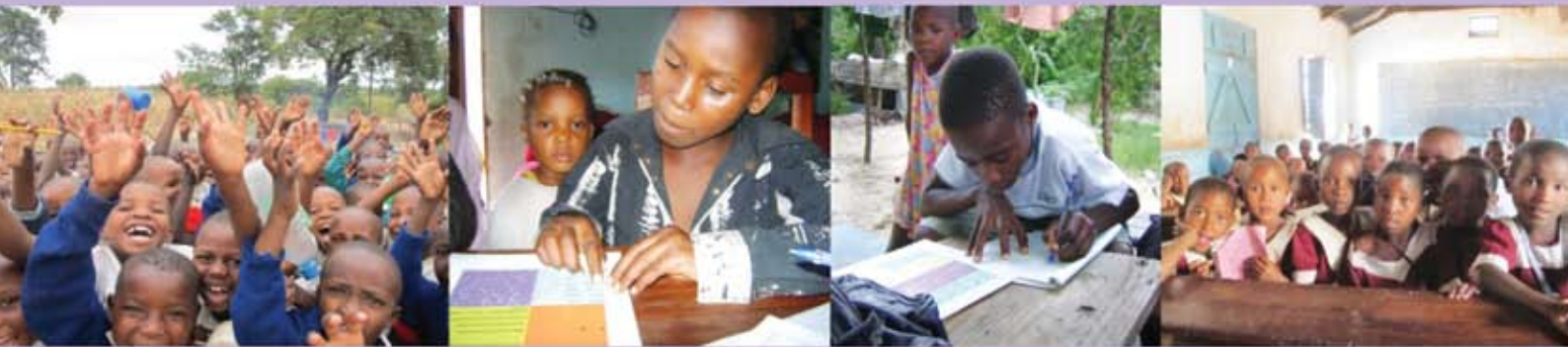


Are Our Children Learning?

Annual Learning Assessment Report Tanzania 2010



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Full dataset will be available on www.uwezo.net starting November 2010

For more information visit www.uwezo.net

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Annual Learning Assessment Report Tanzania 2010

This report is dedicated to Dr. Joseph Kisanji; a committed leader, colleague, guide and friend to Uwezo; the Coordinator of TEN/MET when it agreed to host Uwezo; who sadly passed away earlier in 2010. Dr. Kisanji cared deeply about improving quality and equity in education in Tanzania, and the memory of his tireless efforts continues to inspire us today.



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Summary and Key Findings

Rakesh Rajani, Head, Twaweza

Across Tanzania, huge progress has been made in basic education in the last decade. Enrolments are up in both primary and secondary education, and millions of children are able to go to school. Tanzania is ahead of schedule in meeting the Millennium Development Goals (MDGs) related to education access and gender parity. Tens of thousands of classrooms have been built and tens of thousands of teachers recruited. The budget for education has tripled over this period; the Government now spends over a billion dollars annually or about 20% of its budget on education. Parents too have scrambled to cover their share, for even free education is never quite free, with costs of uniforms, books and pens, extra tuition, transport and whatnot.

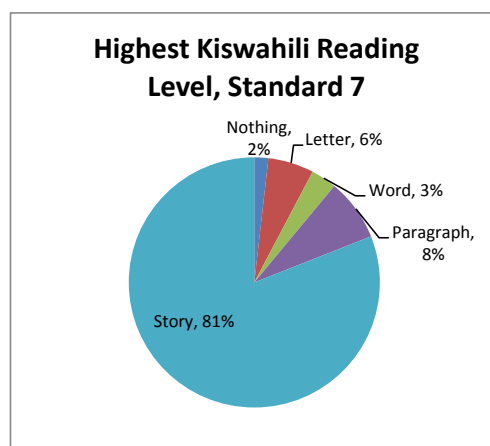
These achievements are no easy feats; they have required significant political commitment. **The key question is: what have these massive efforts and investments yielded? To what extent have these achievements translated into concrete improvements in children's competencies?** The point of schooling is to enable children to develop the knowledge and wherewithal to thrive in the world – starting with basic skills in literacy and numeracy that form the foundation of the ability to be curious, think, listen, ask questions, analyze, synthesize, and communicate with confidence. Are our schools succeeding in this responsibility? Are our children learning?

Uwezo seeks to answer this key question. This report presents the findings of its first assessment. Uwezo, meaning *capability* in Swahili, is a four year initiative to monitor the quality of learning in schools by assessing the basic literacy and numeracy skills of children aged 5-16. The initiative is housed within TEN/MET (Tanzania Education Network, www.tenmet.org) in Tanzania, and it is part of an East Africa wide effort also involving Kenya and Uganda coordinated by Twaweza (www.twaweza.org). The assessment is based on a proven methodology developed by the ASER Center in India, and it uses scientific methods to obtain a random sampling of households around the country. Trained Uwezo volunteers visit the households to assess the mathematics and reading (Kiswahili and English) skills of each child using a short, Standard 2 level assessment. The Standard 2 level is chosen because according to both Tanzanian and international Standards, by the end of the second year of primary education children should have acquired basic skills in literacy and numeracy.

The first Uwezo Tanzania assessment was conducted in May 2010 after extensive preparation and pre-testing. It involved 38 out of 133 districts. In each district 30 villages were randomly selected, and in each village all children aged 5-16 in 20 households were assessed. In total, 42,033 children in 22,800 households were assessed. The six key findings are presented below.

1. One in five primary school leavers cannot read Standard 2 level Kiswahili

Even though Kiswahili is the national language widely spoken across the country, a large number of children are not able to read it fluently. In our sample, less than half (42.2%) of the children surveyed were able to read at the story level. Whereas all children in Standard 3 should be able to read at the Standard 2 story level, less than 1 in 3 (32.7%) can. Most children do not learn to read a simple story until Standard 5 or 6. By the time they complete primary school, however, 1 out of every 5 children still cannot read

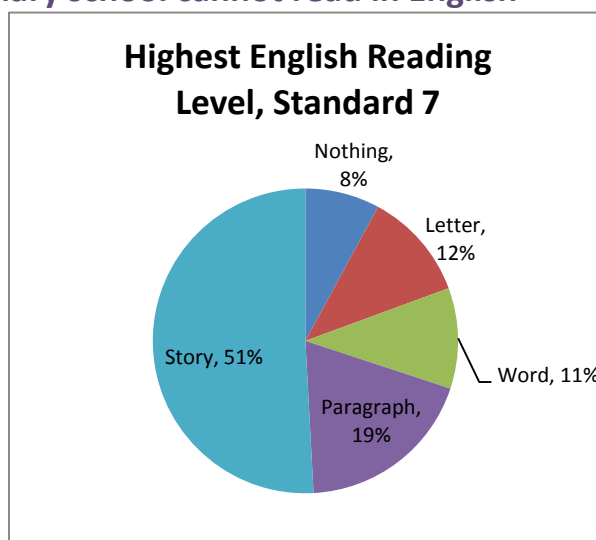


the Standard 2 level story. These children will likely never learn to read, and despite spending seven years in primary schooling, are likely to remain illiterate for life.

PERCENTAGE OF CHILDREN WHO CAN READ STANDARD 2 LEVEL KISWAHILI						
Class	Nothing	Letter	Word	Para	Story	Total
PreSchool	53.5	27.7	2.7	2.5	13.6	100
Std 1	41.8	37.8	10.6	4.2	5.6	100
Std 2	24.1	32.3	17.0	9.8	16.8	100
Std 3	14.8	20.0	16.4	16.1	32.7	100
Std 4	9.6	14.7	12.0	16.6	47.1	100
Std 5	6.0	10.1	7.4	13.8	62.8	100
Std 6	4.0	6.1	4.9	11.1	73.9	100
Std 7	1.8	5.9	3.3	8.0	81.0	100
Total	18.6	19.2	9.6	10.5	42.2	100

2. Half the children who complete primary school cannot read in English

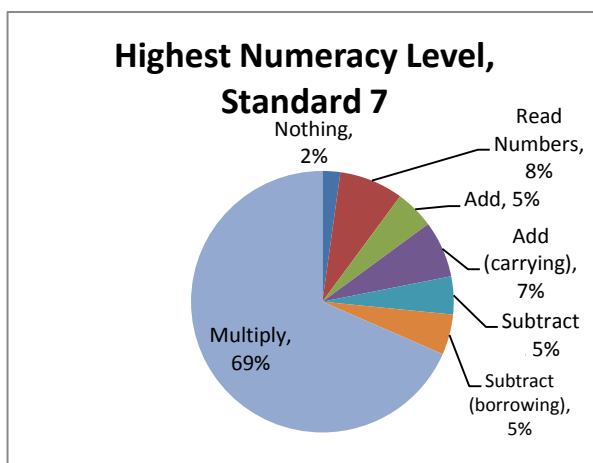
English is by far the hardest subject for children. Even though all children in Standard 3 should be able to read the Standard 2 story level, less than 1 in 10 (7.7%) can. Progress in English is slow; by Standard 5, only 1 in every 4 children can read a story. Nearly half cannot even read short English words. Many children reach Standard 7 without any English skills at all. By the time they complete primary school, half of all children (49.1%) still cannot read a Standard 2 level English story, and far fewer are likely to be able to read at the Standard 7 level. This means that the vast majority of children who enter secondary schooling are unable to read in the English language, the medium of instruction in secondary education.



PERCENTAGE OF CHILDREN WHO CAN READ STANDARD 2 LEVEL ENGLISH						
Age	Nothing	Letter	Word	Para	Story	Total
PreSchool	68.3	16.9	2.3	3.4	9.1	100
Std 1	68.0	24.8	3.8	1.3	2.1	100
Std 2	55.5	29.4	7.5	3.8	3.9	100
Std 3	42.0	26.7	14.2	9.4	7.7	100
Std 4	29.0	24.0	16.0	15.5	15.4	100
Std 5	21.4	19.6	13.7	20.9	24.5	100
Std 6	15.1	13.6	13.6	21.9	35.8	100
Std 7	7.9	11.5	10.7	19.1	50.9	100
Total	37.8	21.0	10.4	12.1	18.7	100

3. Only 7 in 10 primary school leavers can do Standard 2 level Mathematics

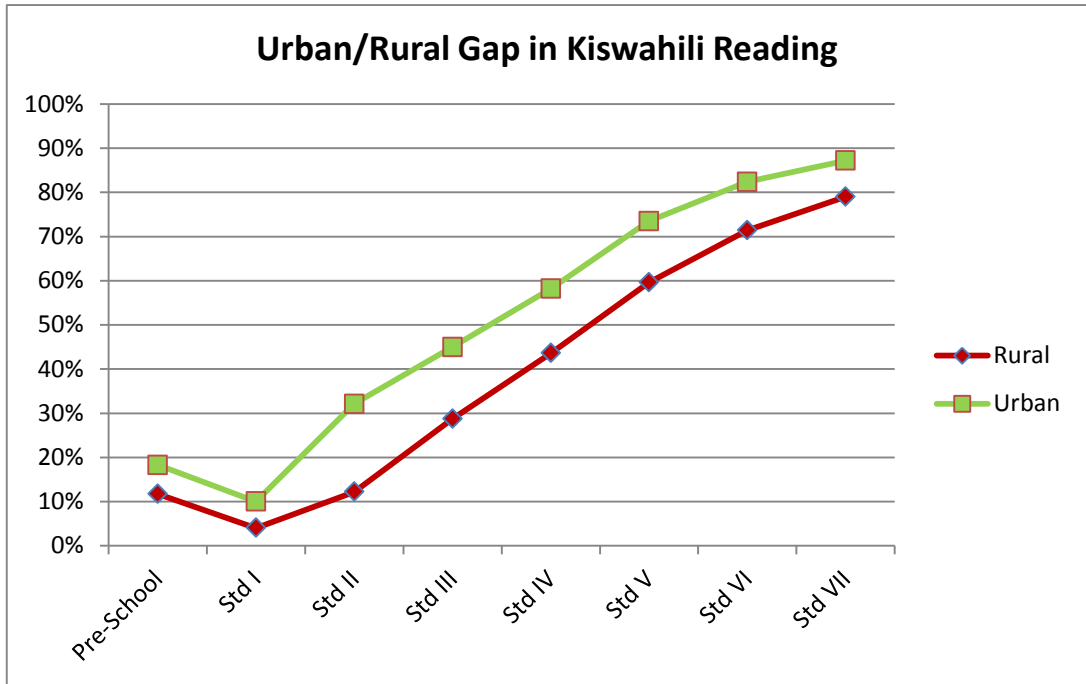
Although multiplication is in the Standard 2 curriculum, hardly any Standard 2 children can multiply. In fact, more than half of them cannot even add. By the time they reach Standard 5, most children can add and subtract, but the majority still cannot multiply. Most children master basic mathematics skills by the end of primary school. However, 3 out of 10 (31.5%) children in Standard 7 still cannot do Standard 2 level multiplication. One in 10 children complete primary school with no mathematics skills at all; they cannot even do basic addition. This likely means that the majority of children entering secondary school do not have an adequate foundation in mathematics that is essential for learning and analysis, particularly in science and commerce.



PERCENTAGE OF CHILDREN WHO CAN DO STANDARD 2 LEVEL MATHEMATICS								
Age	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
PreSchool	40.0	41.9	2.7	1.6	1.7	1	11.0	100
Std 1	26.5	56.9	9.2	1.9	2.3	1	2.4	100
Std 2	15.7	45.8	16.9	4.9	5.5	4	7.6	100
Std 3	9.9	30.3	20.0	8.5	7.3	6	18.5	100
Std 4	7.2	22.0	14.1	10.0	7.0	7	32.8	100
Std 5	5.1	13.9	11.0	10.3	6.7	7	45.8	100
Std 6	3.3	9.2	7.7	10.2	5.9	6	57.8	100
Std 7	2.2	7.9	4.8	7.0	4.7	5	68.5	100
Total	13.1	28.3	11.1	7.0	5.2	5	30.8	100

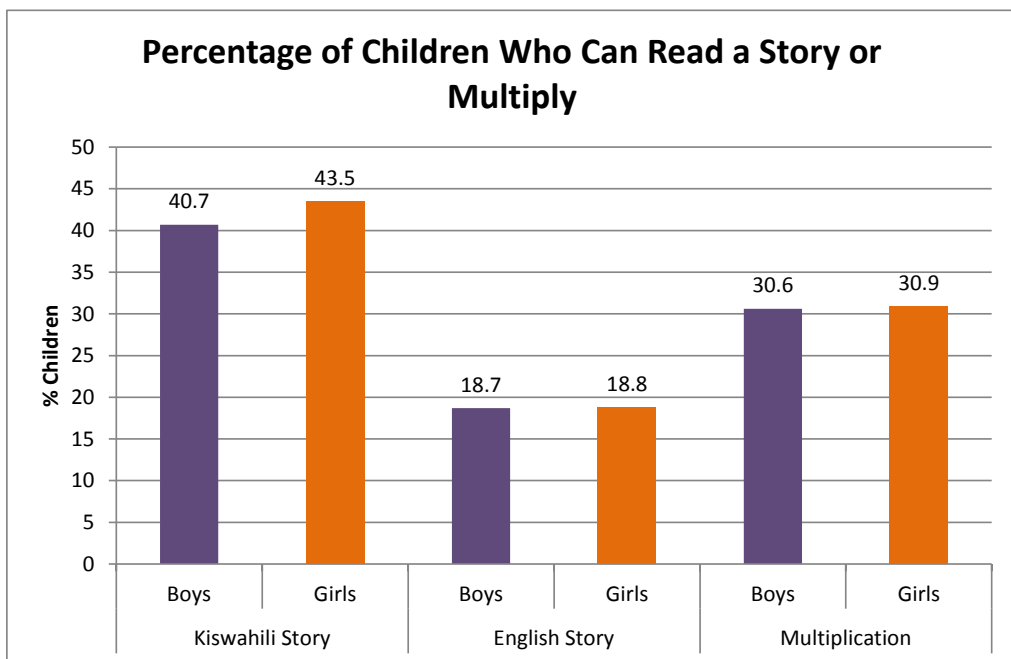
4. Urban-based children perform better than rural-based children

Children in urban areas score about 7-10 percentage points higher than children in rural areas in all subjects. The difference is largest in Standards 2-4, when urban-based children begin to master basic skills while their rural counterparts fall behind. Rural children seem to catch up the Standard 2 level eventually by the time they are in Standards 6 and 7, but in fact may be falling further behind at being able to read at their *own* level.



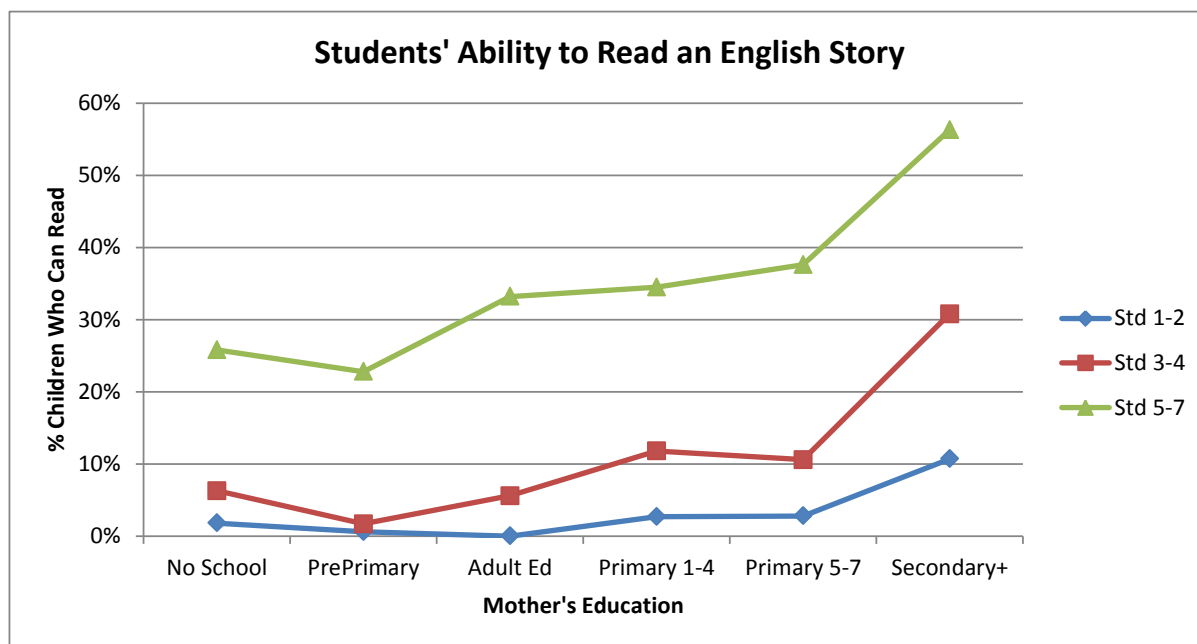
5. Girls do slightly better than boys

Girls performed better than boys in all subjects tested, although the differences are very small. Of all children tested, 43.5% of girls were able to read at the story level in Kiswahili as compared to 40.7% of all boys. For English and Mathematics the differences were negligible, as can be seen in the table below. Nonetheless these findings counter the widely held notion that girls do less well than boys, and raise questions about why there is marked gap in favour of boys in the Primary School Leaving Examinations (PSLE). Overall, however, the slight differences between abilities of girls and boys should not mask the larger reality, namely that too many of both lack basic competencies in both languages and mathematics.



6. Children with educated mothers perform better

Children whose mothers attended secondary school perform dramatically better than other children. For instance, in Standard 3 and 4 these children are *five times more likely* to be able to read a story in English and *more than twice as likely* to be able to multiply and read a story in Kiswahili. Even children whose mothers have attended only primary school seem to have a small but significant advantage above children whose mothers have not been to school. The gap in performance begins in Standard 1 and continues through Standard 7, which suggests that mother's education remains important for children at all levels of schooling.



Conclusion

The key findings summarized above and that are further elaborated in the following chapters reveal that there is a crisis in education in Tanzania. **By the time they enter Standard 3, 100% of children should have basic competencies in literacy and numeracy. The reality is that by Standard 3, 7 out of every 10 children cannot read basic Swahili, 9 out of every 10 children cannot read basic English, and 8 out of every 10 children cannot do basic mathematics.** Even by the time they complete primary education, large numbers of children cannot do what they should have mastered five years earlier in Standard 2. Breakdowns by districts reveal large disparities, with some districts performing far below the national average.

The stark reality is that, despite the enormous advances in education made possible by investing trillions of shillings each year, the vast majority of children in Tanzania are not learning.

What can be done about the situation?

First, we need to pause and make the effort to fully absorb these results and analyze what they mean. Rushing to explain them away or come up with quick solutions may not help, and it may lead to improper diagnosis and ineffective responses. It may also require, politically unsound as it may seem, to temper the enthusiasm with current achievements. Celebrating new buildings and higher

enrolments is dangerous folly if its effect is to mask the reality that too many children in Tanzania complete primary schooling without the ability to read and count.

Second, while major challenges are inevitable whenever an education system is expanded rapidly, one can still ask the question: are the strategic policy and political objectives focused on the right things? At present, in Tanzania and elsewhere, much of the focus is on the provision of educational *inputs*, such as classrooms, laboratories, books and teachers, rather than *learning outcomes*, such as literacy, numeracy, writing, critical thinking and creativity. Since the evidence shows that the inputs are not being translated into learning outcomes, there is a need to realign focus system-wide on achieving learning outcomes within ministries responsible for education, training institutions, curriculum development, examinations, teacher and school assessment, measures of progress, and political commitments.

Third, there is a need to focus on what happens at the school, rather than in national aggregates alone. Studies across the region suggest that the teaching and learning process may be severely compromised. Two of the most common problems appear to be that insufficient funds are reaching schools (ie increasing education budgets are being used up for other things than school level improvements) and teachers are both poorly motivated and not teaching (ie 'time on task' is very low). It may make sense to pay greater attention to these two issues and how to improve them, as well as to rigorously study the relationship between resources at the school level and teacher time on task on one hand and learning outcomes on the other.

Fourth, greater transparency may spur reflection and action among both policy makers and citizens alike. Uwezo is committed to sharing its findings widely to contribute to this purpose. But the Government could take things much further by enabling data from every school to be available online and through mass media, so that every local government official, teacher, parent and student can compare how she or he is doing in relation to others. Technological innovations and the spread of mobile phone in particular make possible information sharing that was unimaginable a few years ago.

Fifth, instead of doing more of what has been done harder or faster it may be time to do something different. Our analysis and studies worldwide suggest that a core part of the puzzle may be to *realign incentives* – so that key actors system-wide are recognized for promoting learning. One idea worth trying and already endorsed by President Kikwete is called *Cash on Delivery* (www.cgdev.org/section/initiatives/_active/codaid). Its basic premise is that additional funding in education should be predicated on and paid on the achievement of an (independently audited) agreed learning outcome, such as literacy and numeracy (eg for every child who completes primary education with agreed ability \$200 would be provided). This idea could be rolled further down, whereby the \$200 could be shared among local officials, teachers and possibly even parents. The point is to nudge key actors to focus on and reward achievement of learning. There is no guarantee that this idea would work. But in the face of the gravity of the crisis in Tanzania, where the usual methods have failed to bring meaningful progress, experimenting with a carefully designed and bold alternative as Cash on Delivery, and rigorously studying its impact, makes sense.

This report is released on the eve of national elections in Tanzania. Whatever its outcome, the next five years present an opportunity to address the education crisis in an honest, bold and strategically effective manner. A skilled, competent and confident people are essential to enable the nation to thrive, particularly in the context of regional integration and increasing globalization. Whoever emerges as the next President of Tanzania, turning education from more of the same inputs to ensuring that every child can read and count and learn may be the greatest test of his leadership.

Background

Uwezo, meaning “capability” in Kiswahili, is a four year initiative to measure competencies in literacy and numeracy among children aged 5-16 years in Tanzania. Uwezo will enable policy makers as well as ordinary citizens – i.e. parents, students, local communities and the public at large – to become aware of actual levels of children’s literacy and numeracy, and to build on that awareness to stimulate both practical and policy changes.

Focus on Schooling

Since independence in 1961, Tanzanian leadership has shown strong commitment to providing education to its children. This is due to the realisation of the importance of education for national development. Every government since independence has focused on education.

In recent years, as a result of the Primary Education Development Programme (PEDP) and Secondary Education Development Programme (SEDP), there has been a significant increase in children enrolled in primary and secondary schools. In 2000, there were 4,382,410 children enrolled in primary schools; by 2005 the number of children enrolled increased to 7,541,208, an increase of 72 percent. Secondary education saw even greater increases after the implementation of SEDP in 2004. In 2003, there were 345,441 students enrolled in Forms 1 to 6. In 2010, there are 1,638,699 students enrolled in secondary schools, an increase of 374 percent. To accommodate the large increases in number of children enrolled, the government has spent a large amount of funds on constructing new classes and schools. There was significant effort made to increase schooling opportunities for children.

The key question that Uwezo tries to answer is, “Has more schooling led to increased learning among children?” In Tanzania, efforts at improving quality of education have focused on increased inputs of teachers and textbooks. Teachers and textbooks are absolutely

important for learning to take place, but they are not sufficient in themselves to ensure that learning will take place. There are other initiatives that are taking place that will have a direct implication on quality of education. Competency-based teaching is one initiative that can improve learning in our schools.

Several NGO initiatives also aim to improve the quality provided. The *Tusome Vitabu Project* (TVP), managed by Care International, aimed at improving reading abilities of children through the establishment of libraries in primary schools. The *Children’s Book Project* has increased the supply of books for children in Kiswahili in selected districts. The Save the Children Project in Mtwara sought to improve the quality of teaching through use of child-centred approaches.

In spite of these and various other efforts, there is little evidence that the commitment to quality has translated into improved learning among children.

The Annual National Assessment

Uwezo Tanzania carried out an assessment of children aged 5 to 16 in three areas: Kiswahili literacy, English literacy, and numeracy. This assessment was carried out in 38 randomly selected districts in the country. This report presents the finding of the first assessment that was conducted in May 2010.

Design and Methodology

This section outlines key aspects of the research design and methodology. The approach was developed in consultation with national and international experts, including many from Tanzania government educational institutions, and research clearance was granted by the Ministry of Education and Vocational Training (MoEVT). Detailed information including sample instruments can be found on www.uwezo.net

Sampling Methodology

How were the 38 districts selected?

All the 133 districts in the country were arranged in alphabetical order. A computer programme randomly generated 38 numbers between 1 and 133. The corresponding districts were picked as sample districts for assessment.

How were the 30 villages for each district selected?

A list of all the villages in each district and their location (ward) was obtained from the National Bureau of Statistics (NBS). From this list we wished to sample 30 villages in each of the sample districts. To obtain these villages the following methodology was used:

1. The wards were listed, the number of villages per ward was physically counted, and ultimately the number of villages for the district was obtained.
2. Since the villages are found in two different types of locations, rural and urban, it was necessary to adopt a multi-stage sampling procedure whereby in the first stage the villages were stratified according to their respective locations (rural and urban). Using **probability proportional to size** sampling the number of villages to be sampled from each of the two locations was determined. For each stratum the villages were then given numbers. For example, if Ward A from the rural stratum had 10 villages those villages were given numbers 1 to 10, and if Ward B from the rural stratum

had 5 villages the numbering continued from 11 to 15. This was done similarly for urban streets (*mtaa*). For each district a table of random numbers was used to select the required 30 villages. The numbers (codes) were then allocated to the respective wards in a spread sheet that contained the name of the region, district and the wards.

3. Actual identification of the villages was done by using the file containing the list of villages in the district. Thus if Ward C had six villages numbered from 5 to 10 and two villages were selected – for example, 5 and 9 - the actual names of these villages was obtained by going to the district file and picking villages number 5 and 9. This was done with great care because it involved counting the villages in that ward (5, 6, 7, 8, 9, 10) and picking the required villages.

Assessment Tools

Children aged 5-16 were assessed in three key areas: Kiswahili literacy, English literacy, and numeracy. An important part of the assessment was to ensure that the assessment tools were robust. Two issues guided the development of assessment tools. The first was the level of the tests to be used for assessing the children. As Uwezo is an East African initiative, the three countries agreed to peg the tests in the three areas at the Standard 2 curricula level. This meant that the tests would not include anything that was not covered in the official Standard 2 curricula. Any child who had completed Standard 2 should be able to read the Kiswahili and English texts and to do the arithmetic in the tests.

The second area of consideration was to decide how these tests were to be developed. For the tests to have validity, expert panels were formed. For each subject area, a panel was formed that included a curriculum developer from the Tanzania Institute of Education (TIE), a practicing teacher, and an expert in the subject area. The first set of tests was prepared during the pilot phase. These tests were further refined

in consultation with the Ministry of Education and Vocational Training (MoEVT) before finalizing the tests for the national assessment.

The tests prepared were pre-tested in both rural and urban settings before being finalized. The English literacy tests were further validated by RTI in the United States, an organization involved in similar assessment through the Early Grade Reading Assessment (EGRA) in selected African countries. These tests were also vetted by the MOEVT to ensure that they were at Standard 2 level.

The literacy tests, both for Kiswahili and English, had five levels: alphabet, word, sentence, story, and comprehension. For numeracy, there were five levels as well: number recognition, addition, subtraction, multiplication, and questions on money.

The Assessment Process

Selecting District Coordinators

District coordinators were crucial for the success of the assessment. District coordinators had to play an important role in the assessment as they were responsible for recruiting volunteers, training them and ensuring that the assessment was carried out as prescribed. District coordinators were identified through the Tanzania Education Network/Mtandao wa Elimu Tanzania (TEN/MET) network. The Netherlands Development Organization (SNV) was particularly useful, given their presence in several regions of the country, in identifying capable district coordinators. It was decided that the district coordinators would come from the district where the assessment was going to take place. In three districts this was not possible, as suitable candidate could not be identified from those districts. Having a district coordinator coming from the district made entry into the district and access to communities easy.

Selecting Volunteers

The Uwezo assessment tool has been deliberately design to be simple to allow large scale assessment and its implementation by large numbers of volunteers. Nevertheless, during the preparation for the Uwezo assessment three concerns were raised and managed regarding the use of volunteers. First, would it be possible to attract a sufficient number of volunteers in each district. Second, would the volunteers be “trainable” to carry out the assessment and fill the required forms. Third, would volunteers agree to work for no payment or “allowances”.

Volunteers were recruited by the district coordinators, using three clearly defined criteria. One, the volunteers should come from the village where the assessment was done. Two, only those who had completed at least secondary education at the Form Four level should be selected as a volunteer. Third, coordinators were advised to select a male and a female volunteer from each village. The list of

selected volunteers was submitted to the research manager for approval. In the end a sufficient number of volunteers with the right qualifications were identified.

Recruiting volunteers from the same villages had two purposes. First, a person coming from the same village would have knowledge of the local language and a cultural understanding of the place. Second, the exercise would demystify the assessment process. When communities see one of their own members carrying out the assessment, they would realize that education assessment is not solely the domain of education professionals. This process of demystifying education is important to get communities involved in the education of their children. Copies of assessment tools were left in villages precisely for this purpose – to enable community members to assess their own children and interact with schools to improve learning. The effects of these efforts on stimulating community engagement need further study.

Overall, the performance of the volunteers was satisfactory. With few exceptions, the data books were properly completed. The volunteers are a useful asset for Uwezo, and contacts will be maintained with them for their future involvement in Uwezo activities such as the dissemination of Uwezo findings at the community level.

National Training

Training of district coordinators was done twice. The first training was carried out over a three day period from March 29 to March 31, 2010. The purpose of the training was to familiarize the district coordinators with the Uwezo approach. As the staff capacity of Uwezo Tanzania is limited, an outside firm, AMKA, was contracted to carry out the national training. This first training session enabled district coordinators to understand the overall research purpose, the Uwezo approach and the tools used in the process. However, further work was needed in enabling the coordinators to understand the Uwezo philosophy, and to motivate them for volunteer recruitment.

A second training session was organized for the district coordinators to fill training gaps and reinforce core approaches. The re-training was conducted on May 13, 2010 by the Uwezo staff and focused on the processes that needed to be done at the district and village levels. Particular attention was paid to the role of district coordinators as trainers of volunteers.

Training Volunteers

Training of volunteers was done by district coordinators in each district. Training in most cases involved the district education authorities who participated in the opening ceremony and gave their blessings to the assessment. The quality of training varied. In some districts the training was done well, as is evident from the quotation below from an ASER researcher:

The trainer was motivated and took special efforts to create posters and handouts which set the tone of the training and also sought to establish the larger goals of this training beyond just the UWEZO assessment and build capacity of volunteers to think and question. She interspersed anecdotes and references to the posters between discussions on the survey formats.

In other cases, the district coordinators did not follow the manuals as expected.

The two most problematic sessions were also the two most important: (1) the sampling method was extremely unclear and did not correspond to what was outlined in the manual. (2) The testing methodology also did not correspond to what was in the manual. The trainer was not completely sure about the testing methodology and this reflected in volunteers' responses when they were asked related questions. For example, volunteers did not know what counted as a mistake in reading.

Some inconsistencies in training are to be expected, but ways have to be found to ensure that inconsistencies are significantly reduced in

the future, if not completely eliminated. Another issue raised by ASER people who observed district training was that volunteers did not get adequate time to practice things they were to do in field. Corrective actions were taken to mitigate for such challenges, including at the level of data entry where potential errors could be identified. Important lessons have been learned about how to improve volunteer training and research integrity. Nonetheless these observed limitations are unlikely to affect survey results in any significant manner.

Access to communities

The research permit obtained from the Ministry of Education and Vocational Training was used to get access to village authorities through district authorities. The District Executive Director issued a letter to the village authorities requesting cooperation with the researchers. Researchers reported receiving full cooperation from authorities at each level.

In the field

Fieldwork was the main activity of the assessment. In the field volunteers were responsible for undertaking several activities as outlined below.

Selecting the school

Volunteers collected data from one government school in the village. If there was more than one school, then volunteers were instructed to select the largest school in terms of number of pupils. In most villages, there was a school from which data was collected. In all cases head teachers cooperated to provide the required information. In urban areas, where the sample unit was a *mtaa* (street), some *mtaa* had no schools.

Drawing the village map

Volunteers were required to draw a map of the village. This map was used to select a sample of households in the village. Volunteers were also required to locate the sampled households on the map. The quality of maps drawn varied as expected. In some villages, the village map

available with the village secretary was used as a basis for drawing a map.

Selecting the Households

In each village or *mtaa* volunteers were required to select 20 households. This was done using the map drawn. The village map was divided into four equal sections. From each section of the village, five households were selected using the “fifth household” approach.

Volunteers selected the 20 households on the first day they were in field. Five additional households were selected as a backup in case a household refused to participate in the assessment.

Selecting the Children

In each household, all the children between the ages of 5 and 16 were assessed using the three tests.

Assessing children

Volunteers were instructed to make the assessment a pleasant event for the child. They were asked to make the child comfortable before the assessment by talking to the child about things that might interest him or her. Children were not to be rushed and given as much time as they needed to read or do the arithmetic. Volunteers were asked to strictly adhere to the following principles:

- If the child is feeling stressed or uncomfortable, do not force him or her to do the tests.
- Let the child take as much time as he/she wishes to answer, do not rush the child.
- Protect the child from parents or elders who may get upset because the child performs poorly.
- Do not pass any comments on the child’s performance, such as “you cannot read,” “you are not studying hard,” “your teachers are not teaching you well,” “you are in Standard six but cannot read,” etc. ***In no circumstance should a child be shamed before his or her family.***

- Do not tell the parents that their child cannot read or is unable to do maths.

Assessing literacy levels

In both literacy and numeracy tests, the aim of the assessment was to find the highest level reached by the child. The highest level reached was recorded in the data book. Both the English and Kiswahili tests had five sections. These are:

- **Letter recognition.** Every letter represents a particular sound. These sounds are important to that particular language. Therefore different languages have different alphabets. When assessing, volunteers were to point to an alphabet and say “What letter is that?” If the child was able to identify five alphabets correctly, he/she moved to the next level.
- **Word recognition.** In both English and Kiswahili tests, there were ten words for a child to read. A person doing the assessment picks the words randomly and asks the child to read the word. If a child was able to read six words correctly then the volunteer moved to the next level. For a child to be judged to have the ability to read the words, he/she should be able to read words accurately and automatically decode them.
- **Sentence and Story Reading Levels.** The next level measured was the ability to read a sentence and read a story. These will be assessed as a combined skill as they require the same ability. We have kept the sentences short. Story level is where sentences are read as a string rather than each sentence separately. The act of reading includes decoding written words and letters, transforming them into recognisable language, and understanding their meaning. When assessing a child’s reading ability, the following were to be considered:

1. **Accuracy:** words are read correctly, without mispronunciations or omissions. Accuracy also in terms of stress, pitch variations, intonation, rate, phrasing and pausing.
 2. **Fluency:** A child who reads word by word in a monotonous way has not achieved necessary fluency levels. A child who has achieved fluency reads smoothly, pauses shortly after a comma, pauses a bit longer at the period mark, and uses the right intonation and stress when a sentence ends with a question mark or exclamation mark.
- **Comprehension:** Those children who had reached story level were asked questions to find out if they understood what they read.
 - **Subtraction:** Children were given two types of subtraction questions, where they did not have to borrow and where they had to borrow.
 - **Multiplication:** Children were asked to multiply 2 digit numbers by a number not greater than 6.
 - **Adding money:** Children in Tanzania do not do problem solving at Standard 2 level. To test their knowledge of ethno maths, children were given simple questions that required adding money.

A child was judged to have reached the story level reading ability if he or she read the story accurately and fluently. A child who was unable to decode more than two words in a sentence had not achieved the sentence level reading ability. A child who read haltingly had not achieved the story level reading ability.

Assessing numeracy levels

Children were provided with note books and pencils to do the sums. The maths test had five sections – number recognition, addition, subtraction, multiplication, and adding money.

- **Number recognition:** Volunteers were to point to any number and ask the child what number that was. If a child knew three or four numbers and was recognising them with certainty, then the child moved to the next stage.
- **Addition:** The child was shown an addition sum and asked to do that in the exercise book. If the child was able to do five sums correctly then he/she moved to the next stage.

Assessment Tools

The following simple tests were used to assess literacy and numeracy.

Kiswahili Test

<p>SILABI</p> <p>fa ki mwa njo le chi ngu za ja nda</p>	<p>KUSOMA MANENO</p> <p>chai sherehe vuta maziwa mama kaka sukari gari babu panda</p>	<p>AYA</p> <p>Baba amejenga nyumba nzuri. Nyumba yetu imezungukwa na miti. Miti huzuia upepo mkali. Miti hutupatia hewa safi. Mimi ni mwanafunzi. Ninasoma darasa la pili. Leo nitasoma vizuri. Ninawapenda walimu wangu.</p>
<p>HADITHI</p> <p>Hapo zamani za kale samaki waliishi nchi kavu. Waliishi kwa kula wadudu kama vile panzi, mende na sisimizi. Siku moja wadudu hawa walikaa kikao na kupanga namna ya kuwaondoa samaki. Katika kikao chao wengi walichangia. Ikafika zamu ya sisimizi. Sisimizi alisimama na kusema, “umoja ni nguvu na utengano ni udhaifu”. Wote walisimama na kupiga kelele, “samaki wauaweee”. Samaki waliposikia hivi walikimbia na kujificha majini. Hadi hivi leo samaki wanaishi majini.</p> <p><i>Maswali.</i></p> <ol style="list-style-type: none"> Hapo zamani samaki waliishi wapi? Zamani samaki walikuwa wanakula wadudu gani? Hadithi hii inatufundisha nini? 		

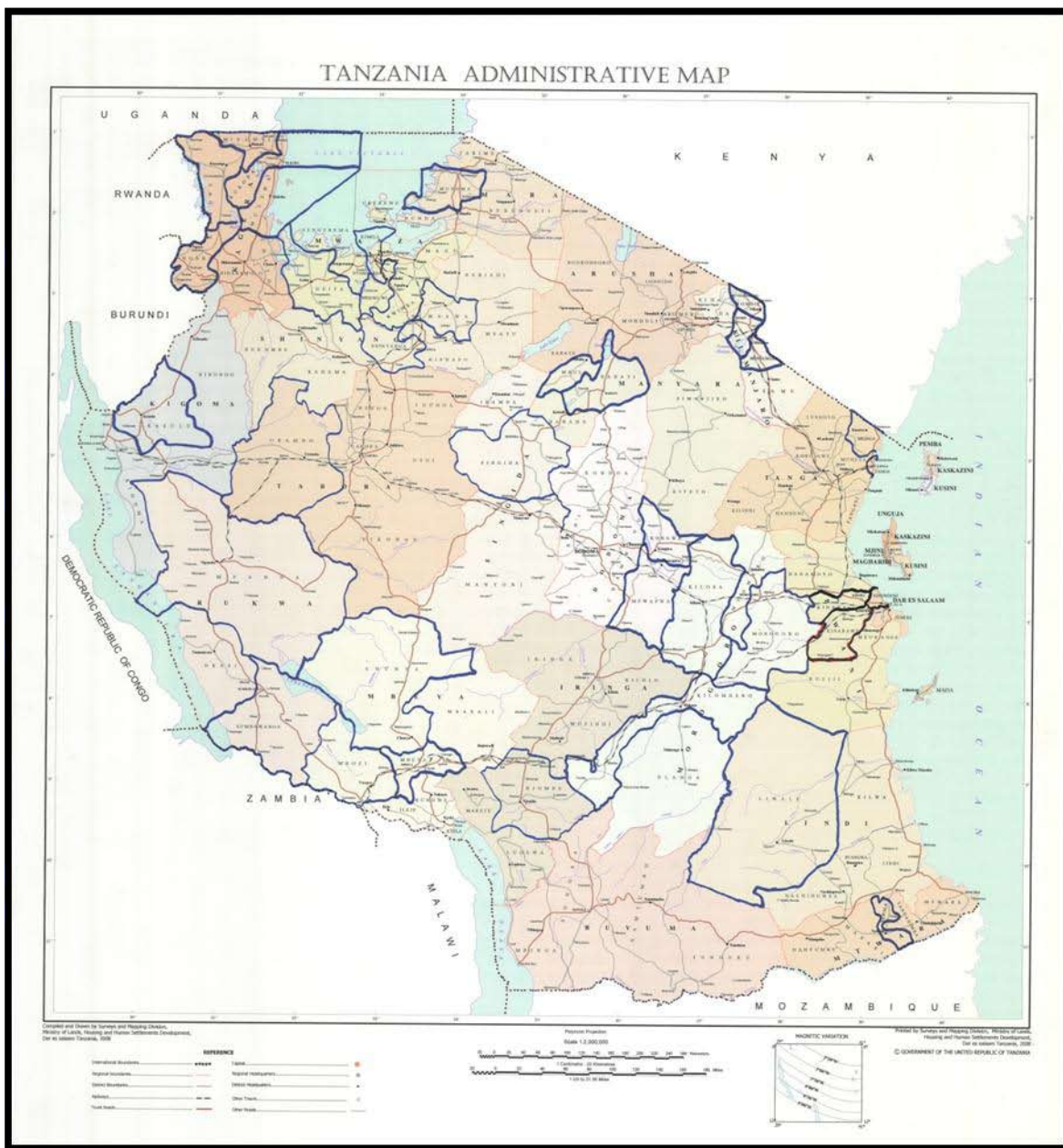
English Test

<p>LETTERS</p> <p>e n d u w f y v j q</p>	<p>WORDS</p> <p>boy tall good best come sing take five work gave</p>	<p>PARAGRAPH</p> <p><i>This is my cat. That dog is big. I like my school. My home is small. I have two sisters.</i></p>
<p>STORY</p> <p>Juma is living in a small village. He gets a letter once a month. The letter is from his son Musa. Musa lives in Dodoma. Juma cannot read the letters. He asks Sara to read the letters for him.</p> <p><i>Questions.</i></p> <ol style="list-style-type: none"> Where does Juma live? What does Sara read? What is the name of Juma's son? 		

Mathematics Test

<p>NUMBER RECOGNITION</p> <p>2 8 6 0 7 5 87 31 51 60 28 99</p>	<table border="1"> <tr> <td>55 +23 -----</td> <td>49 +30 -----</td> <td>24 +71 -----</td> </tr> <tr> <td>33 +42 -----</td> <td>75 +21 -----</td> <td>12 +64 -----</td> </tr> <tr> <td>23 +68 -----</td> <td>77 +25 -----</td> <td>45 +48 -----</td> </tr> </table>	55 +23 -----	49 +30 -----	24 +71 -----	33 +42 -----	75 +21 -----	12 +64 -----	23 +68 -----	77 +25 -----	45 +48 -----	<table border="1"> <tr> <td>89 -42 -----</td> <td>76 -33 -----</td> <td>52 -20 -----</td> </tr> <tr> <td>66 -55 -----</td> <td>48 -4 -----</td> <td>37 -16 -----</td> </tr> <tr> <td>33 -15 -----</td> <td>62 -25 -----</td> <td>70 -34 -----</td> </tr> <tr> <td>97 -48 -----</td> <td>51 -13 -----</td> <td>62 -39 -----</td> </tr> </table>	89 -42 -----	76 -33 -----	52 -20 -----	66 -55 -----	48 -4 -----	37 -16 -----	33 -15 -----	62 -25 -----	70 -34 -----	97 -48 -----	51 -13 -----	62 -39 -----
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Map 1: Locations of districts where assessments were undertaken, May 2010



DISTRICTS SURVEYED	1. Babati	8. Kasulu	15. Liwale	22. Moshi (R)	29. Newala	36. Sumbawa
	2. Bukoba (R)	9. Kibaha	16. Maswa	23. Moshi (U)	30. Ngara	37. Tanga (U)
	3. Bukoba (U)	10. Kilombero	17. Mbeya (U)	24. Mpanda	31. Njombe	38. Urambo
	4. Chunya	11. Kilosa	18. Mbulu	25. Mpwapwa	32. Rombo	
	5. Geita	12. Kinondoni	19. Misungwi	26. Muleba	33. Shinyanga (R)	
	6. Illemela	13. Kisarawe	20. Morogoro (R)	27. Musoma (U)	34. Singida (R)	
	7. Karagwe	14. Kongwa	21. Morogoro (U)	28. Mwanga	35. Singida (U)	

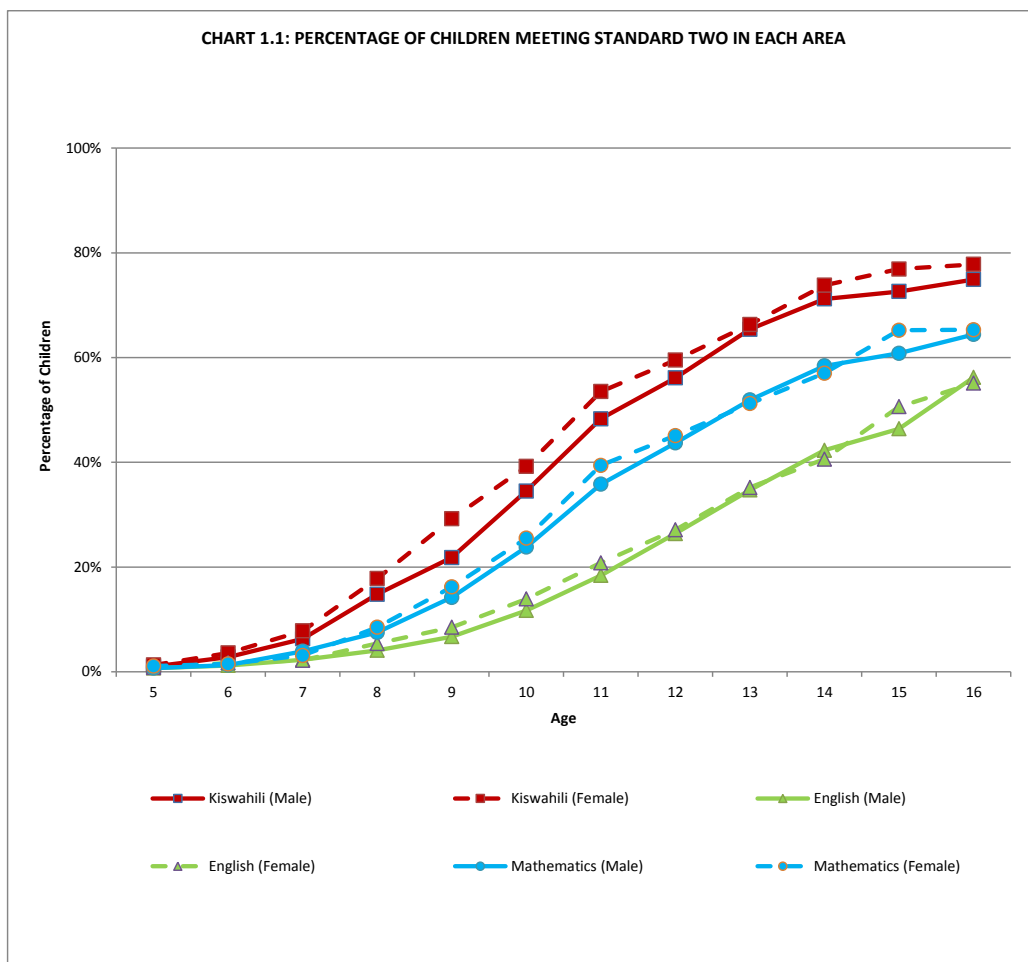
Main Findings

Learning basic literacy and numeracy skills from an early age provides a strong foundation for a child's future. Unfortunately, this is not the case for many children in Tanzania. The findings from the 2010 Uwezo survey show that there is a crisis in education in Tanzania, with most children being unable to demonstrate basic reading and numeracy skills.

By the time they enter Standard 3, 100% of children should have basic competencies in literacy and numeracy. The Uwezo findings show that by Standard 3, 7 out of every 10 children cannot read basic Swahili, 9 out of every 10 children cannot read basic English, and 8 out of every 10 children cannot do basic mathematics. Even by the time they complete primary education, large numbers of children cannot do what they should have mastered five years earlier in Standard 2. Breakdowns by districts reveal large disparities, with some districts performing far below the national average.

The stark reality is that, despite the enormous advances in education made possible by investing trillions of shillings each year, the vast majority of children in Tanzania are not learning.

This main findings chapter is divided into five subsections. In the first three, a description is given of children's proficiency in Kiswahili, English, and Mathematics. In the final two, relationships are examined with the mothers' education levels and the families' socio-economic status.



1. Kiswahili Proficiency

Basic Proficiency

Even though Kiswahili is the national language widely spoken across the country, a large number of children are not able to read it fluently. In our sample, less than half (42.2%) of the children surveyed were able to read at the story level. Whereas all children in Standard 3 should be able to read at the Standard 2 story level, less than 1 in 3 (32.7%) can. Most children do not learn to read a simple story until Standard 5 or 6. By the time they complete primary school, however, 1 out of every 5 children still cannot read the Standard 2 level story. These children will likely never learn to read, and despite spending seven years in primary schooling, are likely to remain illiterate for life.

"Baada ya mtoto wangu wa kidato cha pili kuzidiwa uwezo wa kusoma na kutafsiri aya ya kiswahili, nimefumbuka macho kuwa kuna mapungufu mengi sana katika elimu yetu ambayo sisi watanzania wa vijijini hatuyajui. Utafiti wenu ni ukombozi wetu mpya" (Mzazi, kijiji cha Ichemba, Urambo –Tabora

"After my form two child failed to read and comprehend a Kiswahili paragraph, I have realized that there are so many weaknesses in our education which we Tanzanians from rural areas are not aware. Your research is our new emancipation" (a parent from Ichemba village, Urambo -Tabora).

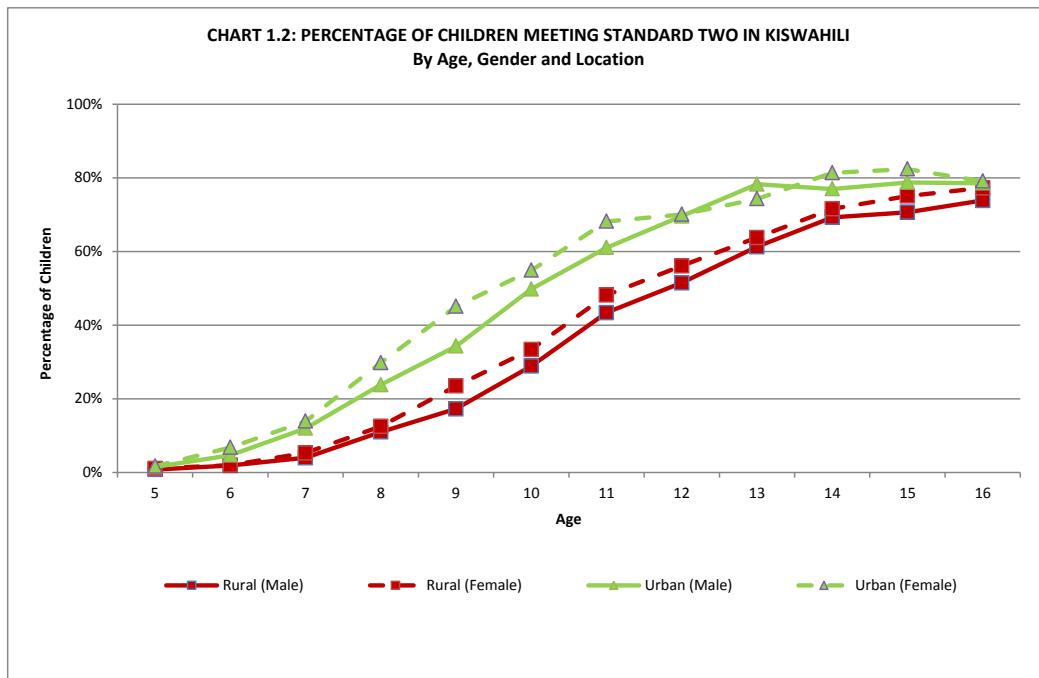
PERCENTAGE OF CHILDREN WHO CAN READ STANDARD 2 LEVEL KISWAHILI						
Class	Nothing	Letter	Word	Para	Story	Total
PreSchool	53.5	27.7	2.7	2.5	13.6	100
Std 1	41.8	37.8	10.6	4.2	5.6	100
Std 2	24.1	32.3	17.0	9.8	16.8	100
Std 3	14.8	20.0	16.4	16.1	32.7	100
Std 4	9.6	14.7	12.0	16.6	47.1	100
Std 5	6.0	10.1	7.4	13.8	62.8	100
Std 6	4.0	6.1	4.9	11.1	73.9	100
Std 7	1.8	5.9	3.3	8.0	81.0	100
Total	18.6	19.2	9.6	10.5	42.2	100

Reading a Kiswahili Story, By Age, Gender and Location

As expected, children's ability to read a story in Kiswahili improves with age. In addition, gender and location seem to influence children's performance as well. With just one exception (urban 13 year olds), girls outperform boys at each age level and in both locations, though often by only a few percentage points.

Also, while urban and rural children start at a similar proficiency level as 5 year olds, a gap of over 20 percentage points emerges in favour of the urban children by the time children are 10 years old. The gap then narrows to within 4 points in 16 year olds. However, while the gap decreases among older children for this survey, it is possible that it would remain if more rigorous reading assessments were given.

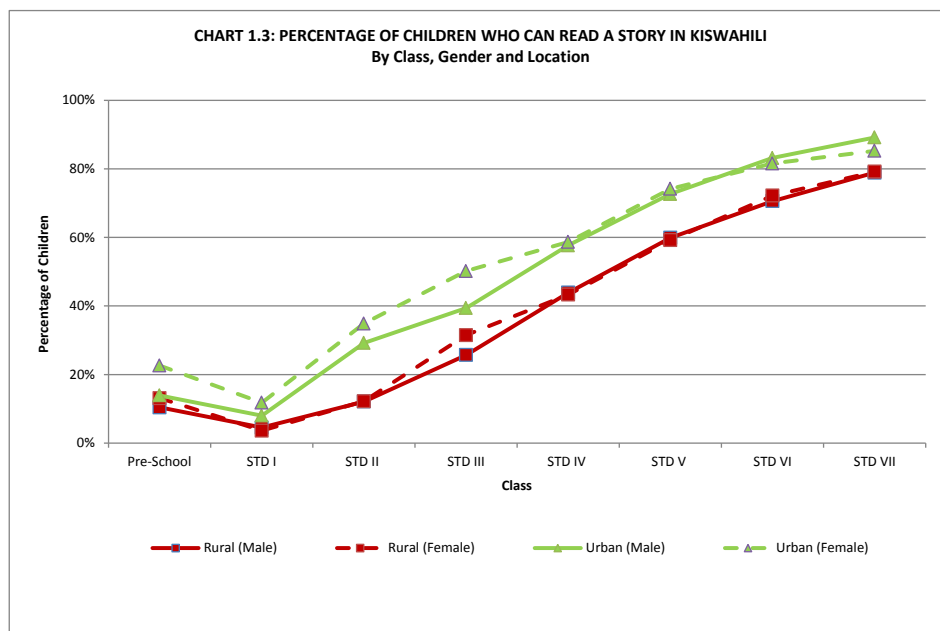
Overall, many children assessed are unable to demonstrate basic Kiswahili reading skills. The low competence in Kiswahili literacy may affect performance at higher levels.



Reading a Kiswahili Story, By Class, Gender and Location

The influence of gender and location are similar when examining children’s class rather than their age. As before, there are many children in both rural and urban areas who are unable to read a Kiswahili text, with girls generally outperforming boys and urban children generally outperforming rural children.

Unlike when children are grouped by age, grouping children by class reveals a small dip among younger children, where reading levels seem to decline from preschool to Standard 1. This decrease is likely due to the factors that help determine whether a student attends preschool; for example, children who attend preschool may be more likely to have received some reading instruction at home as well.



Reading a Kiswahili Story: Comprehension

In assessing children’s comprehension ability, children were given a story with three questions to answer. In both urban and rural settings, about 95 percent of children were able to answer the first two questions correctly. About two thirds of children were able to answer the third question correctly, with rural children slightly outperforming urban children.



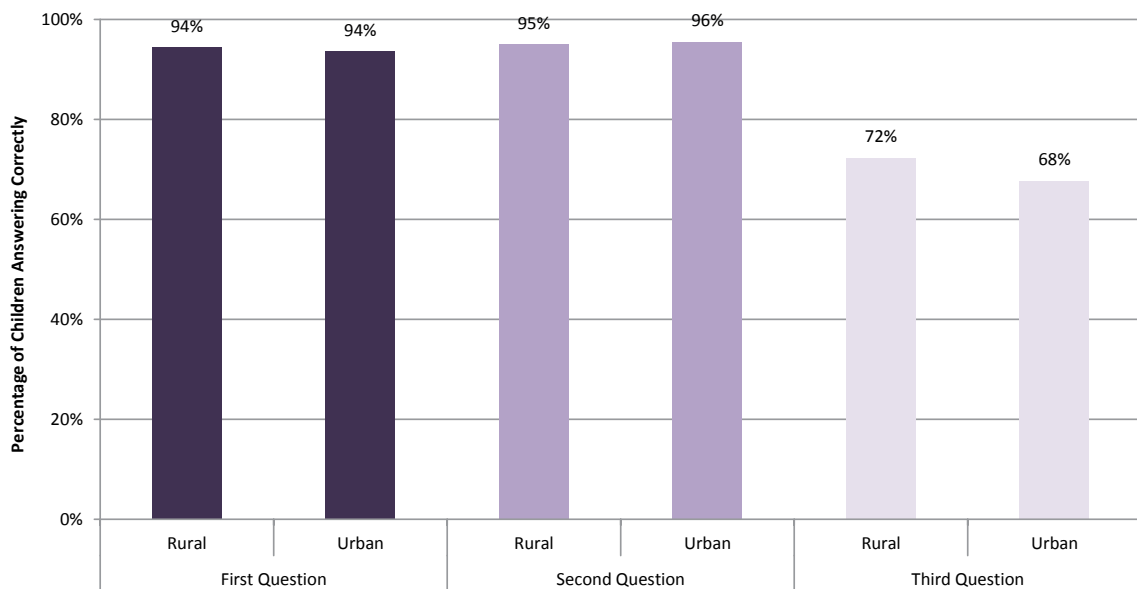
KISWAHILI STORY:

Hapo zamani za kale samaki waliishi nchi kavu. Waliishi kwa kula wadudu kama vile panzi, mende na sisimizi. Siku moja wadudu hawa walikaa kikao na kupanga namna ya kuwaondoa samaki. Katika kikao chao wengi walichangia. Ikafika zamu ya sisimizi. Sisimizi alisimama na kusema, “umoja ni nguvu na utengano ni udhaifu”. Wote walisimama na kupiga kelele, “samaki wauaweee”. Samaki waliposikia hivi walikimbia na kujificha majini. Hadi hivi leo samaki wanaishi majini.

Maswali:

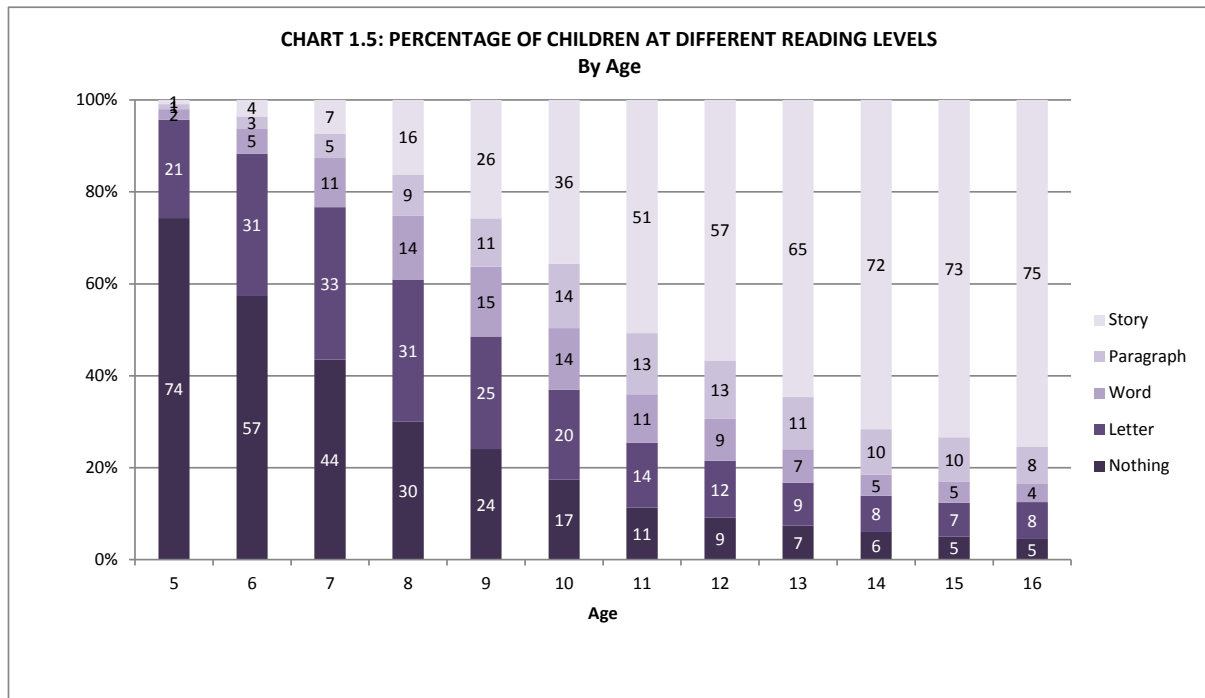
1. Hapo zamani samaki waliishi wapi?
2. Zamani samaki walikuwa wanakula wadudu gani?
3. Hadithi hii inatufundisha nini?

CHART 1.4: PERCENTAGE OF CHILDREN ANSWERING COMPREHENSION QUESTIONS CORRECTLY
By Location

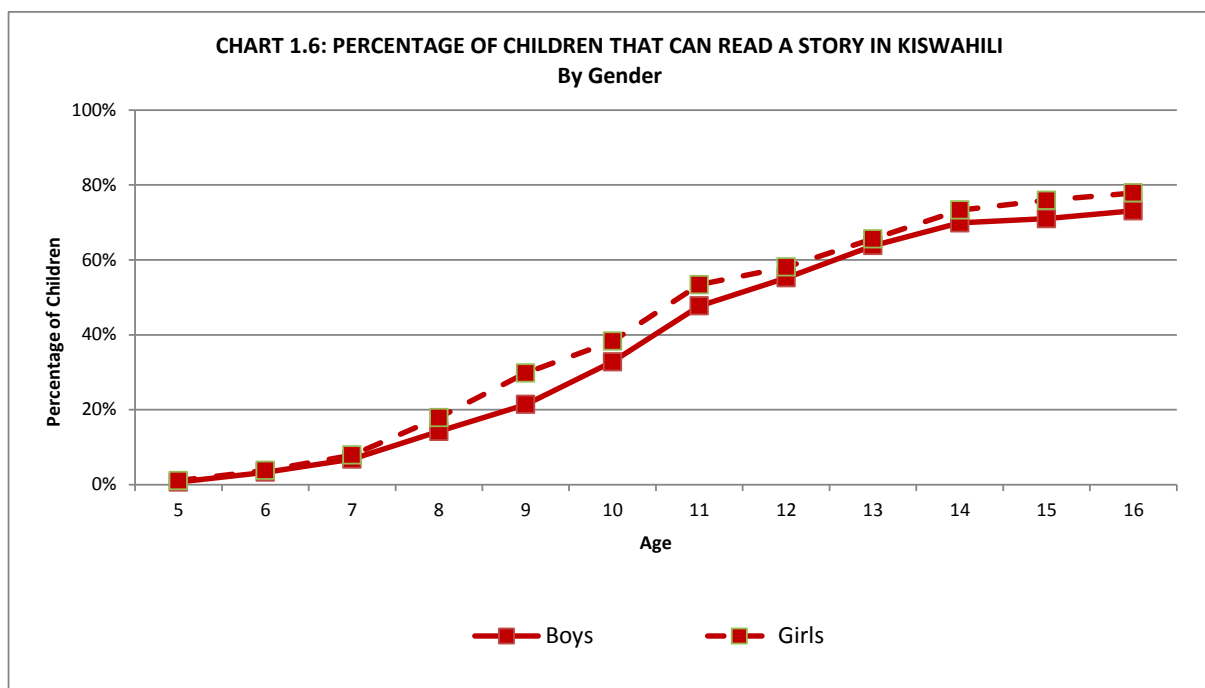


Kiswahili Reading Levels, By Age and Gender

National analysis indicates that 42 percent of all children aged 5-16 can read a story in Kiswahili, from one percent of five year olds, 51 percent of 11 year olds and 75 percent of sixteen year olds. On the other hand, 22 percent cannot read anything. The largest percentage point increase in being able to read a story comes from the ages 10 to 11, while from age 11-16 there is a substantial decrease of children who cannot read anything.

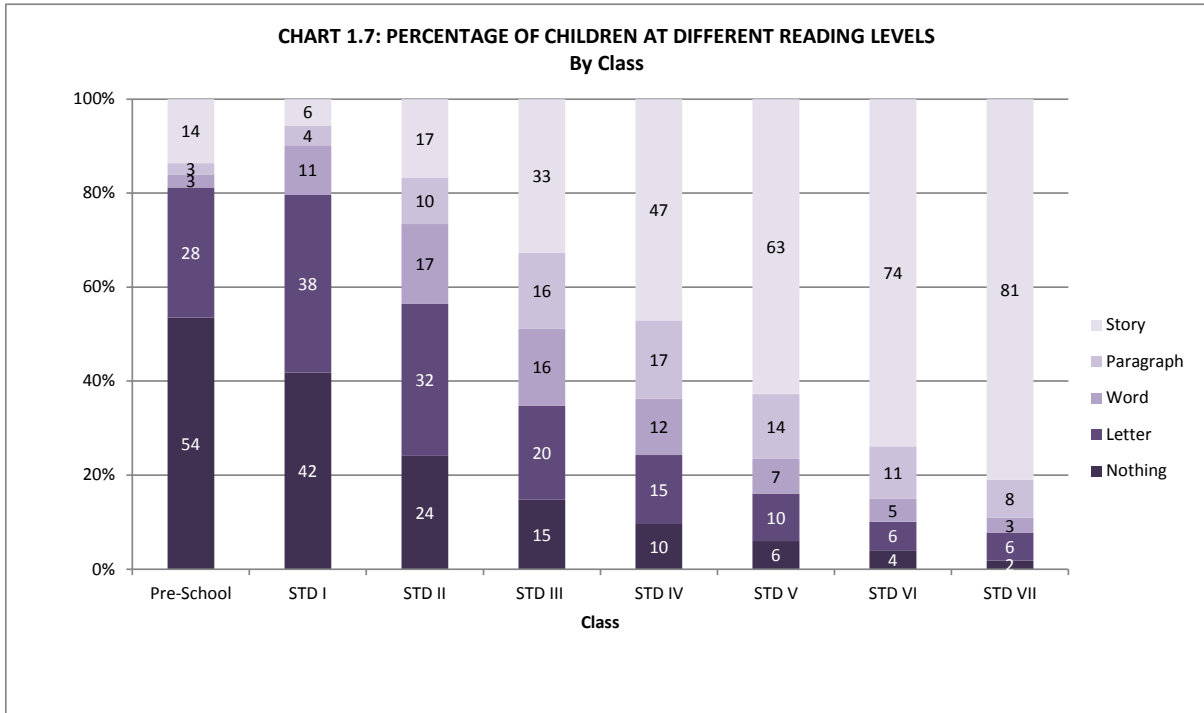


As before, girls outperform boys, being more likely to be able to read a story at each age.

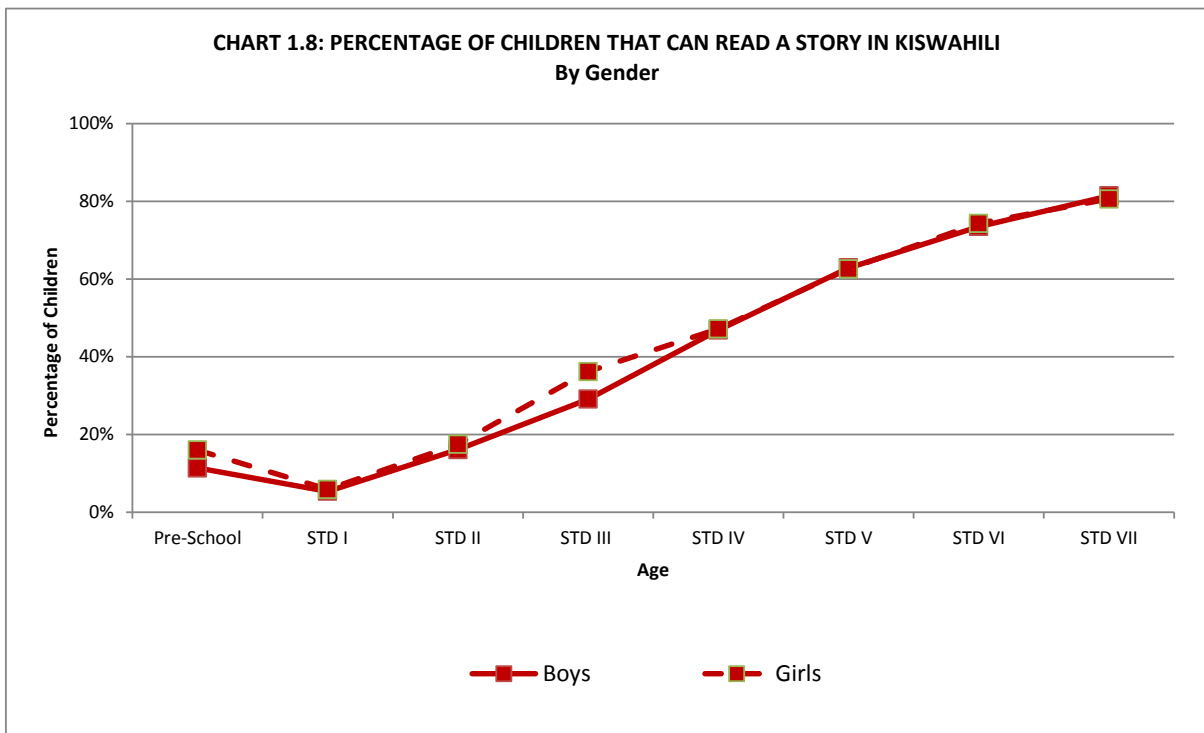


Kiswahili Reading Levels, By Class and Gender

Examining children by class rather than age reveals that 4 out of 5 children in Standard VII are able to read a Kiswahili story, as are 1 out of 3 children in Standard III and 1 out of 6 children in Standard II. Over half the children in Standard III are unable to read a paragraph.



The gender gap in reading a Kiswahili story is less apparent when grouping children by class rather than age, especially in the older classes.



2. English Proficiency

Basic Proficiency

English is by far the hardest subject for children. Even though all children in Standard 3 should be able to read the Standard 2 story level, less than 1 in 10 (7.7%) can. Progress in English is slow; by Standard 5, only 1 in every 4 children can read a story. Nearly half cannot even read short English words. Many children reach Standard 7 without any English skills at all. By the time they complete primary school, half of all children (49.1%) still cannot read a Standard 2 level English story, and far fewer are likely to be able to read at the Standard 7 level. This means that the vast majority of children who enter secondary schooling are unable to read in the English language, the medium of instruction in secondary education.

“Jamani mbona hili zoezi hamtupi na sisi wazazi? Wapo wengi hawajui kusoma sasa watawasaidiaje watoto wao?” (Mzazi kutoka wilaya ya Kilosa)

“Why are parents not given this exercise? There are many parents who cannot read; how can they then help their children?” (A parent from Kilosa district)

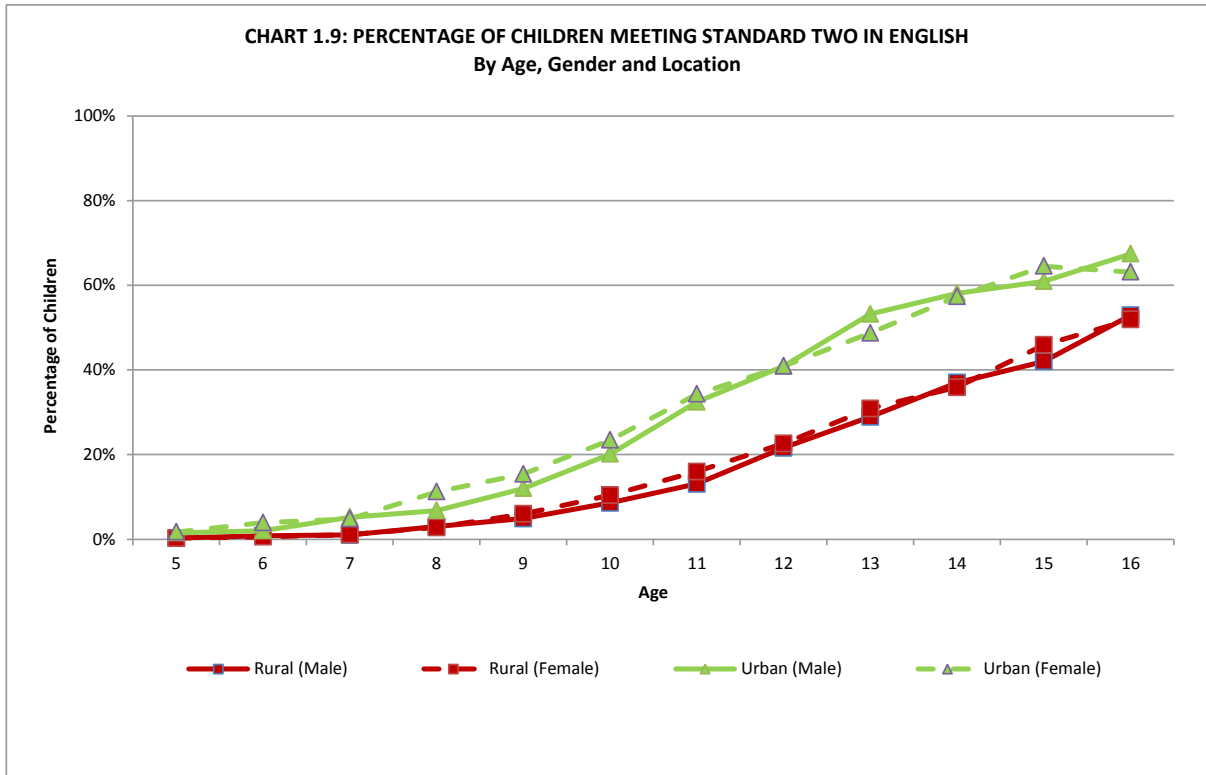
PERCENTAGE OF CHILDREN WHO CAN READ STANDARD 2 LEVEL ENGLISH						
Age	Nothing	Letter	Word	Para	Story	Total
PreSchool	68.3	16.9	2.3	3.4	9.1	100
Std 1	68.0	24.8	3.8	1.3	2.1	100
Std 2	55.5	29.4	7.5	3.8	3.9	100
Std 3	42.0	26.7	14.2	9.4	7.7	100
Std 4	29.0	24.0	16.0	15.5	15.4	100
Std 5	21.4	19.6	13.7	20.9	24.5	100
Std 6	15.1	13.6	13.6	21.9	35.8	100
Std 7	7.9	11.5	10.7	19.1	50.9	100
Total	37.8	21.0	10.4	12.1	18.7	100

Reading an English Story, By Age, Gender and Location



Across age, gender, and location, children fare substantially worse in reading an English story as compared to the Kiswahili story. As with Kiswahili, children from urban areas demonstrate better reading skills in English than their counterparts in rural areas. The difference is highest at age 11, where 33 percent of children in urban areas can read English, as compared to only 15 percent from the same age in rural areas.

Unlike in Kiswahili, there are no significant gender differences in English reading skills. Overall, the number of girls who can read English is just slightly higher compared to that of the boys.



Reading an English Story, By Class, Gender and Location

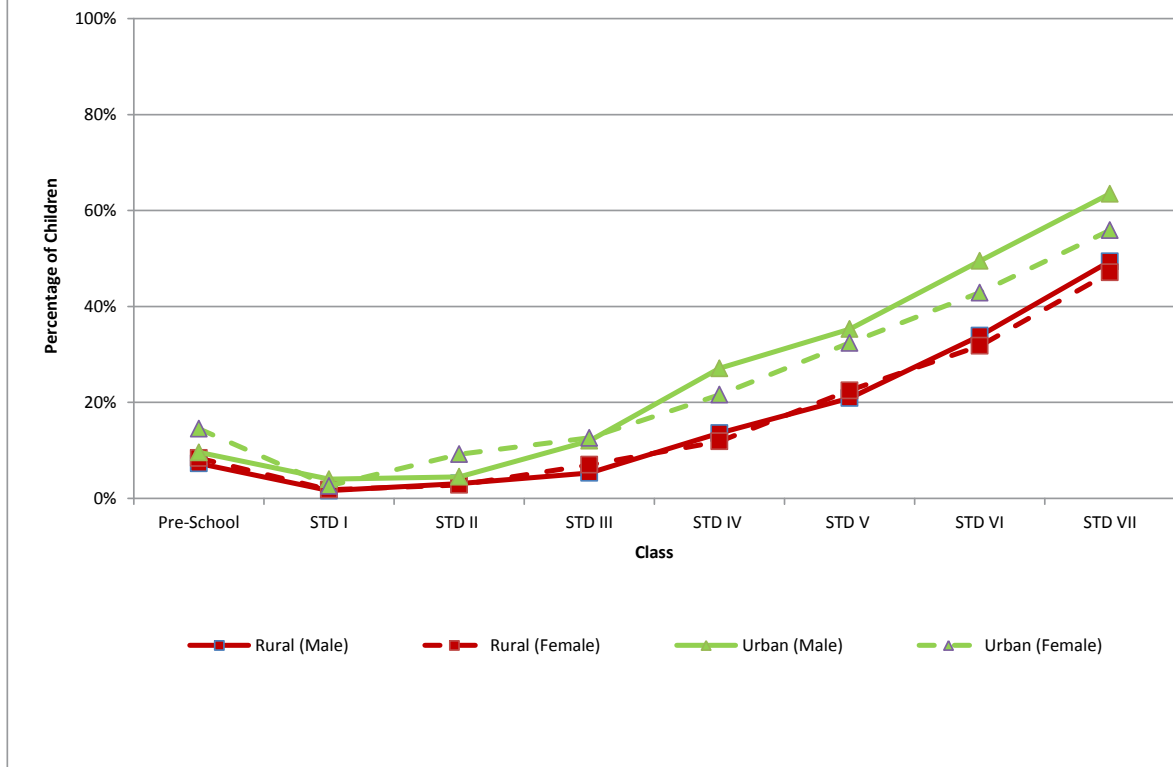
English reading levels are very low for all classes. There are no significant gender differences in reading English. Both females and males from pre-school to Standard 7 are not performing well.

Although reading English is a challenge for children in both urban and rural settings, urban children are generally better readers than rural children. Chart 1.10 illustrates this finding. In rural areas Standard 3 recorded only 6 percent of children who can read a story; this is half of the 12 percent of children recorded in urban areas.



Nationwide, just over 50 percent of all children in Standard 7 can read an English story.

CHART 1.10: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN ENGLISH
By Class, Gender and Location



Reading an English Story: Comprehension

As with the Kiswahili comprehension test, children were given a story with three questions to answer. Overall, 89 percent of all children were able to answer the first question correctly, 85 percent answered the second one correctly and 77 percent were able to answer the third question correctly. Generally, there is a slight difference in English comprehension ability among children in rural and urban areas.



ENGLISH STORY:

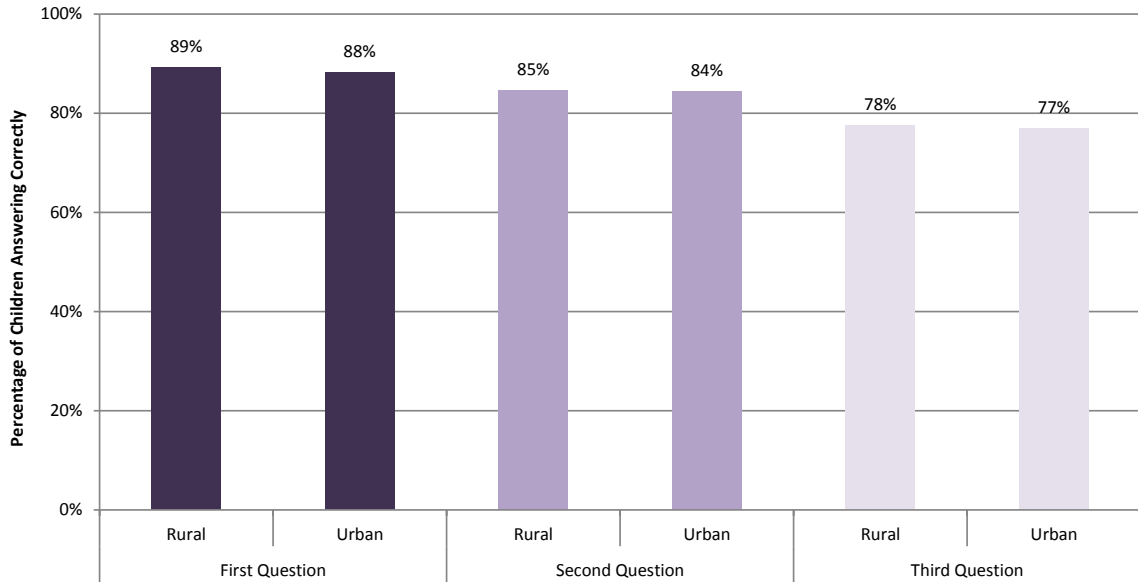
Juma is living in a small village. He gets a letter once a month. The letter is from his son Musa. Musa lives in Dodoma. Juma cannot read the letters. He asks Sara to read the letters for him.

Questions:

- a. *Where does Juma live?*
- b. *What does Sara read?*
- c. *What is the name of Juma's son?*

"I wish my boy could also be given a test because I don't know how he is performing in school, why don't you want to test my child?"
(A Parent in Kilosa district)

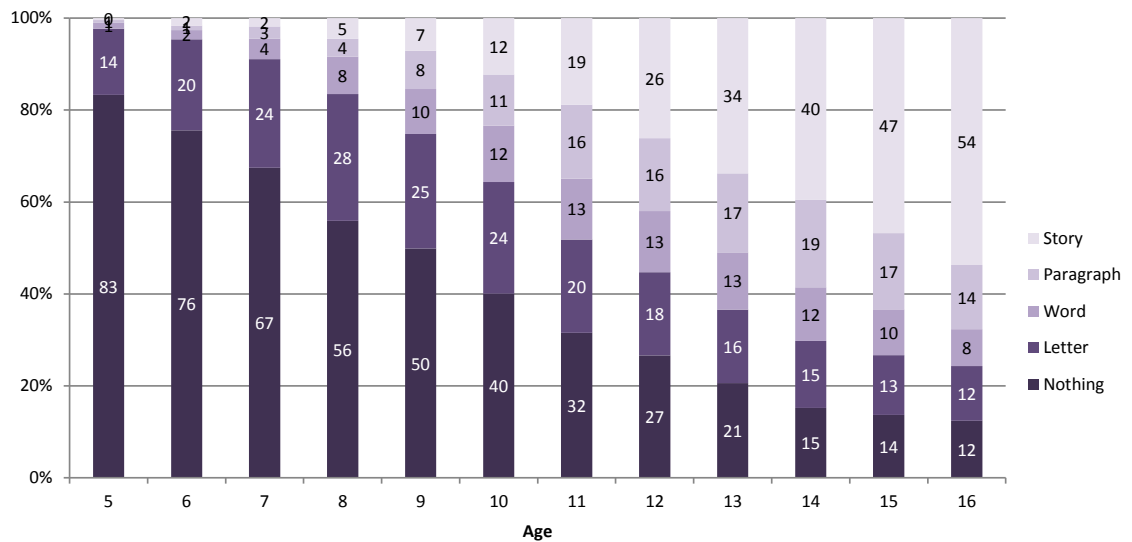
**CHART 1.11: PERCENTAGE OF CHILDREN ANSWERING ENGLISH COMPREHENSION QUESTIONS CORRECTLY
By Location**



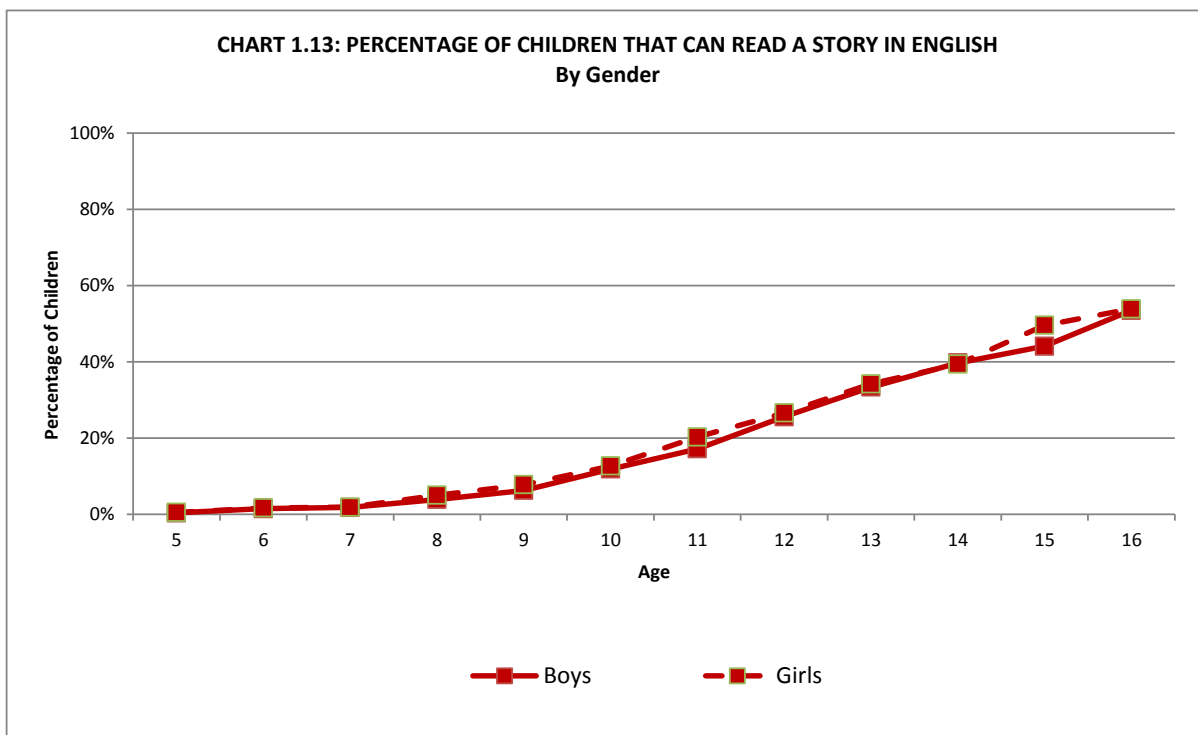
English Reading Levels, By Age and Gender

Nationally, about one out of three 13 year olds and one half of 16 year olds can read an English story. At the same time, one half of all 9 year olds cannot read any English at all.

**CHART 1.12: PERCENTAGE OF CHILDREN AT DIFFERENT ENGLISH READING LEVELS
By Age**

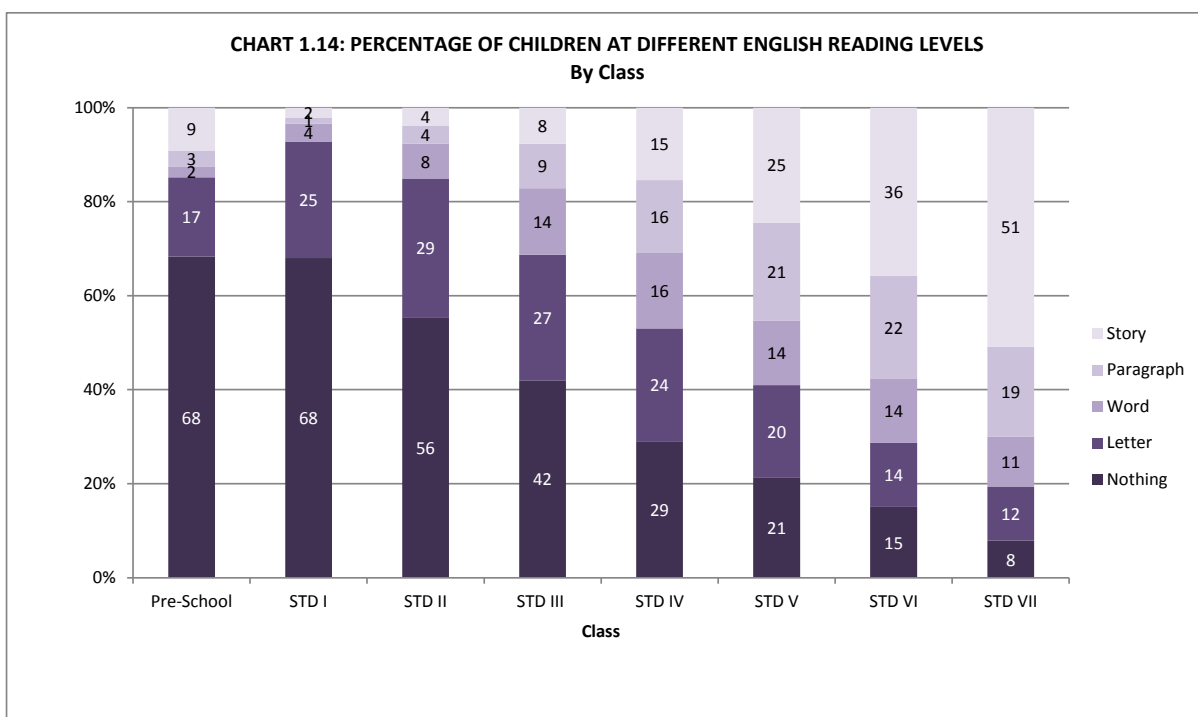


Unlike in Kiswahili, the gender gap in English literacy is very small.

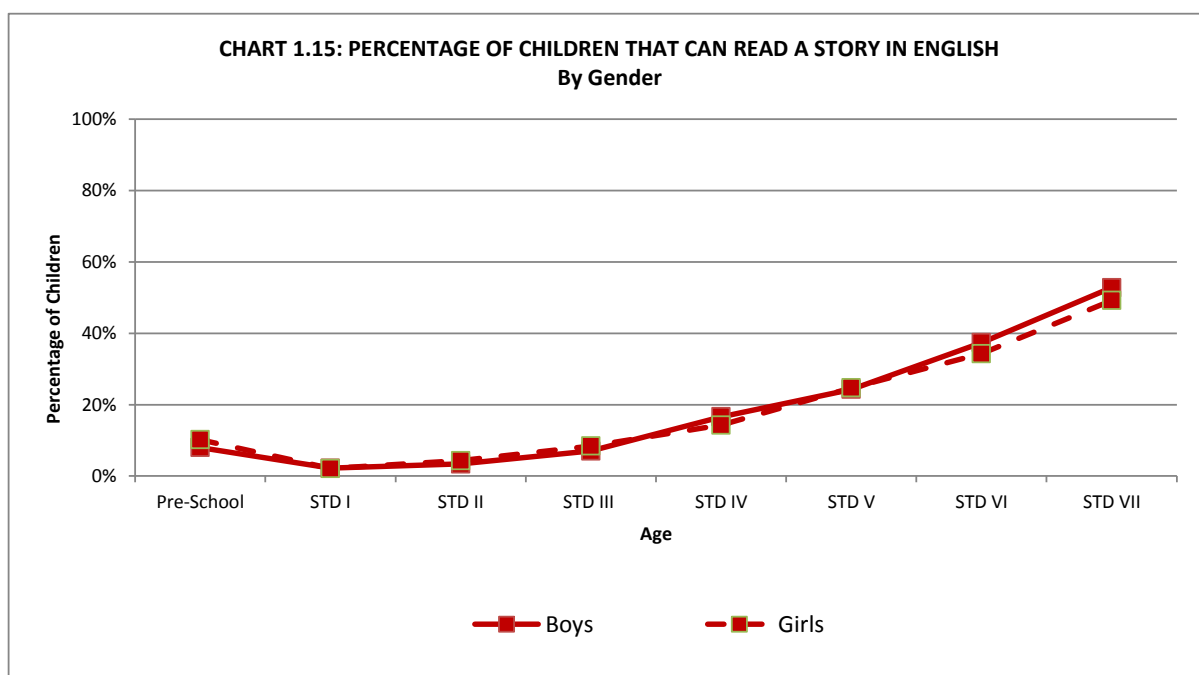


English Reading Levels, By Class and Gender

In Standard 3, less than 1 out of 10 children are able to read an English story. This number rises to 1 out of 4 in Standard 5 and 1 out of 2 in Standard 7. Most children in Standard 2 cannot read any English.



In Standard 7, just over one half of all boys and just under one half of all girls can read an English story.



3. Numeracy

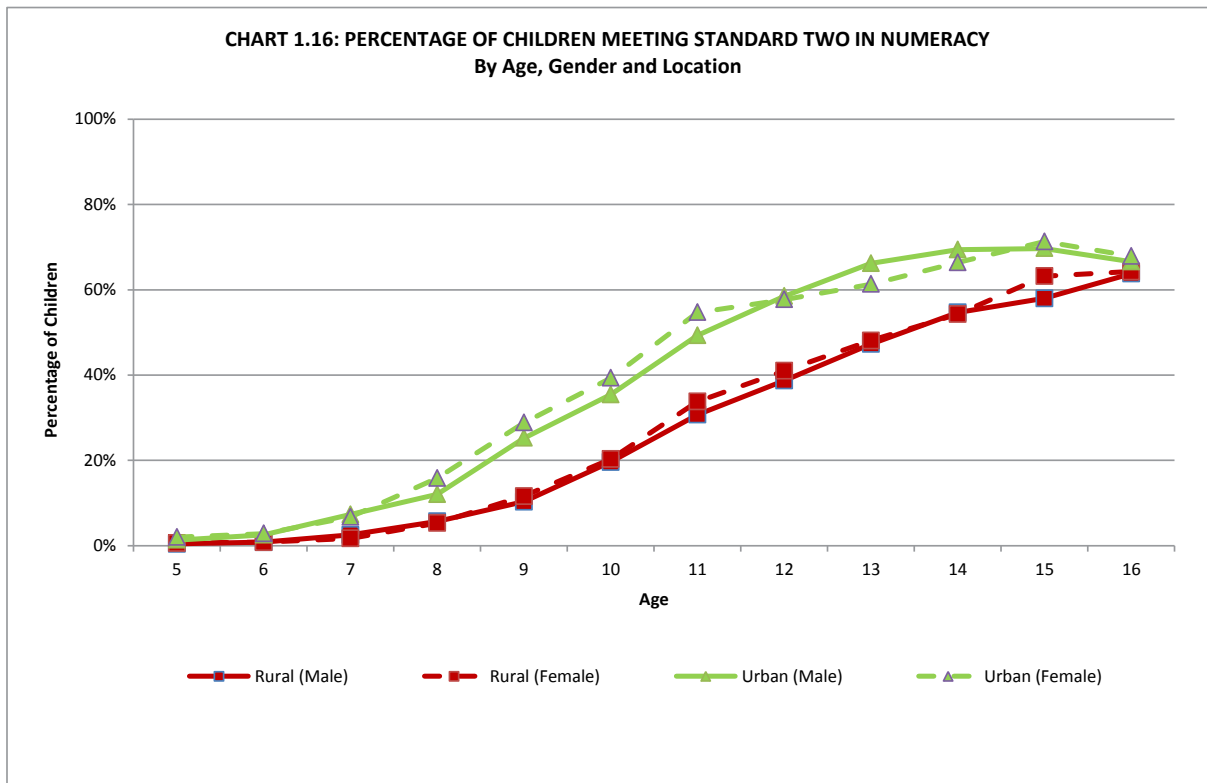
Basic Proficiency

Although multiplication is in the Standard 2 curriculum, hardly any Standard 2 children can multiply. In fact, more than half of them cannot even add. By the time they reach Standard 5, most children can add and subtract, but the majority still cannot multiply. Most children master basic mathematics skills by the end of primary school. However, 3 out of 10 (31.5%) children in Standard 7 still cannot do Standard 2 level multiplication. One in 10 children complete primary school with no mathematics skills at all; they cannot even do basic addition. This likely means that the majority of children entering secondary school do not have an adequate foundation in mathematics that is essential for learning and analysis, particularly in science and commerce.

PERCENTAGE OF CHILDREN WHO CAN DO STANDARD 2 LEVEL MATHEMATICS								
Age	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
PreSchool	40.0	41.9	2.7	1.6	1.7	1	11.0	100
Std 1	26.5	56.9	9.2	1.9	2.3	1	2.4	100
Std 2	15.7	45.8	16.9	4.9	5.5	4	7.6	100
Std 3	9.9	30.3	20.0	8.5	7.3	6	18.5	100
Std 4	7.2	22.0	14.1	10.0	7.0	7	32.8	100
Std 5	5.1	13.9	11.0	10.3	6.7	7	45.8	100
Std 6	3.3	9.2	7.7	10.2	5.9	6	57.8	100
Std 7	2.2	7.9	4.8	7.0	4.7	5	68.5	100
Total	13.1	28.3	11.1	7.0	5.2	5	30.8	100

Multiplication, By Age, Gender and Location

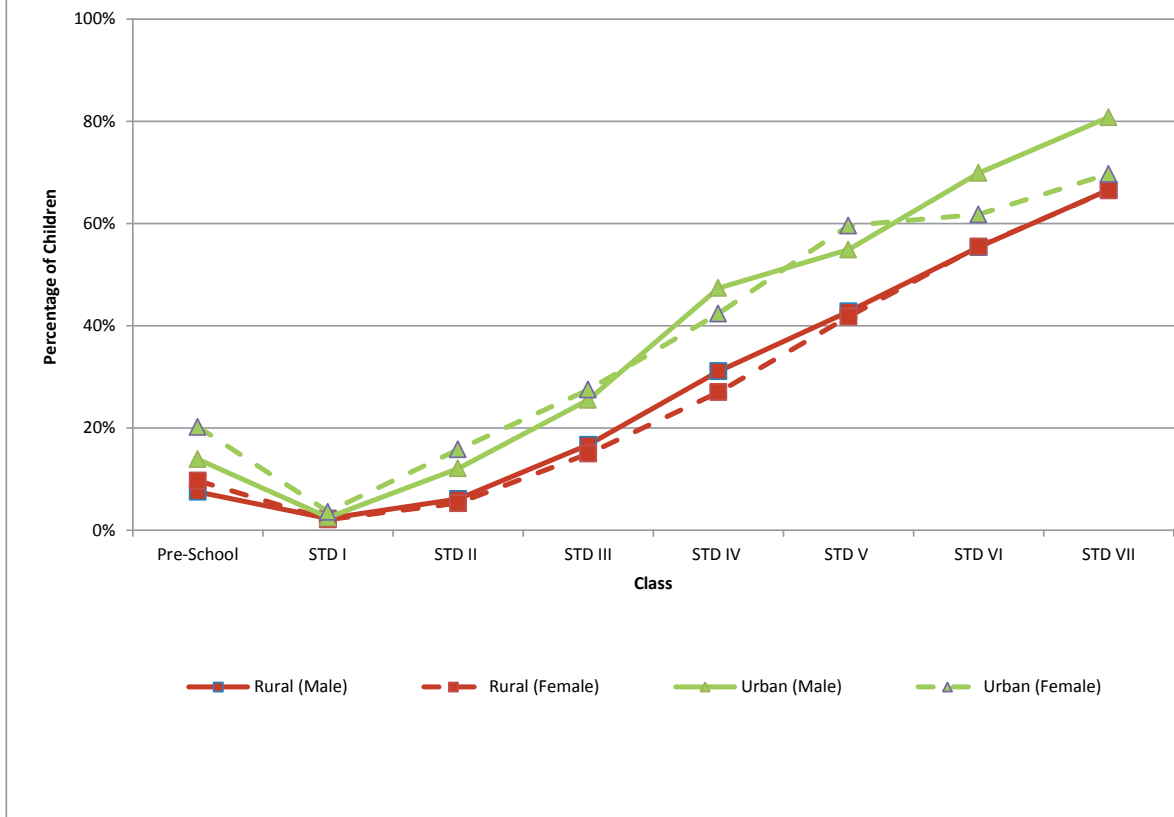
The findings from the survey show that overall 65 percent of 16 years olds are able to solve a Standard 2 multiplication problem. The situation is not encouraging between ages 5 – 11. For example, only 15 percent of children age 9 are able to solve Standard 2 multiplication problems. As with literacy skills, urban children outperform rural children in numeracy, though there is not a large difference between girls and boys.



Multiplication, By Class, Gender and Location

In examining numeracy by location and age (above), the location gap developed in favour of urban children but then all but disappeared among 16 year olds. When looking by class instead of age, however, it is clear that the gap disappears among urban females but not among urban males by Standard 7. Over 80 percent of urban males in Standard 7 are able to perform the numeracy task, as opposed to 70 percent of urban females and 67 percent of male and female rural children.

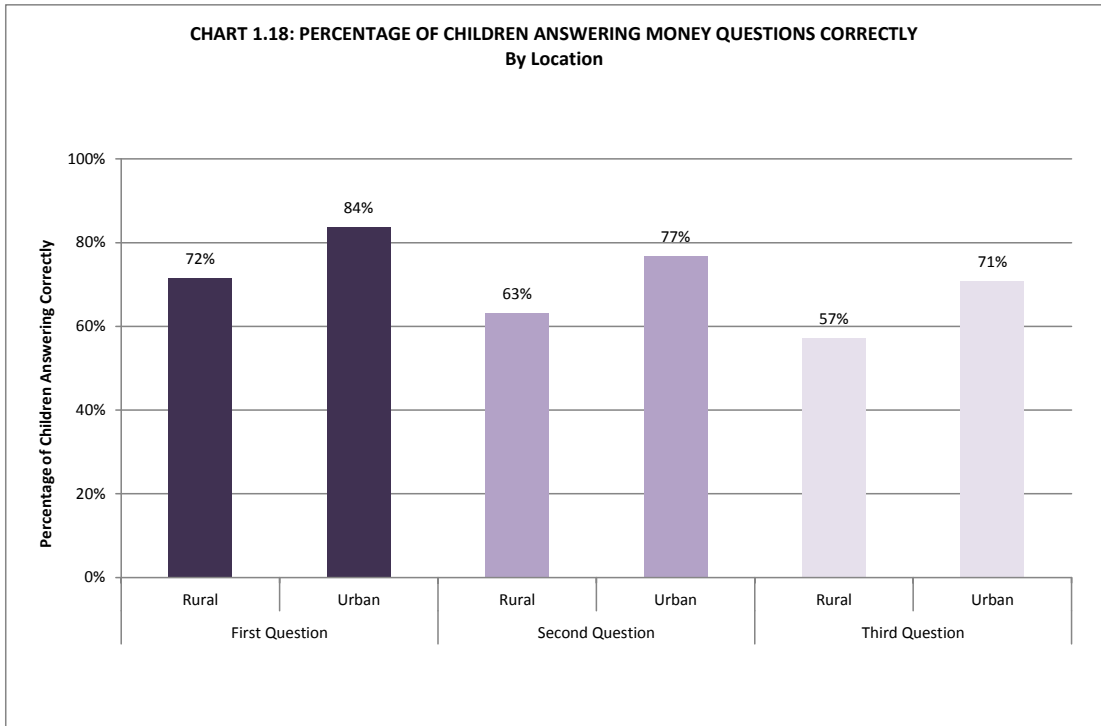
CHART 1.17: PERCENTAGE OF CHILDREN MEETING STANDARD TWO IN NUMERACY
By Class, Gender and Location



Numeracy: Ethno-Mathematics

Children aged 9 to 16 years old were tested in their comprehension level in real life mathematics. Seventy four percent were able to comprehend to the first mathematics question, 66 percent ended at the second question and 60 percent completed the third question. There is a significant gap between urban and rural children in comprehending ethno-mathematics. Those in urban areas did much better in all questions compared to their rural counterparts.

1. 300 shilingi + 200 shilingi = ____ shilingi
2. 800 shilingi – 600 shilingi = ____ shilingi
3. 200 shilingi + 150 shilingi + 150 shilingi = ____ shilingi

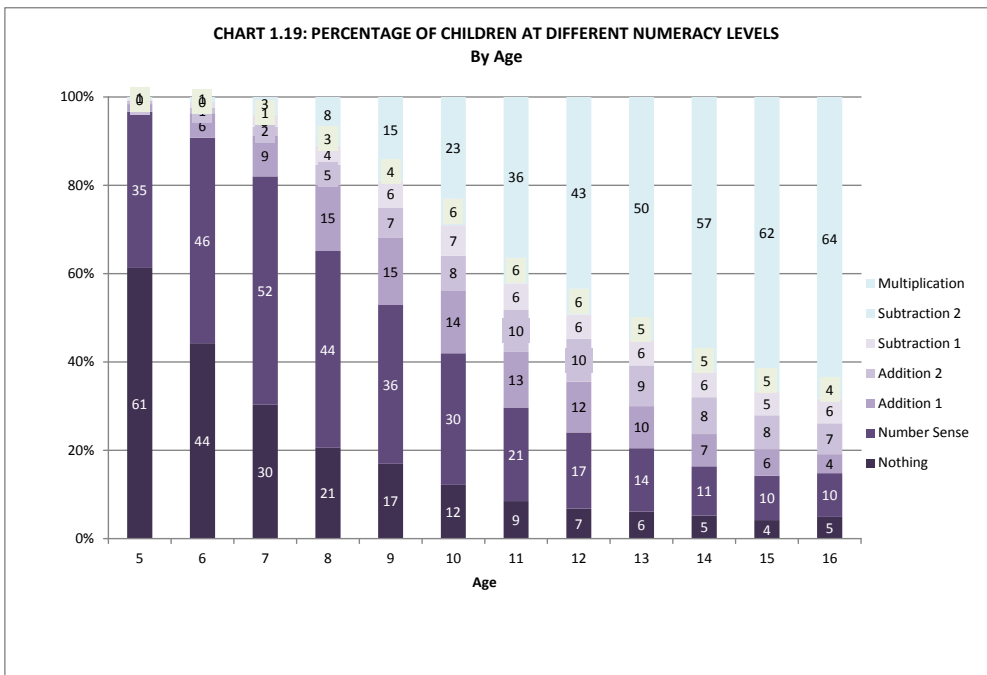


Numeracy Levels, By Age and Gender

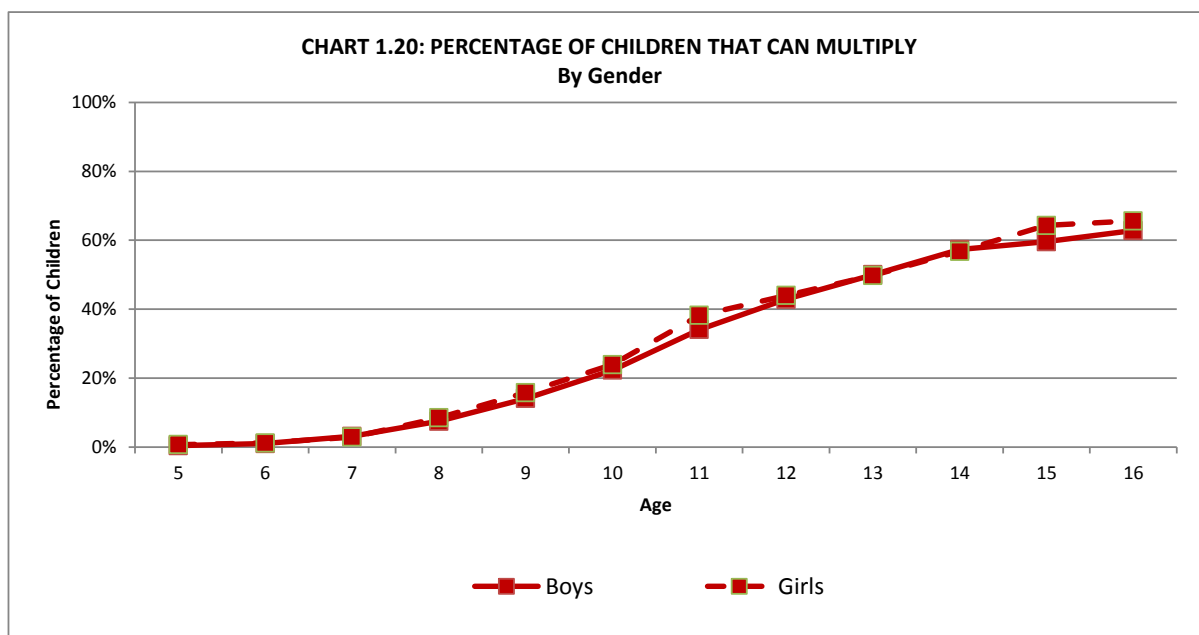
Nationally, half of all nine year olds are able to perform multiplication, as are nearly two thirds of 12 year olds.

"...mbona mnaruka nyumba zingine? Hata mimi ningependa kujua uwezo wa mwanangu? Inakuwaje!" (Mzazi kutoka wilaya ya Kilosa)

"...why are you skipping other houses? I would also like to know my child's ability? How come!" (a parent from Kilosa district)

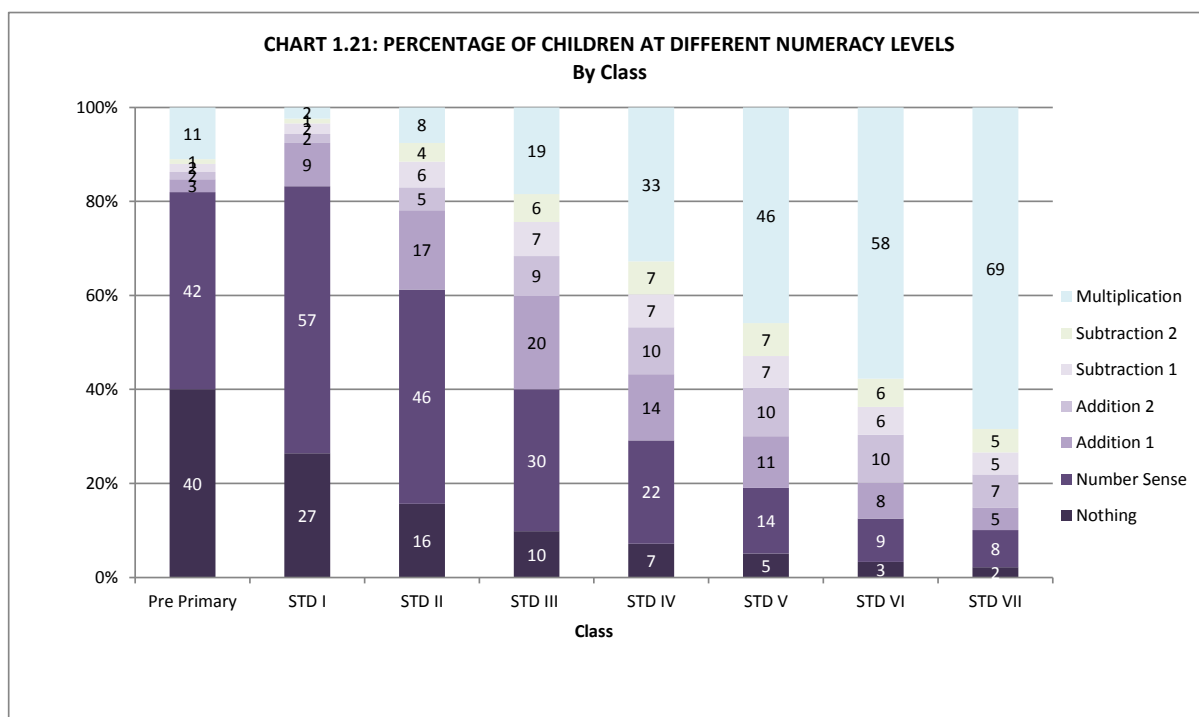


As with English literacy, the gender gap in numeracy is very small. Less than two thirds of 16 year old boys and girls can multiply.

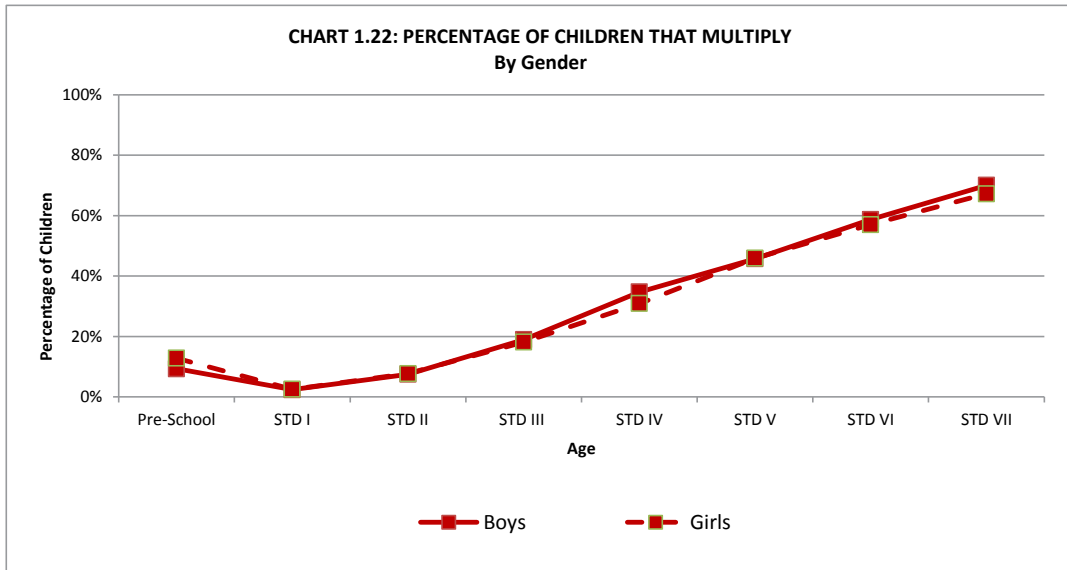


Numeracy Levels, By Class and Gender

From the analysis, two percent of the children in Standard VII do not have any idea of the numbers while another eight percent ended in number identification. Less than 1 out of 5 children in Standard III can multiply.



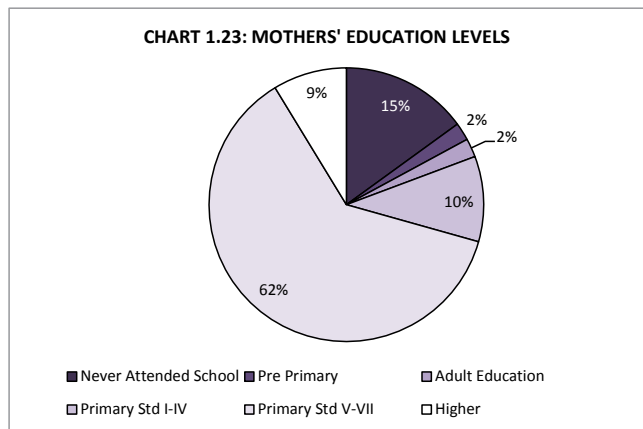
In Standard VII, about 7 out of 10 boys and girls can multiply – the gender difference is quite small as can be seen from the chart below.



4. Mother's Education Level

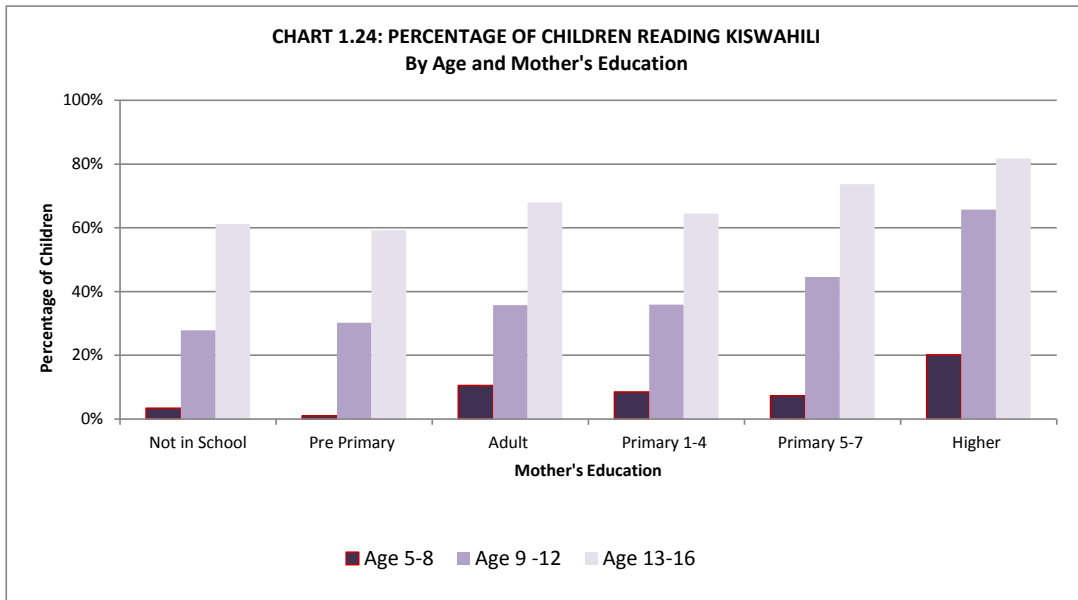
Overview

There is a clear relationship between a mother's level of education and the performance of her children. In this survey, 15 percent of mothers have never been into school. The majority, 71 percent, have at least attained a primary education (Standard 5-7), including 9 percent of all mothers who have attained higher education level. Children, and specifically girls, whose mothers have never been to school, are more likely to be out of school or to perform poorly than those whose mothers have completed at least primary education.

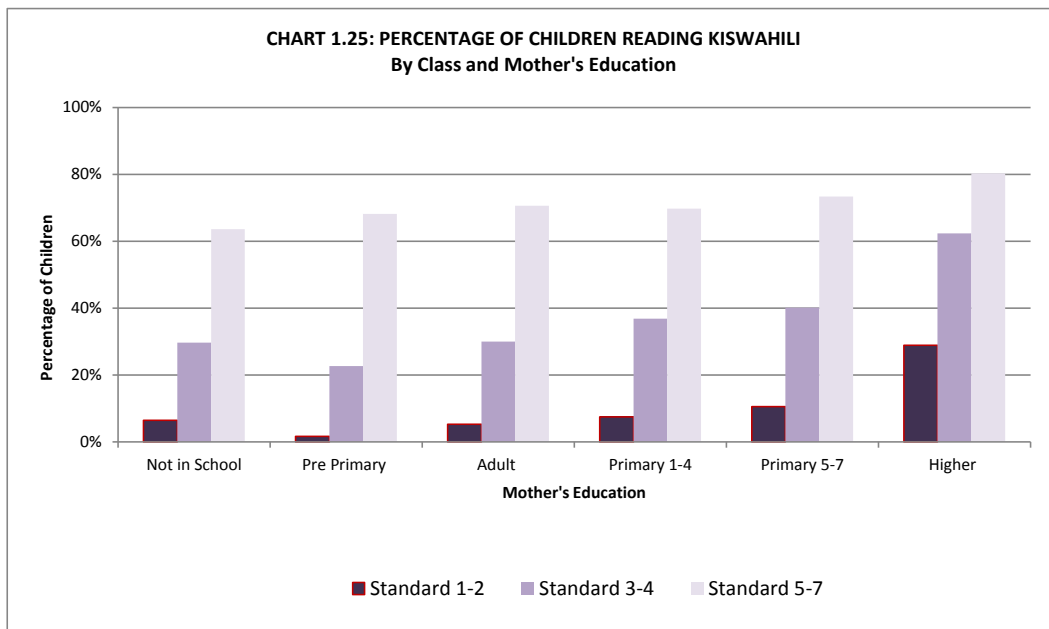


Mother's Education Level and Kiswahili

Children whose mothers received higher education perform better in reading Kiswahili than those whose mothers received less education. Over 80 percent of children aged 13-16 whose mother received higher education can read Kiswahili, compared with 60 percent whose mothers did not attend school. Similarly, over 20 percent of children aged 5-8 whose mother received higher education can read Kiswahili, compared with four percent whose mothers did not attend school.



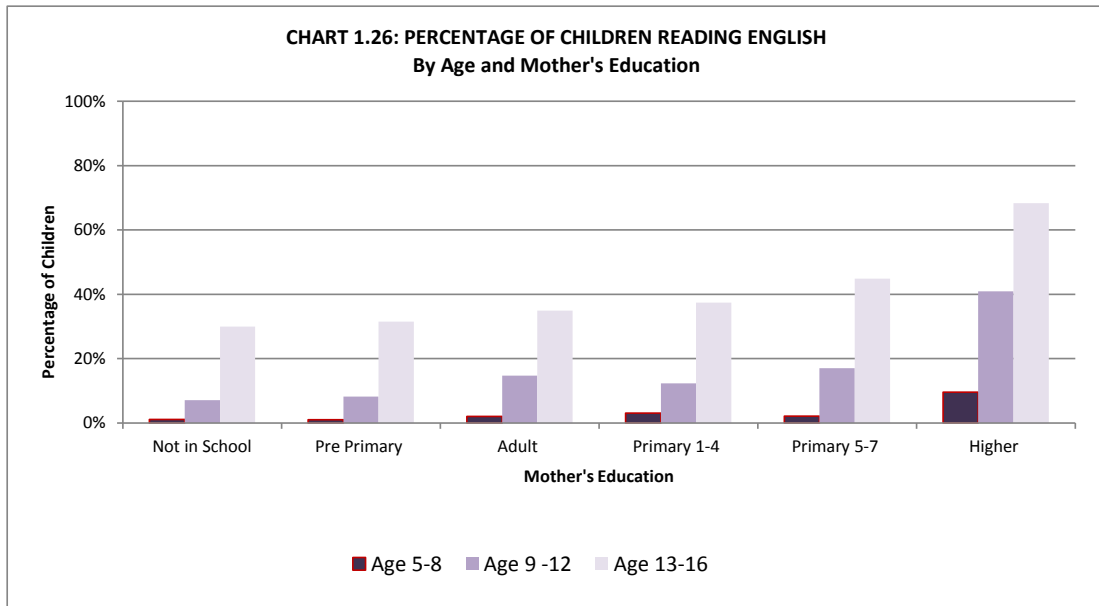
The pattern is similar when examining class instead of age.



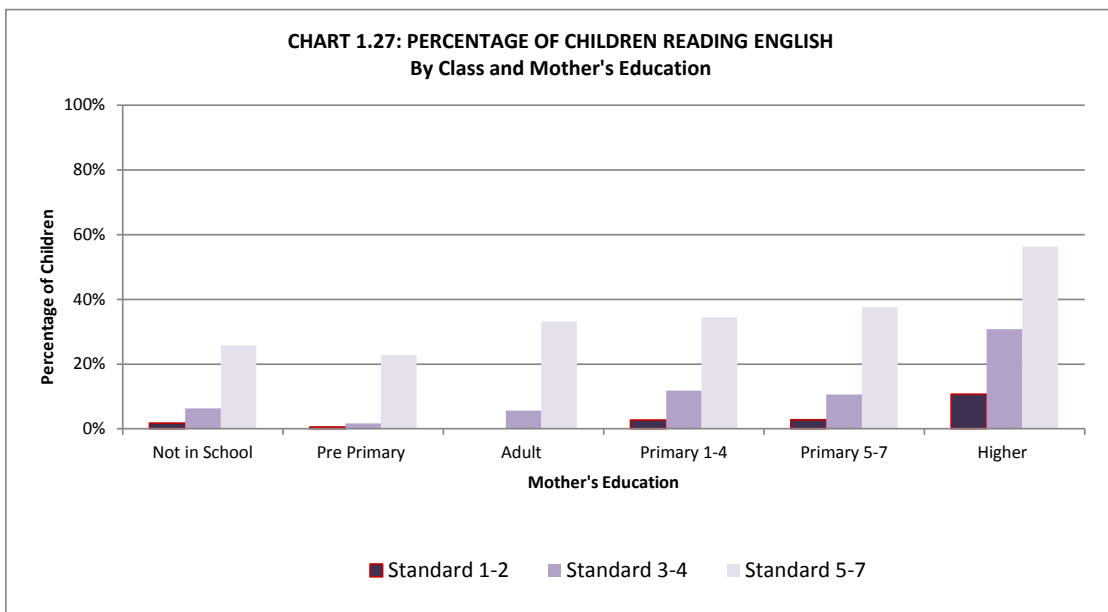
Mother's Education Level and English

Even more so than in Kiswahili, children whose mothers received higher education perform better in reading English than those whose mothers received less education. About 70 percent of children aged 13-16 whose mother received higher education can read English, compared with 30 percent whose mothers did not attend school. Similarly, about 10 percent of children aged 5-8 whose

mother received higher education can read English, compared with one percent whose mothers did not attend school.

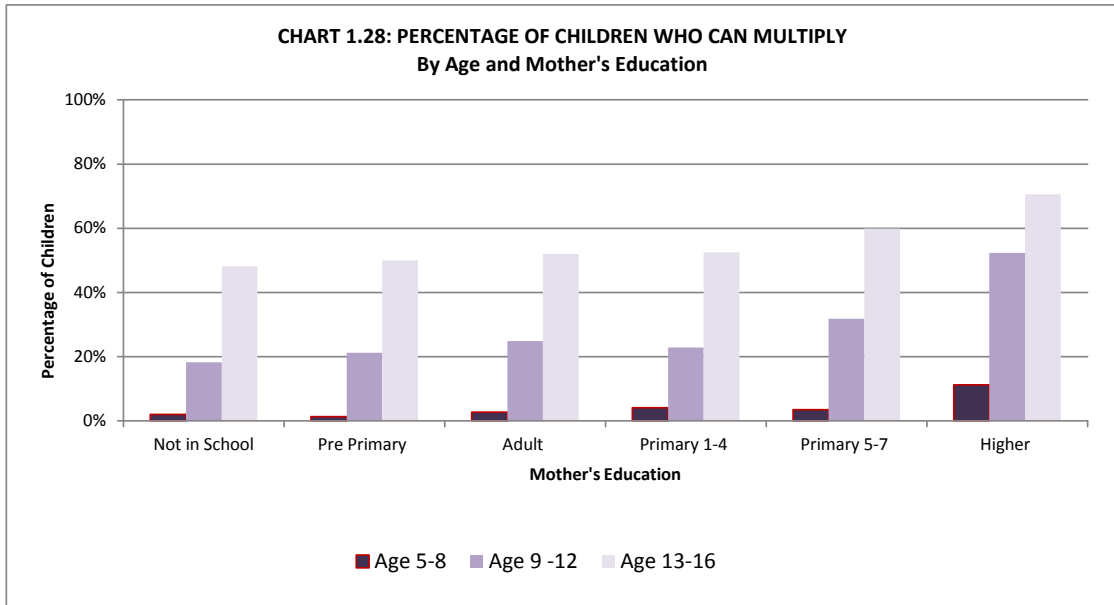


Again, the pattern is similar when examining class instead of age.

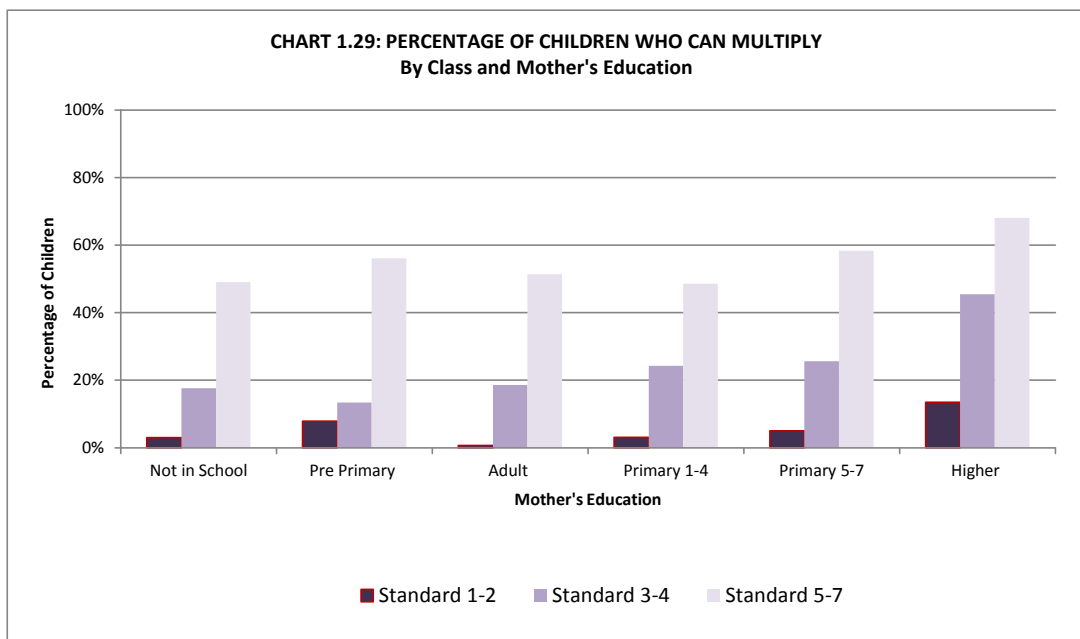


Mother's Education Level and Numeracy

Children whose mothers received higher education perform better in numeracy as well as literacy. Over 70 percent of children aged 13-16 whose mother received higher education can read Kiswahili, compared with 50 percent whose mothers did not attend school. Similarly, over 10 percent of children aged 5-8 whose mother received higher education can read Kiswahili, compared with two percent whose mothers did not attend school.



And again, the pattern is similar when examining class instead of age.



“Jamani hili zoezi ni zuri sana, sikujua mwanangu hajui kusoma. Hivi hawa walimu wana kazi gani huko shuleni? Ngoja kesho nitawaamkia nisikie wataniambia nini? (Mzazi wilaya ya Kilombero)”

‘This exercise is very good; I didn’t know that my child could not read. What do these teachers do at schools? Let me go and see them tomorrow, I wonder what they are going to tell me’ (a parent in Kilombero district)

5. Socio-Economic Status

Resource Ownership by Location

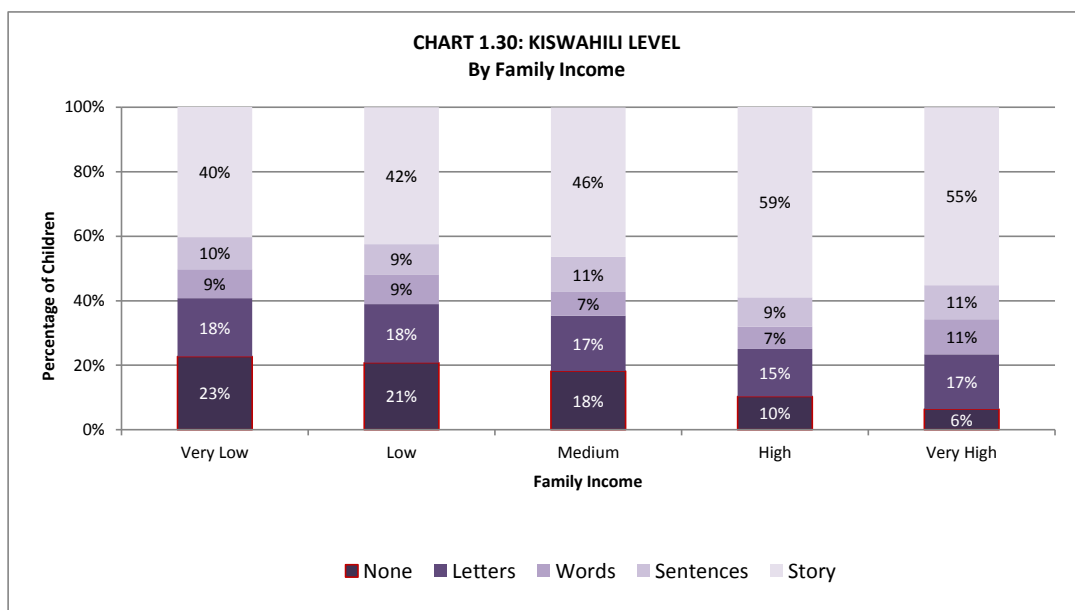
Chart 1.30 shows that 85 percent of all the respondents surveyed owned houses they live in, including 94 percent from rural areas and 65 percent from urban areas. There is a significant difference on the ownership of households between the rural and urban respondents.

Urban residents were also more likely to have piped water, electricity, a mobile phone, a refrigerator and a TV, while rural residents were more likely to own a bicycle.



Socio-Economic Status and Reading Level: Kiswahili

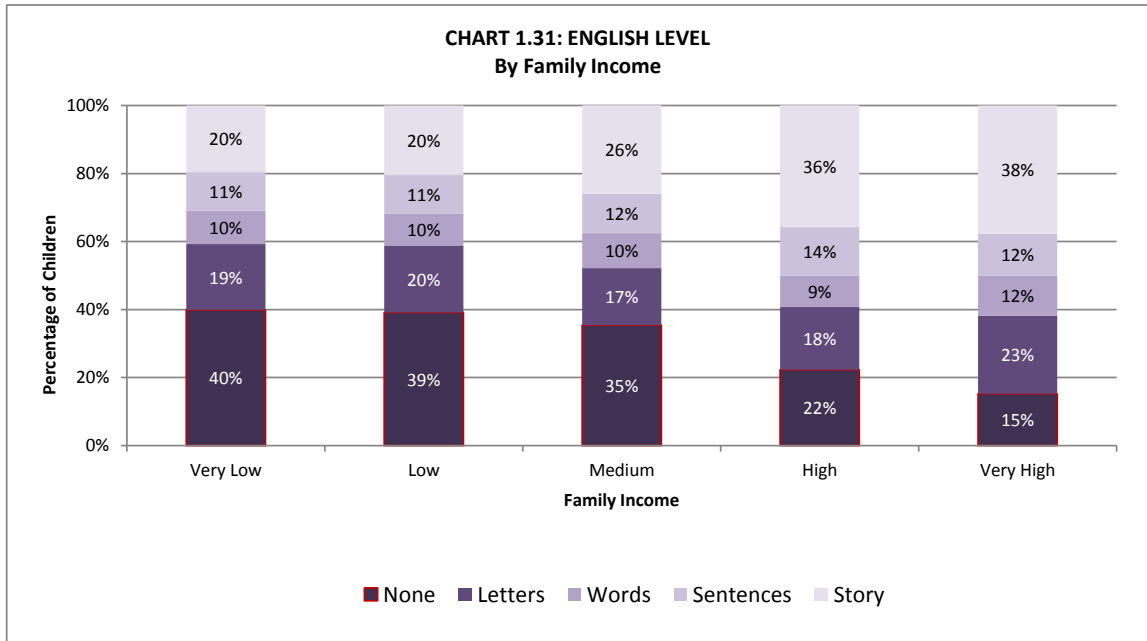
From the findings, household income seems to strongly influence children's reading ability. Forty percent of children from the houses with very low incomes can read Kiswahili at a story level. As the household income increases the numbers of children who can read a story tend to increase. For example, 55 percent of children who are coming from very high income homes managed to read a story without any problem.



Socio-Economic Status and Reading Level: English

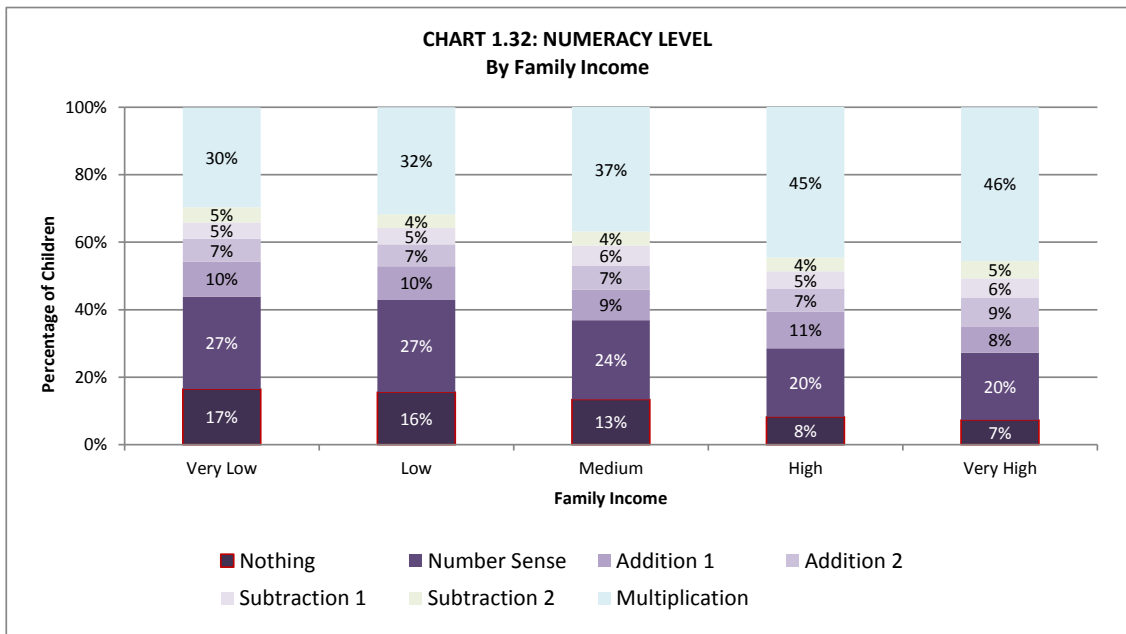
As it was in the case for Kiswahili, the numbers of children who can read An English story tend to increase as household income increases. In the same way, children's story reading ability is directly linked to the household income. Households with high income recorded 38 percent of children who can read an English story, and on the other hand the same households recorded 15 percent of the children who cannot anything. Very low income households recorded 20 percent of children who can read an English story, while very low income household recorded great proportion of children

who cannot read anything. As the income increases, the number of children who can read a story increases as well.



Socio-Economic Status and Reading Level: Numeracy

The findings show that many more children from families with high incomes are able to do multiplication problems compared to those who are coming from very low and low incomes families. Likewise the percentage of children with no numeracy skills tends to decrease with increase of household income.



Assessment Findings by Districts

While Uwezo 2010 is a national study, disaggregating the data reveals significant differences between the 38 districts in which it was conducted.

Tables A and B below show children's literacy and numeracy levels by district. Table A shows the levels by districts for 5 to 16 year old children, and Table B shows these levels for children between the ages of 9 and 16. Data for 9 to 16 are separated because by age 9 children will be in Standard 3 and should be able to read a Standard 2 level story in Kiswahili and English, and to do sums for that level. However, earlier data show that some children enrolled in pre-schools were able to read and do Standard 2 level sums. To capture this, Table A provides data for 5 to 16 year old children.

Table A shows that literacy and numeracy levels of children **aged 5 to 16** vary considerably. Three times as many children in Rombo were able to read a Kiswahili story than in Muleba. In most districts, girls' Kiswahili reading levels were higher than boys'. Overall, as shown earlier, English reading levels were low. Nationally, only 19 percent were able to read the English story. In Rombo, 45 percent of children aged 5 to 16 years were able to read the English story compared to only 8 percent in Liwale. The variation in reading English is much higher than in Kiswahili. Table A shows that while 30 percent were able to do Standard 2 multiplications overall, in Rombo 51 percent were able to do multiplications compared to 18 percent in Kasulu.

Table B shows the literacy and numeracy levels of children **aged 9 to 16**. According to Government standards, all these children would be able to read and do multiplication sums. Overall, however, 54 percent of the children assessed were able to read Kiswahili, 25 percent were able to read English and 41 percent were able to do multiplication. However, literacy and numeracy levels varied across districts. In Moshi urban, 82 percent were able to read a Kiswahili story compared to 29 percent in Muleba district. Variations were higher for English literacy, where 58 percent of the children in Rombo compared to 7 percent in Muleba were able to read English story. Numeracy levels varied by districts as well. In Rombo, 66 percent were able to do multiplications compared to 23 percent in Kasulu.

Table C ranks districts by the **aggregate of their performances in the three areas**. The table shows that children in urban districts generally perform better than children in rural districts. Children in districts such as Rombo, Moshi Urban, and Ilemela have relatively high Kiswahili and English literacy and numeracy levels. On the other hand, children in districts such as Muleba, Kasulu, and Mwanga have poor literacy and numeracy competencies.

Following Tables A-C the data are presented visually in colour coded maps.

Table A: PERCENTAGES OF CHILDREN WHO CAN READ A STORY IN KISWAHILI, READ A STORY IN ENGLISH, AND MULTIPLY. BY GENDER AND DISTRICT (Ages 5 to 16)

DISTRICT	Kiswahili			English			Numeracy		
	M	F	T	M	F	T	M	F	T
Babati	48.4	55.1	51.8	25.4	31.6	28.6	32.3	40.1	36.2
Bukoba rural	39.8	39.1	39.4	15.6	15.8	15.7	26.9	25.0	26.0
Bukoba Urban	46.5	46.5	46.5	22.4	21.6	22.0	40.8	38.6	39.6
Chunya	51.1	53.6	52.2	23.8	26.2	24.9	37.9	36.8	37.4
Geita	49.2	49.0	49.1	21.0	20.0	20.5	37.5	32.6	35.0
Ilemela	52.5	57.5	55.2	33.2	34.5	33.9	42.3	42.0	42.2
Karagwe	33.6	41.5	37.6	10.7	13.4	21.1	19.6	23.7	21.7
Kasulu	26.1	24.6	25.4	10.1	9.6	9.9	18.3	17.4	17.9
Kibaha	40.5	45.8	43.1	16.8	15.1	16.0	32.9	34.1	33.5
Kilombero	37.2	38.9	38.0	13.8	13.7	13.8	32.5	30.5	31.5
Kilosa	43.7	50.9	47.5	13.5	15.9	14.8	30.3	37.7	34.3
Kinondoni	47.0	54.5	51.0	21.9	21.8	21.8	32.4	34.6	33.6
Kisarawe	50.9	56.2	53.5	15.3	13.4	14.4	40.7	39.6	40.2
Kongwa	40.8	42.9	42.0	16.7	18.3	17.5	32.5	28.8	30.5
Liwale	40.7	35.3	38.0	10.4	5.0	7.7	24.4	20.3	22.4
Maswa	39.6	37.1	38.3	17.6	12.6	14.9	29.2	22.8	25.8
Mbeya urban	51.0	47.2	49.2	23.1	16.3	19.8	41.5	40.2	40.8
Mbulu	53.0	58.7	55.8	35.5	37.4	36.4	39.0	39.9	39.4
Misungwi	35.6	39.5	37.7	16.1	16.5	16.3	28.6	31.0	29.8
Morogoro rural	39.3	44.0	41.8	12.2	11.3	11.7	31.9	29.6	30.7
Morogoro urban	33.4	36.2	34.8	10.4	15.0	12.7	32.0	32.4	32.2
Moshi rural	47.1	55.8	51.2	32.1	33.1	32.5	34.8	40.9	37.7
Moshi urban	52.8	56.4	54.6	34.1	38.6	36.4	38.3	38.6	38.5
Mpanda	35.7	35.5	35.6	17.1	11.9	14.4	23.8	23.3	23.5
Mpwapwa	40.0	44.6	42.5	20.5	18.4	19.4	29.1	30.8	30.0
Muleba	19.8	23.3	21.6	4.7	5.8	5.3	26.2	24.9	25.6
Musoma urban	41.8	43.2	42.5	26.6	22.6	24.6	35.1	32.4	33.7
Mwanga	29.4	26.4	27.9	11.7	13.1	12.4	18.3	20.6	19.5
Newala	39.7	43.2	41.6	10.8	12.2	11.5	30.7	31.3	31.0
Ngara	32.9	34.7	33.9	14.6	14.2	14.4	25.5	26.6	26.1
Njombe	46.2	44.2	45.2	25.6	29.3	27.6	36.7	39.1	38.0
Rombo	59.8	68.0	63.8	39.9	49.4	44.5	46.8	54.5	50.6
Shinyanga rural	35.2	31.5	33.2	13.5	7.3	10.1	28.0	20.1	23.7
Singida rural	33.2	35.6	34.4	14.5	15.6	15.1	24.6	22.0	23.3
Singida urban	38.6	42.8	40.8	18.3	18.5	18.4	24.4	26.0	25.2
Sumbawanga	45.4	44.1	44.7	24.2	21.4	22.7	41.3	36.4	38.6
Tanga	31.5	33.3	32.4	16.9	19.1	18.1	23.6	24.7	24.2
Urambo	42.7	46.2	44.4	19.1	17.9	18.5	32.5	30.3	31.4
Total	40.7	43.5	42.2	18.7	18.8	18.7	30.6	30.9	30.8

Table B: PERCENTAGES OF CHILDREN WHO CAN READ STORY IN KISWAHILI, READ A STORY IN ENGLISH, AND MULTIPLY. BY GENDER AND DISTRICT (Ages 9 to 16)

DISTRICT	Kiswahili			English			Numeracy		
	M	F	T	M	F	T	M	F	T
Babati	62.8	70.0	66.5	34.3	41.0	37.8	41.8	51.1	46.7
Bukoba rural	52.1	51.9	52.0	20.3	21.3	20.8	34.7	33.6	34.1
Bukoba urban	64.6	65.3	65.0	30.4	30.8	30.6	58.0	56.0	57.0
Chunya	63.9	67.8	65.7	31.4	34.0	32.6	50.0	47.8	48.9
Geita	58.8	62.4	60.6	25.2	25.6	25.4	46.1	41.9	44.0
Ilemela	67.8	78.2	73.1	44.2	46.5	45.4	56.5	57.8	57.1
Karagwe	41.8	50.6	46.2	13.4	16.7	15.1	24.5	28.6	26.6
Kasulu	32.7	30.6	31.7	12.6	11.8	12.2	23.1	21.9	22.5
Kibaha	54.3	59.4	56.9	22.1	20.1	21.1	45.3	45.6	45.5
Kilombero	49.4	52.6	51.0	18.5	19.4	18.9	44.1	41.7	42.9
Kilosa	54.1	62.3	58.5	17.8	19.4	18.7	37.3	46.7	42.4
Kinondoni	63.2	71.4	67.5	31.3	30.4	30.8	47.5	48.3	47.9
Kisarawe	68.4	75.5	71.8	21.4	18.9	20.2	56.1	54.8	55.5
Kongwa	51.3	52.8	52.1	21.2	23.6	22.5	41.2	36.7	38.7
Liwale	50.6	45.2	48.0	12.9	6.7	9.9	30.2	25.7	28.0
Maswa	46.8	46.6	46.7	21.2	15.2	18.1	34.1	29.2	31.6
Mbeya urban	67.4	63.4	65.5	32.2	24.1	28.5	56.0	56.8	56.4
Mbulu	64.3	71.9	68.0	44.1	47.8	45.9	48.8	50.7	49.7
Misungwi	43.5	50.4	47.0	20.0	21.6	20.8	35.2	40.2	37.7
Morogoro rural	48.6	52.0	50.4	14.4	14.1	14.2	38.5	36.2	37.3
Morogoro urban	49.6	54.4	52.0	15.9	22.7	19.2	48.4	49.0	48.7
Moshi rural	62.1	72.3	66.9	44.5	46.2	45.3	47.6	57.6	52.3
Moshi urban	80.3	84.5	82.3	54.3	57.4	55.8	63.0	59.9	61.4
Mpanda	42.4	45.3	43.8	20.4	15.3	17.9	28.8	29.8	29.3
Mpwapwa	54.1	57.4	55.9	28.9	24.1	26.3	40.6	41.3	41.0
Muleba	26.6	30.7	28.7	6.3	7.6	7.0	34.8	33.3	34.1
Musoma urban	63.0	59.8	61.3	41.4	32.5	36.6	54.4	45.2	49.5
Mwanga	39.2	35.2	37.2	15.7	18.1	16.9	24.6	29.1	26.8
Newala	50.8	61.3	56.2	14.3	17.6	16.0	39.9	45.4	42.7
Ngara	43.0	45.0	44.0	19.3	18.9	19.1	33.7	35.1	34.4
Njombe	60.7	60.0	60.3	34.4	39.8	37.2	49.3	53.7	51.6
Rombo	77.2	82.9	80.0	52.8	63.0	57.8	62.1	70.2	66.0
Shinyanga rural	43.1	38.9	40.8	17.4	9.1	12.9	35.4	25.6	30.1
Singida rural	54.2	61.6	58.1	25.7	26.4	26.1	35.6	38.9	37.3
Singida urban	44.4	50.4	47.4	19.4	22.4	20.9	33.0	31.8	32.4
Sumbawanga	57.2	54.9	56.0	30.8	28.1	29.4	53.1	46.9	49.8
Tanga	43.5	43.6	43.5	22.9	24.8	23.9	32.9	32.5	32.7
Urambo	55.3	60.6	57.9	25.1	23.6	24.4	41.8	39.9	40.9
Total	52.2	56.0	54.1	24.5	24.8	24.6	40.2	40.9	40.5

**Table C: DISTRICT RANKING AGGREGATED
FOR ALL ASSESSMENTS**

District	Kiswahili	English	Numeracy	3 test total	Rank
Rombo	63.8	44.5	50.6	158.9	1
Mbulu	55.8	36.4	39.4	131.6	2
Ilemela	55.2	33.9	42.2	131.3	3
Moshi urban	54.6	36.4	38.5	129.5	4
Moshi rural	51.2	32.5	37.7	121.4	5
Babati	51.8	28.6	36.2	116.6	6
Chunya	52.2	24.9	37.4	114.5	7
Njombe	45.2	27.6	38	110.8	8
Mbeya urban	49.2	19.8	40.8	109.8	9
Kisarawe	53.5	14.4	40.2	108.1	10
Bukoba Urban	46.5	22	39.6	108.1	11
Kinondoni	51	21.8	33.6	106.4	12
Sumbawanga	44.7	22.7	38.6	106	13
Geita	49.1	20.5	35	104.6	14
Musoma urban	42.5	24.6	33.7	100.8	15
Kilosa	47.5	14.8	34.3	96.6	16
Urambo	44.4	18.5	31.4	94.3	17
Kibaha	43.1	16	33.5	92.6	18
Mpwapwa	42.5	19.4	30	91.9	19
Kongwa	42	17.5	30.5	90	20
Singida urban	40.8	18.4	25.2	84.4	21
Morogoro rural	41.8	11.7	30.7	84.2	22
Newala	41.6	11.5	31	84.1	23
Misungwi	37.7	16.3	29.8	83.8	24
Kilombero	38	13.8	31.5	83.3	25
Bukoba rural	39.4	15.7	26	81.1	26
Karagwe	37.6	21.1	21.7	80.4	27
Morogoro urban	34.8	12.7	32.2	79.7	28
Maswa	38.3	14.9	25.8	79	29
Tanga	32.4	18.1	24.2	74.7	30
Ngara	33.9	14.4	26.1	74.4	31
Mpanda	35.6	14.4	23.5	73.5	32
Singida rural	34.4	15.1	23.3	72.8	33
Liwale	38	7.7	22.4	68.1	34
Shinyanga rural	33.2	10.1	23.7	67	35
Mwanga	27.9	12.4	19.5	59.8	36
Kasulu	25.4	9.9	17.9	53.2	37
Muleba	21.6	5.3	25.6	52.5	38

Conclusion

Throughout Tanzania, children want to be educated and parents make great sacrifices to ensure their children go to school. Similarly, children and parents have great hopes about what schooling will give to children in terms of learning, skills, and expanded life-choices. The reality is that while in most parts of Tanzania there is a primary school for children to attend and teachers employed to teach them, schools are failing to deliver quality education. Most children lack even the most basic literacy and numeracy skills when they complete their primary education. The majority of children do not gain even Standard 2 level skills until they are almost finished with primary school. Many never learn these skills at all.

The stark reality is that, despite the enormous advances in education made possible by investing trillions of shillings each year, the vast majority of children in Tanzania are not learning.

If children who attend school are barely learning, every Tanzanian must ask: What is happening – or not happening – all day in school? What are parents doing – or failing to do – at home? Are communities paying attention when, week after week, month after month, year after year, children make little or no progress?

What can be done about the situation?

First, we need to pause and make the effort to fully absorb these results and analyze what they mean. Rushing to explain them away or come up with quick solutions may not help, and it may lead to improper diagnosis and ineffective responses. It may also require, politically unsound as it may seem, to temper the enthusiasm with current achievements. Celebrating new buildings and higher enrolments is dangerous folly if its effect is to mask the reality that too many children in Tanzania complete primary schooling without the ability to read and count.

Second, while major challenges are inevitable whenever an education system is expanded rapidly, one can still ask the question: are the strategic policy and political objectives focused on the right things? At present, in Tanzania and elsewhere, much of the focus is on the provision of educational *inputs*, such as classrooms, laboratories, books and teachers, rather than *learning outcomes*, such as literacy, numeracy, writing, critical thinking and creativity. Since the evidence shows that the inputs are not being translated into learning outcomes, there is a need to realign focus system-wide on achieving learning outcomes within ministries responsible for education, training institutions, curriculum development, examinations, teacher and school assessment, measures of progress, and political commitments.

Third, there is a need to focus on what happens at the school, rather than in national aggregates alone. Studies across the region suggest that the teaching and learning process may be severely compromised. Two of the most common problems appear to be that insufficient funds are reaching schools (ie increasing education budgets are being used up for other things than school level improvements) and teachers are both poorly motivated and not teaching (ie ‘time on task’ is very low). It may make sense to pay greater attention to these two issues and how to improve them, as well as to rigorously study the relationship between resources at the school level and teacher time on task on one hand and learning outcomes on the other.

Fourth, greater transparency may spur reflection and action among both policy maker and citizens alike. Uwezo is committed to sharing its findings widely to contribute to this purpose. But the Government could take things much further by enabling data from every school to be available

online and through mass media, so that every local government official, teacher, parent and student can compare how she or he is doing in relation to others. Technological innovations and the spread of mobile phone in particular make possible information sharing that was unimaginable a few years ago.

Fifth, instead of doing more of what has been done harder or faster it may be time to do something different. Our analysis and studies worldwide suggest that a core part of the puzzle may be to *realign incentives* – so that key actors system-wide are recognized for promoting learning. One idea worth trying and already endorsed by President Kikwete is called *Cash on Delivery* (www.cgdev.org/section/initiatives/_active/codaidd). Its basic premise is that additional funding in education should be predicated on and paid on the achievement of an (independently audited) agreed learning outcome, such as literacy and numeracy (eg for every child who completes primary education with agreed ability \$200 would be provided). This idea could be rolled further down, whereby the \$200 could be shared among local officials, teachers and possibly even parents. The point is to nudge key actors to focus on and reward achievement of learning. There is no guarantee that this idea would work. But in the face of the gravity of the crisis in Tanzania, where the usual methods have failed to bring meaningful progress, experimenting with a carefully designed and bold alternative as Cash on Delivery, and rigorously studying its impact, makes sense.

This report is released on the eve of national elections in Tanzania. Whatever its outcome, the next five years present an opportunity to address the education crisis in an honest, bold and strategically effective manner. A skilled, competent and confident people are essential to enable the nation to thrive, particularly in the context of regional integration and increasing globalization. Whoever emerges as the next President of Tanzania, turning education from more of the same inputs to ensuring that every child can read and count and learn may be the greatest test of his leadership.

Appendix A: Data Tables

TABLE 1.1: NATIONAL READING AND NUMERACY SKILLS

Age	% KISWAHILI			% ENGLISH			% MATHEMATICS		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5	1	1.3	1.2	0.7	0.8	0.8	0.7	1.1	0.9
6	2.8	3.6	3.3	1.2	1.7	1.5	1.3	1.5	1.4
7	6.3	7.8	7.1	2.3	2.2	2.2	3.9	3.1	3.5
8	14.8	17.8	16.4	4.1	5.4	4.8	7.5	8.5	8
9	21.8	29.2	25.6	6.7	8.5	7.7	14.2	16.2	15.2
10	34.5	39.2	36.9	11.7	13.9	12.8	23.8	25.5	24.7
11	48.3	53.5	51	18.4	20.8	19.7	35.8	39.4	37.7
12	56.1	59.5	57.8	26.4	27.1	26.8	43.7	45.1	44.4
13	65.4	66.3	65.9	34.7	35.2	35	51.9	51.2	51.5
14	71.2	73.8	72.5	42.3	40.6	41.4	58.4	57	57.7
15	72.6	76.9	74.7	46.4	50.6	48.4	60.8	65.2	62.9
16	74.9	77.8	76.4	56.2	55.1	55.6	64.4	65.3	64.9
Total	41	43.9	42.5	21.3	21.9	21.6	31.7	32.5	32.1

TABLE 1.2: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN KISWAHILI BY AGE, GENDER AND LOCATION

Age	National			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5	1.0	1.3	1.2	0.8	1.1	1.0	1.5	1.7	1.6
6	2.8	3.6	3.3	1.9	2.0	1.9	4.7	6.8	5.8
7	6.3	7.8	7.1	4.0	5.3	4.6	12.0	13.9	13.0
8	14.8	17.8	16.4	11.0	12.5	11.8	23.8	29.8	27.1
9	21.8	29.2	25.6	17.3	23.5	20.5	34.3	45.1	39.9
10	34.5	39.2	36.9	28.9	33.4	31.2	49.8	54.9	52.4
11	48.3	53.5	51.0	43.4	48.2	45.9	61.1	68.2	64.8
12	56.1	59.5	57.8	51.5	56.1	53.8	69.6	70.1	69.8
13	65.4	66.3	65.9	61.3	63.8	62.6	78.3	74.3	76.3
14	71.2	73.8	72.5	69.3	71.6	70.5	77.0	81.4	79.2
15	72.6	76.9	74.7	70.7	75.1	72.8	78.8	82.4	80.6
16	74.9	77.8	76.4	73.9	77.3	75.5	78.6	79.1	78.9
Total	41.0	43.9	42.5	38.7	41.5	40.1	47.1	50.3	48.7

TABLE 1.3: PERCENTAGE OF CHILDREN WHO CAN READ A KISWAHILI STORY BY CLASS, GENDER, AND LOCATION

Class	National			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Pre-School	11.4	16.0	13.6	10.4	13.1	11.7	13.9	22.6	18.3
STD I	5.4	5.9	5.6	4.5	3.6	4.0	8.0	11.8	10.0
STD II	16.1	17.5	16.8	12.1	12.2	12.2	29.2	34.9	32.1
STD III	29.1	36.2	32.7	25.7	31.5	28.7	39.4	50.2	45.0
STD IV	46.9	47.2	47.1	43.9	43.3	43.6	57.7	58.7	58.2
STD V	62.9	62.6	62.8	59.9	59.2	59.6	72.7	74.2	73.5
STD VI	73.5	74.3	73.9	70.6	72.2	71.4	83.2	81.6	82.4
STD VII	81.4	80.6	81.0	78.9	79.2	79.0	89.2	85.3	87.2
Total	40.7	43.5	42.2	38.4	40.9	39.7	47.9	51.5	49.8

Table 1.4a First Question – Kiswahili

Location	Yes	No	Total
Rural	94.4	5.6	100.0
Urban	93.6	6.4	100.0
Total	94.1	5.9	100.0

Table 1.4b Second Question - Kiswahili

Location	Yes	No	Total
Rural	95.0	5.0	100.0
Urban	95.5	4.5	100.0
Total	95.2	4.8	100.0

Table 1.4b Third question – Kiswahili

Location	Yes	No	Total
Rural	72.3	27.7	100.0
Urban	67.7	32.3	100.0
Total	71.0	29.0	100.0

TABLE 1.5: PERCENTAGE OF CHILDREN READING KISWAHILI AT DIFFERENT LEVELS BY AGE

Age	Nothing	Letter	Word	Para	Story	Total
5	74.4	21.4	2.3	1.1	0.9	100
6	57.4	31.0	5.4	2.7	3.6	100
7	43.5	33.2	10.7	5.2	7.4	100
8	30.1	30.9	13.9	9.0	16.2	100
9	24.1	24.5	15.2	10.5	25.8	100
10	17.4	19.6	13.5	14.0	35.7	100
11	11.3	14.1	10.6	13.3	50.7	100
12	9.1	12.4	9.1	12.7	56.7	100
13	7.4	9.3	7.3	11.4	64.7	100
14	6.0	7.9	4.6	9.9	71.7	100
15	5.0	7.4	4.6	9.6	73.4	100
16	4.5	8.0	4.1	8.0	75.4	100
Total	21.6	18.0	9.0	9.7	41.8	100

TABLE 1.6a: PERCENTAGE OF BOYS READING KISWAHILI AT DIFFERENT READING LEVELS BY AGE

Age	Nothing	Letter	Word	Para	Story	Total
5	75.8	20.3	1.7	1.5	0.7	100
6	62.1	28.5	4.0	2.2	3.3	100
7	45.0	32.6	10.4	5.2	6.8	100
8	31.7	30.7	14.4	9.0	14.2	100
9	26.2	27.2	15.7	9.5	21.4	100
10	18.6	20.4	14.5	13.7	32.8	100
11	11.8	15.7	10.9	13.9	47.7	100
12	10.0	12.9	9.4	12.5	55.2	100
13	8.2	9.4	7.9	10.7	63.8	100
14	6.9	8.5	5.0	9.7	69.9	100
15	5.5	8.4	4.4	10.8	71.0	100
16	4.9	9.4	4.5	8.3	73.1	100
Total	22.8	18.3	9.2	9.6	40.1	100

TABLE 1.6b: PERCENTAGE OF GIRLS READING KISWAHILI AT DIFFERENT LEVELS BY AGE

Age	Nothing	Letter	Word	Para	Story	Total
5	73.0	22.4	2.8	0.7	1.1	100
6	53.0	33.2	6.7	3.2	3.8	100
7	42.0	33.8	11.0	5.2	7.9	100
8	28.6	31.0	13.5	9.0	17.9	100
9	22.1	22.0	14.6	11.5	29.8	100
10	16.1	18.7	12.6	14.2	38.3	100
11	10.8	12.8	10.2	12.7	53.4	100
12	8.2	11.9	8.9	12.9	58.1	100
13	6.6	9.2	6.6	12.0	65.6	100
14	5.1	7.3	4.2	10.1	73.3	100
15	4.6	6.3	4.8	8.4	75.9	100
16	4.2	6.6	3.7	7.7	77.9	100
Total	20.4	17.6	8.8	9.8	43.5	100

TABLE 1.7: PERCENTAGE OF CHILDREN READING KISWAHILI AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Letter	Word	Para	Story	Total
Pre-School	53.5	27.7	2.7	2.5	13.6	100
STD I	41.8	37.8	10.6	4.2	5.6	100
STD II	24.1	32.3	17.0	9.8	16.8	100
STD III	14.8	20.0	16.4	16.1	32.7	100
STD IV	9.6	14.7	12.0	16.6	47.1	100
STD V	6.0	10.1	7.4	13.8	62.8	100
STD VI	4.0	6.1	4.9	11.1	73.9	100
STD VII	1.8	5.9	3.3	8.0	81.0	100
Total	18.6	19.2	9.6	10.5	42.2	100

TABLE 1.8a: PERCENTAGE OF BOYS READING KISWAHILI AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Letter	Word	Para	Story	Total
Pre-School	56.3	27.4	2.4	2.5	11.4	100
STD I	42.4	37.1	11.0	4.2	5.4	100
STD II	22.6	33.5	17.8	10.0	16.1	100
STD III	15.2	21.5	17.6	16.6	29.1	100
STD IV	9.9	14.8	11.8	16.6	46.9	100
STD V	6.1	10.4	6.7	13.8	62.9	100
STD VI	4.5	6.9	4.9	10.2	73.5	100
STD VII	1.7	6.0	3.2	7.8	81.4	100
Total	19.3	19.9	9.8	10.4	40.7	100

TABLE 1.8b: PERCENTAGE OF GIRLS READING KISWAHILI AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Letter	Word	Para	Story	Total
Pre-School	50.5	28.0	3.0	2.5	16.0	100
STD I	41.3	38.5	10.2	4.1	5.9	100
STD II	25.6	31.1	16.2	9.7	17.5	100
STD III	14.4	18.5	15.3	15.6	36.2	100
STD IV	9.4	14.6	12.2	16.6	47.2	100
STD V	5.8	9.7	8.1	13.8	62.6	100
STD VI	3.5	5.3	4.9	11.9	74.3	100
STD VII	1.8	5.9	3.3	8.3	80.6	100
Total	17.9	18.6	9.4	10.6	43.5	100

TABLE 1.9: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN ENGLISH BY AGE, GENDER, AND LOCATION

Age	National			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5	0.7	0.8	0.8	0.3	0.3	0.3	1.5	1.7	1.6
6	1.2	1.7	1.5	0.8	0.6	0.7	2.0	3.9	3.0
7	2.3	2.2	2.2	1.0	1.1	1.1	5.2	4.8	5.0
8	4.1	5.4	4.8	3.0	2.8	2.9	6.8	11.2	9.2
9	6.7	8.5	7.7	4.9	6.0	5.5	12.0	15.4	13.8
10	11.7	13.9	12.8	8.6	10.4	9.5	20.1	23.4	21.8
11	18.4	20.8	19.7	13.1	16.0	14.6	32.4	34.3	33.4
12	26.4	27.1	26.8	21.6	22.6	22.1	40.9	40.9	40.9
13	34.7	35.2	35.0	28.9	30.9	29.9	53.2	48.7	50.9
14	42.3	40.6	41.4	37.0	35.9	36.4	58.1	57.3	57.7
15	46.4	50.6	48.4	42.0	45.9	43.8	60.9	64.5	62.7
16	56.2	55.1	55.6	52.9	51.9	52.4	67.4	63.1	65.0
Total	21.3	21.9	21.6	18.6	19.1	18.9	28.6	29.4	29.0

TABLE 1.10: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN ENGLISH BY CLASS, GENDER AND LOCATION

Class	National			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Pre-SchL	8.0	10.2	9.1	7.3	8.4	7.8	9.6	14.5	12.0
STD I	2.2	2.1	2.1	1.6	1.8	1.7	4.0	2.6	3.2
STD II	3.4	4.3	3.9	3.1	2.8	2.9	4.5	9.2	6.8
STD III	7.0	8.4	7.7	5.3	7.0	6.2	12.0	12.6	12.3
STD IV	16.6	14.3	15.4	13.6	11.9	12.7	27.1	21.6	24.1
STD V	24.3	24.7	24.5	20.9	22.5	21.7	35.3	32.4	33.8
STD VI	37.4	34.3	35.8	33.9	31.8	32.8	49.5	42.9	46.1
STD VII	52.8	49.2	50.9	49.4	47.1	48.1	63.5	55.9	59.4
Total	18.7	18.8	18.7	16.7	17.2	17.0	24.8	23.4	24.1

Table 1.11a First Question – English

Location	Yes	No	Total
Rural	89.2	10.8	100.0
Urban	88.2	11.8	100.0
Total	88.9	11.1	100.0

Table 1.11b Second Question – English

Location	Yes	No	Total
Rural	84.5	15.5	100.0
Urban	84.3	15.7	100.0
Total	84.5	15.6	100.0

Table 1.11c Third question – English

Location	Yes	No	Total
Rural	77.5	22.5	100.0
Urban	77.0	23.0	100.0
Total	77.4	22.7	100.0

TABLE 1.12: PERCENTAGE OF CHILDREN READING ENGLISH AT DIFFERENT LEVELS BY AGE

Age	Nothing	Letter	Word	Para	Story	Total
5	83.3	14.4	1.3	0.6	0.4	100
6	75.6	19.8	2.0	1.0	1.6	100
7	67.4	23.6	4.4	2.7	1.8	100
8	55.9	27.6	8.1	3.9	4.5	100
9	49.9	24.9	9.8	8.3	7.1	100
10	40.1	24.3	12.3	11.1	12.3	100
11	31.5	20.3	13.2	16.1	18.8	100
12	26.6	18.1	13.3	15.8	26.1	100
13	20.6	16.0	12.5	17.2	33.8	100
14	15.2	14.6	11.7	19.0	39.6	100
15	13.7	13.0	10.0	16.6	46.8	100
16	12.4	11.9	8.0	14.0	53.7	100
Total	39.0	19.5	9.6	11.2	20.7	100

TABLE 1.13a: PERCENTAGE OF BOYS READING ENGLISH AT DIFFERENT LEVELS BY AGE

Age	Nothing	Letter	Word	Para	Story	Total
5	85.8	12.4	1.1	0.4	0.4	100
6	80.0	16.6	1.3	0.7	1.5	100
7	66.7	24.0	4.1	3.4	1.8	100
8	58.0	26.8	8.2	3.0	3.9	100
9	52.6	25.9	8.2	6.9	6.3	100
10	40.7	24.2	12.0	11.2	11.9	100
11	32.9	20.3	13.7	16.0	17.2	100
12	26.9	19.2	12.6	15.8	25.6	100
13	21.3	15.8	12.0	17.6	33.4	100
14	16.4	14.8	11.4	17.7	39.7	100
15	15.0	14.3	10.2	16.5	44.1	100
16	11.3	13.2	7.8	14.2	53.5	100
Total	40.0	19.5	9.2	11.0	20.3	100

TABLE 1.13b: PERCENTAGE OF GIRLS READING ENGLISH AT DIFFERENT LEVELS BY AGE

Age	Nothing	Letter	Word	Para	Story	Total
5	80.8	16.4	1.5	0.8	0.5	100
6	71.6	22.8	2.7	1.2	1.7	100
7	68.1	23.2	4.7	2.0	1.9	100
8	54.1	28.3	8.0	4.6	5.0	100
9	47.5	24.0	11.3	9.5	7.8	100
10	39.5	24.3	12.6	10.9	12.7	100
11	30.4	20.3	12.8	16.3	20.3	100
12	26.4	17.1	14.1	15.8	26.6	100
13	19.9	16.1	13.0	16.8	34.2	100
14	14.0	14.3	12.1	20.2	39.4	100
15	12.4	11.6	9.8	16.7	49.6	100
16	13.5	10.6	8.3	13.8	53.9	100
Total	38.0	19.5	10.0	11.4	21.1	100

TABLE 1.14: PERCENTAGE OF CHILDREN READING ENGLISH AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Letter	Word	Para	Story	Total
Pre-School	68.3	16.9	2.3	3.4	9.1	100
STD I	68.0	24.8	3.8	1.3	2.1	100
STD II	55.5	29.4	7.5	3.8	3.9	100
STD III	42.0	26.7	14.2	9.4	7.7	100
STD IV	29.0	24.0	16.0	15.5	15.4	100
STD V	21.4	19.6	13.7	20.9	24.5	100
STD VI	15.1	13.6	13.6	21.9	35.8	100
STD VII	7.9	11.5	10.7	19.1	50.9	100
Total	37.8	21.0	10.4	12.1	18.7	100

TABLE 1.15a: PERCENTAGE OF BOYS READING ENGLISH AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Letter	Word	Para	Story	Total
Pre-School	70.3	16.3	2.2	3.3	8.0	100
STD I	67.9	24.6	4.0	1.4	2.2	100
STD II	55.4	30.6	6.8	3.8	3.4	100
STD III	42.8	26.4	13.9	9.9	7.0	100
STD IV	28.6	23.9	15.5	15.4	16.6	100
STD V	19.2	20.3	14.2	22.0	24.3	100
STD VI	15.1	13.6	12.4	21.6	37.4	100
STD VII	7.2	11.9	10.1	18.0	52.8	100
Total	38.1	21.3	10.0	11.9	18.7	100

TABLE 1.15b: PERCENTAGE OF GIRLS READING ENGLISH AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Letter	Word	Para	Story	Total
Pre-School	66.3	17.5	2.4	3.6	10.2	100
STD I	68.1	25.0	3.6	1.3	2.1	100
STD II	55.6	28.2	8.2	3.8	4.3	100
STD III	41.3	27.0	14.4	8.9	8.4	100
STD IV	29.4	24.1	16.5	15.6	14.3	100
STD V	23.3	18.8	13.3	19.8	24.7	100
STD VI	15.2	13.6	14.7	22.1	34.3	100
STD VII	8.5	11.2	11.2	20.0	49.2	100
Total	37.4	20.8	10.8	12.2	18.8	100

TABLE 1.16: PERCENTAGE OF CHILDREN WHO CAN DO MULTIPLICATION BY AGE, GENDER, AND LOCATION

Age	National			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
5	0.7	1.1	0.9	0.4	0.6	0.5	1.3	2.0	1.6
6	1.3	1.5	1.4	0.8	0.8	0.8	2.5	2.8	2.6
7	3.9	3.1	3.5	2.5	1.7	2.1	7.3	6.7	7.0
8	7.5	8.5	8.0	5.7	5.3	5.5	12.0	15.8	14.0
9	14.2	16.2	15.2	10.3	11.6	11.0	25.2	28.8	27.1
10	23.8	25.5	24.7	19.6	20.3	20.0	35.4	39.3	37.4
11	35.8	39.4	37.7	30.7	33.8	32.3	49.3	54.7	52.1
12	43.7	45.1	44.4	38.7	41.0	39.8	58.5	57.7	58.1
13	51.9	51.2	51.5	47.3	48.1	47.7	66.2	61.3	63.7
14	58.4	57.0	57.7	54.7	54.3	54.5	69.4	66.4	67.9
15	60.8	65.2	62.9	58.0	63.2	60.5	69.7	71.3	70.5
16	64.4	65.3	64.9	63.8	64.3	64.1	66.6	67.9	67.3
Total	31.7	32.5	32.1	29.5	30.1	29.8	37.9	38.7	38.3

TABLE 1.17: PERCENTAGE OF CHILDREN WHO CAN DO MULTIPLICATION BY CLASS, GENDER, AND LOCATION

Class	National			Rural			Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Pre-School	9.3	12.8	11.0	7.5	9.7	8.6	13.9	20.2	17.0
STD I	2.4	2.5	2.4	2.3	2.1	2.2	2.5	3.6	3.1
STD II	7.5	7.7	7.6	6.1	5.3	5.7	12.1	15.8	13.9
STD III	18.9	18.1	18.5	16.7	15.0	15.8	25.5	27.5	26.5
STD IV	34.7	30.9	32.8	31.1	27.0	29.0	47.4	42.4	44.7
STD V	45.7	45.9	45.8	42.8	41.8	42.3	54.9	59.6	57.3
STD VI	58.7	57.0	57.8	55.4	55.5	55.5	69.9	61.8	65.7
STD VII	70.0	67.2	68.5	66.6	66.5	66.5	80.8	69.7	75.0
Total	30.6	30.9	30.8	28.6	29.0	28.8	37.0	36.7	36.9

Table 1.18a First Question – Mathematics

Location	Yes	No	Total
Rural	71.6	28.4	100.0
Urban	83.8	16.2	100.0
Total	74.3	25.7	100.0

Table 1.18b Second Question – Mathematics

Location	Yes	No	Total
Rural	63.2	36.8	100.0
Urban	76.7	23.3	100.0
Total	66.2	33.8	100.0

Table 1.18c Third question – Mathematics

Location	Yes	No	Total
Rural	57.2	42.8	100.0
Urban	70.7	29.3	100.0
Total	60.2	39.8	100.0

TABLE 1.19: PERCENTAGE OF CHILDREN WHO CAN DO MATHEMATICS AT DIFFERENT LEVELS BY AGE

Age	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
5	61.2	35.3	1.8	0.8	0.2	0	0.6	100
6	44.1	46.4	5.5	1.2	1.4	0	1.1	100
7	30.2	51.5	9.2	2.0	2.7	1	3.0	100
8	20.5	44.4	15.0	4.5	4.3	3	8.0	100
9	17.0	36.0	15.2	6.9	6.1	4	15.0	100
10	12.2	29.9	14.3	7.8	7.0	6	23.1	100
11	8.5	21.2	12.6	9.5	6.0	6	36.3	100
12	6.8	17.3	11.5	9.7	5.5	6	43.4	100
13	6.1	14.3	9.5	9.2	5.7	5	49.9	100
14	5.2	11.1	7.3	8.3	5.8	5	57.0	100
15	4.2	10.1	6.0	7.7	5.3	5	61.9	100
16	4.9	9.9	4.3	7.0	5.6	4	64.2	100
Total	16.2	26.7	10.1	6.7	4.9	4	31.2	100

TABLE 1.20a: PERCENTAGE OF BOYS WHO CAN DO MATHEMATICS AT DIFFERENT LEVELS BY AGE

Age	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
5	64.5	32.2	2.1	0.6	0.1	0	0.4	100
6	47.5	44.1	5.2	1.0	0.9	0	1.0	100
7	32.0	49.4	9.1	1.8	2.9	2	3.1	100
8	22.2	43.1	15.4	4.3	4.1	3	7.5	100
9	18.1	38.0	15.7	6.6	5.3	2	14.1	100
10	12.5	30.4	14.7	7.8	6.7	6	22.3	100
11	9.2	21.1	13.3	10.4	5.6	6	34.1	100
12	6.9	17.0	11.1	10.1	6.0	6	42.9	100
13	6.4	14.0	9.7	9.5	5.5	5	50.0	100
14	6.0	11.9	6.6	7.8	5.9	5	57.3	100
15	4.7	11.4	5.9	8.2	5.5	5	59.6	100
16	4.6	11.2	4.9	6.5	5.7	4	62.8	100
Total	17.2	26.4	10.1	6.7	4.8	4	30.8	100

TABLE 1.20b: PERCENTAGE OF GIRLS WHO CAN DO MATHEMATICS AT DIFFERENT LEVELS BY AGE

Age	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
5	57.9	38.5	1.5	1.0	0.3	0	0.7	100
6	41.0	48.5	5.7	1.4	1.7	1	1.2	100
7	28.5	53.6	9.2	2.2	2.5	1	2.9	100
8	19.0	45.6	14.7	4.7	4.6	3	8.5	100
9	16.0	34.1	14.8	7.1	6.8	5	15.8	100
10	11.9	29.4	14.0	7.9	7.2	6	23.9	100
11	7.8	21.4	11.9	8.8	6.3	6	38.2	100
12	6.6	17.6	11.9	9.3	5.1	6	44.0	100
13	5.7	14.5	9.3	9.0	5.9	6	49.8	100
14	4.6	10.4	7.9	8.8	5.6	6	56.8	100
15	3.6	8.8	6.1	7.2	5.0	5	64.3	100
16	5.2	8.5	3.7	7.5	5.6	4	65.6	100
Total	15.3	27.0	10.0	6.7	5.1	4	31.7	100

TABLE 1.21: PERCENTAGE OF CHILDREN WHO CAN DO MATHEMATICS AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
Pre Primary	40.0	41.9	2.7	1.6	1.7	1	11.0	100
STD I	26.5	56.9	9.2	1.9	2.3	1	2.4	100
STD II	15.7	45.8	16.9	4.9	5.5	4	7.6	100
STD III	9.9	30.3	20.0	8.5	7.3	6	18.5	100
STD IV	7.2	22.0	14.1	10.0	7.0	7	32.8	100
STD V	5.1	13.9	11.0	10.3	6.7	7	45.8	100
STD VI	3.3	9.2	7.7	10.2	5.9	6	57.8	100
STD VII	2.2	7.9	4.8	7.0	4.7	5	68.5	100
Total	13.1	28.3	11.1	7.0	5.2	5	30.8	100

TABLE 1.22a PERCENTAGES OF BOYS WHO CAN DO MATHEMATICS AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
Pre school	42.0	41.8	2.8	1.4	1.7	1	9.3	100
STD I	27.3	54.9	10.3	1.8	2.3	1	2.4	100
STD II	15.4	44.4	18.2	5.6	4.9	4	7.5	100
STD III	10.3	29.8	19.9	9.2	7.1	5	18.9	100
STD IV	7.4	20.6	13.5	10.0	7.2	7	34.7	100
STD V	5.0	13.8	10.3	10.9	7.0	7	45.7	100
STD VI	3.0	9.7	7.0	10.1	5.7	6	58.7	100
STD VII	1.8	8.0	4.6	6.4	4.7	4	70.0	100
Total	13.6	28.1	11.2	7.0	5.2	4	30.6	100

TABLE 1.22b: PERCENTAGE OF GIRLS WHO CAN DO MATHEMATICS AT DIFFERENT LEVELS BY CLASS

Class	Nothing	Num	Add1	Add2	Sub1	Sub2	Mul	Total
Pre school	38.0	42.0	2.6	1.8	1.6	1	12.8	100
STD I	25.6	58.9	8.1	2.0	2.3	1	2.5	100
STD II	16.1	47.2	15.5	4.2	6.1	3	7.7	100
STD III	9.4	30.7	20.1	7.9	7.4	6	18.1	100
STD IV	7.1	23.3	14.7	10.1	6.8	7	30.9	100
STD V	5.3	13.9	11.6	9.8	6.3	7	45.9	100
STD VI	3.5	8.7	8.4	10.3	6.0	6	57.0	100
STD VII	2.5	7.9	5.0	7.6	4.7	5	67.2	100
Total	12.6	28.6	11.0	6.9	5.3	5	30.9	100

TABLE 1.23: PERCENTAGE OF MOTHER EDUCATION LEVEL

Level	%
Never Attended School	15.0
Pre Primary	2.1
Adult Education	2.2
Primary Std I-IV	10.1
Primary Std V-VII	62.0
Higher	8.7
Total	100

TABLE 1.24: PERCENTAGE OF CHILDREN, WHO CAN READ A STORY IN KISWAHILI BY MOTHERS' EDUCATION LEVEL, AGE, AND GENDER,

Mothers' Education level	Age 5-8			Age 9 -12			Age 13-16		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Not in School	2.7	4.1	3.4	27.8	27.7	27.8	61.5	60.9	61.2
Pre Primary	1.2	0.7	1.0	22.7	38.1	30.2	45.8	70.0	59.3
Adult	10.9	10.2	10.5	28.0	43.7	35.7	59.1	76.5	68.0
Primary 1-4	7.4	9.6	8.5	30.9	40.5	35.9	61.6	67.7	64.4
Primary 5-7	6.6	7.9	7.3	42.2	47.0	44.6	72.6	74.8	73.7
Higher	16.6	23.5	20.1	63.2	67.9	65.7	81.4	82.2	81.8
Total	6.8	8.6	7.7	40.3	45.2	42.8	70.4	72.9	71.7

TABLE 1.25: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN KISWAHILI BY MOTHER'S EDUCATION, CLASS AND GENDER

Mothers' Education level	Standard 1-2			Standard 3-4			Standard 5-7		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Not in School	6.7	6.3	6.5	30.6	28.9	29.7	65.4	61.9	63.6
Pre Primary	2.0	1.2	1.7	4.8	36.6	22.7	58.1	75.7	68.2
Adult	7.2	3.6	5.3	18.5	40.8	30.0	66.5	74.2	70.6
Primary 1-4	7.1	7.9	7.5	33.0	40.9	36.9	65.8	73.9	69.8
Primary 5-7	10.3	10.8	10.6	38.2	42.2	40.2	73.4	73.5	73.4
Higher	28.5	29.3	28.9	62.2	62.6	62.4	80.4	80.2	80.3
Total	10.4	10.8	10.6	37.8	41.7	39.8	72.2	72.5	72.3

TABLE 1.26: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN ENGLISH BY MOTHERS' EDUCATION LEVEL, AGE, AND GENDER

Mothers' Education level	Age 5-8			Age 9 -12			Age 13-16		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Not in School	0.7	1.4	1.1	7.0	7.3	7.1	31.2	28.8	30.0
Pre Primary	1.2	0.7	1.0	9.1	7.3	8.2	33.3	30.0	31.5
Adult	3.1	1.2	2.0	8.6	20.9	14.7	31.8	37.9	34.9
Primary 1-4	1.5	4.6	3.1	11.7	12.9	12.3	36.9	37.9	37.4
Primary 5-7	1.9	2.2	2.1	16.0	18.0	17.0	44.5	45.3	44.9
Higher	8.9	10.3	9.6	41.6	40.3	40.9	69.2	67.4	68.3
Total	2.2	2.8	2.5	16.0	17.7	16.9	43.7	44.0	43.8

TABLE 1.27: PERCENTAGE OF CHILDREN WHO CAN READ A STORY IN ENGLISH BY MOTHER'S EDUCATION LEVEL AND CLASS

Mothers' Education level	Standard 1-2			Standard 3-4			Standard 5-7		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Not in School	2.1	1.4	1.8	6.4	6.2	6.3	27.0	24.7	25.8
Pre Primary	0.0	1.2	0.6	0.0	3.0	1.7	19.8	25.1	22.8
Adult	0.0	0.0	0.0	1.2	9.6	5.6	30.0	36.0	33.2
Primary 1-4	2.1	3.3	2.7	12.9	10.7	11.8	34.2	34.9	34.5
Primary 5-7	2.9	2.8	2.8	10.0	11.2	10.6	38.2	37.0	37.6
Higher	9.3	12.0	10.7	35.7	26.4	30.8	60.0	52.9	56.3
Total	3.0	3.1	3.1	11.4	11.5	11.5	37.9	36.3	37.1

TABLE 1.28: PERCENTAGE OF CHILDREN WHO CAN DO MULTIPLICATION BY MOTHERS' EDUCATION LEVEL, AGE, AND GENDER

Mothers' Education level	Age 5-8			Age 9-12			Age 13-16		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Not in School	2.4	1.5	2.0	17.6	19.1	18.3	49.1	47.3	48.2
Pre Primary	1.8	0.7	1.3	20.5	22.0	21.2	41.7	57.1	50.0
Adult	3.1	2.3	2.7	21.6	28.4	24.9	49.6	54.3	52.0
Primary 1-4	3.7	4.6	4.1	20.7	24.9	22.9	50.4	55.0	52.5
Primary 5-7	3.2	3.8	3.5	31.3	32.4	31.8	59.6	60.1	59.9
Higher	11.4	11.0	11.2	50.2	54.2	52.3	71.3	70.0	70.6
Total	3.7	4.0	3.8	29.5	31.3	30.4	58.0	58.6	58.3

TABLE 1.29: PERCENTAGE OF CHILDREN WHO CAN DO MULTIPLICATION BY MOTHERS' EDUCATION LEVEL, CLASS, AND GENDER

Mothers' Education level	Standard 1-2			Standard 3-4			Standard 5-7		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Not in School	3.5	2.5	3.0	18.9	16.4	17.6	50.3	48.0	49.1
Pre Primary	14.1	0.0	7.9	0.0	23.9	13.4	52.9	58.6	56.1
Adult	0.7	0.7	0.7	19.3	18.0	18.6	43.9	57.9	51.4
Primary 1-4	3.0	3.2	3.1	23.0	25.7	24.3	46.9	50.4	48.6
Primary 5-7	4.6	5.5	5.0	27.0	24.2	25.6	59.2	57.5	58.3
Higher	15.9	11.3	13.5	47.1	44.1	45.5	68.1	68.1	68.1
Total	4.9	5.0	5.0	26.6	24.7	25.6	57.6	56.6	57.1

TABLE 1.30a: RESOURCE OWNERSHIP BY LOCATION

Heading	Rural	Urban	Total
Ownership of house	93.5	65.2	85.0
Piped water	7.3	42.6	17.8
Electricity	7.5	46.6	19.2
Mobile phone	40.4	66.8	48.3
Bicycle	59.8	38.7	53.5
Vehicle- Motorcycle	5.7	8.0	6.4
Vehicle – Car	1.3	6.0	2.7
Fridge/Freezer	1.7	19.8	7.1
Radio	67.2	73.3	69.0
TV	7.0	40.7	17.3

TABLE1.30b: HOUSEHOLD INCOME IN RELATION TO CHILDREN'S KISWAHILI READING LEVEL

Income Level	None	Letters	Words	Sentences	Story	Total
Very Low	22.7	18.1	9.0	9.9	40.4	100
Low	20.8	18.2	9.2	9.4	42.4	100
Medium	18.2	17.2	7.3	10.9	46.3	100
High	10.3	14.8	6.8	9.2	59.0	100
Very High	6.4	17.0	10.9	10.5	55.2	100
Total	20.4	17.9	8.9	9.6	43.2	100

TABLE1.31: HOUSEHOLD INCOME IN RELATION TO CHILDREN'S ENGLISH READING LEVEL

Income Level	none	letters	words	sentences	story	Total
Very Low	39.9	19.4	9.8	11.3	19.6	100
Low	39.1	19.7	9.5	11.3	20.4	100
Medium	35.4	16.8	10.3	11.6	26.0	100
High	22.3	18.4	9.3	14.2	35.9	100
Very High	15.2	23.0	11.8	12.3	37.7	100
Total	37.7	19.4	9.7	11.5	21.8	100

TABLE1.32: HOUSEHOLD INCOME IN RELATION TO CHILDREN'S NUMERACY LEVEL

Income Level	none	num	add1	add2	sub1	sub2	mul	Total
Very Low	16.5	27.4	10.4	6.7	4.9	4.5	29.5	100
Low	15.6	27.3	10.0	6.5	4.8	4.1	31.7	100
Medium	13.4	23.5	9.1	7.0	6.0	4.2	36.9	100
High	8.2	20.4	10.9	6.6	5.3	4.1	44.6	100
Very High	7.3	19.9	7.7	8.6	5.8	5.2	45.5	100
Total	15.2	26.6	10.1	6.7	5.0	4.3	32.3	100

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- Achien'g Migire, Ilemela district, Education Development Foundation (EDFO), Mwanza
- Yared Babona, Missungwi district, Education Development Foundation (EDFO), Mwanza
- Tiluganilwa Mayunga, Singida Rural district, Regional Administrative Secretary (RAS), Singida
- Venance Mlally, Kilosa district, Mafiga Women & Youth Development Organization (MWAYODEO), Morogoro
- Vincent Mnyanyika, Mbeya Urban district, HakiElimu, Dar es Salaam
- Zippora Shekilango, Kinondoni district, Taaluma Women Group (TWG), Dar es Salaam
- Zuhura Karya, Singida Urban district, Malezi Society, Singida

These district coordinators cooperated with thousands of other hundreds to undertake the assessment in a spirit of dedication and responsibility that is essential to regenerating our nation. We are deeply grateful to them, and to the head teachers and teachers who provided data on schools, and to the families, communities, and children who participated in the study with understanding, curiosity and patience.

Across Tanzania, huge progress has been made in basic education in the last decade. Enrolments are up in both primary and secondary education. Tens of thousands of classrooms have been built and teachers recruited. The budget for education has tripled over this period; the Government now spends over a billion dollars annually on education. The key question, however, is what have these massive efforts and investments yielded? To what extent have these achievements translated into concrete improvements in children's competencies? Are our children learning?

Uwezo seeks to answer this key question. Meaning *capability* in Swahili, Uwezo is a four year initiative to assess the quality of learning in schools by assessing the basic literacy and numeracy skills of children aged 5-16. This report presents the findings of its first assessment conducted in May 2010 involving 42,033 children in 22,800 households, the largest survey of its kind. The assessment is based on a proven methodology that uses scientific methods to obtain a national picture of the situation.

The findings reveal that despite huge investments and gains in enrolment, education in Tanzania is in a state of crisis. **By the time they enter Standard 3, 100% of children should have basic competencies in literacy and numeracy. The reality is that by Standard 3, 7 out of every 10 children cannot read basic Swahili, 9 out of every 10 children cannot read basic English, and 8 out of every 10 children cannot do basic mathematics.** Even by the time they complete primary education, large numbers of children cannot do what they should have mastered five years earlier in Standard 2. Analysis by districts reveals large differences, with some districts performing far below the national average.

The report is released on the eve of the national elections. Whoever emerges as the next President of Tanzania, ensuring that every child can read and count and learn may be the greatest test of his leadership.

