught, but also would give teachers a sense that they were not alone and would have someone to go to for assistance when needed.

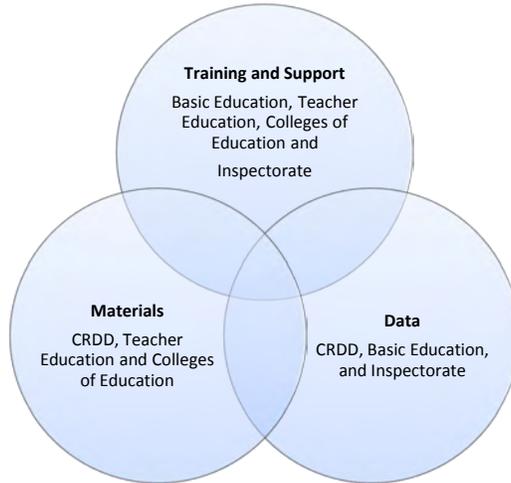
Secondly, how the system works to ensure support for teachers should be thought through. Ghana is ahead of many other sub-Saharan African countries in having a structure of instructional support through circuit supervisors and DTSTs. Since these support staff have already been built in to the education system, it is a matter of reviewing the barriers and incentives that exist to giving teachers high-quality support for NALAP. It is essential that these personnel have intensive review of NALAP. In addition, providing specific training on how to deliver support for NALAP, how to talk with teachers, and what kinds of feedback are helpful for teachers will be important. It appears that while the professionals exist in the system, they need capacity building in how to give effective, specific, and targeted feedback on instructional implementation. There is also a need to consider the frequency by which circuit supervisors and DTSTs visit classrooms. It is important that teachers get consistent and frequent visits focused on instruction and feedback on that instruction. The time when those visits is most essential is especially in the weeks immediately after training, just as teachers are solidifying their personal views as to whether the new methods are likely to be effective in improving instruction compared to the cost of doing more and extra work. Implementing these reforms to the supervisory structure would require a plan for delivering Travel and Transportation (T&T) funds based on the number of schools, number of visits to each, and distance. Strategies to make these T&T funds more effective might include tying their distribution to the frequency of visits, the quality of feedback forms submitted, and the distance that supervisors and DTSTs have to travel. Recognizing the incentives within the supervisory system to focus on already-successful and nearby schools is critical. Utilizing the information derived from the observational protocols to increase and distribute educational quality data throughout the system would focus the system on the instructional issues that are necessary for effective NALAP implementation.

Institutional Support (implementation)

Implementation of NALAP involves several institutional organizations, typically heavily focused on their own line responsibilities, working together. This is intrinsically difficult. Improving the program based on these recommendations would also likely increase the need to have collaboration across the divisions of GES. Figure 9 below shows how divisions within GES

could collaborate on NALAP implementation. NALAP is seated in a combination of the Curriculum Research and Development Division (CRDD) and Basic Education divisions, but it requires the active support of Teacher Education, the Inspectorate, and Colleges of Education. While these inter-directorate relationships are complex, we would like to emphasize that successful NALAP implementation will require careful collaboration.

Figure 9. Possible Collaboration of Divisions around NALAP Implementation



Annex A: Literacy Assessment Protocols

!ho hia sɛ wo ne mmofra a yɛ resese wɔ n mmɔ denbɔ no fa agodi kwan so ne wɔ n di nkɔ mmɔ fi wɔ n ankasa pɛ mu fa nneɛ ma bi a abofra ani gye ho ho. Ma abofra no nhu sɛ dwumadi no nyɛ ade kyenkyenee bi na mmom ɛ yɛ agodi bi a ne yɛ yɛ anigye.

Osukuuni, maakye ɛ . Wɔ frɛ me na mete Mepɛ sɛ meka m'ankasa ho asɛ m kakra kyerɛ wo. [Mewɔ mma baasa, mmarimaa baanu ne abeawa baako. Nea odi kan no adi mfe dunum, nea ɔ to so abien no adi mfe dubaako, na nea ɔ to so abiɛ sa no anya mfe awotwe. Mewɔ akraman abien a wɔ wɛ n yɛ n fi anadwo. M'ani gye mmirikatu ne bɔɔ lobɔ ho yiye. Metaa kenkan ayɛ sɛ m fi nhoma ahorow mu.]

ɛ Wubetumi aka w'ankasa ara ne w'abusua ho asɛ m akyerɛ me? {Twɛ n mmuae no; sɛ osukuuni no mpɛ sɛ ɔ ka a, kɔ asɛ mmisa a ɛ to so 2 no so, nanso sɛ ɔ pene so a, toa nkɔ mmɔ bɔ no so}

2. Sɛ wuwie sukuu a, adwuma bɛ n na wobɛ yɛ ?

- Ma me nka nea enti a mewɔ ha nnɛ yi nkyerɛ wo. Meyɛ adwuma wɔ Asoɛ e a ɛ hwɛ Adesua ne Agodi so hɔ , na yɛ pɛ sɛ yehu ɔ kwan a mmofra nam so sua akenkan. Wo ti ye, wɔ apaw wo aka ho te sɛ obi a wadi loto.
- Yehia wo mmoa wɔ dwumadi yi mu. Nanso wompɛ sɛ woyɛ a, ɔ hyɛ biara nni mu.
- Yɛ rebedi akenkan agodi bi. Merebɛ ma wo akenkan nkyerɛ wde, nsɛ mfua ne ayɛ sɛ m tiawa bi dennen wɔ Twi mu.
- Mede wɔɔ kye a mikura yi bɛ hwɛ mmere tenten a wode bɛ kenkan.
- Eyi NY! sɔ hwɛ enti ɛ rennya nsunsuanso biara wɔ wo sukuu adesua mu.
- Mebisa wo nsɛ m bi nso afa w'abusua ho, sɛ ebia, kasa a w'abusuafo ka wɔ fie ɛ ne nneɛ ma bi a abusua no wɔ .
- MERENKYER!W wo din, ɛ no nti obiara renhu wo mmuae no.
- Bio sɛ wompɛ sɛ woyɛ a, ɔ hyɛ biara nni mu. Sɛ yefi ase na sɛ wompɛ sɛ wubua asɛ mmisa bi a, yebege atom.

Wowɔ nsɛ mmisa bi? Woaboa wo ho sɛ yemfi ase?

Sɛ ɔ pene so a, kyerɛ wɔ adaka yi mu YIW (sɛ abofra no mpene so a, da no ase. Fa ɔ kwan koro no ara na wo ne abofra a odi so nkasa)

A. Date of assessment :	Day____ Mo____ Yr____
B. Assessor name/code :	
C. NAME of school :	
D. Unique School code :	
E. District:	
F. School Shift:	<input type="radio"/> Morning <input type="radio"/> Afternoon <input type="radio"/> Full Day
G. Multigrade?	<input type="radio"/> Yes <input type="radio"/> No

I. Teacher Name:	
J. Student's Class:	<input type="radio"/> ɔ = P2 <input type="radio"/> 6 = P3
K. Student's Section:	
L. Unique student code :	
M. Student's year and month of birth :	Year : _____ Month : _____
N. Student's gender :	<input type="radio"/> Girl <input type="radio"/> boy
O. Start time: End Time	_____:_____ _____:_____

Dwumadi ε: Akyerε wde Nnyigyei	📖 Sheet A	🕒 60 seconds																																																																																																																									
<p>👂 Twi akyerε wde pii wɔ nhoma yi so. Mepa wo kyε w kenkan dodow biara a wubetumi wɔ nnyigyei mu kyere me. Nhwε so bi ne /k/. ka na mintie. sε abofra no tumi ka no pε pεε pε a, ma no amo. Sε wantumi anka no pε pεε pε a, ka /k/ ma ontie. Afei ka nea edi so yi /d/. Mo, wɔ ka no /d/ sε abofra no antumi anka no pε pεε pε a, ka /d/ ma ontie. Woate nea ε sε sε woyε no ase? Meka “Fi ase” pε a, kenkan akyerε wde no mu biara nnyigyei ntε mntε m pε pεε pε sε nea wubetumi. Ka akyerε wde yi nnyigyei kyere me. Fi ase fi ha na toa so sεε . [Nhwε so no akyi no, fa wo nsateaa si akyerε wde a edi kan no so na twe ase fa kuw a edi kan no ase.] Sε wudu akyerε wde bi a wunnim ne nnyigyei a, mε kyere wo. Sε amma saa a, mε ye komm atie wo. Woaboa wo ho? Fi ase.</p>		<p>👁️</p> <ul style="list-style-type: none"> • If the time on the stopwatch runs out (60 seconds). <p>🔄</p> <ul style="list-style-type: none"> • If a child stops on a word for <u>3 SECONDS</u>. 																																																																																																																									
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Dwumadi 2: Nsɛ mfua akenkan	📖 Sheet B	🕒 60 seconds																																																																		
<p>🗣️ Nsɛ mfua bi ni. Mepa wo kyɛ w kenkan dodow biara a wubetumi (ɛ nsopɛ le nsɛ mfua no, na mmom kenkan) Nhwe so bi ni, “mama”.</p> <p>Yɛ nsɔ eyi nhwe : mepa wo kyɛ w kan asɛ mfua yi [fa wo nsa si asɛ mfua “Nanso”]so: (sɛ abofra no ka no pɛ pɛɛ pɛ a, ma no amo: asɛ mfua no yɛ “Nanso.” (sɛ abofra no anka no yiye a, ka kyerɛ no se: asɛ mfua no yɛ “Nanso.”</p> <p>Afei sɔ foforo hwe bio: mepa wo kyɛ w kan asɛ mfua ‘Ananse’ [Fa wo nsa si asɛ mfua ‘Ananse’ so]: (Sɛ abofra no kan no pɛ pɛɛ pɛ a, ma no amo: asɛ mfua no yɛ “anomaa.” Sɛ abofra no ankan no yiye a, ka kyerɛ no se: asɛ mfua no yɛ “anomaa.”</p> <p>Sɛ meka “fi ase” a, kenkan nsɛ mfua no ntɛ mntɛ m pɛ pɛɛ pɛ sɛ nea wubetumi. Kenkan nsɛ mfua no fi kuw a edi kan ne nea ɛ toatoa so wɔ ase no. Mɛ yɛ komm atie wo gye sɛ ebia wuhia mmoa bi.</p> <p>Woahu nea ɛ sɛ sɛ woyɛ no? Woasiesie wo ho? Fi ase.</p>		<p>👉</p> <ul style="list-style-type: none"> • If the time on the stopwatch runs out (60 seconds). 🔄 • If a child stops on a word for <u>3 SECONDS</u>. 																																																																		
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Dwumadi 3: Akenkan dennen ne ntease		Sheet C			60 seconds
<p>☛ Ayε sε m tiawa bi ni. Mepε sε wokenkan no dennen ntε mntε m pε pεε pε sε nea ε fata. Wokenkan wie a, wubebua nε mmisa bi afa nea woakenkan no ho. Woate nea ε sε sε woyε no ase? Meka se “Fi ase” a, kenkan ayε sε m no yiye sε nea wubetumi. Mε yε komm atie nea worekan no, gye sε ebia wuhia mmoa bi. Woasiesie wo ho? Fi ase</p>					<p>🕒 60 seconds</p> <p>👉</p> <ul style="list-style-type: none"> • If the time on the stopwatch runs out (60 seconds).
<p>✂ (/) Incorrect or no response (]) After the last number read</p>					<p>🕒</p> <ul style="list-style-type: none"> • If a child stops on a word for <u>3 SECONDS</u>.
<p>Merebebisa wo nε mmisa kakra afa ayε sε m a woakan no ho. Bɔ mmɔ den bua nε mmisa no yiye sε nea wubetumi.</p>					<p>👉</p> <ul style="list-style-type: none"> • If student does not answer <u>any</u> items in first line <u>correctly</u>
<p><i>Nana Mansa ne ne nenanom baanu na ε te. Wɔn mu panyin no adi mfe asia. Kumaa no adi mfe anum.</i></p>	<p>ε6</p>	<p>Mmofra no ne hena na ε te? [Nana Mansa]</p>	<p>Correct</p>	<p>Incorrect</p>	<p>No Response</p>
<p><i>Mmofra nketewa yi taa sɔre ntε m. Wɔn na wɔyε biribiara de boa aberewa no.</i></p>	<p>33</p>	<p>Bobɔ nneε ma abien a wugye di sε mmofra nketewa tumi yε ma aberewa no? [wɔ noa aduan, wɔ kɔ asu, wɔ pra fie hɔ, wɔ horo ne nneε ma, wɔ ne no kasa]</p>	<p>Correct</p>	<p>Incorrect</p>	<p>No Response</p>
<p><i>Da bi ɔ bea bi bε sraa aberewa no.</i></p>		<p>Hena na ɔ bε sraa aberewa no? [ɔ bea bi]</p>	<p>Correct</p>	<p>Incorrect</p>	<p>No Response</p>
<p><i>Mmofra nketε wa yi suban no sɔɔ ɔ bea no ani. \$kamfoo wɔn..</i></p>	<p>5ɔ</p>	<p>Adε n nti na ɔ bea no kamfoo mmofra no? [ε fisε n'ani sɔɔ mmofra no adeyε]</p>	<p>Correct</p>	<p>Incorrect</p>	<p>No Response</p>
<p><i>Ɔkaa se: mekɔ m'akuraa a, menya bi aka akyerε me mma.</i></p>	<p>68</p>	<p>Dε n na wugye di sε ɔ bea no bε ka akyerε ne mma? [mmofra no adeyε, mmofra no suban pa]</p>	<p>Correct</p>	<p>Incorrect</p>	<p>No Response</p>
<p>✂ Time left (seconds):</p>					
<p>✂ Number attempted:</p>					
<p>✂ Number Incorrect:</p>					
<p>✂ Discontinued: (check box if yes)</p>					

Dwumadi 3: Otie akenkan ntease		Sheet None			None
<p>☛ Merebε kan ayε sε m tiawa bi akyerε wo. Mε kan no dennen prε kopε . !no akyi wubebua nsε mmisa afa ho. Mepa wo kyε w tie no yiye na bua nsε mmisa no pε pεε pε sε nea wubetumi. Woate nea ε sε sε woyε no ase?</p>					<p>⌚</p> <p>• If a child does not answer within <u>30 SECONDS</u>.</p>
<p>☛ Da bi na akokɔ nini redidi wɔ borɔ fere dua bi ase. Anomaa bi kosii dua no so. Borɔ fere a abere no baako tew bε bɔɔ fam tim! Ehu kε se kaa akokɔ nini. Na ɔ teε m se: “Owia atew atɔ .” Anomaa no buaa se: “Woboa ε yε borɔ fere ε nyε owia”</p>					
!hefa na na akokɔ nini redidi?	[Borɔ fere dua bi ase]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Hena na okosii dua no so?	[anomaa bi]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Dε n na ε tew ɔɔ fam tim?	[borɔ fere a abere]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Dε n na ε kaa akokɔ nini?	[Ehu]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Adε n nti na akokɔ nini kae sε owia atew atɔ ?	[na onnim sε ε yε borɔ fere]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
✂ Number attempted:					
✂ Number Incorrect:					

Student Stimuli Booklet Akuapem

March 2011

Example: **A** **V** **L**

K i b l i t ɔ e a u

1 d o e n S a e n m

n w o l f ɔ e i n ε

o L l h e o y a n u

w k N b d N u s l m

a w n n a m a y s h

w p d k ɔ r r k o Y

a k g b ε r n i ɔ n

p s e A n a a m o a

f a a u b a t a m e

Example: Nanso anomaa

Fati mama Nanso foro nso

akwakoraa ananse se ma Enti

no ni Ata εyε di

Da ka nsu ase yâ

de bere Daa wɔ Yi

kae Kyerεε bi wɔ akura

hɔ ara saa na Mu

akyi wɔn aba Nana biara

so sε ho ne Dεn

ɔketewa Fεfε Dɔtedan me yεn

Nana Mansa ne ne nenanom baanu na εte. W ɔ
n mu panyin no adi mfe asia. Kumaa no adi mfe
anum. Mmofra nketewa yi taa sore nt ε m. W ɔ n
na wɔ ye biribiara de boa aberewa no. Da bi
ɔbea bi b ε sraa aberewa no. Mmofra nketewa yi
suban no s ɔ ɔ ɔ bea no ani. ɔkamfoo wɔ n.
ɔkaa se: meko m'akuraa a, menya bi aka akyerε
me mma.

Di ni tu nni a baŋ sheli

Di tu ni a zaŋ diema laasabu n-che ka suhudoo kpe a mini bia sheba a ni yen vihi maa sunsuuni. Alizama dibu ka a yen zaŋ ka yi toyisi jendi bia maa yel' yura. Di tu ni bia maa nya vihigu ŋo ka di nyela deen' sheli din yen niŋ o nyayisim ka pa ni din yen ti o muyisigu.

Nolini soli suhibu: Karimmi sabbu din be adaka ŋo ni vienyela n-ti bia maa

Dasiba bia. N yuli m-booni ka nyi na. N bo ri ni n toyisi a m maya yela.

[A bihi kalinli mini be yuma, binko biri mini deen' sheŋa a ni yura]

1. Jaande, a ni tooi yeli ma a mini a yiŋnima yela? [Guhimi ka o labisi, o yi bi labisira nyin bo himi o bo higu din pahi ayi (2). Amaa be yi labisira nyin chami tooni n-suhi soli be sani.
2. A yi ti bi chaŋ shikuru bo ka a lee yuri niŋbu?

- Che ka n yeli a n ni kana kpe sheli zuŋu zuŋo. Karinzo ndi min diemadiema tuma yili ka n yina. Ti bo rimi ni ti baŋ bihi ni bo hindi karimbu sham. Daliri n-kuli niŋ ka ti pii chirigi a maa.
- Ti borimi ni a so ŋ ti. Amaa a yi bi bori ni a soŋ ti, pa taali n-nye li.
- Ti yen diemla karimbu diema. N yen chemi ka a karim bachiko ba, bachinima, nti pahi salin' ŋmaa. A yen karimla di zaa yihi palo ni.
- N yen zaŋla waachi ŋo n-nya a ni tooi karindi yomyom sham.
- Dimbo ŋo pala zahimbu, di mi bi yen pahi a shikuru ŋo zahimbu ni.
- N ni bo hi a bo hisi n-jendi a yiŋanima, kamani zuliya bali sheli a yiŋanima ni yeri yiŋa, nti pahi binshenja a yiŋanima ni mala.
- M bi yen sabi a yuli, di zuŋu so ku tooi baŋ ni nyini n-labisi bohisi maa.
- N lahi bori ni a baŋ ni a suhu yi bi yu pa talahi n-nye li ni a labisi bohisi maa.

Ti yi pili a yi bi bori ni a labisi bo higu di sayiya.

A mali bo higu ni a bohi ma? A niŋ shili ni ti pili?

O yi sayi ni yi pilima nyin dalimmi adakubila ŋo

Mm

(O yi bi sayi nyin puhimi o, ka tayi bia so. Na kuli zaŋmi gbaŋ ŋo tum tuma).

A. Date of assessment :	Day____ Mo____ Yr____
B. Assessor name/code :	
C. NAME of school :	
D. Unique School code :	
E. District:	
F. School Shift:	<input type="radio"/> Morning <input type="radio"/> Afternoon <input type="radio"/> Full Day
G. Multigrade?	<input type="radio"/> Yes <input type="radio"/> No

I. Teacher Name:	
J. Student's Class:	<input type="radio"/> 4 = P2 <input type="radio"/> 6 = P3
K. Student's Section:	
L. Unique student code :	
M. Student's year and month of birth :	Year : _____ Month : _____
N. Student's gender :	<input type="radio"/> Girl <input type="radio"/> boy
O. Start time: End Time	_____ : _____ _____ : _____

Tuma 1: Bachiko ba vuri banbu

Sheet A

60 seconds

dagbani bachiko ba m-be gban go zuyu. Jaande, wuhimi ma bachiko ba maa yini kam sheli vuri a ni mi. Pa di yuya ka m bo ri ni a boli, amaa di vuri ni nye sheli.

Shehira, bachiko bili go vuri [tirimi A] nyela "AH" kamani "ADAKA" ni.

Ti buyisima: Yelimi ma bachiko bili go vuri [tirimi V] ni nye sheli.

Bia maa yi wuhi di vuri vienyela nyin yelima:

Mbo, bachiko bili go vuri nyela "VVVVV."

Lahi buyisimi sheli: Yelimi ma bachiko bili go vuri [tirimi L] ni nye sheli.

Bia maa yi wuhi di vuri vienyela nyin yelima:

Mbo, Bachiko bili go vuri nyella "LLL"

Bia maa yi bi wuhi di vuri vienyela nyin yelima :

Bachiko bili go vuri nyela "LLL"

A ban a ni yen nig shem maa ?

N yi yeli "pilima," nyin bo limi bachiko ba maa vuri vienyela yomyom a milinsi tariga.

Yelimi ma bachiko ba go vuri. "Pilimi" kpe n-kpa g-go polo.

[Tirimi bachiko bili din nye tuuli kuliga maa ni shehira maa tibu nyaaga.ka zag a nubila dolisi tuuli kuliga maa n-wuhi o]. A yi paai bachiko b' sheli a ni bi mi, n ni wuhi a li. Di yi pa lala, n kuli yen fomi ka wumdi a ni ueri bachiko ba maa vuri shem. A nig shili ? pilima.

(/) Incorrect or no response (]) After the last number read

										Tot. Cum.
u	m	s	B	a	j	i	f	n	i	(10)
g	M	l	p	w	a	t	p	v	I	(20)
i	i	n	i	h	d	a	m	m	d	(30)
a	ε	l	i	y	o	n	n	i	k	(40)
u	b	i	o	h	η	y	i	i	i	(50)
o	a	c	η	i	r	A	k	a	g	(60)
z	y	a		s	m	k	ε	d	n	(70)
i	i	a	a	ʒ	a	l	n	ε	l	(80)
i	y	a	η	n	u	i	ε	o	u	(90)
b	a	a	i	a	t	K	r	u	b	(100)



•If the time on the stopwatch runs out (60 seconds).



•If a child stops on a word for 3 SECONDS.



•If student does not answer any items in first line correctly

Time left (seconds):

Number attempted:

Number Incorrect:

Discontinued: (check box if yes)

Tuma 2: Bchinima karimbu	📖 Sheet B	🕒 60 seconds																																																																				
<p>☛ bachi sheja m-bo ɲo . Jaande, karmmi bachinima maa a milinsi tariga (di boli bachikoba, bolimila bachinima maa). Shehira, bachi ɲo nyela. "bua".</p> <p>Ti buyisima: Jaande, karimmi bachi ɲo [tirimi bachi ɲo : "bara"]:</p> <p><i>Bia maa yi karim vienyela, yelim:</i> Mbo, bachi ɲo nyela "bara" <i>Bia maa yi bi karim vienyela: yelima:</i> Bachi ɲo nyela "bara"</p> <p>Lahi buyisi bachi sheli: Jaade karimmi bachi ɲo [tirimi bachi ɲo : "niɲ".</p> <p><i>Bia maa yi karim vienyela, yelima:</i> Mbo, bachi ɲo nyela "niɲ". <i>Bia maa yi bi karim vienyela, yelima:</i> Bachi ɲo nyela "niɲ"</p> <p>N yi yeli "pilima", nyin karimmi bachinima maa vienyela a milinsi tariga yomyom. Karimmi bachinima maa n-dolisi gbaɲ maa yeliɲ tuuli kuliga maa ni. N yen fomi ka wumdi a ni karindi sham, naɲila a bo rila n so ɲsim.</p> <p>A baɲ a ni yen niɲ sham maa? A niɲ shili? Pilima.</p>		<p>☞ If the time on the stopwatch runs out (60 seconds).</p> <p>☞ If a child stops on a word for <u>3 SECONDS</u>.</p> <p>☞ If student does not answer <u>any</u> items in first line <u>correctly</u></p>																																																																				
☞ (/) Incorrect or no response () After the last number read																																																																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="5"></th> <th style="text-align: center;">Tot. Cum.</th> </tr> </thead> <tbody> <tr> <td style="width: 20%;">mali</td> <td style="width: 20%;">ni</td> <td style="width: 20%;">Zuyu</td> <td style="width: 20%;">Kom</td> <td style="width: 20%;">lahi</td> <td style="text-align: center;">(5)</td> </tr> <tr> <td>maa</td> <td>Fati</td> <td>saha</td> <td>o</td> <td>nyela</td> <td style="text-align: center;">(10)</td> </tr> <tr> <td>nye</td> <td>na</td> <td>niɲ</td> <td>bi</td> <td>nya</td> <td style="text-align: center;">(15)</td> </tr> <tr> <td>yi</td> <td>tooi</td> <td>pam</td> <td>mini</td> <td>din</td> <td style="text-align: center;">(20)</td> </tr> <tr> <td>zaa</td> <td>ka</td> <td>be</td> <td>chaɲ</td> <td>viɛlli</td> <td style="text-align: center;">(25)</td> </tr> <tr> <td>ya</td> <td>N</td> <td>shāli</td> <td>niriba</td> <td>daa</td> <td style="text-align: center;">(30)</td> </tr> <tr> <td>nti</td> <td>ma</td> <td>che</td> <td>mi</td> <td>gba</td> <td style="text-align: center;">(35)</td> </tr> <tr> <td>yeli</td> <td>la</td> <td>Kpatinariga</td> <td>bila</td> <td>a</td> <td style="text-align: center;">(40)</td> </tr> <tr> <td>Be</td> <td>di</td> <td>jenkuno</td> <td>ti</td> <td>ɲo</td> <td style="text-align: center;">(45)</td> </tr> <tr> <td>ɲun</td> <td>Amaa</td> <td>Ata</td> <td>ba</td> <td>bo</td> <td style="text-align: center;">(50)</td> </tr> </tbody> </table>										Tot. Cum.	mali	ni	Zuyu	Kom	lahi	(5)	maa	Fati	saha	o	nyela	(10)	nye	na	niɲ	bi	nya	(15)	yi	tooi	pam	mini	din	(20)	zaa	ka	be	chaɲ	viɛlli	(25)	ya	N	shāli	niriba	daa	(30)	nti	ma	che	mi	gba	(35)	yeli	la	Kpatinariga	bila	a	(40)	Be	di	jenkuno	ti	ɲo	(45)	ɲun	Amaa	Ata	ba	bo	(50)
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Be	di	jenkuno	ti	ɲo	(45)																																																																	
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☞ Discontinued: (check box if yes)																																																																						

Tuma 3: Lahibali karim yihi palo		Sheet C			60 seconds
<p>☛ Lahibali nmaa m-bo nɔ . M bo rimi ni a karim li yihi palo vienyela yomyom. A ban a ni yen nin sheli maa? N yi yeli "pilima", nyin karimmi lahibali maa vienyela a milinsi tariga. N yen fomi ka wum a karim maa, nayila a bo rila so nsim. A nin shili? Pilima.</p>					<p>☝</p> <ul style="list-style-type: none"> • If the time on the stopwatch runs out (60 seconds). <p>🔄</p> <ul style="list-style-type: none"> • If a child stops on a word for <u>3 SECONDS</u> <p>☝</p> <ul style="list-style-type: none"> • If student does not answer <u>any</u> items in first line <u>correctly</u>
<p>☛ (/) Incorrect or no response () After the last number read</p>					
<p>Pumpo nɔ, n yen bo hi a la bo hisi n-jendi lahibali sheli a ni karim maa. Kpanmi a manja n-labisi bo hisi maa a milmsi tariga.</p>					
		Correct	Incorrect	No Response	
N yuli m-booni Sibiri. M mini m ba ni m ma bela ti ya san.	16	Ya ka Sibiri be? [Be ya; O ya; san]			
Yuuni kam, tingbani kuurimi ka saa naan ti mi. Ka ti lihir zuyusaa ka suhiri Naawuni.	33	Bo zuyu ka tingbani kuura? [Saa bi mi; saa n-zo; wuuni n-du; Be bi boli saa]			
Dahinsheli, n daa zila sambani ni ka sagbana zibigi. Binsheli daa lu n zuyu na, ka lahi lu m-pahi.	54	Bo n-daa lu Sibiri zuyu maa? [kom; saa]			
N daa yiyisi guui n-kuli. Saa maa n-daa paana maa.	68	A tehiya ni wula ka Sibiri suhu daa be saa maa ni daa luna maa? [suhupielli; lari; nyayisim]			
☛ Time left (seconds):					
☛ Number attempted:					
☛ Number Incorrect:					
☛ Discontinued: (check box if yes)					

Tuma 4: Wum ka Gbaai					None
<p>N yen karimla lahiba ŋmaa yihi palo, ka a wum, ka m bo hi a bo hisi. Jaande, wummi vienyela ka labisi bo hisi maa a milinsi tariga. A ban a ni yen niŋ sham maa?</p>					<p>None</p> <p>If a child does not answer within <u>30 SECONDS</u>.</p>
<p>Asibiri dali ka Dawuni mini Danaa diemda. Be yurila sambani ni diambu. Be ŋmeri bolli. Dawuni mini Danaa guuri pam amaa be na di zi bolli tabigibu vienyela. Be yi bo hinda, dahiasheli be ni tabigi bolli vienyela n-di goo.</p>					
Bondali ka Dawuni mini Danaa diemda?	[Asibiri dali]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Ya ka be yuri diambu?	[sambani ni]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Dawuni mini Danaa mi bolli tabigibu vienyela?	[aayi; m-m]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Bo ka Dawuni min Danaa mi niŋbu vienyela?	[guubu]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Be yi tabigi bolli vienyela bo n-yen niŋ?	[Be ni di goo]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
Be yi di goo, wula ka di yen niŋ ba?	[Di ni niŋ ba nyayisim]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
<p>Number attempted:</p>					
<p>Number Incorrect:</p>					

Student Stimuli Booklet

March 2011

Example : A v L

u m s B a j i f n i

g M l p w a t p v I

i i n i h d a m m d

a ε l i y o n n i k

u b i o h η y i i i

o a c η i r A k a g

z y a s m k ε d n

i i a a ʒ a l n ε l

i y a η n u i ε o u

b a a b i a t K r u b

Example : bara

nin

mali	ni	Zuyu	Kom	lahi
maa	Fati	saha	o	nyɛla
nyɛ	na	nin	bi	nya
yi	tooi	pam	mini	din
zaa	ka	be	chan	viɛlli
ya	N	shāli	niriba	daa
nti	ma	che	mi	gba
yɛli	la	Kpatinariga	bila	a
Bɛ	di	jɛnkuno	ti	ɲɔ
ɲun	Amaa	Ata	ba	bɔ

N yuli m-booni Sibiri. M mini m ba
ni m ma bela ti ya saŋ. Yuuni kam,
tingbani kuurimi ka saa naan ti mi.
Ka ti lihir zuyusaa ka suhiri
Naawuni. Dahinsheli, n daa zila
sambani ni ka sagbana zibigi.
Binsheli daa lu n zuyu na, ka lahi
lu m-pahi. N daa yiyisi guui n-kuli.
Saa maa n-daa paana maa.

Akwankyerɛ

Ohia dɛ yɛnye mbofra a yɛresese hɔn mbɔdzembɔ no, fa agodzi kwan do nye hɔn dzi nkɔmbɔ fi hɔn ankasa hɔn pɛ mu fa ndzɛmba bi a abofra enyi gye ho ho. Ma abofra no nhu dɛ dwumadzi no nnye adze dzendzen bi na mbom ɔyɛ agodzi bi a ne yɛ yɛ enyigye.

Osuanyi, me ma wo akye. Wɔfrɛ me _____ na metse _____. Medzi mfe _____. Meyɛ _____ . M'enyi gye _____ ho yie).

- Ibotum aka wankasa na w'ebusuafo ho asɛm akyerɛ me a? (Tweɔn osuanyi no nyi asɛmbisa no ano, sɛ osuanyi no mmpɛ dɛ ɔkasa a, kɔ asɛmbisa a ɔtɔ do ebien (2) no do, nanso sɛ ɔpen do a, toa nkɔmbɔdzi no do)
- Da a annkɔ skuul no, ebɛn adze na eyɛ?
 - Ma menka siantsir a mowɔ ha nkyerɛ wo. Meyɛ edwuma wɔ asoɛe a ɔhwɛ adzesua na agodzi ho nsɛm do, na yɛpɛ dɛ yehu kwan a mbofra fa do sua akenkan. Wo tsir ye, woeyi wo aka hɔn a wobedzi dɛm dwuma yi ho.
 - Yehia wo mboa wɔ dwumadzi yi mu. Naaso sɛ emmpɛ dɛ eyɛ a, ɔhyɛ biara nnyi mu.
 - Yerebedzi akenkan agor bi. Merebɛma akenkan akyerɛwamba, nkasafua na akenkansɛm tsiaba bi wɔ Mfantse mu ma metsie.
 - Medze watse a mikitsa yi bɔhwɛ mber tsentsɛn a edze bɛkenkan.
 - Iyi NNYɛ nsɔhwɛ ntsi Orinnya nsunsuando biara wɔ wo skuul adzesua do.
 - Mibebisa wo nsɛm bi so a ɔfa w`abusua ho, tse dɛ kasa a w'ebusuafo ka wɔ fie na ndzɛmba bi a ebusua no wɔ.
 - MERENNKYERɛW wo dzin, dɛm ntsi obiara runnhu dɛ ɔwo na emaa dem mbuae yi.
 - Bio sɛ emmpɛ dɛ idzi dɛm dwuma yi a, ɔhyɛ biara nnyi mu. Sɛ yɛhyɛ ase na sɛ emmpɛ dɛ iyi asɛmbisa bi ano a, yɛbɛgye ato mu.

Ɛwɔ asɛmbisa bi a? Ayɛ krado dɛ ebɛhyɛ ase a?

Sɛ ɔpen do a, kyerɛw wɔ adaka yi mu NYEW

(Sɛ abofra no mmpɛn do a, da no ase. Fa dɛm kwan yi ara do na enye abofra a odzi do nkasa)

A. Date of assessment :	Day____ Mo____ Yr____
B. Assessor name/code :	
C. NAME of school :	
D. Unique School code :	
E. District:	
F. School Shift:	<input type="radio"/> Morning <input type="radio"/> Afternoon <input type="radio"/> Full Day
G. Multigrade?	<input type="radio"/> Yes <input type="radio"/> No

I. Teacher Name:	
J. Student's Class:	<input type="radio"/> 4 = P2 <input type="radio"/> 6 = P3
K. Student's Section:	
L. Unique student code :	
M. Student's year and month of birth :	Year : _____ Month : _____
N. Student's gender :	<input type="radio"/> Girl <input type="radio"/> boy
O. Start time: End Time	_____ : _____ _____ : _____

<p>Dwumadzi 1: Akyerɛwamba Ngyegyee</p> <p>Fantse akyerɛwamba pii wɔ krataa yi do. Mepa wo kyɛw kenkan dodow biara a ibotum wɔ ngyegyee no mu kyere me. Mfatoho bi nye /a/ ka ma mintsie</p> <p>Sɛ abofra no tum ka no pɛpɛɛpɛ a, ma no mbo.</p> <p>Sɛ oenntum annka no pɛpɛɛpɛ a, ka /a/ ma ontsie.</p> <p>Afei ka dza odzi do yi /ɔ/. Mbo, wɔka no /ɔ/sɛ abofra no enntum annka no pɛpɛɛpɛ a, ka /ɔ/ ma ontsie.</p> <p>Atse dza ɔwɔ dɛ eyɛ no ase? Meka "hyɛ ase" pɛr a, kenkan akyerɛwamba no mu biara ne ngyegyee ntsɛmntsɛm pɛpɛɛpɛ dɛ mbrɛ ibotum. Ka akyerɛwamba yi ne ngyegyee kyere me. Hyɛ ase fi ha na toa do dɛmara. (Mfatoho no ekyir no, fa wo nsa si akyerewamba a odzi kan no do na fa wo nsa fa do fi benkum kɔ nyimfa do kesi ewiei wɔ kuw a odzi kan no do). Sɛ edur akyerɛwamba bi a innyim a, mɛkyere wo. Sɛ amba no dɛm a, mɛyɛ dzinn etsie wo.</p> <p>Ayɛ krado a? Hyɛ ase.</p>	<p>🕒 60 seconds</p> <p>👉</p> <ul style="list-style-type: none"> • If the time on the stopwatch runs out (60 seconds). <p>👉</p> <ul style="list-style-type: none"> • If a child stops on a word for <u>3 SECONDS</u>. <p>👉</p> <ul style="list-style-type: none"> • If student does not answer <u>any</u> items in first line correctly 																																																																																																														
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Task 2. Nkasafua mbofra wɔ ho nyimdzee dwumadzi		Sheet B		60 seconds																																																																		
<p>Dwumadzi 2: Nkasafua akenkan</p> <p>Nkasafua bi iyi. Mepa wo kyɛw kenkan dodow biara ibotum (mma nnsopɛr nkasafua no; na mbom kenkan) Mfatoho bi nye, "Maame"</p> <p>Yɛnsɔ iyi nhwɛ: mepa wo kyɛw kenkan nkasafua yinom (Fa wo nsa si kasafua 'bankye' do)</p> <p>(Sɛ abofra no ka no pɛpɛɛpɛ a, ma no mbo; kasafua no yɛ 'Bankye')</p> <p>Afei sɔ foro hwɛ bio, mepa wo kyɛw kekan kasafua 'bɔdom' so (Fa wo nsa si asɛmfua 'bɔdom' do)</p> <p>Sɛ abofra no annkan no yie a, ka kyerɛ no dɛ asɛmfua no yɛ 'bɔdom'</p> <p>Sɛ meka "hyɛ ase" a, kenkan nkasafua no ntsɛmmtsɛm pɛpɛɛpɛ dɛ mbrɛ ibotum. Kenkan nkasafua no fi kuw a odzi kan nye dza ɔtoa do wɔ ase no. Mɛyɛ dzinn etsie wo gyedɛ ebia ihia mboa bi.</p> <p>ɛhu dza ɔwɔ dɛ eyɛ a?</p> <p>Yɛ? krado Hyɛ ase.</p>				<p> 60 seconds</p> <p></p> <ul style="list-style-type: none"> • If the time on the stopwatch runs out (60 seconds). <p></p> <ul style="list-style-type: none"> • If a child stops on a word for <u>3 SECONDS</u>. <p></p> <ul style="list-style-type: none"> • If student does not answer <u>any</u> items in first line <u>correctly</u> 																																																																		
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Dwumadzi 3 - Akenkan		Sheet C (/) Incorrect or no response () After the last number read			60 seconds
<p>Anansesem tsiaba bi nye yi. Mepɛ dɛ ibue w'ano kenkan dɛ mbrɛ ɔfata. Sɛ ekenkan wie a, yi yi nsɛmbisa bi a ɔfa dza akenkan no ho ano. Atse dza ɔwɔ dɛ eyɛ no ase? Meka "hyɛ ase" a, kenkan anansesɛm no yie dɛ mbrɛ ibotum. Mɛbeyɛ dzinn etsie dza erekankan no, gye dɛ ebia ihia mboa bi. Ayɛ krado? Hyɛ ase.</p>					
		<p>Miribebisa wo nsɛmbisa kakra afa anasesɛm a akenkan no ho. Bɔ mbɔdzɛn bua nsɛmbisa no yie dɛ mbrɛ ibotum</p>			<p>⌚ If the time on the stopwatch runs out (60 seconds).</p> <p>⏸ If a child stops on a word for <u>3 SECONDS</u>.</p> <p>✋ If student does not answer <u>any</u> items in first line correctly</p>
<p>Wɔfrɛ me Amba. Menye me maame, me papa, na me nuabanyin ɔsam tse ekuraase. 16</p>	<p>a) Henfa na Amba tse? (ekuraase, fie)</p>	Correct	Incorrect	No Response	
<p>Afe biara, asaase no wo kɛsɛɛ ansa ana nsu esi famu. Yɛhwɛ wi mu na ɣ tweɔn . 33</p>	<p>b) Eɛɛnadze ntsi na asaase no do wo? [Nna nsu nntɔ, nna ɔpɛ aba, ɔyɛ ɔpɛ ber, nyame mma nsu nntɔ] c) Eɛɛnadze ntsi na Amba na n`ebusuafo hwɛ wimu ?(hwɛ dɛ nsu bɔtɔ, nna ɔpɛ aba, ɔyɛ ɔpɛ ber, nyame nntɔ]</p>				
<p>Ewiaber bi a na metse abɔntsen no, muhun dɛ nsu emuna. Hɔ na biribi bɔɔ me tsir do kakra bi na afei ɔyɛɛ dzen. 54</p>	<p>d) Eɛɛnadze bɔɔ Amba ne tsir do? [(Nsu, bobaa, dua)]</p>				
<p>Mohuruii dze mbirika kɔr fie. Nsu rotɔ. 68</p>	<p>e) Ehwe a nsu tɔe no Amba noho yɛɛ no dɛn?(nyaa enyigye, nyaa ndaase)</p>				
✂ Time left (seconds):					
✂ Number attempted:					
✂ Number Incorrect:					
✂ Discontinued: (check box if yes)					

Ntsie na Ntease		Sheet None			None
<p>Miribebisa wo nsɛm kakra afa anasesɛm iribetsie yi ho. Bɔ mbɔɔzen bua nsɛmbisa yi ano no yie dɛ mbrɛ ibotum?</p>					<p>• If a child does not answer within 30 SECONDS.</p>
<p>☛ Nnoma mba ebien gu buw kɛse kor mu. Fa yɛ hyew fa yɛ win. Panyin no se pin hɔ kakraba no so se pin hɔ, pin hɔ, pin hɔ dɛmara na ɔkɔr do, kesi ber a hɔn na Na Kweedu bae. ɔboa e ma asomdwee bae.</p>					
a) Nnoma mba no yɛ ahen?	[ebien]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
b) Nnoma no wɔ henfa?	[buw mu]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
c) Wɔfrɛ nnoma no dɛn??	[panyin na Kakra]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
d) ɛbɛnadze na nnoma no reyɛ? ?	[wɔreper]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
e) Sɛ hɔn maame ammba nkyɛ ebɛnadze besi?	[nkyɛ wɔbɔko]	<input type="radio"/> Correct	<input type="radio"/> Incorrect	<input type="radio"/> No Response	
☞ Number attempted:					
☞ Number Incorrect:					

Student Stimuli Booklet

Fante

March 2011

Example: A v L

T ε y s o i b n e k

a ε i e ε w N d a a

b t a n o u o n d a

o w f n ε o n A y w

a e a d w r k m n a

u h r m u l n ε o b

h a o y i t p f d o

e d e m e a b a a s

o k o ε n M a r k n

o k o ε n m a r k n

Example: maame

bɔdom

kakraba

mu

kwan

Ɔkaa

a

bi

Nsu

okura

nye

Ata

yɛ

kɔ

Fati

akɔdaa

ne

hɔn

Da

hɛn

pii

kyerɛɛ

edziban

kaa

nna

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dzi

Ananse

dze

yi

do

Wɔ frɛ me Amba. Menye me maame, me
papa, na me nuabanyin Ɔsam tse
ekuraase. Afe biara, asaase no wo ke sɛɛ
ansaana nsu esi famu. Yɛ hwɛ wimu na
yɛ tweɔn. Ewiaber bi a na metse abɔntsen
no, muhun dɛ nsu emuna. Hɔ na biribi bɔɔ
me tsir do kakra bi na afei ɔyɛɛ dzen.
Mohuruii dze mbirika kor fie. Nsu roto.

Annex B: Interview Protocols

Student Interview Protocol

School Name:

EMIS Code:

Student Number (1-20):

How old are you?	
What language do you speak most often at home?	Local Language 1 English 2 Other 3
What grade are you in?	Grade 1 1 Grade 2 2 Grade 3 3 Grade 4 4
What grade were you in last year? [DON'T VERIFY BY ASKING IF CHILD IS REPEATING]	KG 0 Grade 1 1 Grade 2 2 Grade 3 3 Grade 4 4 Don't Know/ Refuse 888
Do you like to read?	No 0 Yes 1 Don't Know/ Refuse 9
Why? Or Why not?	
Do you think being a good reader will help you in school? if yes how? If no why not?	No 0 Yes 1 Don't Know/ Refuse 9
May I please see your language exercise book ? [HOW MANY PAGES HAVE TEACHERS' MARKS/ CORRECTIONS? (DO NOT COUNT COMMENT)]	None 0 Some (every few pages) 1 Many (most pages) 2 All pages 3
Last week, how many times did you get homework in literacy?	Never 0 One time 1 Two times 2 Three times 3 Four times 4 Every day 5 Don't Know/ Refuse 888
Did your teacher check your homework last week in literacy?	No 0 Yes 1 Don't Know/ Refuse 888

Can your father read?	No	0
	Yes	1
	Don't Know/ Refuse	888
Can your mother read?	No	0
	Yes	1
	Don't Know/ Refuse	888
Do you have a reading time in your classroom or in your school library?	No	0
	Yes	1
	Don't Know/ Refuse	888
Do you bring home reading books from your classroom or from the school library to read at home?	No	0
	Yes	1
	Don't Know/ Refuse	888
Apart from school books, do you have books that you can read at home?	No	0
	Yes	1
	Don't Know/ Refuse	888
How often do you read out aloud to someone at home?	Never	0
	Sometimes	1
	Once a week	2

	2-3 times per week	3
	Every day	4
	Don't Know/ Refuse	888
Does someone at home read to you? If yes, how often?	Never	0
	Sometimes	1
	Once a week	2
	2-3 times per week	3
	Every day	4
	Don't Know/ Refuse	888
Thank you very much		

Classroom Teacher Interview Protocol

Region	
District	
EMIS Code	
School Code	
School Name	
Grade	
Class Enrollment	Boys: Girls:
Interviewer	
Date	

1. Have you been trained as a teacher? What level of training?

2. Teaching experience:

a. Total years teaching:

b. Years teaching this grade at this school:

3. Ghanaian Language used to teach literacy in early grades:

4. How well do you speak the language used in early grades in this school?

not at all fair well

5. How well do you read the language used in early grades in this school?

not at all fair well

6. How well do you write the language used in early grades in this school?

not at all fair well

7. Did you receive NALAP training?

Yes

No

a. How many days in 2009-2010?

b. How many days in 2010-2011?

8. Did you find the training helpful in your implementation of NALAP?

Yes

No

Why? Why not?

9. What do you think of the NALAP materials?

- | | | |
|---|------------|-----------|
| a. Is the Teacher Guide easy to use? | Yes | No |
| b. Is the level of difficulty appropriate in the pupil materials? | Yes | No |
| c. Are the materials related to the child's environment and culture (i.e., connected to what the child knows, appropriate to the child's life)? | | |
| Ghanaian language? | Yes | No |
| English? | Yes | No |
10. Have you received instructional support on NALAP? **Yes** **No**
- If yes, who has provided support? Allow more than one response.
- a. Other teachers
 - b. School head teacher
 - c. Circuit supervisor
 - d. District trainers
 - e. Other
11. Was the support given helpful in sustaining your use of NALAP? **Yes** **No**
- a. Why? Why not?
12. Do you teach the NALAP lessons each day? **Yes** **No**
- a. What about the lessons makes them good/not good to teach each day?
13. Which strategies for teaching literacy are most effective in your classroom?
14. What materials are most effective for teaching literacy?

Why are these more effective than others? Are any materials ineffective?

15. How do children learn about letters and sounds?

a. What activities do you find most effective for teaching letter/sound correspondence?

b. Where did you learn these techniques?

16. How do children learn to sound out words?

a. What activities do you find most effective for teaching how to sound out words?

b. Where did you learn these techniques?

17. How do you check for student understanding? Can you give an example of an activity

18. What has changed in your classroom with NALAP?

19. Are the community members aware of the NALAP approach to teaching children to read? Has

that changed over time?

Head Teacher Interview Protocol

1. Enrolments for each grade up to P3 by gender

	Girls	Boys
KG 1		
KG 2		
P1		
P2		
P3		

Region		
District		
EMIS Code		
School Code		
School Name		
Highest Grade		
School type:	Public	Private
School Location	Rural	Urban
Interviewer		
Date		

2. What is the Ghanaian language of this school?

3. How was the language selected?

4. Are your NALAP materials in this language? **Yes** **No**

5. What proportion of the pupils in KG1 – P3 speak that language fluently?

Less than half **About half** **About 3/4** **Virtually all**

If the language of the NALAP materials is different from the language of many children, ask why.

6. What is the approximate distance to the school from the district capital, in kilometers?

7. Is the road tarred? **Yes** **No**

8. Did you and the teachers in this school receive NALAP training? **Yes** **No**

How many days 2009-2010?

How many days 2010-2011?

Did you find the training useful?

Yes

No

Why?/Why not?

9. How long is the literacy period each day?

10. Does your school have an active SMC?

Yes

No

What role does the SMC play in NALAP?

11. Does your school have an active PTA?

Yes

No

What role does the PTA play in NALAP?

12. How often have you attended training for early grade reading instruction?

13. What were the important things that you learned about reading and reading instruction in the

trainings?

14. Do you have the chance to support your teachers in giving reading instruction to students?

15. Now that you have had experience with NALAP, what are your views on it (e.g., based on classroom

observation and conversations with teachers).

16. How much class time is spent on reading now? Before NALAP?

17. What materials were most valuable in supporting reading improvements?

18. How effective were the lesson plans?

19. What are the community's views of NALAP?

Annex C: Classroom Observation Protocol

NATIONAL LITERACY ACCELERATION PROGRAM

Classroom Observation Instrument

March 2011

Region _____
District _____
EMIS Code _____
School Code _____
Observer _____
Date _____
School _____

ELEMENT 1.1: LESSON PLANNING

BEST PRACTICE: NALAP lessons are planned for the teacher. But the teacher must review the plans before teaching and be ready to lead lessons. Teachers should demonstrate the following best practices in L1 and L2 lessons:

- (1) connect learning to relevant previous knowledge;
- (2) address the unit objectives (what the learners will know and be able to do);
- (3) address core points;
- (4) address individual needs. NOTE: There do not need to be individual plans for each learner, but instruction should be differentiated for variety in students' abilities.);
- (5) use teaching and learning materials as specified in the lesson; and,
- (6) assess learning (checklist, evaluation sheet, oral questioning, etc.).

□	□	□	□
Slow pace and hesitation shows no preparation. <i>Or</i> teacher uses NALAP materials but does not use Teacher Guide	Some parts of Ghanaian language lesson or English lesson delivered according to Teacher Guide	3-5 parts of both Ghanaian language and English lessons delivered according to Teacher Guide.	All parts of Ghanaian language and English lesson delivered according to Teacher Guide

ELEMENT 2.1: USE OF CLASS TIME

BEST PRACTICE: Each class has a set length of time for Ghanaian language and English lessons. Class time for teaching and learning is maximized by starting class on time, attending to interruptions quickly and achieving tasks on time.

□	□	□	□
Teacher and learner activities do not begin on time; interruptions not handled efficiently; much time is wasted; length of time for Ghanaian language and English lesson is not respected	Some time is wasted due to late beginning of lesson; interruptions not handled efficiently; both Ghanaian language and English lessons delivered, but timing is not appropriate	Teacher and learner activities begin promptly; interruptions are handled partially; most time is used for teaching and learning; time for Ghanaian language and English is off by less than 15 minutes	Teacher and learner activities begin promptly and interruptions are handled quickly. Class time for teaching and learning is maximized. Lessons and tasks are achieved on time.

ELEMENT 2.2: MANAGING LEARNER TASK-RELATED BEHAVIOUR

BEST PRACTICE: Learning is maximized when learners are on-task. Teachers use strategies to arouse attention at the beginning of the class and sustain attention during the lesson.

On-task behaviour is defined as “learners are doing what the teacher expects them to be doing at the time,” such as reading, using TLMs, listening to the teacher, working in a group, etc.

Off-task behaviour includes sleeping, daydreaming, not paying attention, etc.

NOTE: Off-task behaviour is not necessarily misbehaviour; the child may not be disturbing others, but may be off-task.

□	□	□	□
<i>Many</i> learners are <i>off-task</i> , looking around, daydreaming, not doing what the teacher expects. The teacher does not attempt to get them on-task.	<i>Some</i> learners are <i>off-task</i> . The teacher notices and tries to get them on-task.	<i>Few</i> learners are <i>off-task</i> . The teacher notices and gets some of them on-task.	<i>All</i> learners are <i>on-task</i> , doing what the teacher expects <i>or</i> the teacher notices off-task learners and gets all of them on-task.

ELEMENT 3.1: ARRANGEMENT OF LEARNERS

BEST PRACTICE: The arrangement of furniture (if available) and/or learners allows for interaction among learners and contributes to a stimulating environment for learning.

□	□	□	□
Learners sit in rows facing the teacher.	Learners sit in groups but work as whole class.	Learners sit in groups during the lesson and work as a group, in pairs, or individually.	Classroom arrangement allows for group work with the teacher, group or pair work for learners, and whole class work.

ELEMENT 3.2: CLASSROOM DISPLAYS

BEST PRACTICE: Teacher appropriately displays learners' work, and NALAP teaching and learning materials as specified for the lesson, to help facilitate a stimulating environment for learning.

□	□	□	□
<i>No</i> learner work <i>or</i> NALAP teaching and learning materials displayed.	<i>Some</i> learners' work <i>or</i> NALAP teaching and learning materials displayed.	<i>Both</i> learners' work <i>and</i> NALAP teaching and learning materials are present but not well displayed or used appropriately.	<i>Both</i> learners' work <i>and</i> appropriate NALAP teaching and learning materials are displayed; <i>and</i> NALAP teaching and learning materials are used as specified in the Teacher Guide.

ELEMENT 3.3: LEARNER ENGAGEMENT

BEST PRACTICE: Teacher ensures that learners actively participate in the lesson (individually, in pairs, in groups, or with the whole class). Learner participation in lesson activities helps learners to grasp the concepts and develop language skills; and it is directly related to learner achievement.

□	□	□	□
Learners sit passively and listen to the teacher.	<i>Few</i> learners actively participate and most learners watch.	<i>Most</i> learners actively participate in learning activities. <i>A few</i> only watch.	<i>All</i> learners actively participate as instructed in learning activities.

ELEMENT 3.4: LEARNER INTERACTION

BEST PRACTICE: Children learn by interacting with others about what is being taught. Learning is enhanced when teachers encourage interaction among learners, and learners are free to share ideas and learning materials among themselves.

<p style="text-align: center;">□</p> <p>No interaction among learners. Teacher does not encourage learner interaction.</p>	<p style="text-align: center;">□</p> <p>Learners are allowed limited interaction with each other, according to the lessons in the NALAP Teacher Guide</p>	<p style="text-align: center;">□</p> <p>Learners are encouraged to interact with each other, according to the lessons in the NALAP Teacher Guide, and some pupils interact as instructed.</p>	<p style="text-align: center;">□</p> <p>Teacher successfully promotes learner interaction, following the lessons in the Teacher Guide; whole class is active and lively during group work; learners share ideas and learning materials among themselves as instructed</p>
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ELEMENT 3.5: GENDER SENSITIVITY

BEST PRACTICE: Teachers treat girls and boys equally. They call on girls and boys, encourage both boys and girls to succeed, give them equal roles and responsibilities, and use gender sensitive TLMs, etc.

□	□	□	□
Teacher's attention is on only boys or only girls.	Teacher calls on boys and girls to participate but demonstrates a preference for one over the other.	Teacher calls on and encourages girls and boys equally.	Teacher treats girls and boys equally--calls on girls and boys, encourages boys and girls to succeed, gives both roles as group leaders, uses gender sensitive TLMs, etc.

ELEMENT 4.1: USE OF TEACHING AND LEARNING MATERIALS (TLMs)

BEST PRACTICE: The *use* of appropriate TLMs by teachers and learners enhances learning. NALAP lessons specify TLMs that are essential to the lesson and appropriate for the level of the learners. The use of the NALAP TLMs by the teacher and/or the learners facilitates effective lesson delivery.

NOTE: For the purposes of this assessment, the use of standard TLMs, such as chalk, chalkboard, exercise books, and pencils should not be considered in the rating.

□	□	□	□
No NALAP TLMs are used by the teacher or the learners.	Teacher alone uses appropriate NALAP TLMs; pupils do not use TLMs.	Teacher uses NALAP TLMs, and learners engage with the TLMs (individually, in pairs, small groups, or whole class).	Teacher uses NALAP TLMs according to the lesson in the Teacher Guide, and learners engage with the TLMs (individually, in pairs, small groups, or whole class) as specified in the lessons.

ELEMENT 4.2: THINKING SKILLS

BEST PRACTICE: In teaching learners to process and create information, teachers use methods that actively involve learners in discussions for problem solving, analyzing, comparing/contrasting, creating, sharing ideas and experiences, etc.

□	□	□	□
Teacher tells information to learners. Learners listen to teacher, answer recall questions, recite, copy from the chalkboard, etc.	The teacher asks questions that have more than one correct answer. Learners respond to the teacher's questions.	Learners are involved in discussions and <i>some</i> learners share their own ideas.	Learners are involved in discussions for problem solving, analyzing; <i>and/or</i> in creative activities. <i>Many</i> learners share their own ideas and experiences related to the lesson.

ELEMENT 4.3: FEEDBACK

BEST PRACTICE: During the lesson effective feedback helps learners to know if they are progressing. Feedback is provided to individual learners or learners working in groups to let them know whether their work is adequate or inadequate. It helps learners recognize their mistakes and figure out corrections. Feedback is given in a way that encourages learners to keep trying.

□	□	□	□
Teacher does not give feedback <i>or</i> feedback is harsh and does not encourage learners to try again.	Teacher gives feedback to whole class only. No feedback is given to groups or individuals. Feedback encourages learners.	Teacher gives <i>some</i> feedback to groups and/or individuals. Feedback encourages learners.	Teacher consistently gives feedback to groups and/or individuals. Feedback helps learners recognize their mistakes and figure out corrections. It encourages learners to keep trying.

ELEMENT 4.4: ORAL AND WRITTEN COMMUNICATION IN GHANAIAN LANGUAGE

BEST PRACTICE: Teacher has command over the Ghanaian language used in the school (oral and written) and is able to communicate effectively in it. Oral language used in the lesson is appropriate and understood by the learners. Written language on the chalkboard and on teacher-prepared materials is correct.

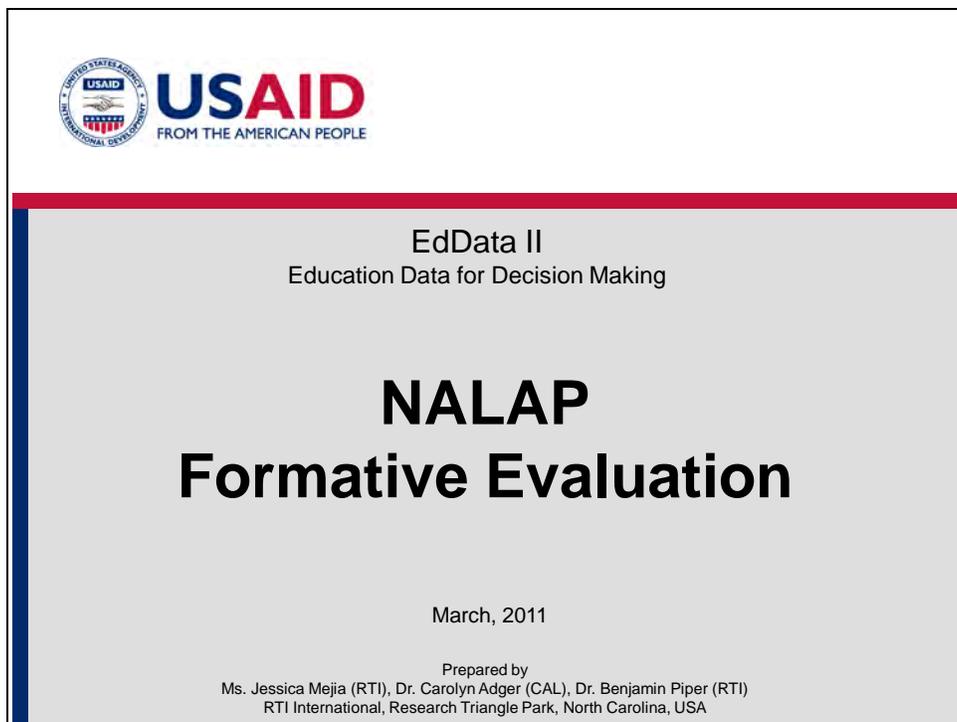
□	□	□	□
Teacher cannot speak, read or write the Ghanaian language used in the school.	Teacher speaks but cannot read or write the Ghanaian language used in the school.	Teacher speaks, reads and writes the Ghanaian language used in the school but has difficulty in explaining concepts.	Teacher speaks, reads and writes the Ghanaian language with ease, and explains concepts in different ways for the understanding of learners.

ELEMENT 4.5: ORAL AND WRITTEN COMMUNICATION IN ENGLISH

BEST PRACTICE: Teacher has command over English (oral and written) and is able to communicate effectively in it. Oral language used in the NALAP English lesson is appropriate and understood by the learners. Written English on the chalkboard and on teacher-prepared materials is correct. Teacher uses oral English only in KG1, KG2, and KG3 and does not attempt to teach children to read English in those classes.

□	□	□	□
Teacher is not confident in the use of English.	Teacher speaks but cannot read <i>or</i> write English well enough to teach the English lesson confidently. Note that KG1, KG2, and P1 NALAP English lessons use oral English only.	Teacher speaks, reads and writes English but has difficulty in teaching the English lesson. Note that KG1, KG2, and P1 NALAP English lessons use oral English only.	Teacher has command over English and explains concepts in different ways so that learners understand during the English lesson. Teacher writes English clearly on chalkboard in P2 and P3 only. Note that KG1, KG2, and P1 NALAP English lessons use oral English only.

Annex D: NALAP Formative Evaluation (presentation)



Objective

- In-depth view of NALAP implementation at the micro level, limited breadth
- Implemented by EdData – focus on data for decision-making
- Interested in providing usable information for GES and USAID
- Ground-breaking literacy intervention in an era of increased focus on *quality*

Methodology

- Mixed methods approach
- Loci of analysis: Classroom pedagogy, institutional framework, material revisions, pupil assessment
- Connected purposively with May 2010 assessment
- Presentation
 - Background
 - Findings
 - Implications
 - Response and discussion

Evaluation Activities

- Development of Language Assessments
- Training of Evaluation Teams
- Pilot assessment, ensuring reliability
- Data collection in schools
- Data entry
- Data analysis
- Report writing
- Presentation

Sample



- 2 Schools in Tamale metropolis
- 3 schools in Takoradi
- 3 schools in Kwahu West
- 1 school in Salt Pond (for practice)

Data

- 132 reading assessments
 - Letters, words, story, reading comprehension and listening comprehension
- 132 Student interviews on school and family literacy background
- 8 Head teacher interviews
- 11 Teacher interviews
- 12 Classroom observations

Reading Tasks

Task	Ghana		
	Dagbani	Akuapem	Fante
Letter Sound Naming	X	X	X
Word Naming	X	X	X
Oral Reading Fluency	X	X	X
Reading Comprehension	X	X	X
Listening Comprehension	X	X	X

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5/4/2012

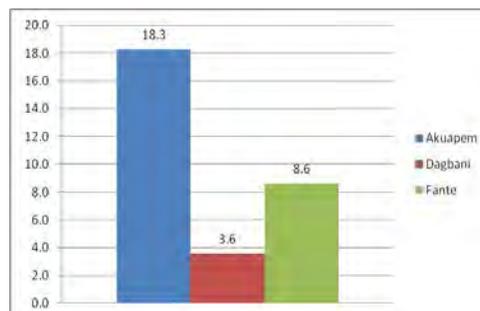
Findings

- Pupils' achievement assessment
- Instruction findings
 - Interview findings
 - Classroom observation findings

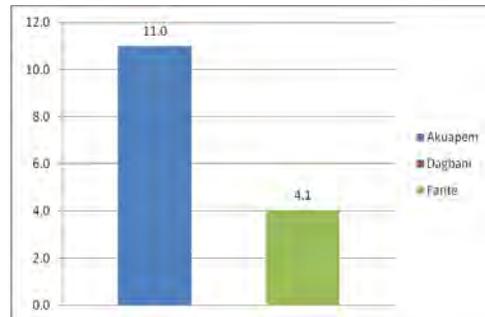
Literacy Assessment Sample

Language	Female	Male	Total
Akuapem	24	28	52
Dagbani	8	15	23
Fante	26	31	57
Total	58	74	132

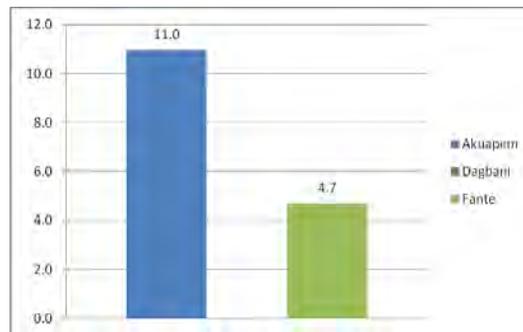
Letter Identification (per minute)



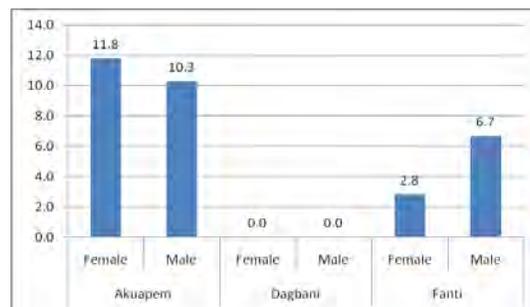
Common Word identification (per minute)



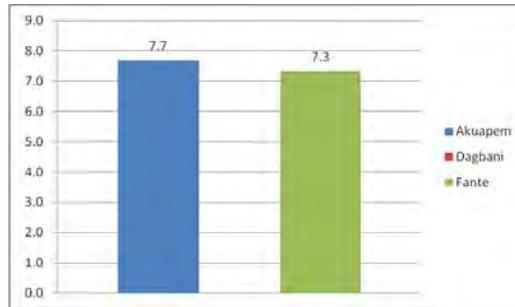
Story Reading (words per minute)



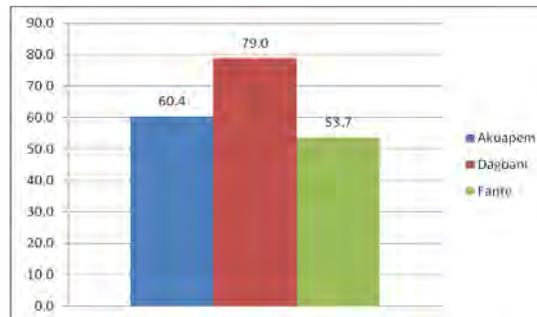
Story Reading (wpm) by gender



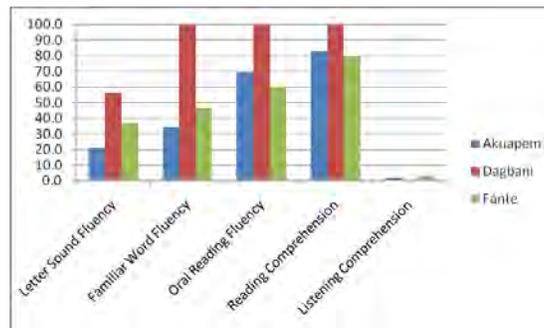
Reading Comprehension (% correct)



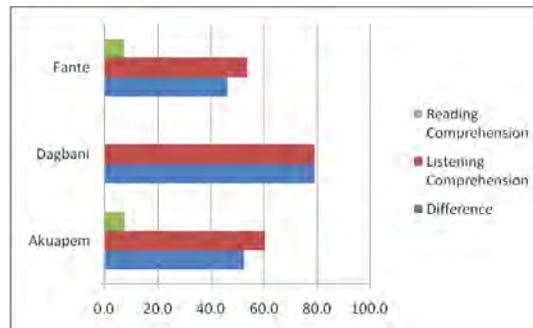
Listening Comprehension (% Correct)



Percentage of Zero Scores by Task



Comprehension Score Comparisons



Discussion Questions

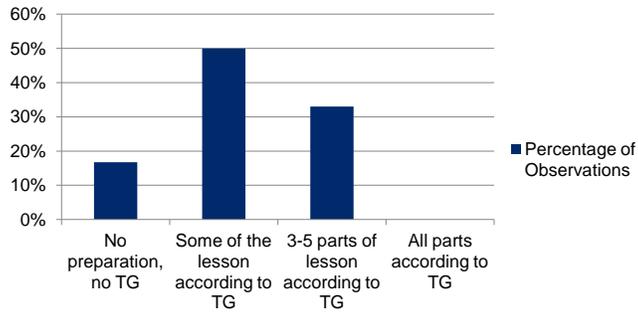
- What are your views on the reasons for the low findings?
- What is necessary for children to be able to read by the end of P2?

Instruction Findings

- From two sources
 - Classroom Observation
 - Matched with previous NALAP implementation study
 - Interviews
 - From current NALAP study

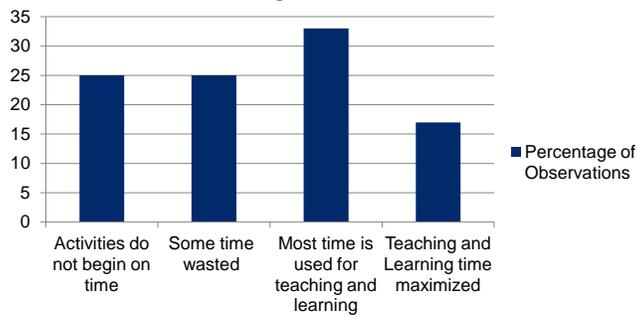
Lesson Planning

Percentage of Observations



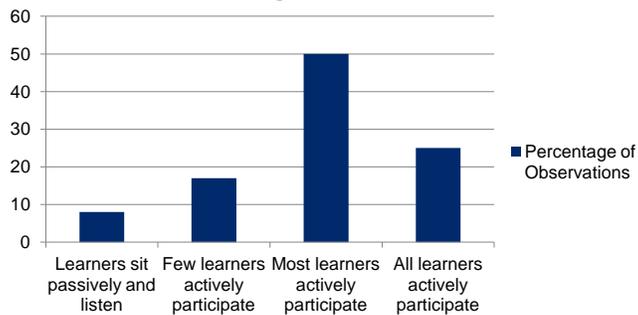
Class Time Use

Percentage of Observations

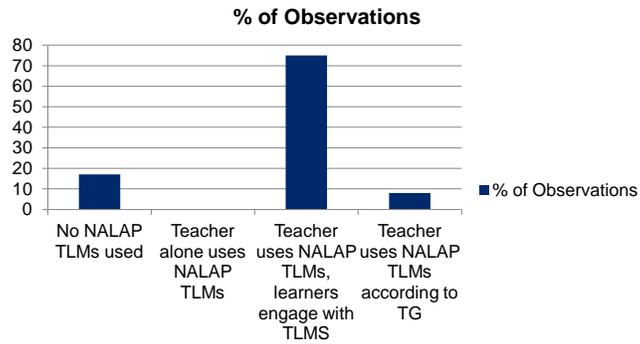


Learner Engagement

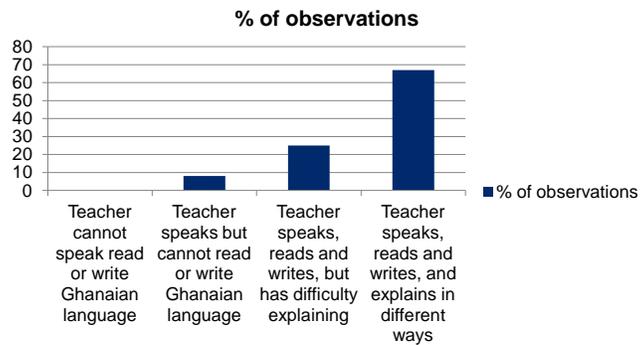
Percentage of Observations



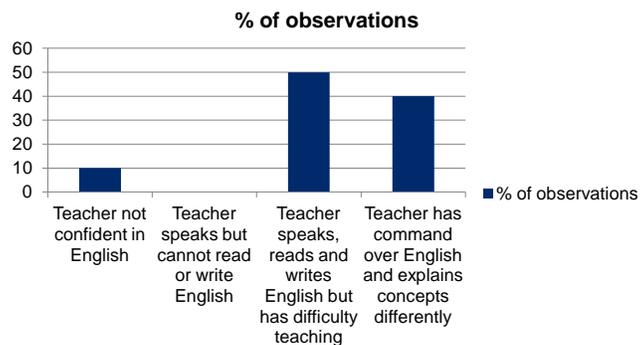
Use of Materials



Ghanaian Language



English Language



Lesson Planning

Region	Change
Eastern	↓
Northern	↓
Western	↓

Class Time Use

Region	Change
Eastern	↓
Northern	↔
Western	↔

Managing Behavior

Region	Change
Eastern	↔
Northern	↓
Western	↓

Classroom Arrangement

Region	Change
Eastern	↔
Northern	↔
Western	↓

Classroom Displays

Region	Change
Eastern	↓
Northern	↓
Western	↑

Learner Engagement

Region	Change
Eastern	↓
Northern	↓
Western	↔

Learner Interaction

Region	Change
Eastern	↓
Northern	↔
Western	↑

Gender Sensitivity

Region	Change
Eastern	↔
Northern	↑
Western	↔

Teaching and Learning Materials

Region	Change
Eastern	↓
Northern	↓
Western	↑

Thinking Skills

Region	Change
Eastern	↓
Northern	↔
Western	↑

Feedback

Region	Change
Eastern	↓
Northern	↔
Western	↑

Ghanaian Language

Region	Change
Eastern	↔
Northern	↑
Western	↑

English Language

Region	Change
Eastern	↔
Northern	↔
Western	↔

Overall Change

Region	Change
Eastern	-8 ↓
Northern	-3 ↓
Western	+3 ↑

Interview Findings

Use of Teacher Guides is spotty

- “Oh! NALAP is a good programme. The way it is structured, if teachers follow the approach properly, it would help children pick [up] reading faster.” (Head Teacher)
- Teacher Guide is the foundation: “the almighty Teachers Guides.”
- But Teacher Guides are being used selectively.
- Re: value of NALAP materials, only 3 of 11 teachers mentioned the Teacher Guide.
- Re effective strategies for teaching literacy, 2 P2 teachers named materials external to P2 lessons
- But one teacher said “[They were] prepared systematically and that makes teaching and learning interesting and positively challenging. They make teaching easy. . . . But if you fail to teach one day, you destroy the pattern.”

Instruction in phonics is weak

- Extensive repetition and little instruction in decoding
- Re how children learn letter/sound connections, 6 of 11 teachers referred to phonics. Others said “imitating what teacher says; pronunciation and how sound goes.” Observations confirm belief that hearing words read aloud conveys the ability to decode.
 - Re activities for teaching letter/sound, teachers said “relate letter name and sound” but also “repeat after the teacher.”
 - Re how children learn to sound out words, 4 of 11 teachers said that children should repeat. Others mentioned phonics; one mentioned blending.
 - Only one teacher taught sound/letter connections as per the Teacher Guide lesson.

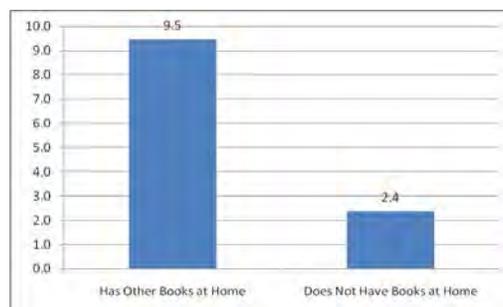
Discussion Questions

- Why do you think the instructional adherence to the teachers’ guide is difficult? What should be done to improve it?
- Why is the overall quality of NALAP lesson plan implementation declining over time? What should be done to improve it?

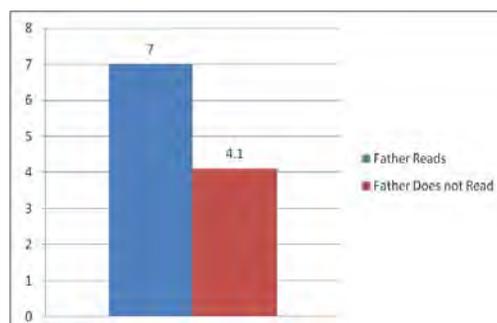
Predictive Factors for Pupil Assessment

- Access to Books
- Parent's Literacy
- Teacher's Involvement in Homework
- Student's Views on Reading
- Grade Repetition

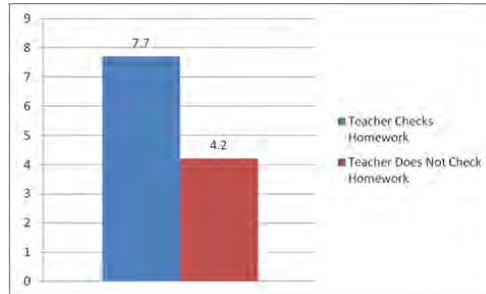
Having Books at Home



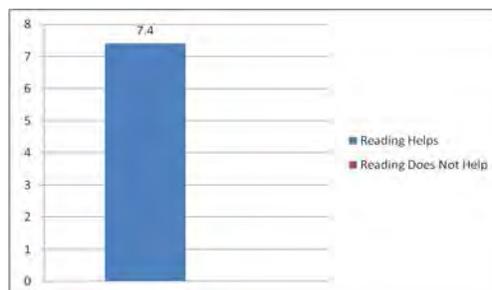
Father's Literacy



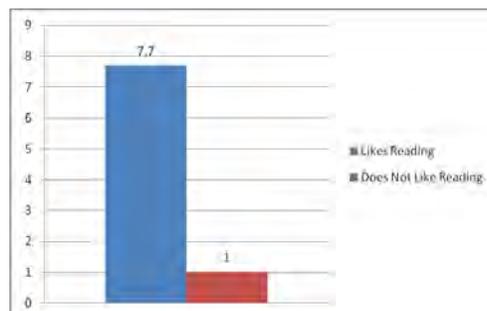
Teacher Checks Homework



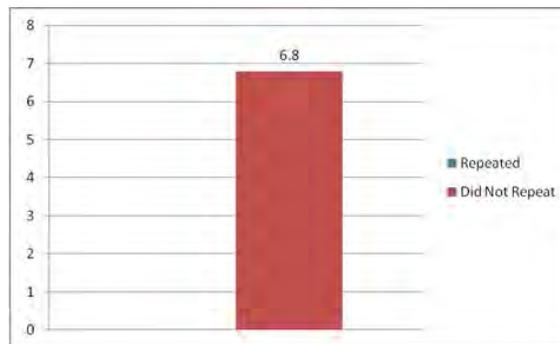
Student's Views on Whether Reading Helps One's Future



Does Student Enjoy Reading?



Grade Repetition



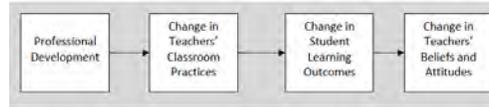
Implications

- Pedagogical Improvements
- Refresher Course
- Use of Data in NALAP
- NALAP Material Revisions
- Social Advocacy
- Institutional support (instruction)
- Institutional support (implementation)

1. Pedagogical Improvements

- Use Teacher's Guide
- Focus on phonics and decoding
- Questions for comprehension (which types?)
- Themes to ease entry to reading skills, rather than entry to content
- Focus on teacher attitudes and interest (incentives)

2. Refresher Course



- Stagger refresher implementation
- Focus on phonics
- Incorporate model lessons, and lesson critique
- Prepare supervisors, DTSTs, head teachers for instructional support roles
- Integrate with Colleges of Education

3. Use of Data

- Report Cards are an opportunity
- NALAP ongoing assessment using oral assessment, every Friday
- NALAP/Mother tongue inclusion in NEA
- Ghanaian language is examinable
- Program evaluation throughout NALAP, to measure program impact
- Diff-in-diff, regression discontinuity

4. Material Revision

- Assumptions about the speed of phonics skill acquisition
- Much time spent on repeating words
- Heavy amounts of text per page, long paragraphs
- Consider some letters, syllables, word decoding interspersed in P2 and P3 pupils' books
- Activities books / workbooks could supplement

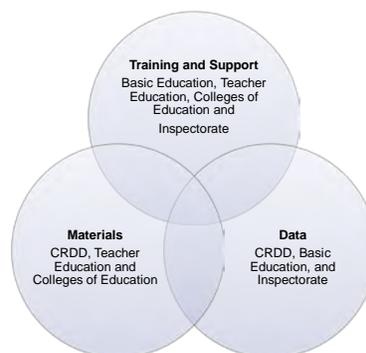
5. Social Advocacy

- Make the deal with the community explicit
- Share success stories
- School report cards
- Expand reading contests at district level
- Developing local writers in mother tongue
- *Results* are the best advocate for the program

6. Institutional Support (instruction)

- Teacher change theory
- Positive and negative reinforcement in loosely coupled systems
- Training is necessary for support staff (head teachers, circuit supervisors, DTSTs)
 - Not punitive, specific responses to instructional quality
 - Frequency (and quality) of contact is critical
 - Barriers to contact? T&T? Training?
 - Specific protocols developed to help improve observation feedback

7. Institutional support (implementation)



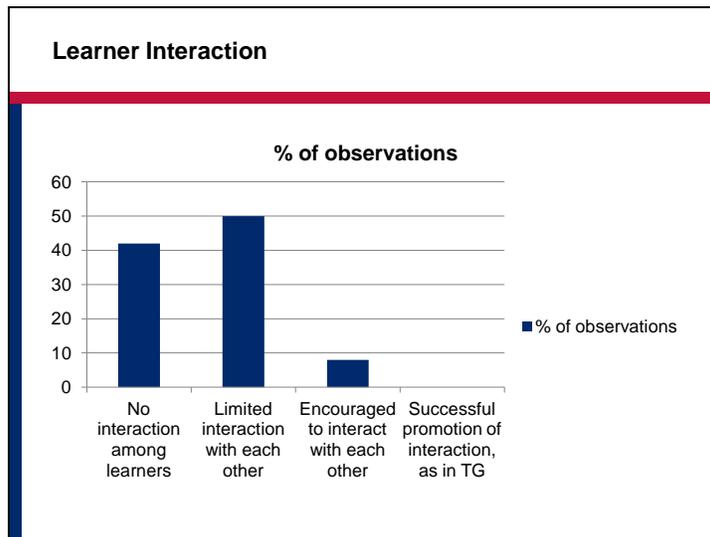
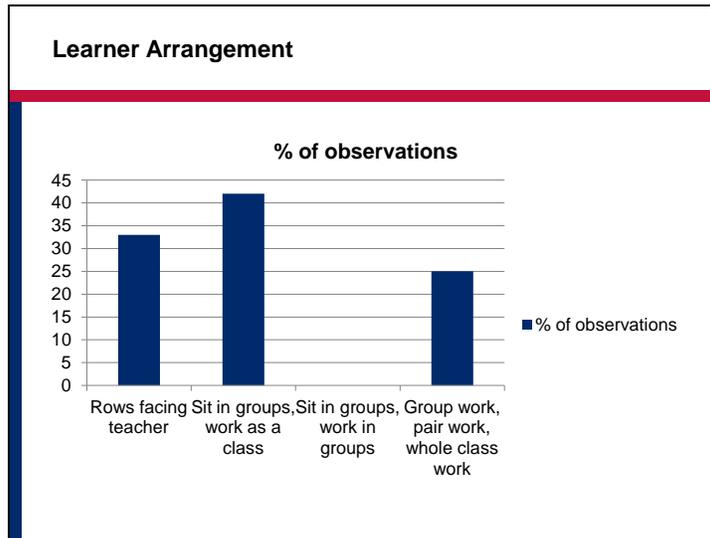
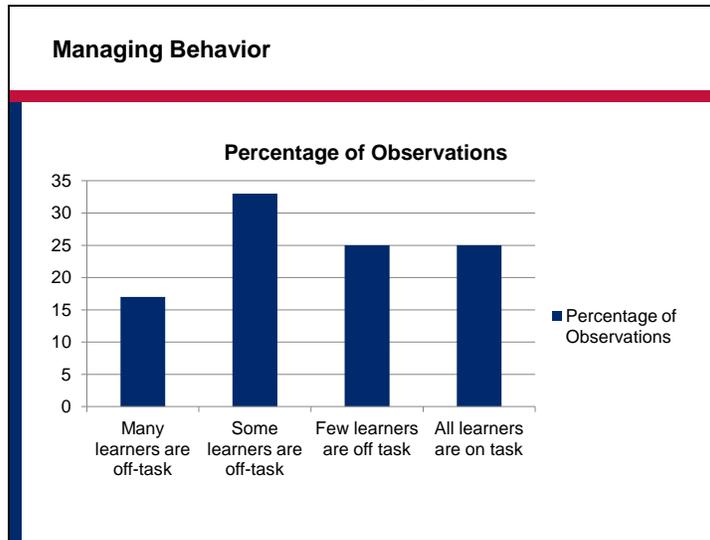
Thank You!

bpiper@rti.org

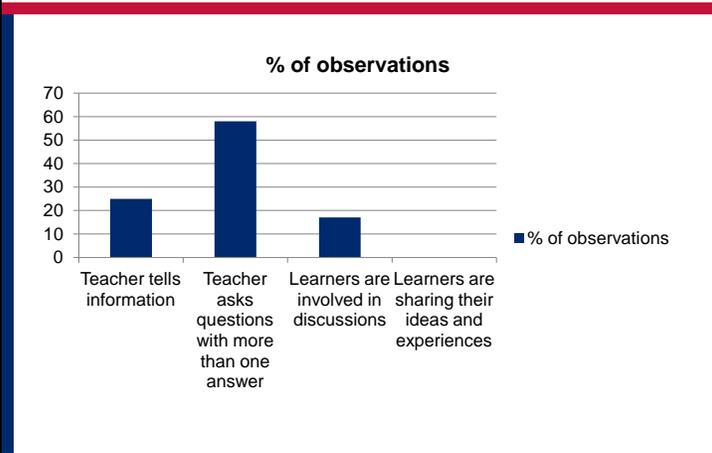
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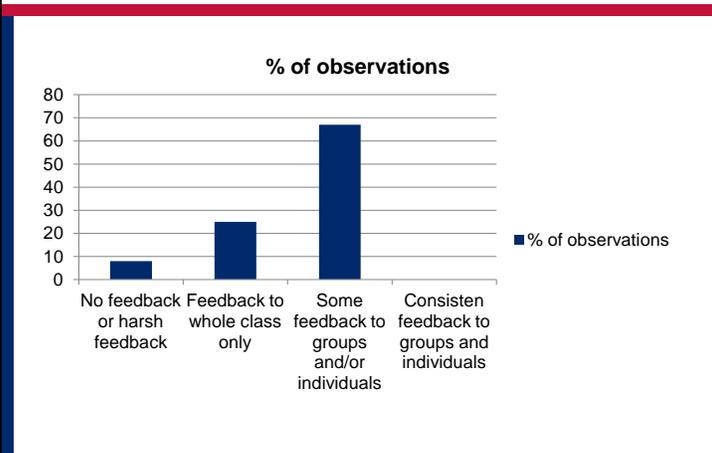
ADDENDUM



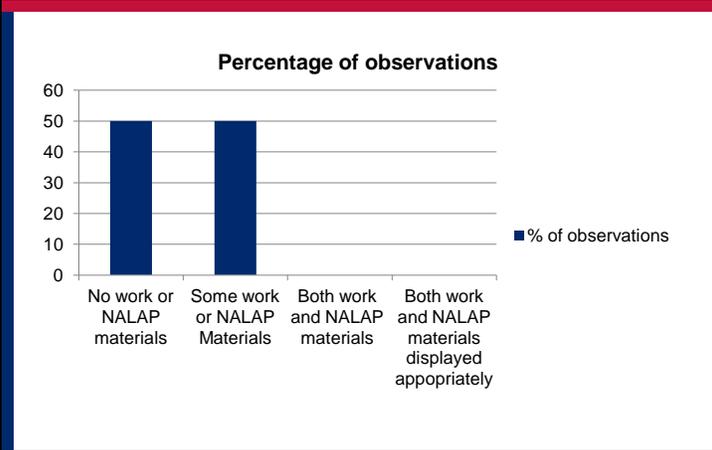
Thinking Skills



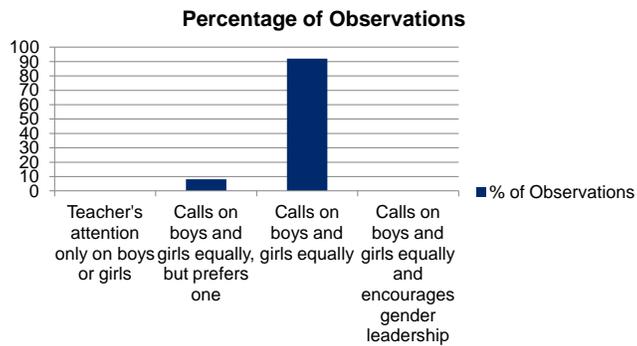
Feedback



Classroom Displays



Gender Sensitivity



Language Transfer issues

- NALAP has many advantages to other MT programs in Sub-Saharan Africa
- Important to ensure better English outcomes vis a vis the implicit deal with the community
- Consider specifying the relationship between individual language sounds and English
- Implications for English materials, and P4-P6 English instruction
- Implications for LOI in non-literacy subjects