

UWEZO at TWAWEZA ANNUAL ASSESSMENT FEEDBACK STUDY

USING THE LOT QUALITY ASSURANCE SAMPLING (LQAS) METHODOLOGY

Varja Lipovsek & Michael Katagaya (Twaweza)
Yovani A. Moses Lubaale & Bram Piot (Independent consultants)
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1. Introduction

This report presents results from the Lot Quality Assurance Sampling (LQAS) survey conducted by Twaweza on its Uwezo initiative in Uganda. It gives a brief background to the intervention (the Uwezo assessment), introduction to the LQAS method of quality control, the purpose of this particular study, detailed methodology, results, discussions and key recommendations.

Twaweza is a ten year citizen-centered initiative, focusing on large-scale change in East Africa. Twaweza believes that lasting change requires bottom-up action and therefore seeks to foster conditions and expand opportunities through which millions of people can get information, and hence make change happen in their own communities, directly and by holding governments to account. Uwezo, one of Twaweza's key components, is a four year initiative that aims to improve competencies in literacy and numeracy among children aged 6-16 years in Kenya, Tanzania and Uganda.

Uwezo means 'capability' in Kiswahili; it draws on the ASER initiative in India (ASER, 2013). Uwezo is engaged in assessing basic literacy and numeracy levels of children aged 6-16 years across all the districts in Kenya, Tanzania and Uganda through household-based surveys. The survey process and the findings aim to make parents, students, local communities and the public at large more aware of the actual levels of children's capabilities in literacy and numeracy. Increased information, awareness and pressure is intended to inform wider public policy debates through the media and encourage governments, other authorities and civil society to improve the quality of education by focusing more on learning outcomes. Uwezo's main goal is to contribute to an improvement of at least 10 percent in literacy and numeracy levels among children aged 6-16 years in Kenya, Tanzania and Uganda.

In the months of July and August 2013 Uwezo Uganda chapter conducted the 3rd annual learning assessment. The LQAS survey was implemented four weeks after the assessment, and was primarily a monitoring tool to check on the implementation of certain key aspects of the assessment.

The objectives of the 2013 Uwezo LQAS study were:

- 1. To investigate the reach and coverage of the Uwezo communication materials distributed at the time of the learning assessment
- 2. To investigate the recall of the assessment itself, and recall of instant feedback (as per the 2013 assessment)
- 3. To investigate the parental engagement with their children's learning through behaviors such as reading with children, and checking homework
- 4. To gather additional information relevant to Uwezo, such as parental preferences for the type of communication materials

2. Methodology

2.1 The LQAS method

Lot Quality Assurance Sampling (LQAS) is a sampling method used for quality assurance purposes (MEASURE Evaluation, 2013; Core group, 2008). It has been used extensively in monitoring the achievement of service delivery as well as behavior change programs, primarily in the health sector (e.g., MEASURE Evaluation, 2011). Advantages of the LQAS method include:

- a) The decentralization of data management to the field level, which means that managers have information to judge performance of indicators in individual supervision areas within an entire project area.
- b) Routine monitoring of project interventions for management purposes.
- c) Simplified data analysis allows for hand calculation of indicators at the supervision area level

- d) Data collection may be carried out by project staff, while they are in the sampled communities during performance of their regularly scheduled duties, thus lowering data collection costs and staff time required
- e) It allows for testing a hypothesis regarding a particular sub-group's relative performance in an intervention area

Additional essentials of the LQAS logic and process can be read in Core Group (2008) publications; more details as to why a sample of 19 is sufficient are provided in Annex 5.

2.2 The Uwezo LQAS survey in Uganda

The study was designed to give estimates for the entire country and to compare three categories of districts based on their performance in the 2012 Annual Learning Assessment, resulting in a purposeful stratification of districts. All districts were ordered according to the 2012 Uwezo Annual Learning Assessment results; from that list, 7 top-scoring, 7 average-scoring, and 7 lowest-scoring districts were selected (see Table 1). Although Kampala was among the top performing districts, it was removed from the sample primarily given the logistical difficulties of conducting the follow-up study in the urban setting. Therefore, the exercise was carried out in 20 districts.

Indicators assessed included the following;

- 1) Do parents know the learning levels (English and arithmetic) of their children vis-a-vis the Uwezo test?
- 2) Are there Uwezo materials present in the home? (calendars, booklets)
- 3) Can parents recall a number of key Uwezo messages?
- 4) Has the parent done something differently (either with the child, or vis-à-vis the school, or other key actors) as a result of the assessment?

The exercise was conducted in Uganda between August and September 2013; it involved Uwezo country staff, regional coordinators and staff from Tanzania and Kenya led by a team of two consultants; one local and the other international. The researchers were trained for two days in Kampala on how to conduct the survey and on background of the LQAS methodology. For the fieldwork, senior researchers were coupled with Uwezo district contact persons (DCP) in each chosen district; the DCPs facilitated making contact with selected households as well as village leaders, as appropriate. They also assisted in translation where necessary. Each team had to traverse a district to identify and interview the selected households. The data collection exercise took between two and four days (depending on the remoteness of the district).

Table 1: Classification of districts according to the 2012 Uwezo learning assessment

| Bottom-scoring | Middle-scoring | Top-scoring |
|----------------|----------------|-------------|
| Amolatar | Arua | Bushenyi |
| Bugiri | Bukwo | Kiruhura |
| Kaabongo | Kamwenge | Mbarara |
| Kaliro | Kumi | Mityana |
| Kotido | Kyenjojo | Nakaseke |
| Moroto | Masindi | Wakiso |
| Nakapiripirit | Pader | |

The target population was parents/caregivers of children 6-16 years old in the households that had participated in the 2013 assessment. In each district, a sample of 19 households was randomly selected

from the assessment books. The sample size was 19 households per district in 20 districts, for a total of 380 households. An additional 5 replacement households were selected in each district.

3. Results

The study results are presented according to the main topics on the questionnaire, including knowledge of UWEZO and recall of the learning assessment, recall and engagement with Uwezo communication materials, and parental involvement in supporting children's homework and studying at home. The results are presented both in aggregate district groups (top, middle, and low performing), as well as, where relevant particularly for Uwezo management of the assessment, by district (following the LQAS conventions). As per the LQAS methodology, each district can be classified as reaching (or not) a certain threshold. This being the first LQAS survey conducted for Uwezo, the average of each indicator was taken as the reference figure or "benchmark" against which district-level results were to be compared (detailed table in Annex 1). Proportions cannot be calculated for each individual district as the number of sampled households per district was 19, and LQAS is not intended to produce precise estimates at the supervision area level (see Annex 5).

3.1 Knowledge of Uwezo and recall of the learning assessment

Results are presented in Table 2, and show that 84.2% of the respondents had heard of Uwezo prior to the LQAS exercise, almost uniformly across the three clusters of districts. Furthermore, 89.2% also confirmed that someone had come to their household to assess the children in the previous month, with some variation between the districts. Further scrutiny among those who said that the children had been assessed however showed that only 69% could remember if they were told the results of the assessment. Districts which are ranked as low performers had the lowest proportion, with 65% of respondents who could remember that they were told the results of the assessment

Table 2: Number and proportion of parents responding affirmatively to questions related to knowledge about UWEZO and the learning assessment

| Item | Number | Bottom (%) | Middle (%) | Top (%) | Total (%) |
|---|--------|---------------|---------------|------------|--------------|
| Have you heard of UWEZO before today? | 380 | 84.2 | 85.7 | 82.5 | 84.2 |
| Have you heard of a report about children going to school but not learning? | 380 | 69.9 | 60.2 | 71.9 | 67.1 |
| Did someone come to your house last month to assess your children? | 380 | 85.7 | 90.2 | 92.1 | 89.2 |
| Where you told how your children performed? | 339 | 64.9 | 68.3 | 74.3 | 69.0 |

Examining the performance by district, particularly for the question on recall of the learning assessment, the LQAS table (Annex 1) shows that of the 20 districts, Amolatar and Kiliro (both in the bottom performing group) did not meet the quality threshold for this indicator.

3.2 Uwezo communication materials given to households

During the assessment, three types of materials were given to households in which the assessment was conducted: a calendar, a poster and a story booklet (Annex 9). The purpose of these materials was to create awareness about Uwezo, as well as to encourage parents to participate in their children's education. Every assessed household was meant to receive at least one copy of each material; the study found that 81.6% of all households reported having received the calendar, 67.9% reported having received the poster, and 52.1% report having received the booklet, as can be observed in Table 3. Among those who received the materials, the majority report still having the materials (range 83.3-95.2%), and were able to show the materials to the interviewer (range 89.7-95.3%). There was some variation between the district groups, with parents in high-performing districts reporting higher rates of

having received the materials (except the posters, where the highest proportion reporting having received the poster was the middle-scoring group). The proportion of adults reporting someone in the household had read the booklet with a child was lowest in the bottom performing districts at 65.0%, and highest in the top performing districts at 79.2%. Finally, one in five of the household in the overall sample reported that someone outside the household had also read the booklet.

Table 3: Number and proportion of respondents who have received the materials, and still have the materials

| Item | Number | Bottom (%) | Middle (%) | Top (%) | Total (%) |
|--|--------|---------------|---------------|------------|--------------|
| Calendar | | | | | |
| Has received the calendar | 380 | 73.7 | 82.0 | 90.4 | 81.6 |
| Reports still having the calendar | 310 | 94.9 | 93.6 | 97.1 | 95.2 |
| Interviewer saw the calendar | 295 | 95.7 | 98.0 | 92.0 | 95.3 |
| Poster | | | | | |
| Has received the poster | 380 | 59.4 | 75.9 | 68.4 | 67.9 |
| Reports still having the poster | 258 | 82.3 | 92.1 | 89.7 | 88.4 |
| Interviewer saw the poster | 211 | 93.9 | 96.8 | 85.7 | 92.5 |
| Story booklet | | | | | |
| Has received story booklet | 380 | 45.1 | 49.6 | 63.2 | 52.1 |
| Reports still having the booklet | 198 | 80.8 | 90.0 | 79.0 | 83.3 |
| Interviewer saw the booklet | 198 | 86.1 | 94.4 | 87.8 | 89.7 |
| Reports someone read booklet with children | 198 | 65.0 | 77.3 | 79.2 | 74.2 |
| Anyone outside household read the booklet | 380 | 13.5 | 24.8 | 28.1 | 21.8 |

Examining the results by district to facilitate improved management of Uwezo teams in the future, the LQAS table (Annex 2) reveals that particularly Moroto and Nakapiripirit are problematic, as they did not reach the quality threshold for any of the three materials. Kumi district underperformed on two of the three indicators related to communication materials. In addition, a number of districts are shown as lagging behind particularly in the distribution of the story booklets. These include, in addition to the three districts mentioned above, Amolatar, Kaliro, Arua, Kiruhura and Mbarara.

Furthermore, an index was created to find out the number of materials households received (Table 4). Despite the fact that each household in which the children's assessment was made was expected to have received all of the materials, 15% of the households received none of the communication materials. On the other hand, 44% of all the households received all three materials (calendar, poster and booklet). By classification of the districts, the households in bottom performing districts appeared to have received (or recall receiving) the least materials, while among households in top-performing districts, one out of two received all materials.

Table 4: Number of communication materials received per household

| | Number | Bottom (%) | Middle (%) | Top (%) | Total (%) |
|------|--------|---------------|---------------|------------|--------------|
| None | 57 | 21.8 | 14.3 | 7.9 | 15.0 |
| One | 47 | 14.3 | 10.5 | 12.3 | 12.4 |
| Two | 109 | 27.8 | 28.6 | 29.8 | 28.7 |
| All | 167 | 36.1 | 46.6 | 50.0 | 44.0 |

Respondents those who reported having received the communication materials but could not show it to the research team were asked what happened to the materials. The results are displayed in Figure 1;

given the relatively high proportions in the "don't know" and "other" categories, findings suggests it is not too clear what is the fate of these materials.

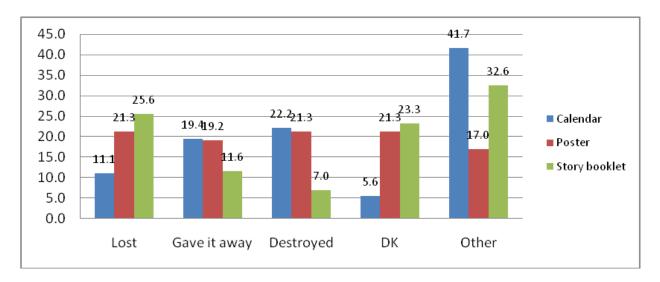


Figure 1: Reported fate of the communication materials not kept in household

Respondents were also asked which of the communication materials they preferred. As Table 5 shows, preferences were fairly evenly divided among the three types of materials, with a somewhat greater preference overall (at 38.4%) for the calendar. By the classification of districts, parents in the bottom performing districts preferred the poster, while the calendar was preferred in the middle and top performing districts.

| | _ | | |
|---------------------|-------------------|--------------------|------------------------|
| Table F. Duamautian | -f | | communication material |
| Table 5. Proportion | ot resonnaents re | annrting hreterren | communication material |
| | | | |

| | Bottom (%) | Middle (%) | Top (%) | Total (%) |
|------------------|------------|------------|---------|-----------|
| Calendar | 29.8 | 44.7 | 40.0 | 38.4 |
| Poster | 36.5 | 29.8 | 21.9 | 29.4 |
| Story booklet | 28.9 | 21.9 | 36.2 | 28.8 |
| Don't know/other | 4.8 | 3.5 | 1.9 | 3.4 |

The survey also included open-ended questions about the reasons for the preference of each of the communications materials (data not shown). The main reason given for preference of the calendar was that it is useful in knowing the dates and the days when children go back to school and that it helps children learn the months in year. Those who preferred the poster primarily liked that it shows, in picture form, the interaction of parents and children on the topic of education. Respondents who preferred the story booklet highlighted the usefulness in the booklet in encouraging children to read.

3.3 Parental participation in children's education through home-based activities

In addition to engagement with Uwezo assessment and materials, respondents were also asked a series of questions on how much they participate in, or otherwise support, their children's education. This section examines behaviors undertaken at home: reading with children, checking homework, and narrating stories as well as involvement in the children's school (e.g., attending parent-teacher meetings).

Table 6 presents results regarding parental support of learning at home; respondents were asked how frequently they engaged in a given behavior, and the answer options included daily, once per week or

more, a few times per month, or never. For a number of the behaviors respondents were also asked to estimate the frequency with which they engaged in the past year overall, and specifically for the past month. The results, presented in Table 3, are for those who answered "daily" or "at least once a week" (vs. less frequently). As can be noted in the Table, there appears to be considerable variation between the district groups. While 51.8% parents from the top performing districts reported that in the past year, they were reading with their children at least once a week, this figure was 29.3% in the bottomachieving group and 27.1% in the middle-achieving group. The proportions were very similar when parents were asked about reading in the previous month.

The study also inquired about the frequency of storytelling. Results show a fairly uniform picture in that about half of all parents frequently tell stories to their children; there doesn't seem to be much variation among top, middle and bottom performing districts.

Furthermore, parents were asked about the overall frequency of checking homework, and the frequency with which the parent checked children's work in the past one month. While about half the parents in the overall sample reported checking homework, there is considerable variation between the groups of districts, as shown in Table 6. Among parents in the bottom performing districts, 33.8% checked homework in the past year, while this figure was 46.6% for the middle performing districts, and 77.2% among the top performing districts. Trends were similar for checking homework within the past month. When asked whether they took any other action to support learning of their children, two thirds of all parents answered positively (with only slight variation across districts). A qualitative follow-up question inquired as to what those supportive actions were; most of the responses centered on ensuring their children have the necessary materials and other inputs (ranging from books to shoes to food) to enable them to study (data not shown).

Table 6: Number and proportion of parents who report participating in their children's learning activities at least once per week or more frequently

| Item | Number | Bottom (%) | Middle (%) | Top (%) | Total (%) |
|--|--------|---------------|---------------|------------|--------------|
| Reads with children (in past year) | 380 | 29.3 | 27.1 | 51.8 | 35.3 |
| Read with children in the past month | 380 | 24.1 | 36.1 | 50.0 | 36.1 |
| Frequency of story narration (in past year) | 380 | 49.6 | 42.9 | 50.9 | 47.6 |
| Checks the children's homework (in past year) | 380 | 33.8 | 46.6 | 77.2 | 51.3 |
| Checked the children's homework in the past month | 380 | 27.8 | 52.6 | 76.3 | 51.1 |
| Taken action to improve the learning of the children in the past month (other than reading or checking homework) | 380 | 67.7 | 69.9 | 64.9 | 67.6 |

The LQAS results for each district for these variables can be observed in Annex 3. It is interesting to note that Amolatar and Nakapiripirit, which are among the bottom-ranking districts, nevertheless score high on all the indicators related to parental support of learning at home.

3.4 Parental participation in children's education in school and community

Respondents were also asked a series of questions on how much they participate in, or otherwise support their children's education. These included involvement in the children's school, as well as other actions taken in the community. Results are shown in Table 7.

Among all respondents, 74.2% had attended a parent-teacher association meeting in the current school year (highest proportion was reported in the middle performing district, at 84.2%), and 58.7% of all parents had talked to a teacher in the past month about their child's performance (highest proportion in the top performing district, at 67.5%).

Furthermore, when asked if they took any action to improve learning in the community (as opposed to in their households), it is interesting to note that the highest proportion of parents answering positively come from the bottom-scoring districts, and the lowest proportion from the highest-scoring. A qualitative follow-up question revealed a range of answers about what those supportive actions were: among the most common mentioned were advocating to other community members about the importance of schooling, encouraging other parents to become involved in parent-teacher meetings, and encouraging children to be in school on time (data not shown).

Table 7: Number and proportion of parents who report being involved in their children's school, and supporting education in their community

| Item | Number | Bottom (%) | Middle (%) | Top (%) | Total (%) |
|--|--------|---------------|---------------|------------|--------------|
| Involved in a parent-teacher association meeting in this school year | 380 | 66.9 | 84.2 | 71.1 | 74.2 |
| Talked in the past month to the teacher about children learning | 380 | 52.6 | 57.1 | 67.5 | 58.7 |
| Taken action to improve learning in the community in the past month | 380 | 51.9 | 33.8 | 25.4 | 37.6 |

Annex 3 also displays the LQAS results by district for the above indicators. The picture is mixed, with some districts in each group performing well, and others under-performing.

4. Discussion

As a monitoring exercise to establish the fidelity with which the assessment was conducted, this study has yielded some interesting insights. While the actual assessment (which had taken place approximately 4-6 weeks before) was recalled by the majority of households, it is worth noting that the districts where recall did not meet the quality threshold are Amolatar and Kaliro. One can speculate that some of the recall issues might arise if the person who was present during the assessment was not present in the household during the LQAS survey. With this in mind, LQAS researchers were in fact instructed to ask specifically for the person who had been present during the assessment. This was critical also to maximize the possibility of speaking to the person who would have been given the instant feedback, which is a core component of the Uwezo approach. Overall, just about 70% of the respondents confirmed having received the instant feedback. It was unfortunately not possible to check the accuracy of the recall (which would require having the scores of each assessed child available at the time of the research, for counter-checking), but this exercise, as well as other anecdotal evidence from within Uwezo (data not shown here) suggest there may be considerable variation in how feedback is given. If instant feedback is to remain a central feature of Uwezo, the mechanisms for its delivery ought to be examined more closely.

An important component of the Uwezo assessment is the distribution of communication materials; in the 2012 assessment, there was the calendar, the poster, and the story booklet. This study suggests that there are several issues in the distribution. First, less than half of households in the overall sample reported receiving all three materials (and 15% received none of the materials). When examined by district group, it is shown that among the highest scoring districts the distribution (or its recall) was considerably better than among middle and low scoring districts. Two of the low performing districts appear to do particularly poorly in terms of distribution; while among the materials, the lowest distribution is for the booklets. Uwezo could examine further the logistics of getting the materials to the more remote and poorly-accessible districts (factors of distance and road conditions not under Uwezo control), as well as the logistics of producing, and facilitating the transport, of all materials.

The study also sought insight on the appeal of the different materials. The data do not suggest clear preference for one type over another; it is likely that a different form of investigating the preference of materials would be more insightful (e.g. comparing the preference of various formats during pretesting).

The study also assessed parental involvement and support of children's learning. While these are behaviors that do not directly result from the assessment itself, the Uwezo theory of change holds that through the assessment (and the associated materials), parents will become more actively involved in their children's learning. The LQAS study in fact sought to examine if there is a difference in some of the self-reported behaviors directly after the assessment. This was done by asking parents how much they read with their children and checked their homework in the past year, as well as specifically in the past month (presumably, right after the assessment). This study finds no observable differences between the two sets, although this measure, as all other self-reported measures, is likely to suffer from recall bias. Furthermore, it is a valid question whether any significant effect ought to be expected due to a single assessment visit (worthy to note that the null effects are consistent with the Lieberman et al., 2013 study, which focused on Uwezo in Kenya). Perhaps not surprisingly, parents in top-performing districts are more likely to read with their children, and to check their homework. It would be insightful to examine further what motivates and enables these parents to support their children in such ways.

Regarding the results by district, it could be interesting to examine further why two among the lowest-scoring districts overall (Amolatar and Nakapiripirit) perform considerably better than other districts in that group on indicators of parental involvement at home.

In addition to behaviors undertaken at home, the study also examines a number of behaviors that connect parents to schools. The results indicate that parents report fairly high levels of attendance at parent-teacher association (PTA) meetings. More than half of the overall sample also reports speaking with teachers outside of those meetings. It is likely that more in-depth investigation would be useful to understand the nature of these interactions, as the government of Uganda introduced the PTAs to ensure that teachers and parents can sit at the same table to run the affairs of managing the schools. These interactions, however, can range from very passive to very pro-active, and their effect on learning outcomes is not yet clear.

5. Conclusions & Recommendations

- 1. Use the LQAS method in the future to monitor the delivery of the assessment and materials and to identify districts that need improvement; the method is probably less well suited to assess changes in parental behavior.
- 2. Examine in more detail, and strengthen, the delivery of instant feedback to assessed households; pay special attention in districts where problems have been noted.
- 3. Pre-test materials to understand better the preferences of the target audience and conduct small-scale qualitative exercise to understand which format is most engaging.
- 4. Ensure appropriate availability of communication materials, particularly booklets; focus on districts where delivery has not been satisfactory, and consider logistics of transportation.
- 5. Examine further the possible "positive deviance" in parental involvement among some of the low-scoring districts as a potential entry-point for further understanding what motivates parents to actively support education of their children.
- 6. Investigate further the motivating factors which prompt parents to actively support learning (e.g., by checking homework); also the nature of the parent-teacher associations and whether they could be a potential platform to further engage parents.

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Annex 1: LQAS results regarding knowledge of Uwezo and recall of assessment

| Supervisio | n Areas | Total | heard |)} Have you d of UWEZO ore today | report a | Heard of a about children to school but learning? | {q400} Did someone come to your house last month to assess your children? | | |
|------------|---------------------|-------|-------|--|----------|--|---|-------|--|
| Bottom | AMOLATAR | 19 | 19 | + | 13 | + | 14 | - | |
| | BUGIRI | 19 | 19 | + | 12 | + | 18 | + | |
| | KAABONGO | 19 | 19 | + | 6 | - | 15 | + | |
| | KALIRO | 19 | 15 | + | 17 | + | 14 | - | |
| | KOTIDO | 19 | 18 | + | 19 | + | 17 | + | |
| | MOROTO | 19 | 12 | - | 10 | - | 19 | + | |
| | NAKAPIRIPIRIT | 19 | 10 | - | 16 | + | 17 | + | |
| | Total | 133 | 112 | 84.2% | 93 | 69.9% | 114 | 85.7% | |
| Middle | ARUA | 19 | 16 | + | 16 | + | 17 | + | |
| | BUKWO | 19 | 18 | + | 7 | - | 17 | + | |
| | KAMWENGE | 19 | 15 | + | 13 | + | 19 | + | |
| | KUMI | 19 | 17 | + | 15 | + | 16 | + | |
| | KYENJOJO | 19 | 19 | + | 11 | + | 18 | + | |
| | MASINDI | 19 | 17 | + | 12 | + | 15 | + | |
| | PADER | 19 | 12 | - | 6 | - | 18 | + | |
| | Total | 133 | 114 | 85.7% | 80 | 60.2% | 120 | 90.2% | |
| Тор | BUSHENYI | 19 | 15 | + | 19 | + | 18 | + | |
| | KIRUHURA | 19 | 16 | + | 11 | + | 19 | + | |
| | MBARARA | 19 | 10 | - | 9 | - | 15 | + | |
| | MITYANA | 19 | 19 | + | 16 | + | 18 | + | |
| | NAKASEBE | 19 | 17 | + | 11 | + | 17 | + | |
| | WAKISO | 19 | 17 | + | 16 | + | 18 | + | |
| | Total | 114 | 94 | 82.5% | 82 | 71.9% | 105 | 92.1% | |
| All | Grand Total | 380 | 320 | | 255 | | 339 | | |
| districts | Average | | | 84.2% | | 67.1% | 89.2% | | |
| | | | | | | | | | |
| | LQAS decision rules | | 14 | | 11 | | 15 | | |

Annex 2: LQAS results regarding communication materials given to households

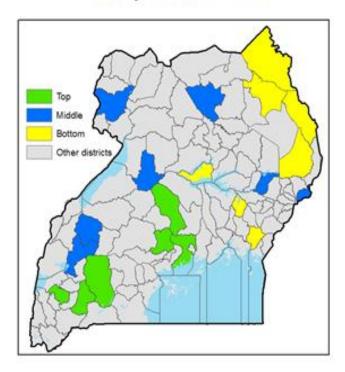
| Supervision | n Areas | Total | receiv | 00} Did you ve a UWEZO alendar | receiv | 00} Did you ve a UWEZO er this year | {Q2600} Did the children receive a story booklet this year | | |
|-------------|---------------------|-------|--------|--------------------------------------|--------|---|--|-------|--|
| Bottom | AMOLATAR | 19 | 16 | + | 13 | + | 4 | - | |
| | BUGIRI | 19 | 16 | + | 17 | + | 17 | + | |
| | KAABONGO | 19 | 14 | + | 11 | + | 12 | + | |
| | KALIRO | 19 | 19 | + | 12 | + | 1 | - | |
| | KOTIDO | 19 | 15 | + | 15 | + | 12 | + | |
| | MOROTO | 19 | 10 | - | 4 | - | 8 | - | |
| | NAKAPIRIPIRIT | 19 | 8 | - | 7 | - | 6 | - | |
| | Total | 133 | 98 | 73.7% | 79 | 59.4% | 60 | 45.1% | |
| Middle | ARUA | 19 | 14 | + | 11 | + | 6 | - | |
| | BUKWO | 19 | 18 | + | 13 | + | 12 | + | |
| | KAMWENGE | 19 | 18 | + | 17 | + | 9 | + | |
| | KUMI | 19 | 10 | - | 12 | + | 8 | - | |
| | KYENJOJO | 19 | 15 | + | 14 | + | 9 | + | |
| | MASINDI | 19 | 19 | + | 17 | + | 9 | + | |
| | PADER | 19 | 15 | + | 17 | + | 13 | + | |
| | Total | 133 | 109 | 82.0% | 101 | 75.9% | 66 | 49.6% | |
| Тор | BUSHENYI | 19 | 16 | + | 13 | + | 14 | + | |
| | KIRUHURA | 19 | 17 | + | 11 | + | 6 | - | |
| | MBARARA | 19 | 17 | + | 9 | - | 11 | + | |
| | MITYANA | 19 | 18 | + | 14 | + | 16 | + | |
| | NAKASEBE | 19 | 18 | + | 15 | + | 10 | + | |
| | WAKISO | 19 | 17 | + | 16 | + | 15 | + | |
| | Total | 114 | 103 | 90.4% | 78 | 68.4% | 72 | 63.2% | |
| All | Grand Total | 380 | 310 | | 258 | | 198 | | |
| districts | Average | | 81.6% | | | 67.9% | 52.1% | | |
| | | | | | | | | | |
| | LQAS decision rules | | 14 | | 11 | | 9 | | |

Annex 3: LQAS results regarding parental participation in, and support of, children's education

| Supervision Areas | | Total | (q7 Freque readi | en last | (q800) Frequency of reading to children last month | | (q900) Frequency of story narration last year | | (q1000) Frequency of checking homework last year | | (q1100) Frequency of checking homework last month | | {Q1200} In this school, were you involved in any PTA meetings at your children | | {q1300} In past month taken initiative to talk to a teacher about | | {q1600} Have you taken any action to improve learning in your community | |
|-------------------|------------------|-------|------------------------|---------|--|-------|---|-------|---|-------|---|-------|--|-------|---|-------|---|-------|
| Bottom | AMOLATAR | 19 | 11 | + | 10 | + | 11 | + | 11 | + | 12 | + | 17 | + | 14 | + | 12 | + |
| | BUGIRI | 19 | 6 | - | 2 | - | 7 | - | 9 | - | 5 | - | 17 | + | 12 | + | 15 | + |
| | KAABONGO | 19 | 5 | - | 4 | - | 12 | + | 4 | - | 4 | - | 18 | + | 11 | + | 5 | + |
| | KALIRO | 19 | 2 | - | 2 | - | 2 | - | 3 | - | 2 | - | 3 | - | 4 | - | 3 | - |
| | KOTIDO | 19 | 3 | - | 2 | - | 13 | + | 3 | - | 1 | - | 8 | - | 7 | - | 12 | + |
| | MOROTO | 19 | 2 | - | 2 | - | 2 | - | 2 | - | 1 | - | 11 | - | 8 | - | 10 | + |
| | NAKAPIRIPIRIT | 19 | 10 | + | 10 | + | 19 | + | 13 | + | 12 | + | 15 | + | 14 | + | 12 | + |
| | Total | 133 | 39 | 29.3% | 32 | 24.1% | 66 | 49.6% | 45 | 33.8% | 37 | 27.8% | 89 | 66.9% | 70 | 52.6% | 69 | 51.9% |
| Middle | ARUA | 19 | 3 | - | 5 | - | 6 | - | 6 | - | 9 | - | 14 | + | 14 | + | 12 | + |
| | BUKWO | 19 | 6 | - | 9 | + | 10 | + | 7 | - | 16 | + | 16 | + | 10 | + | 7 | + |
| | KAMWENGE | 19 | 8 | + | 5 | - | 9 | - | 10 | + | 8 | - | 17 | + | 11 | + | 4 | - |
| | KUMI | 19 | 5 | - | 7 | + | 8 | - | 10 | + | 10 | + | 16 | + | 7 | - | 10 | + |
| | KYENJOJO | 19 | 8 | - | 11 | + | 12 | + | 13 | + | 14 | + | 19 | + | 12 | + | 3 | - |
| | MASINDI | 19 | 7 | + | 7 | + | 9 | - | 10 | + | 10 | + | 16 | + | 9 | + | 3 | - |
| | PADER | 19 | 4 | - | 4 | - | 3 | - | 3 | - | 6 | - | 14 | + | 13 | + | 6 | + |
| | Total | 133 | 41 | 30.8% | 48 | 36.1% | 57 | 42.9% | 59 | 44.4% | 73 | 54.9% | 112 | 84.2% | 76 | 57.1% | 45 | 33.8% |
| Тор | BUSHENYI | 19 | 11 | + | 10 | + | 11 | + | 13 | + | 10 | + | 14 | + | 17 | + | 2 | - |
| | KIRUHURA | 19 | 7 | + | 4 | - | 10 | + | 13 | + | 15 | + | 9 | - | 9 | + | 2 | - |
| | MBARARA | 19 | 11 | + | 11 | + | 9 | - | 17 | + | 17 | + | 15 | + | 13 | + | 10 | + |
| | MITYANA | 19 | 14 | + | 14 | + | 14 | + | 17 | + | 17 | + | 19 | + | 17 | + | 8 | + |
| | NAKASEBE | 19 | 9 | + | 9 | + | 6 | - | 13 | + | 12 | + | 12 | + | 9 | + | 4 | - |
| | WAKISO | 19 | 7 | + | 9 | + | 8 | - | 15 | + | 16 | + | 12 | + | 12 | + | 3 | - |
| | Total | 114 | 59 | 44.4% | 57 | 42.9% | 58 | 43.6% | 88 | 66.2% | 87 | 65.4% | 81 | 71.1% | 77 | 67.5% | 29 | 25.4% |
| All | Grand Total | 380 | 139 | | 137 | | 181 | | 192 | | 197 | | 282 | | 223 | | 143 | |
| districts | Average | | 36. | 6% | 36. | 1% | 47. | .6% | 50.5 | 5% | 51.8 | 3% | 74.2 | % | 58.7 | % | 37 | 7.6% |
| | LQAS decision ru | ules | 7 | 7 | 7 | 7 | 1 | .0 | 10 | | 10 |) | 12 | | 9 | | | 5 |

Annex 4: Map of Uganda showing the districts visited for the study

Map with SAs



41

Annex 5: LQAS method

(Source: Core Group (2008) LQAS Frequently asked questions:

http://www.coregroup.org/storage/documents/LQAS/Assessing Community Health Programs A Participants Manual and Workbook.pdf)

A sample size of 19 provides an acceptable level of error for making management decisions; at least 92% of the time, it identifies whether a coverage benchmark has been reached or whether a Supervision Area (SA) is substantially below the average coverage of a program area. Samples larger than 19 have practically the same statistical precision as a sample size of 19. They do not result in better information, and they cost more.

Why use a Sample Size of 19?

Little is added to the precision of the measure by using a sample larger than 19, notwithstanding the level of coverage to be assessed. Sample sizes less than 19 however, see a rapid deterioration in the precision of the measure. This is particularly problematic when coverage benchmarks vary.

- Low sample size needs (n=19 in most cases)
- Simple to apply yet has very specific conclusions
- District level people can be trained to entirely 'own' this methodology
- Provides high quality information at low & affordable cost
- Fast 'supervision areas' are able to conduct self-evaluation and obtain results immediately after the survey
- Results are locally relevant and can be utilized in district level annual planning and decision-making

What can a sample of 19 tell us?

- i. Good for setting priorities within a Supervision Area
- ii. Good for setting priorities among supervision areas with large differences in coverage
- iii. Good for deciding what are the higher performing supervision areas to learn from
- iv. Good for deciding what are the lower performing supervision areas in which to invest resources
- v. Good for identifying knowledge/practices that have high coverage from those of low coverage

Annex 6: LQAS Decision Rule Table
Optimal LQAS decision rules for sample sizes of 12-30 and coverage benchmarks of 10%-95%

| · | | | | | | | | | | | | | | | | | | |
|--|-----|-------|------|-------|--------|-------|--------|------|--------|-------|-------|------|------|--------|-----|-------|-------|-----|
| LQAS Table: Decision Rules for Sample Sizes of 12-30 and Coverage Targets/Average of 10%-95% Sample Average Coverage (Baselines) / Annual Coverage Target (Monitoring and Evaluation) | | | | | | | | | | | | | | | | | | |
| Sample | - | Avera | ge C | overd | ige (E | aseli | nes) / | Annu | Jal Co | overa | ge To | rget | Moni | toring | and | Evalu | ation |) |
| Size* | 10% | 15% | 20% | 25% | 30% | 35% | 40% | 45% | 50% | 55% | 60% | 65% | 70% | 75% | 80% | 85% | 90% | 95% |
| 12 | N/A | N/A | 1 | 1 | 2 | 2 | 3 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 10 | 11 |
| 13 | N/A | N/A | 1 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 11 |
| 14 | N/A | N/A | 1 | 1 | 2 | 3 | 4 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 11 | 11 | 12 |
| 15 | N/A | N/A | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 6 | 7 | 8 | 9 | 10 | 10 | 11 | 12 | 13 |
| 16 | N/A | N/A | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 9 | 10 | 11 | 12 | 13 | 14 |
| 17 | N/A | N/A | 1 | 2 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 18 | N/A | N/A | 1 | 2 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 11 | 12 | 13 | 14 | 16 |
| 19 | N/A | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 20 | N/A | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 21 | N/A | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 16 | 17 | 18 |
| 22 | N/A | N/A | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 9 | 10 | 12 | 13 | 14 | 15 | 16 | 18 | 19 |
| 23 | N/A | N/A | 1 | 2 | 3 | 4 | 6 | 7 | 8 | 10 | 11 | 12 | 13 | 14 | 16 | 17 | 18 | 20 |
| 24 | N/A | N/A | 1 | 2 | 3 | 4 | 6 | 7 | 9 | 10 | 11 | 13 | 14 | 15 | 16 | 18 | 19 | 21 |
| 25 | N/A | 1 | 2 | 2 | 4 | 5 | 6 | 8 | 9 | 10 | 12 | 13 | 14 | 16 | 17 | 18 | 20 | 21 |
| 26 | N/A | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 9 | 11 | 12 | 14 | 15 | 16 | 18 | 19 | 21 | 22 |
| 27 | N/A | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 10 | 11 | 13 | 14 | 15 | 17 | 18 | 20 | 21 | 23 |
| 28 | N/A | 1 | 2 | 3 | 4 | 5 | 7 | 8 | 10 | 12 | 13 | 15 | 16 | 18 | 19 | 21 | 22 | 24 |
| 29 | N/A | 1 | 2 | 3 | 4 | 5 | 7 | 9 | 10 | 12 | 13 | 15 | 17 | 18 | 20 | 21 | 23 | 25 |
| 30 | N/A | 1 | 2 | 3 | 4 | 5 | 7 | 9 | 11 | 12 | 14 | 16 | 17 | 19 | 20 | 22 | 24 | 26 |

N/A: not applicable, meaning LQAS can not be used in this assessment because the coverage is either too low or too high to assess an SA.

shaded cells indicate where alpha or beta errors are \geq 10%. hashed cells indicate where alpha or beta errors are > 15%.



TWAWEZA/UWEZO LOT QUALITY ASSURANCE SAMPLING (LQAS) UGANDA, AUGUST 2013

Background: Materials needed

- 1. Maps of the selected districts
- 2. Enumeration area (EA) maps of the EAs where sampled households fall
- 3. List of household names (and contact details) for 19 households in each district
- 4. A district map with general plotting of where the 19 households are to be found, to aid in planning movement within the district

| RESEARCHER'S NAME | |
|---------------------|-------------------|
| RESEARCHER 3 NAIVIE | |
| | |
| DISTRICT | |
| | |
| ENUMERATION AREA | |
| | |
| ARRIVAL TIME: | HOUSEHOLD NUMBER: |

Introduction: Introduce yourself (by name). Briefly Introduce Uwezo and ask for permission to conduct interview.

Instructions: In each household you visit, ask for permission from the head of the household before you proceed with the interview. Fill in the appropriate response with a tick ($\sqrt{\ }$).

| NO | QUESTION | YES | NO | PROGRESSION/OPTIONS |
|-----|---|-----|----|---|
| 100 | Have you heard of Uwezo before today? | | | Continue with interview regardless of a YES or NO answer. |
| 200 | Have you heard of a report about children going to school but not learning? | | | Continue with interview regardless of a YES or NO answer. |
| 300 | Do you have children aged 6-16 years in | | | If NO, skip to 1600 and end the interview at 2500. |

| | your household? | Remember to ADD one of the 5 replacement households! | | | | | | |
|------|---|--|--------------------------------------|---|---------------|--|--|--|
| 400 | Did someone come to your house in the last month to assess your children in reading and mathematics? | If NO, skip to | 700 | | | | | |
| 500 | Were you told how your children performed? | If NO, skip to | 700 | | | | | |
| 600 | What do you recall? (Descriptive) | | | | | | | |
| 700 | Think about this calendar year. In this year, how frequently have you read to any of your children? | Daily | at least once or more per week | Less frequently/a few times per month | not at all | | | |
| 800 | Now think about the past month. In the past month, how frequently have you read to any of your children? | Daily | at least once or more per week | Less frequently/a few times per month | not at all | | | |
| 900 | In general, how often do you narrate stories to any of your children? | Daily | at least once or more per week | Less frequently/a few times per month | not at all | | | |
| 1000 | Again, think about this calendar year. In this year, how frequently have you checked any of your children's homework? | Daily | at least once or more per week | Less frequently/a few times per month | Not at all | | | |

| NO | QUESTION | YES | NO | PROGRESSION/OPTIONS | | | | | | | |
|------|---|-----|----|---------------------|----------|--------------------------------------|--|---|--|---------------|--|
| 1100 | Now think about the past month. In the past month, how frequently have you checked any of your children's homework? | | | Daily | | at least once or more per week | | Less frequently/a few times per month | | Not at all | |
| 1200 | In this school year , were you involved in any PTA meetings at your children's school? | | | | | | | | | | |
| 1300 | In the past month , have you taken any initiative to talk to a teacher about your children's learning? | | | | | | | | | | |
| 1400 | Apart from reading with your children | | | If NO, sk | ip to 16 | 00 | | | | | |

| | | | | T | | | | | | | | _ |
|------|--|-----|----|---------------------|----------|---------|-----|-------------|-------|----------|-------|----------|
| | and/or helping with homework, have you | | | | | | | | | | | |
| | taken any other action in the past month | | | | | | | | | | | |
| | to improve the learning of your children? (Do not suggest) | | | | | | | | | | | |
| 1500 | Which action? (Descriptive) | | | | | | | | | | | |
| 1300 | Willen action: (Descriptive) | | | | | | | | | | | |
| 1600 | Have you taken any action in the past | | | If NO, skij | o to 180 | 00 | | | | | | |
| | month to improve learning in your | | | | | | | | | | | |
| | community? | | | | | | | | | | | |
| 1700 | Which action? (Descriptive) | | | | | | | | | | | |
| 1800 | Did you receive an Uwezo calendar this | | | If NO, skip to 2100 | | | | | | | | |
| | year? | | | | | | | | | | | |
| 1900 | Do you still have the calendar? | | | If NO, skip to 2100 | | | | | | | | |
| 2000 | Could you show me the calendar? | | | | | | | | | | | |
| 2100 | (Read only if NO to 1900 or 2000) | | | Lost | G | ave | Des | troyed | Don't | | Oth | er |
| | What happened to the calendar? | | | | | vav | | ici o y c u | know | | 0 | · |
| 2200 | Did you receive an Uwezo poster this yea | ·? | | If NO, skij | | , | | I | | | | |
| | | | | | | | | | | | | |
| NO | QUESTION | YES | NO | PROGRESSION/OPTIONS | | | | | | | | |
| 2300 | Do you still have the poster? | | | If NO, skip to 2600 | | | | | | | | |
| 2400 | Could you show me the poster? | | | | | | | | | | | |
| 2500 | (Read only if NO to 2300 or 2400) | | | Lost | | Gave it | ı | Destroyed | Don't | (| Other | |
| | What happened to the poster? | | | | | away | | | know | | | <u> </u> |
| 2600 | Did the children receive a story booklet | | | If NO, | skip to | 3300. | | | | | | |
| | this year? | | | | | | | | | | | |
| 2700 | Have you, or anyone else in the | | | | | | | | | | | |
| | household, read the story booklet | | | | | | | | | | | |
| | together with the children? | | | | | | _ | | | | | |
| | 1 | i | 1 | 1 | | | | | | | | |

If NO, skip to 3300

Neighbors

Relatives

Others

Friends

2800

2900

Did anyone else outside this household

Who are these?(tick all that apply)

read the story booklet?

| Could you show me the story booklet? | | | | | | |
|---|---|---|---|---|--|---|
| (Read only if NO to 3000 or 3100) What happened to the booklet? | | Lost | Gave it away | Destroyed | Don't know | Other |
| Of the materials given to you during the assessment (calendar, poster, story booklet), which one do you like most?(tick only one) | | Calendar | Poster | Story booklet | Don't know | |
| Why do you like this one the most? (Descriptive) | | | | | | · |
| u for your time and willingness to talk to | me. | | | | | |
| Departure Tir | me: | | | | | |
| | Read only if NO to 3000 or 3100) /hat happened to the booklet? f the materials given to you during the ssessment (calendar, poster, story ooklet), which one do you like nost?(tick only one) /hy do you like this one the most? Descriptive) u for your time and willingness to talk to | Read only if NO to 3000 or 3100) /hat happened to the booklet? f the materials given to you during the ssessment (calendar, poster, story ooklet), which one do you like most? (tick only one) /hy do you like this one the most? Descriptive) I for your time and willingness to talk to me. Departure Time: | Read only if NO to 3000 or 3100) /hat happened to the booklet? f the materials given to you during the ssessment (calendar, poster, story poklet), which one do you like most? (tick only one) /hy do you like this one the most? Descriptive) I for your time and willingness to talk to me. Departure Time: | Read only if NO to 3000 or 3100) /hat happened to the booklet? f the materials given to you during the ssessment (calendar, poster, story pooklet), which one do you like most? (tick only one) /hy do you like this one the most? Descriptive) I for your time and willingness to talk to me. | Read only if NO to 3000 or 3100) /hat happened to the booklet? f the materials given to you during the ssessment (calendar, poster, story booklet), which one do you like host? (tick only one) /hy do you like this one the most? Descriptive) I for your time and willingness to talk to me. Departure Time: | Read only if NO to 3000 or 3100) //hat happened to the booklet? f the materials given to you during the seessment (calendar, poster, story ooklet), which one do you like host? //hy do you like this one the most? Descriptive) I for your time and willingness to talk to me. Departure Time: |

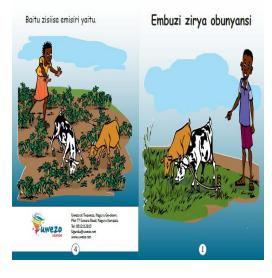
Annex 8: Sample of Uwezo communication materials Poster:

Do you spend time with your child?





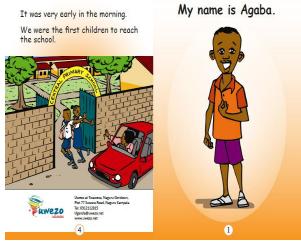
Emergent reader booklet:



Ibedo kede cawa me lok kede atini?







UWEZO Calendar:







