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Prepared by:
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Malawi Teacher Professional Development Support
(MTPDS)

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RTI International and Seward Inc.

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Foreword

In recent years, Malawi has made great strides in realizing the Millennium Development Goal (MDG) of providing universal access to primary education to all children of school-going age by 2015. The 2011 school census report showed that net enrollment had reached 99%. However, recent studies such as those carried out by the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) and the 2010 Early Grade Reading Assessment (EGRA) baseline have revealed a worrying picture of poor performance in Malawian primary schools, especially in literacy. Now is the time to focus upon improving educational attainment in all schools nationwide. The Early Grade Reading Assessment provides us with a valuable tool for measuring progress towards this goal.

The Ministry of Education, Science and Technology (MoEST) believes that reading is the most important skill that any child can learn at school. Without the ability to read, it is impossible for a child to access the school curriculum and it is impossible for an adult to participate fully as a productive member of society. Literacy is instrumental for national development, and the earlier that learners master literacy skills the better.

EGRA measures a learner's progress in developing the essential component skills of reading from the earliest stages, when interventions will have the most effect. MoEST is committed to developing internal capacity to administer EGRA as an integral part of its efforts to monitor learner achievement and to track the impact of interventions. For this reason it is heartening to know that the results in this report are based upon fieldwork conducted and supervised by MoEST staff.

This 2011 EGRA midterm assessment report documents the performance of 3,000 Standard 2 and 4 learners, from a random selection of 150 schools nationwide. The results of this nationally representative sample present a challenge to everyone with an interest in primary education in Malawi.

—John Bisika, Permanent Secretary for Education, Science and Technology

Abbreviations

ABE/LINK	Assistance to Basic Education/Linkages to Education and Health initiative
CERT	Centre for Education, Research and Training
CLS	Centre for Language Studies
CPD	Continuous Professional Development
cwmp	correct words per minute
DBE	Directorate of Basic Education
DIAS	Directorate of Inspectorate and Advisory Services
DTED	Department of Teacher Education and Development
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
IRI	Interactive Radio Instruction
IRR	Inter-Rater Reliability
M&E	Monitoring and Evaluation
MANEB	Malawi National Examinations Board
MIE	Malawi Institute of Education
MoEST	Ministry of Education, Science and Technology
MTPDS	Malawi Teacher Professional Development Support project
NPC	National Primary Curriculum
PEA	Primary Education Advisor
PTA	Parent–Teacher Association
RTI	RTI International (trade name of Research Triangle Institute)
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
TTC	Teacher Training College
USAID	United States Agency for International Development

Glossary of Statistical Terms

Coefficient: The number or symbol placed before and multiplying another unit. It is constant and distinguished from a variable. It can serve as a measure of a property or characteristic.

Confidence interval: The range in which users can be confident that the true target population value lies. It is calculated using the standard error.

Correlation: Strength and direction of a linear relationship between variables.

Cronbach’s alpha: Often used as a measure of the internal consistency reliability of a psychometric instrument

Logistic regression: A type of Regression analysis used for predicting the outcome of a variable that can take on a limited number of response categories such as an interview question that results in a yes/no (0 /1) answer.

Mean: The average score of a distribution or group, approximate statistical norm, or expected value for a distribution or group.

Odds ratio: The ratio of the probability that an event will occur versus the probability that the event will not occur.

***p*-value:** The level of probability that an empirical result could occur by chance. As the *p*-value becomes small, say, less than 10%, we can say that the result is statistically significant.

Performance: *In this case*, how well the student did on any particular subtest.

Regression analysis: Tool for investigating relationships between dependent and independent variables. It helps explain how the typical value of the dependent variable changes as any independent variable is varied and others remain fixed.

Reliability: The extent to which a measuring procedure yields the same results on repeated trials.

Sample: A group of individuals selected from a population, usually intended to represent the population in a study.

Sampling variance: The extent to which estimates based on hypothetical replications of the sample are similar in value. Low values of sampling variance indicate that all such replications will produce similar estimates.

Standard error: Square root of the sampling variance.

Variance: A measure of variation that indicates the distance between the scores of a distribution or group from the mean, or the average distance between the mean score and other scores in the group. Smaller deviations indicate more scores closer to the mean while larger deviations indicate scores being more spread out and thus more variance among the group.

Statistically significant: Denotes statistical evidence that a difference in distributions or groups does exist, meaning that the result is unlikely to occur by chance.

Validity: The degree to which the study design is able to scientifically answer the question it is intended to answer. The validity of a test refers to its ability to measure what it claims to measure.

Weight: Weights are values assigned to each case in the data file. They are normally used to make statistics computed from a sample based test more representative of the population.

Glossary of Reading Terms

Alphabetic principle: Familiarity with the alphabet and with the principle that written spellings systematically represent sounds that can be blended into meaningful words.

Automaticity: See fluency

Benchmark: A standard of achievement used as a reference and against which other performance can be measured.

clpm: Correct letters per minute, a standard measure of speed of letter identification (letter naming).

cspm: Correct sounds per minute, a standard measure of speed of sound identification.

cwpm: Correct words per minute, a standard measure of ability to read.

Decode/decoding skills: In the reading context, the ability to use the knowledge of spelling-sound relationships and the pronunciation of irregular words to derive a pronunciation of written words.

Fluency/automaticity: The bridge between decoding and comprehension. Fluency in word recognition means that the reader is no longer aware of or needs to concentrate on the mental effort of translating letters to sounds and forming sounds into words. At that point, the reader is decoding quickly enough to be able to focus on comprehension.

Letter-sound correspondence: The principle that each letter represents a unit of sound; the importance is in knowing which sounds are represented by a particular letter.

Oral reading fluency: The ability to read narrative text aloud, accurately and quickly.

Phoneme: The smallest linguistically distinctive unit of sound allowing for differentiation of two words within a specific language (e.g., “toy” and “boy” differ by only one phoneme, but the meaning changes).

Phonological awareness: A general appreciation of the sound structure of language, as demonstrated by the awareness of sounds at three levels of structure: (i) syllables, (ii) onsets and rimes, and (iii) phonemes.

Executive Summary

Methodology

This report presents the results of the Malawi Teacher Professional Development Support (MTPDS) midterm Early Grade Reading Assessment (EGRA) survey, conducted near the beginning of the school year, in November 2011. A nationally representative sample of 3,019 learners was assessed, with a two-step process used for selection of the sample: 150 schools were randomly selected from the six divisions and then 20 learners were randomly selected from each of these 150 schools. The sample was stratified to include equal numbers of boys and girls, and equal numbers of learners from Standards (grades) 2 and 4, divided equally among the six education divisions.

To allow for a comparison of results over time, the 2011 EGRA assessment tested the same nine reading skills in Chichewa as were tested in the 2010 EGRA baseline study. The reading skills tested included letter naming, syllable segmentation, initial sound identification, syllable reading, familiar word reading, nonsense word reading, oral reading fluency, reading comprehension, and listening comprehension. Each of these subtests contains important component skills in early reading and is predictive of later performance in literacy. The orally administered assessment instrument was carefully piloted, and enumerators were rigorously trained over a five-day period to ensure high standards of reliability.

To build the capacity of the Ministry of Education, Science and Technology (MoEST) to sustainably implement EGRA, MoEST personnel collected all data. Test items were written in Chichewa, but enumerators presented instructions in the children’s home language (i.e., the language spoken most frequently at the child’s home) if this language was not Chichewa. The testing was accompanied by a questionnaire that investigated various aspects of learners’ backgrounds that could potentially be associated with performance. Teacher and head teacher interviews were also conducted in each school.

Results

Results by Subtest

The results of the 2011 midterm study were broadly similar to those of the EGRA baseline study conducted in 2010. The same pattern of strengths and weaknesses was found across subtests between Standards 2 and 4.

The EGRA assessment was conducted at the beginning of the school year for learners in Standards 2 and 4. In Standard 2, the mean achievement on all fluency-related subtests, which required the learners to read letters or words, was close to zero nationwide. In letter naming, Standard 2 learners were able to correctly name, on average, only three letters per minute. For all subtests that required reading text—including syllables, familiar words, and nonsense words—Standard 2 learners were unable to read even one syllable or word on average. Performance for Standard 4 learners was better but was still very low compared with grade-level expectations.

For oral reading fluency, on average, children were not able to read even one word upon beginning Standard 2. In Standard 4, oral reading fluency was approximately 15 correct words per minute (cwpm). Both groups were tested on a paragraph estimated to be at a Standard 1 or 2 level.

There was a strong association between performance in reading words on the oral reading fluency subtest and performance on the other fluency-related tests. For example, on average, Standard 4 learners could read 24 letters correctly per minute. However, those who could read 31 or more cwpm could also read over 45 letters correctly per minute.

For familiar word reading, Standard 4 children read approximately 14 cwpm. Familiar word reading combines decoding strategies with automatic recognition of words children know. Given the low average, it is likely that learners in Malawi are having trouble in both areas. On nonsense word reading, learners could read only 8.5 cwpm. The low nonsense word reading score indicates that learners struggled with decoding new words. It may be that learners are memorizing words rather than using multiple strategies, including decoding words and reading by combining syllables.

The syllable segmentation and initial sound identification subtests assess different phonemic awareness skills. They are also both considered pre-reading skills. The results show that on average, by Standard 4 Malawian learners were able to distinguish the syllables in about half of the words presented in Standard 4. This is considered very late, as phonemic awareness skills are usually considered to be among the first foundational skills that children must master when learning to read, and more complex skills such as story reading depend on those initial skills. Learners are not developing the essential ability to listen to words and distinguish phonemes in those words.

In Standard 2, learners scored about 51% of items correct on listening comprehension subtest. This percentage had increased to 70% at the beginning of Standard 4. This difference indicates that learners' comprehension improves as they mature and gain exposure to new ideas and comprehension strategies in school.

Reading comprehension is linked to reading fluency. Because learners were struggling with reading fluency, their achievement in reading comprehension was much lower than in listening comprehension on questions of similar difficulty. Learners beginning Standard 4 were able to respond correctly to approximately 15% of questions (i.e., less than 1 out of 5). This effectively means that learners were still not able to study independently in any subject regardless of whether textbooks were available or not.

Comparisons by Gender, Urban/Rural Categorization, and Division

The performance of male and female learners was remarkably similar, suggesting that factors that later affect relative achievement by gender had yet to manifest themselves.

The general pattern of low performance across the subtests was similar for both urban and rural learners. However, Standard 4 learners in urban areas performed better on average than rural learners across all subtests except listening comprehension. Standard 2 results were significantly different for all fluency variables, favoring rural learners, but the difference in real terms was minor given that for all subtests except letter naming, the average was less than one correct item per minute.

Performance varied by division, with the strongest performance being registered in Shire Highlands and the weakest in Northern education division. The general pattern of strengths and weaknesses between subtests was similar.

Factors Predicting Achievement

The learner and teacher interviews revealed a number of factors that strongly correlated with learner performance. The strongest predictive factor of all was the availability of a Chichewa reading text. Learners with their own textbook outperformed those who did not have a textbook by an average of 8.7 cwpm in oral reading fluency, or roughly equivalent to the effect of a year of schooling.¹ This finding points to the need to prioritize investment in textbooks and learning material.

Other highly significant factors also included teachers supervising learners in a library and teachers requiring learners to read aloud; both of these relate to the frequency of opportunity to practice reading.

The parents' level of education also appeared to be a significant factor. For example, learners whose father graduated from secondary school read on average 4.2 words per minute faster than those whose father did not. The presence of non-school reading material in the home was also positively associated with performance. Some indicators of socioeconomic status were also positively correlated with achievement, including possession of a refrigerator and mobile phone.

A surprising result was that the learners of untrained teachers performed significantly better than learners of trained teachers. It is hypothesized that untrained teachers, who are still undergoing training, may prepare more thoroughly and teach more conscientiously since they are still undergoing supervision and assessment. Less surprising was the correlation between high levels of learner performance and low levels of teacher absenteeism.

A correlation was found between learner–teacher ratio and oral reading fluency. Put simply, the results indicate that if there are more learners per teacher, it is more likely that learners will not be able to read a single word of text. For every additional child per teacher, the probability of the child scoring zero on oral reading fluency was found to increase by 1%. This finding has clear implications for maintaining national efforts to reduce class size.

Across all learners tested, the mean oral reading fluency was 7.7 cwpm for learners in Chichewa-speaking schools and 5.4 in non-Chichewa-speaking schools. These differences were significant and suggest that learners who are not learning to read in their home language are being placed at a significant disadvantage.

Comparison of 2010 and 2011 Results

The results of the 2010 and 2011 surveys were broadly similar. The only significant changes were a decline in performance on the phonemic awareness subtests on syllable segmentation and initial sound identification, and a significant increase in performance in listening comprehension. Such differences could be due to random variation or to consistent differences in the manner in which the tests were administered. Overall the results suggest that levels of performance remained at the same unacceptably low levels as revealed by the 2010 baseline study. Clearly, as of November 2011, existing interventions had not yet achieved any measurable impact on learner achievement on a national scale.

¹ Equivalence was estimated by calculating the learner gain per year (dividing the difference between Standards 2 and 4 average results on oral reading fluency by two, which equals approximately 7.25 cwpm).

Benchmarks and Targets

Benchmarks and targets for performance in Standards 2 and 4 have been set for each of the EGRA subtests by the MoEST-convened National EGRA Coordination Committee. In 2011, more than 10% of learners reached the benchmarks for letter naming (Standard 4), syllable segmentation (Standards 2 and 4), and listening comprehension (Standards 2 and 4). For the other subtests, the percentages reaching the benchmark were considerably lower. Less than 10% of learners reached the level expected in subtests that required decoding, which included syllable reading, familiar word reading, nonsense word reading, and oral reading fluency (with comprehension).

Conclusions and Recommendations

Learners are continuing to get a very late start in learning to read, and performance remains well below expectations. In Standard 2, over half the learners scored zero across all the subtests related to phonemic awareness and word reading. Even by the beginning of Standard 4, the majority of learners were not reading well enough to be able to learn from their textbooks.

The results for the midterm EGRA assessment in 2011 revealed a similar picture to 2010. Efforts to improve learner performance on literacy on a national level have yet to achieve measurable impact. International experience shows that effective interventions must combine several essential components, including teacher training, support for teachers, increased time on task, and ensured availability of appropriate reading material. These various elements have yet to be assembled consistently on a national scale in Malawi. Based on the results of the assessment, we recommend the following:

- Start teaching the alphabet and letter sounds at the beginning of Standard 1.
- Teach decoding skills from Standard 1.
- Promote best practices in early reading instruction, including helping learners to sound out words, teaching vocabulary and comprehension strategies, assessing regularly, and checking homework.
- Ensure that schools build in more time for reading practice.
- Minimize the turnover of skilled teaching staff in the early grades.
- Step up efforts to provide suitable reading material.
- Maintain efforts to reduce class size and ensure equitable treatment of early grade learners in this regard.
- Develop strategies to address the needs of learners in non-Chichewa-speaking schools.
- Focus on eliminating zero scores on EGRA assessments through adopting a mastery approach to progression through the syllabus in the early grades.
- Intensify coaching and supervision of teachers to support improved early grade reading.
- Review the pre-service curriculum to include the fundamental components of early literacy acquisition.

- Expand the scope of comprehensive reading interventions, which include continuous professional development (CPD) in key skills, on-the-job coaching and support, provision of reading materials, increased time on task, continuous assessment, and promotion of community support for literacy.
- Publicize and monitor the implementation of literacy benchmarks and targets as an integral part of the MoEST National Primary Curriculum Monitoring and Evaluation (M&E) Strategy (MoEST, 2011c).
- Develop, document, publicize, and implement a National Early Literacy Improvement Strategy, enjoying high-level MoEST support and through which the efforts of all interested stakeholders can be coordinated.

1. Introduction

This report provides the results from a nationally representative study of primary school learners' early grade reading skills in the Chichewa language, undertaken near the beginning of the school year, in November 2011, as part of the Malawi Teacher Professional Development Support (MTPDS) project. The MTPDS program is a 3-year United States Agency for International Development (USAID) project, supporting the professional development of teachers in Malawi and implementation of the National Primary Curriculum (NPC) with the goal of improving early grade reading and performance of learners. This study followed an initial baseline study, conducted in November 2010, and used the same Malawi Early Grade Reading Assessment (EGRA) instruments with some newly adapted material (See **Annex A** for the 2011 instrument and instructions in Chichewa). The study aims to inform the Ministry of Education, Science and Technology (MoEST), development partners, and other relevant stakeholders of the current status of learner performance in early grade reading in Malawi. Additionally, this report provides actionable information to support policy development.

Over 3,000 learners were assessed in 2011, compared to 1,000 in 2010. This expanded sample size permitted stronger comparisons of learner performance to be made according to the following categories: subtest, gender, division, and urban/rural categorization. It allowed better examination of these factors by Standard (2 and 4). The data also enabled the analysis of the effect of class size, language of instruction, and various other factors found to be predictive of learner performance. (See **Annex B** for more information about the sample.)

Over the long term, information on learner reading performance can aid the MoEST—in conjunction with donors and Malawian stakeholders—to better gauge the effect of systematic reforms as well as the impact of projects.

1.1 Research Design

The EGRA test is administered orally to individual learners. It takes approximately 15 minutes to administer per learner, and in this study, it was combined with a questionnaire measuring a variety of learner background variables aimed at identifying factors that are consistently correlated with performance.

The EGRA tools for Malawi's midterm early grade reading assessment in 2011 were based on the tools developed for the baseline study in 2010. The tools for the 2010 baseline assessment were developed during workshops with the MoEST and other education stakeholders well-versed in the teaching of reading in Chichewa in primary schools (for details, see the Malawi 2010 EGRA report [MTPDS, 2010]). This process ensured that materials were valid and reliable for the Chichewa language and in the Malawian context. Materials specific to the rules and structure of Chichewa were developed with the help of a linguist and incorporated letters, syllables, and words obtained by creating word frequency lists from Malawian textbooks written in Chichewa. The assessment was piloted, the results were analyzed, and then the instrument was finalized. The final instrument contained nine subtests to assess a variety of reading skills.

Adaptation

In 2011, the EGRA instrument used in 2010 was adapted to create a slightly different version of the test. This adaptation had two goals. The first was to address the possibility that learners would remember items from the previous assessment, thereby biasing the results. The second was to ensure that the 2010 and 2011 instruments were comparable. The adaptation required balancing these two somewhat opposite aims and was accomplished by keeping a percentage of items the same in both tests.

Two methods were used to adapt the assessment: (1) randomization of items, and (2) development of new subtests, coupled with statistical analysis to compare them to the original version.

Randomization of items consisted simply of taking all the items, such as letters or words, and randomly placing them in different positions in the subtest than in the previous version—an approach that is ideal for ensuring comparability. For the 2011 Malawi EGRA test adaptation, an Excel form was used to randomize the items. Randomization was used for all subtests with the exception of: (1) oral reading fluency, (2) reading comprehension, and (3) listening comprehension.

For the oral reading fluency, reading comprehension, and listening comprehension subtests, new stories and questions were developed that followed the rules specified in the *EGRA Toolkit* (RTI International, 2009) and the *Guidance Notes for Planning and Implementing EGRA* (RTI and International Rescue Committee, 2011). These rules are concerned with ensuring comparability with regard to text difficulty and familiarity of the subject matter. Following the initial creation of these subtests, piloting and analysis were undertaken (see next section), and the results revealed which stories were the best match with the original.

Piloting

The adapted 2011 EGRA instrument was piloted in seven schools in Lilongwe Rural and Lilongwe City districts. The pilot instrument contained five reading passages and five listening passages (only one version of each passage was selected for the final instrument). Any particular child either (1) read stories and answered questions, or (2) answered listening comprehension questions. An individual child was given only one type of subtest in order to reduce the possibility of fatigue. For a particular subtest type, the same learner was given all five versions so difficulty level could be compared within subject as well as across subjects. Stated another way, individual learners would have similar scores across all five versions if the difficulty levels were properly calibrated. Furthermore, the order of presentation of the stories and questions was randomized.

The results of the pilot test were analyzed using a psychometric method called Rasch analysis. Using the Rasch model allows items to be examined in relation to the ability of persons responding to those items. Results are presented in terms of an ability and difficulty continuum. After data collection, all subtests, including the reading comprehension subtest, were adjusted statistically in order to hold the level of difficulty constant from 2010 to 2011. The adjustment was made by comparing how children compared to themselves when attempting two different versions of the same subtest.

For example, if a child was tested on a reading story with five questions, and on story #1 he or she scored three correct responses, then on story #2 he or she scored four correct responses, and that pattern was the same for all children, then we would say that story #2 was $\frac{3}{4}$ the difficulty, or 25% easier, than story #1. In other words, we used the pilot test results to calculate a correlation coefficient

for each subtest (representing the relative difficulty of the 2011 subtest to the 2010 subtest). The correlation coefficients were as follows: oral reading fluency (.934), reading comprehension (.676), and listening comprehension (.912). Those coefficients were applied to the results of the comparison between 2010 and 2011 EGRA data, which are discussed in Section 5.

2011 EGRA Instrument

The EGRA 2011 instrument, like that used in 2010, consisted of nine subtests:

1. **Letter Naming:** Ability to say the names of the letters of the alphabet accurately, without hesitation and naturally. This is a timed test that assesses automaticity and fluency of letter name knowledge—measured in correct letters per minute.
2. **Syllable Segmentation:** The first of two measures of phonemic awareness. The subtest measures learners' ability to hear a word and break it up into syllables. This is one of the first skills needed to understand how to read new words by decoding.
3. **Initial Sound Identification:** The second measure of phonemic awareness (the understanding that words are made of sounds). This subtest measures learners' ability to hear and isolate the first sound in a word. This is generally considered a pre-reading skill and can be assessed in a variety of ways.
4. **Syllable reading:** This subtest is used because Chichewa is considered by Malawians to be syllabic in nature. This subtest asks children to read the most commonly occurring syllables in a particular language—measured by correct syllables read per minute.
5. **Familiar Word Reading:** Ability to read high-frequency words. This assesses whether children can process words quickly—measured by words read correctly per minute.
6. **Nonsense Word Reading:** Ability to decipher “words” that follow the linguistic rules but do not actually exist in Chichewa. The nonsense words used for EGRA are truly made-up words. This subtest assesses a child's ability to “decode” words fluently—measured by nonsense words read correctly per minute.
7. **Oral Reading Fluency:** Ability to read a passage, approximately 60 words long—measured by words read correctly per minute.
8. **Reading Comprehension:** Ability to answer comprehension questions based on the passage read—measured by percent correct out of five comprehension questions.
9. **Listening Comprehension:** Ability to follow and understand a simple oral story. This assesses a child's ability to concentrate and focus to understand a very simple story and answer both literal and inferential questions without the burden of reading the story. It is a more complete measure of learners' ability to comprehend stories—measured by percent correct out of five comprehension questions.

In 2010, the EGRA instrument contained a decision rule intended to simplify the assessment administration for learners who were doing very poorly on the cognitively easier subtests. Learners scoring zero on the test of familiar word reading were not required to attempt the nonsense word reading, oral reading fluency, or reading comprehension sections. Instead, it was assumed that learners would likely score zero on these tests as well. However, due to some inconsistencies among enumerators in applying the decision rule in 2010, it was not used in 2011. Instead, all learners were tested on all subtests.

To measure test-score reliability, the Cronbach’s Alpha method was used, yielding an alpha score of 0.87, which is more than acceptable for this type of instrument. Detailed information on the reliability and validity of the EGRA 2011 Instruments is included in **Annex C**.

Grade and Language

This midterm assessment was a follow-up to the 2010 national EGRA baseline for Malawi. Both assessments included children at the beginning of Standards (grades) 2 and 4. Having learners from these Standards in the sample gives us a measure of what children have learned after a full 1 and 3 years of learning, respectively. Standards 1–3 are normally considered to be the Standards in which primary school learners, if given proper learning conditions, will learn to read. In Standard 1, many early foundational skills are learned, and it is a common expectation that children will be able to read by the end of Standard 2. Standard 3 is a time to develop skills in comprehension. As such, children in Malawi could be expected to read fluently and with comprehension by the end of Standard 3.

For the first few years, the language that children learn to read is Chichewa, according to the curriculum policy and practice in Malawi. English is also taught as a separate subject. Teachers are expected to use the learners’ home language as the medium of instruction for all subjects in Standards 1–4. In the majority of schools, this language is Chichewa; however, in certain regions of the country, other home languages predominate (for example, Chitumbuka in the Northern Education Division and Chiyao in Mangochi district). In such places, learners are still expected to learn to read in Chichewa. Because the curriculum prescribes that the learning outcomes in reading are to be achieved in Chichewa, the EGRA subtests for all learners are set in this language. However, during the EGRA administration, enumerators were required to translate the instructions to learners for completing the assessment into the learners’ home language.

Sampling

An important step in the research design for the midterm assessment was to decide on the priority groups to focus on for comparison. It was agreed with MoEST during the planning phase of the study that four groups were of particular interest, and that at least two variables within each group would be compared: grade (Standard 2 and Standard 4), gender (male and female), division (six administrative education divisions), and urban/rural categorization. In 2011, the sampling design maximized the precision for reporting on differences among grade, gender, and divisions. Because urban/rural category was also of interest, the data were also disaggregated by an urban-versus-rural variable.

Malawi’s six divisions encompass 34 education districts. The 2010 national Education Management Information System (EMIS) was the source for the school list. Systematic random sampling was used to select an equal number of schools from each of the six districts. All schools in the country, captured in the EMIS, had a possibility of being chosen. At least 400 learners were chosen in each division. This is the recommended sample size for each comparison group based on previous international experience in implementing EGRA (see the *EGRA Toolkit* [RTI International, 2009]). Within the school, the assessment was administered to a random sample of 20 learners, 10 in each grade.

Nationally, 3,019 learners—1,493 female and 1,526 male—were assessed from 150 schools (see **Table 1**). Random selection reflected the rural majority of Malawi, with approximately 2,732 rural learners and 287 urban learners.

Table 1. Study Sample, by Division and Standard

Division	Schools	Learners, Standard 2	Learners, Standard 4	Total Learners per Division
Central Eastern	25	252	247	499
Central Western	25	251	251	502
Northern	25	253	257	510
Shire Highlands	25	254	249	503
South Eastern	25	264	247	511
South Western	25	252	242	494
Total	150	1,526	1,493	Learner Total: 3,019

For cost and efficiency reasons, it was not possible to draw a simple random sample of learners from across the country, since in most cases doing so would have resulted in the testing of one individual learner per school. Instead, to enable inferences to be made about the performance of the entire nation, not just the learners sampled, *sampling weights* were attached to the data. That is, because the learners were grouped within schools, and schools within divisions, the design did not give every individual learner an equal chance of selection, necessitating the use of a statistical process to determine the probability of selection of each person in the sample—the sampling weight. Based on the total population and learners in the sample, a weight was calculated for each level of selection (schools by division, learners by grade). Stata, the statistical analysis software used to examine these data, used the final learner weight to estimate the results for the entire population of learners. The weighting required that instead of reporting standard deviation (providing the average of the difference from the sample mean), we had to report standard error, or the accuracy of our estimation (mean) for the population. The weights increased the power of the estimates based on data from the individual learners to make them representative of the estimated population within each group.

Data Collection

The data were collected from November 14 to December 1, 2011, in all divisions of Malawi. The assessment was carried out by staff from the following MoEST institutions: Centre for Language Studies (CLS); Centre for Education, Research and Training (CERT); and several Teacher Training Colleges (TTCs). MTPDS staff provided support in coordinating the exercise. The supervisors of data collection teams were selected from various relevant MoEST departments and institutions, including the Directorate of Inspectorate and Advisory Services (DIAS), Directorate of Basic Education (DBE), Department of Teacher Education and Development (DTED), Malawi Institute of Education (MIE), TTCs, and Malawi National Examinations Board (MANEB). Primary Education Advisors (PEAs) served as enumerators, assessing individual learners on their Chichewa reading ability and carrying out the associated learner interviews (see below).

As part of the study, teachers of Standards 2 and 4 who were present on the day of data collection, as well as the head teacher, were interviewed at each school. A total of 375 teachers and 148 head teachers were interviewed (at all schools, combined). These interviews consisted of questions about

training, experience, and reading instruction. Interviews were used as part of the analysis of predictive factors of reading performance.² The interview instruments and student assessments can be found in **Annex A** or may be downloaded from the MTPDS website (www.mtpds.org).

1.2 Descriptive Statistics

Learner Background Questionnaire Results

As part of both the 2010 baseline and 2011 midterm EGRA assessments, children were also asked questions about their socioeconomic status, family situation, and school background. **Table 2** summarizes learners' responses to these questions based on weighted data. Some are proxies for socioeconomic status, and others are factors shown in research to correlate with learner learning.

Results of the questionnaire also show that socioeconomic status of the learners in the sample was generally low. In terms of education, about 59% of learners reported attending kindergarten or nursery school. Also, the percentage of learners who reported having textbooks was low. It was also variable across regions, ranging from 21% to 39%. This is significant because learners who did not have textbooks performed lower on reading assessments in both 2010 and 2011.

Table 2. Background Questionnaire: Summary of Self-Reports, by Division

Item	Central Eastern	Central Western	Northern	Shire Highlands	South Eastern	South Western	Total
Has radio	72.4%	67.8%	80.9%	73.5%	77.3	69.3%	73.1%
Has phone	49.6%	42.2%	66.5%	42.3%	49.4%	54.2%	49.8%
Has electricity	9.7%	10.9%	24.2%	15.7%	21.0%	26.5%	17.2%
Has television	11.6%	10.7%	27.5%	13.7%	15.7%	22.2%	16.2%
Has refrigerator	5.7%	7.3%	11.1%	5.3%	9.2%	11.0%	8.1%
Has toilet	3.7%	4.9%	9.3%	3.5%	4.1%	7.5%	5.4%
Has bicycle	68.7%	67.4%	70.4%	81.9%	78.9%	57.4%	70.8%
Has motorcycle	6.5%	7.7%	9.7%	6.8%	13.3%	6.7%	8.5%
Has vehicle	15.8%	20.4%	21.6%	7.7%	16.6%	15.6%	16.7%
Went to nursery/kindergarten	49.7%	51.6%	54.5%	63.8%	69.7%	70.1%	59.0%
Was absent ^a	18.2%	26.8%	26.1%	27.6%	26.6%	28.3%	25.6%
Had textbook	20.9%	39.2%	27.3%	35.0%	25.2%	27.6%	30.0%
Has other books	30.3%	23.9%	40.4%	26.8%	28.2%	46.8%	31.8%
Mother finished primary	63.3%	82.1%	94.0%	76.6%	82.7%	86.3%	79.6%
Father finished primary	75.0%	86.9%	93.1%	76.1%	89.3%	83.2%	83.9%

Source: EGRA 2011

^a Learner responded that he or she was absent for more than one week the prior year.

² The Malawi questionnaires were adapted from a core set of questionnaires. To learn more about the development of the core questionnaires, which included a literature review, panel consultations, and field trials, see Section 3, "Process Followed in Tool Development," in Crouch (2009).

Table 3 presents the results of learner age according to standard. We found that the average age of learners was nine years in Standard 2 and 11 years in Standard 4. In Standard 2, ages ranged from 6 to 17, and in Standard 4, from 7 to 18. The official entry age for Standard 1 is 6 years. Therefore the expected age for learners who have moved through the system without repetition is 7 years old in Standard 2 and 9 years old in Standard 4. The range of ages present in Malawian classrooms makes the job of teaching more complex, as the instruction should be adapted to the range of cognitive development and experience present.

Table 3. EGRA assessment 2011: Learner Age, by Standard

Standard/ Grade	Minimum	Maximum	Average	Standard Error
2	6	17	8.8	0.07
4	7	18	11.1	0.07

2. Results by Subtest, EGRA 2011

The EGRA 2011 assessment in Malawi comprised nine subtests. These fell into two main categories: timed and untimed. Five of the subtests were timed and hence can be said to have a fluency component. These were letter naming, syllable reading, familiar word reading, nonsense word reading, and oral reading fluency. On the other hand, four of the tests were not timed and therefore did not have a fluency component. These were syllable segmentation, initial sound identification, reading comprehension, and listening comprehension. The next two tables summarize the results of all the subtests of the 2011 assessment. **Table 4** presents the fluency-based subtests, with results expressed in terms of mean correct items per minute; and **Table 5** presents the other subtests, with results expressed in terms of mean percentage correct responses (out of either 5 or 10 items). Note that baseline-to-midterm comparisons are presented in Section 5.

Table 4. Results on EGRA Subtests with a Fluency Component, by Standard

Subtest	Standard/ Grade	Mean (correct items per minute)	Standard Error
Letter naming	Standard 2	3.1	0.25
	Standard 4	24.0	0.85
Syllable reading	Standard 2	0.8	0.15
	Standard 4	20.2	0.88
Familiar word reading	Standard 2	0.5	0.10
	Standard 4	14.0	0.64
Nonsense word reading	Standard 2	0.3	0.06
	Standard 4	8.5	0.39
Oral reading fluency	Standard 2	0.4	0.10
	Standard 4	14.9	0.70

Table 5. Results on EGRA Subtests Measured by Percent Correct, by Standard

Subtest	Number of Items	Standard/Grade	Percent Correct	Standard Error
Syllable segmentation	10	Standard 2	27.5%	1.19%
		Standard 4	52.7%	1.18%
Initial sound identification	10	Standard 2	3.9%	0.41%
		Standard 4	7.9%	0.56%
Reading comprehension	5	Standard 2	0.4%	0.09%
		Standard 4	15.2%	0.83%
Listening comprehension	5	Standard 2	50.7%	0.96%
		Standard 4	69.9%	0.90%

At the beginning of Standard 2 (when this assessment was carried out), achievement on all fluency-related subtests, which required the learners to read letters or words, remained close to zero for all learners nationally. In letter naming, Standard 2 learners were able to name only three letters correctly on average in one minute. For all subtests that required reading text—including syllables, familiar words, and nonsense words—children were not able to read even one item on average. Performance for Standard 4 learners was better but was still very low compared with grade-level expectations.

There was a strong association between performance on oral reading fluency and performance on the other fluency-related tests, which is explored in more detail below. For example, Standard 4 learners could read an average of 24 letters correctly per minute. However, those who could read 31 cwpm or more could read over 45 letters correctly per minute. Clearly, there was a large gap in fluency even at Standard 4 between strong readers and average learners on the skill of letter naming.

Of all the text-reading subtests, Standard 4 learners were most fluent in syllable reading, with an average of 20 syllables read correctly per minute. Again, these results were closely related to those for oral reading fluency. Learners whose oral reading fluency scores were above 30 cwpm were able to read approximately 51 syllables per minute.

For familiar word reading, Standard 4 children read approximately 14 cwpm. Given that familiar word reading combines the automatic reading of text that learners already know with the decoding of new words, it is likely that the low average indicates problems in both of these areas. For nonsense word reading, learners could read only approximately 8.5 cwpm. It may be that learners are memorizing words rather than using multiple strategies, including decoding words, reading by combining syllables, and practicing reading frequent words. In particular, not developing decoding skills will cause learners problems in trying to read more complex words at higher academic levels (Stanovich, 1986).

For oral reading fluency, on average, children were not able to read even one word upon beginning Standard 2. At the beginning of Standard 4, reading fluency was approximately 15 cwpm. The same passage of text was used for both Standards 2 and 4. Although there are no pre-determined leveled

texts in Chichewa, as there are in English, this passage was estimated to be at about a Standard 1 or 2 level by local experts.

Recently established national benchmarks, elaborated further in Section 6, set the expected performance level for Standard 3 learners at 50 cwpm. Moving the average learner up to this level will require resources, time, and dedication.

The subtests of syllable segmentation and initial sound identification assess different phonemic awareness skills. Both assess ways that learners hear and distinguish sounds or groups of sounds in the language. They are also both considered pre-reading skills—that is, skills that should be developed very early on, even before a learner learns to read text.

The results show that on average, Malawian learners were able to distinguish the syllables in about half of the words presented by Standard 4. This shows delayed development in this skill that should and could be developed from the first day of school, and even in communities or kindergartens before Standard 1.

Learners in both Standards 2 and 4, on average, scored less than 10% correct on initial sound identification. This means that they scored less than 1 item correct; indicating that learners are not developing the ability to listen to words and distinguish phonemes in those words. This skill, which could also be learned starting on the first day of school, can be applied to learning letter sounds, and later to reading printed words.

At the beginning of Standard 2, learners scored about 51% of items correct on listening comprehension. By contrast, this percentage was approximately 70% at the beginning of Standard 4. This difference indicates that learners' comprehension improves as they mature and gain exposure to new ideas and comprehension strategies in school.

As mentioned previously, reading comprehension is linked to reading fluency. Because these learners were struggling with reading fluency, their achievement in reading comprehension was much lower than in listening comprehension on questions of similar difficulty. Learners beginning Standard 4 were able to respond correctly to approximately 15% of questions, or 0.75 items out of 5. This means that the majority of learners are not able to learn from what they had read. Moreover, it effectively means that learners are not able to study independently in any subject, regardless of whether textbooks are available or not.

In summary, the pattern of strengths and weakness across subtests between Standards 2 and 4 is broadly similar. For example, learners in both Standards performed relatively well in listening comprehension and poorly in reading comprehension. However there was relatively little improvement in performance of initial sound identification from one grade level to the next, which suggests that this skill is rarely taught and represents a gap in the current syllabus.

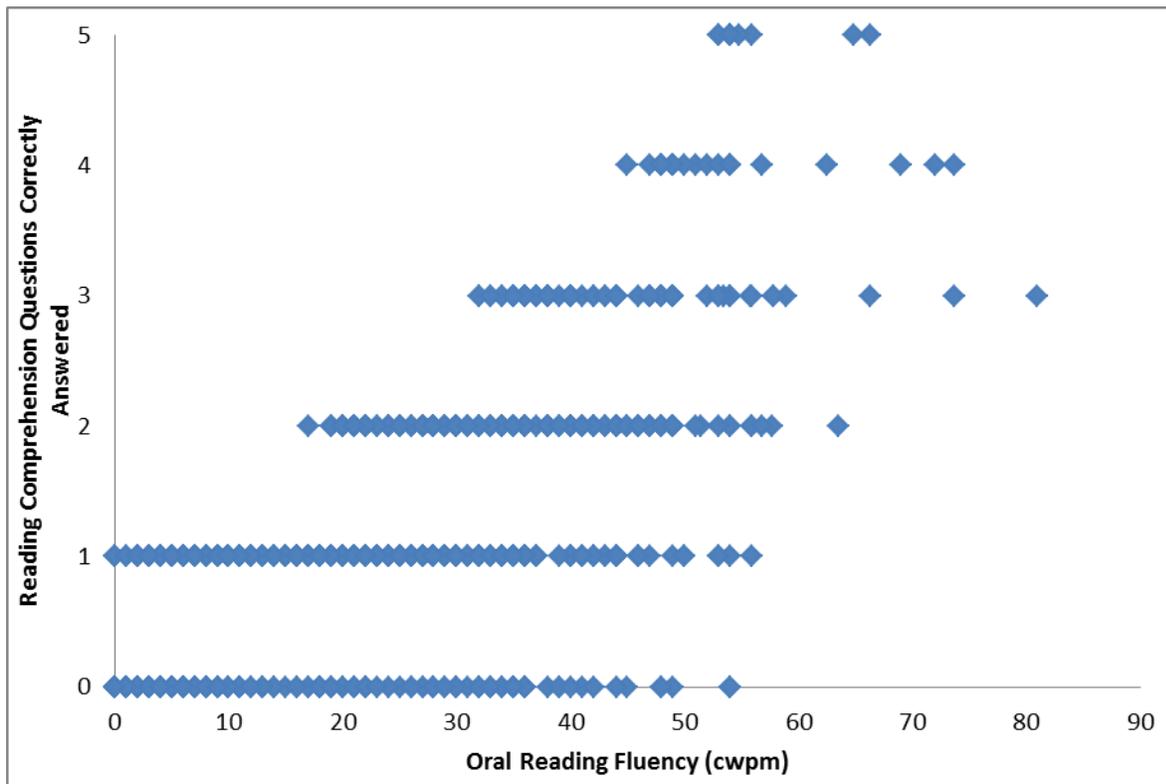
The comparatively strong performance on listening comprehension clearly demonstrates that learners have the ability to comprehend a simple story that is read to them. So, reading skill and not the ability to comprehend is the greater barrier to performance in reading comprehension. Poor reading comprehension presents a barrier to performance in all subjects in the curriculum.

Figure 1 shows the intersection of oral reading fluency (on the horizontal axis) and reading comprehension (on the vertical axis). The results on the 2011 midterm EGRA assessment are similar to

those in 2010. There is a clear relationship between increasing oral reading fluency and increasing comprehension. In order for Malawian learners to achieve 60% comprehension, their oral reading fluency had to be approximately 30 cwpm or more. All learners who responded to 80% or more of the questions had a reading fluency over 45 cwpm, and they clustered closer to 50 cwpm. This gives some approximation of the level of reading fluency required for a child to be able to answer the majority of questions on a text at approximately a Standard 1 or 2 level.

However, some surprising results were also recorded. For example, a number of learners were able to read over 40 words per minute aloud and yet were not able to answer any comprehension questions correctly. Such learners must be decoding fluently, but without comprehension.

Figure 1. Oral Reading Fluency and Reading Comprehension, 2011 EGRA



3. Summary and Comparison by Gender, Grade Level, Urban/Rural Designation, and Division

This section summarizes the 2011 assessment results and draws comparisons by gender, grade level, division, and urban/rural designation.

3.1 Overview

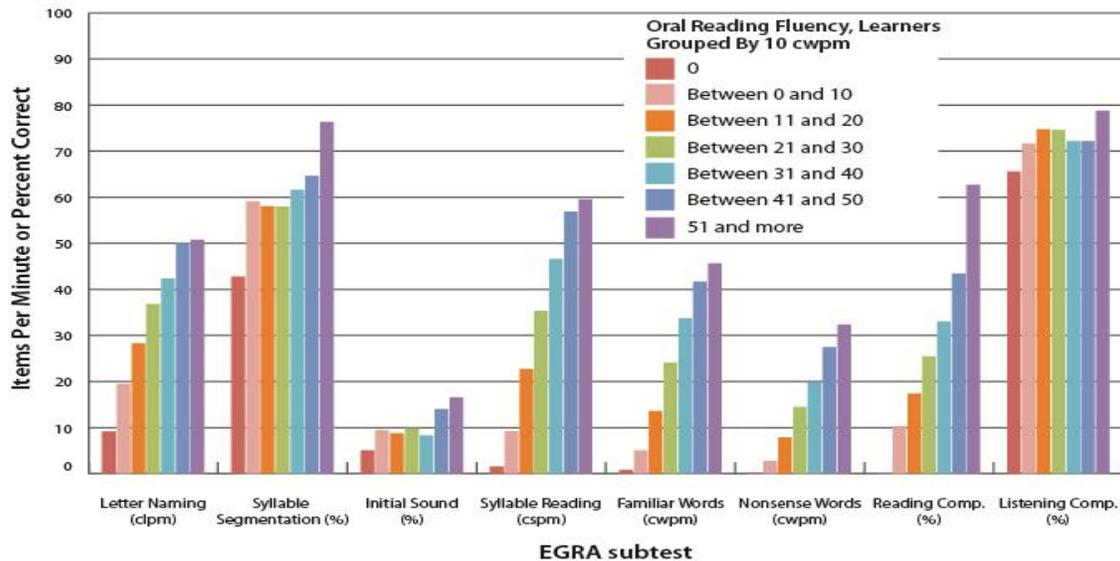
The goal of reading is comprehension. In order to comprehend text, learners must seamlessly combine multiple skills, including recognizing letters, reading words using the sounds of the letters, recalling the

meaning of the vocabulary words, and using background knowledge and comprehension skills to interpret the author’s meaning.

The first steps in learning to read entail learning the fundamental skills for word-level decoding and comprehension. In the early grades, one of the best indicators of reading skill is oral reading fluency, which predicts later reading and comprehension (Fuchs, Fuchs, Hosp, & Jenkins, 2001).

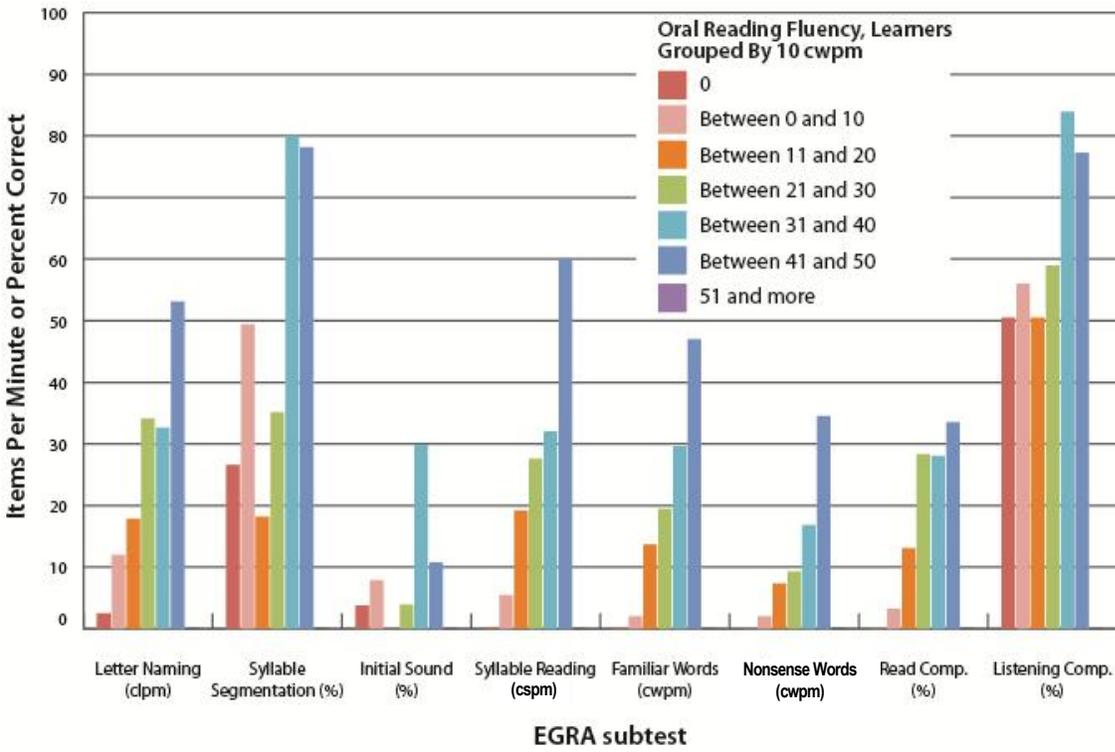
In **Figures 2 and 3**, the bars represent the mean results of learners who have been grouped according to their oral reading fluency results. Learners are categorized into the following groups: 0, 1–10, 11–20, 21–30, 31–40, 41–50, and 50 or more cwpm. The graphs show how reading fluency on the story correlated with skills measured by the other EGRA subtests. Standard 4 results are presented first, followed by Standard 2 results. This is because so few learners in Standard 2 could read more than one word, the data were sparse, and thus general learner ability is not very well represented above 10 cwpm.

Figure 2. Standard 4 Oral Reading Fluency Performance Groups’ Scores on Other EGRA Subtests



Note: The different types of subtests are scored differently. For example, the comprehension subtest scores are expressed as percent correct, while fluency subtests (letters, word reading, etc.) are expressed in terms of correct items per minute.

Figure 3. Standard 2 Oral Reading Fluency Performance Groups' Scores on Other EGRA Subtests



Note: The different types of subtests are scored differently. For example, the comprehension subtest scores are expressed as percent correct, while fluency subtests (letters, word reading, etc.) are expressed in terms of correct items per minute.

Table 6 summarizes the numbers of learners per standard. Note that groups above 10 cwpm for Standard 2, shaded in the table, had 12 or fewer learners per group. By contrast, the Standard 4 data are robust, with at least 100 learners per group (with the exception of one category, the “51 or more” group, which has 52 learners, which is still a good-sized group).

Table 6. Number of Learners per Oral Reading Fluency Performance Group, by Standard

Oral Reading Fluency Group	Standard 2, No. of Learners per Group	Standard 2, % of Learners per Group	Standard 4, No. of Learners per Group	Standard 4, % of Learners per Group
Zero	1457	95.5%	645	42.3%
Between 0 and 10	48	3.1%	147	9.6%
Between 11 and 20	12	0.8%	122	8.0%
Between 21 and 30	3	0.2%	218	14.3%
Between 31 and 40	2	0.1%	187	12.3%
Between 41 and 50	3	0.2%	114	7.5%
51 or more	0	0.0%	52	3.4%

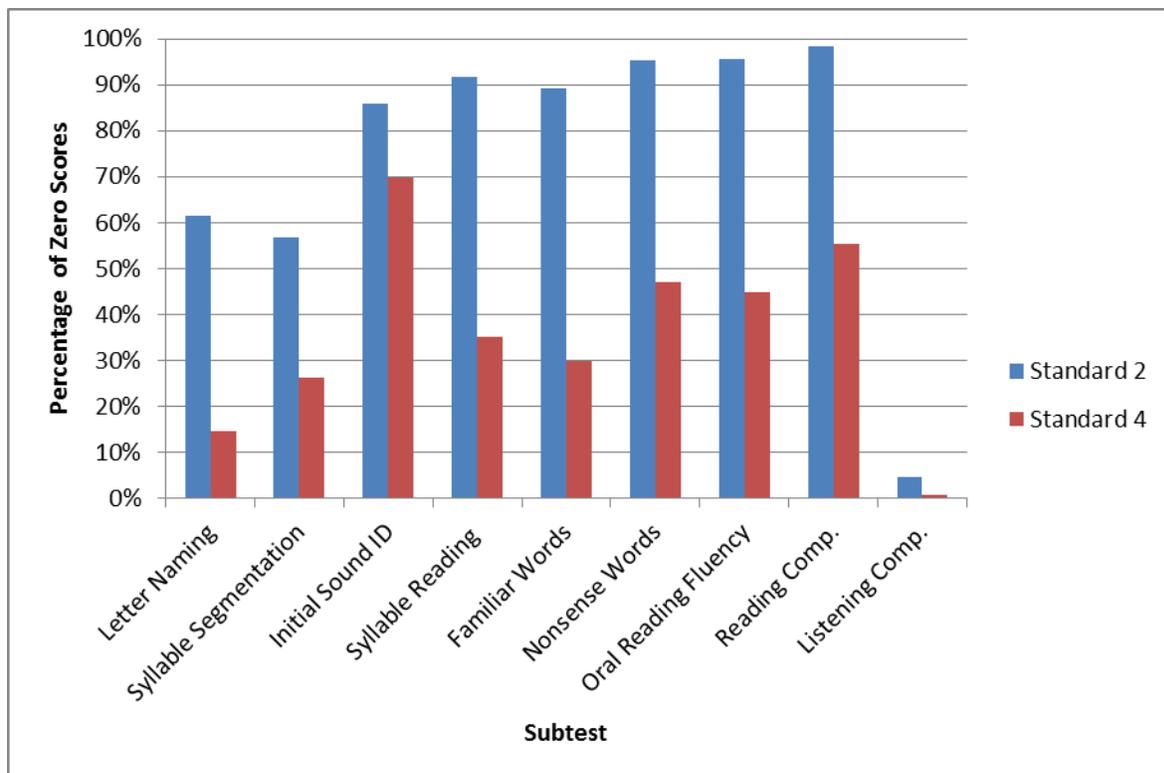
Syllable segmentation and initial sound identification measure different phonemic awareness skills. Although the pattern of increasing ability was less pronounced than for the decoding skills, the same general trend existed: these skills were stronger in children who displayed better oral reading fluency. **Figure 3** also shows that learners who could not read a word of the story (represented by the bar labeled “0”) were able to demonstrate phonemic awareness skills (syllable segmentation and initial sound identification), letter knowledge, and listening comprehension. This is an expected result, since these skills are considered pre-reading skills that children can begin to develop even before they learn printed letters and words.

Learners at the beginning of Standard 2 who were not able to read a word of the oral reading fluency text still performed on this story at a mean of approximately 50% correct on the listening comprehension text (**Figure 3**). This appears to confirm that learners who are ready to learn are not getting an opportunity to develop word-level skills. As in Standard 4, the other skills measured by EGRA subtests generally correlate with higher performance on oral reading fluency.

3.2 Zero Scores

Whenever a high proportion of learners is unable to correctly respond to any items on an assessment, those learners become an important population to understand and to target in the improvement of education services. An analysis of zero scores on EGRA in 2011 reveals that many learners were failing to learn to read (**Figure 4**).

Figure 4. Zero Scores on EGRA Subtests at the National Level, by Standard



It is troubling that learners beginning Standard 2 are getting what appears to be a very late start in early reading skill development. By Standard 2, over 61% of learners are still unable to identify a single letter of the alphabet. On phonemic awareness pre-reading skills, including syllable segmentation and initial sound identification, over half of Standard 2 learners scored zero.

The more complex skill of word decoding, then, had not yet begun for Standard 2 learners. At the start of Standard 2, between 89% and 100% of learners in the country scored zero on all text reading and reading comprehension subtests, including familiar and nonsense words, oral reading fluency, and reading comprehension.

Among learners beginning Standard 4, over 40% scored zero on oral reading fluency when reading a simple story, as well as on answering questions on the story. Approximately 30% of Standard 4 learners could not read a syllable or a single familiar word. In phonemic awareness skills, zero scores were less in Standard 2 than in Standard 4. For the syllable segmentation subtest, the zero scores in Standard 4 were about half of what they were in Standard 2, from just over 55% to about 25%, which likely means that learners are continuing to develop their ability to distinguish syllables within a word as they move through Standards 2 and 3. However, individual sounds (as opposed to syllables) remained a mystery to learners even by Standard 4. About 70% of these learners could not identify the initial sound in a word. Learning letter-sound relationships has been found in research as key to learning to read words (Juel, 1991). Malawian learners' missing the ability to hear and distinguish sounds is a weakness that could be easily remedied through changes in instruction, permitting learners to read better, and earlier, in their schooling.

3.3 Gender

Globally, and in Malawi, systemic gender inequities often cause unequal achievements for males and females. For example, in 2011 the survival rate of boys in Malawi to Standard 8 was 53.8%, as compared to 47.2% for girls (MoEST, 2012a). EGRA provides an opportunity to study the degree to which differences may exist between the sexes in achievement in early reading skills. The EGRA subtest analysis showed no statistically significant difference between males and females in reading skills in either Standard 2 or Standard 4, with the exception of Standard 4 listening comprehension. Standard 4 results, presented in **Table 7**, are illustrative of the results found by gender.

We did not combine the data for Standards 2 and 4, because the variation between the standards is so high that it makes it hard to find significance. In other words, when the standards are combined, the variance in all estimates is greater. Standard 4 was chosen because performance results for the whole population were higher, making it easier to see differences in means (if they exist). The means in Standard 2 would be obscured, given the high amount of zero scores for this Standard.

Looking at the means, it appears that even on subtests for which learners showed higher performance, the results were very similar for both sexes. For example, on letter naming, males were able to read 24 letters on average, and females also read 24 letters on average. On the subtest for syllable segmentation, males correctly distinguished approximately 55% of syllables, and females 51%; and on familiar word reading, both sexes read approximately 14 cwpm.

Table 7. Subtest Analysis by Gender, Standard 4

Subtest	Number of Items	Gender	Mean or Percent Correct	Standard Error	<i>p</i> -Value
Letter naming	—	Male	23.8	0.87	0.581
		Female	24.3	1.05	
Syllable segmentation	10	Male	54.6%	1.50%	0.067
		Female	50.9%	1.60%	
Initial sound identification	10	Male	8.7%	0.78%	0.060
		Female	7.1%	0.64%	
Syllable reading	—	Male	19.9	0.99	0.537
		Female	20.5	1.07	
Familiar word reading	—	Male	13.7	0.72	0.472
		Female	14.3	0.77	
Nonsense word reading	—	Male	8.3	0.45	0.489
		Female	8.7	0.48	
Oral reading fluency	—	Male	14.6	0.77	0.533
		Female	15.1	0.85	
Reading comprehension	5	Male	15.3%	0.90%	0.824
		Female	15.1%	1.05%	
Listening comprehension	5	Male	71.5%	1.03%	0.010
		Female	68.4%	1.11%	

Male respondents had slightly higher scores on Listening comprehension than female. Although the differences were statistically significant, in practical terms, the results were similar (a difference of approximately three percentage points, or a fraction of a listening comprehension question).

These results present a positive picture of equality in learning achievement in the early grades and suggest that factors affecting relative achievement in reading have not yet manifested themselves by

the beginning of Standard 2, although other factors could mask inequalities, such as a gender bias in repetition or dropout.

3.4 Urban/Rural Designation

The performance of learners was compared according to the urban or rural designation of their school in the EMIS (MoEST, 2010). This allowed the EGRA midterm assessment (2011) to investigate whether learners in urban areas have an advantage over learners in rural areas in learning to read. Schools that were in peri-urban areas were thought to have a character more like an urban school, so they were included in the urban category. **Table 8** presents the results by the urban and rural categories; **Table B-3** in **Annex B** presents numbers of students and schools by urban/rural designation and division.³

Table 8. EGRA Subtest Analysis by Urban/Rural Designation, Standard 4

Subtest	Number of Items	Urban/Rural	Mean or Percent Correct	Standard Error	p-Value
Letter naming	—	Rural	23.6	0.91	0.107
		Urban	28.4	2.69	
Syllable segmentation	10	Rural	52.0	1.23	0.112
		Urban	59.8	4.60	
Initial sound identification	10	Rural	7.7	0.60	0.337
		Urban	9.7	2.02	
Syllable reading	—	Rural	19.8	0.91	0.216
		Urban	24.6	3.71	
Familiar word reading	—	Rural	13.6	0.66	0.130
		Urban	17.7	2.52	
Nonsense word reading	—	Rural	8.3	0.41	0.259
		Urban	10.2	1.55	
Oral reading fluency	—	Rural	14.6	0.72	0.218
		Urban	18.2	2.83	
Reading comprehension	5	Rural	15.9	0.86	0.308
		Urban	18.5	3.40	
Listening comprehension	5	Rural	70.0	0.98	0.547
		Urban	69.7	1.95	

³ We did not combine the data for Standards 2 and 4, for the same reason as given for the results by gender: The high level of variation between the Standards makes it hard to find significance. When the Standards are combined, the variance in all estimates is greater. Standard 4 was chosen because performance results for the whole population were higher, making it easier to see differences in means (if they exist). The means in Standard 2 would be obscured, given the high amount of zero scores for this Standard.

By Standard 4, urban learners had higher scores on all subtest means, except listening comprehension. However, the higher urban means are not extreme. For example, looking at the three word-reading subtests, the difference between the averages of rural and urban learners ranged from 1.9 cwpm for nonsense word reading (8.3 vs. 10.2) to 4.1 cwpm for familiar word reading (13.6 vs. 17.7).

None of the reported differences in Standard 4 were statistically significant. However this may be due to the relatively small sample size of urban learners (287 out of a total sample of 3,019).

The subtests revealing the biggest difference in means by urban designation were familiar word reading and oral reading fluency, with a 4.1% and a 3.6% percentage point difference in scores, respectively, favoring urban learners.

Many factors might account for such differences. MoEST hypothesizes that the most important of these may include the literacy rate of parents, availability of print material at home and school, exposure to print media in the environment, and access to preschool.

However, the differences between urban and rural areas were modest and, in general, learners were missing many of the same fundamental skills no matter what environment they lived in. In reading comprehension, both urban and rural learners were able to respond correctly to less than one question on average.

In summary, although there appear to be patterns of difference among urban and rural learners, both urban and rural learners were reading well below what would be expected at their grade level.

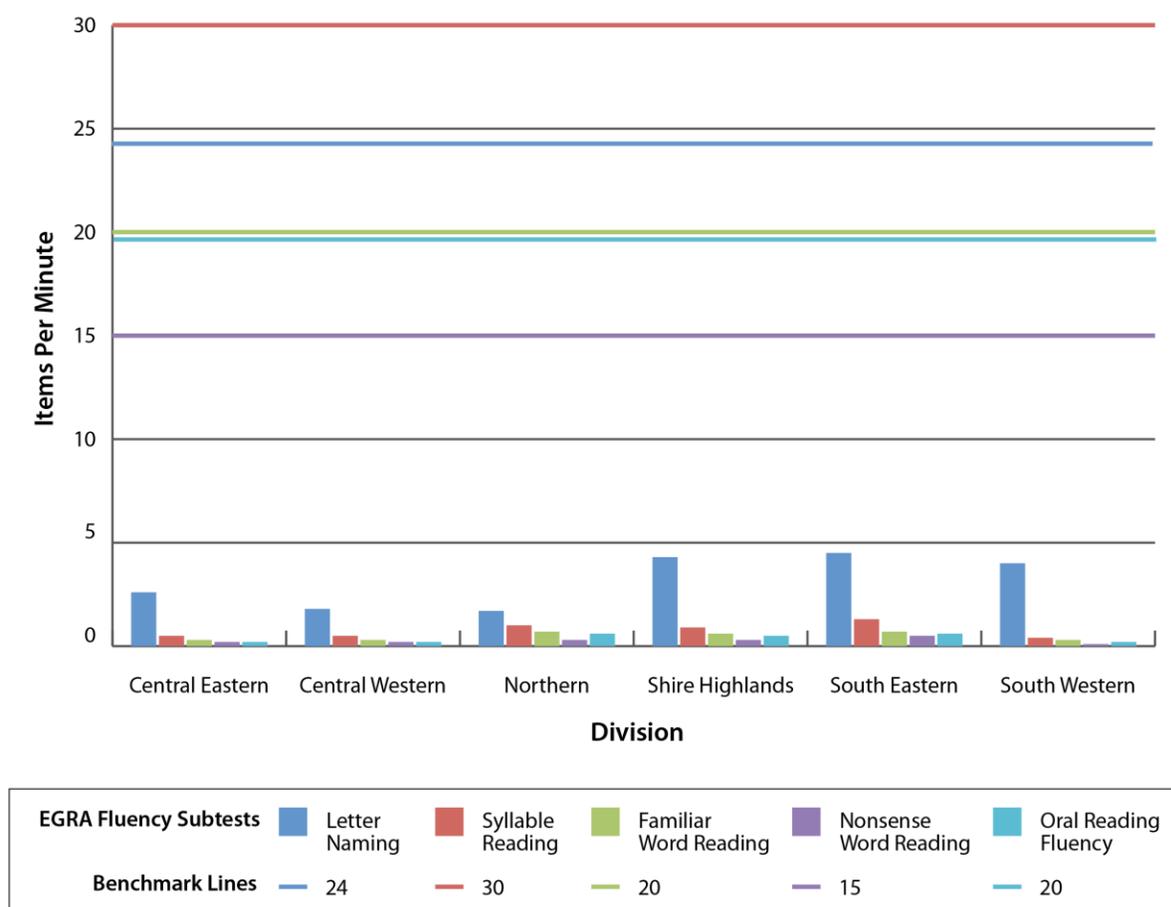
Significance Testing

Significant differences (at $p < 0.05$) were found between urban and rural second graders for the fluency subtests (letter naming, syllable reading, familiar word reading, nonsense word reading, and oral reading fluency), favoring rural learners. However, with the exception of letter naming (rural learners naming 3.2 correct letters per minute [clpm], and urban learners naming 1.8 clpm), the remaining significance tests were comparing averages of less than one item per minute. So, although differences were significant in statistical terms, they are not very meaningful in real terms.

No significant differences were detected for Standard 4 learners. Differences were not detected in Standard 4, because the scores of urban and rural learners were fairly similar to one another. To detect smaller differences (i.e., to increase precision), a larger sample of urban schools would be required.

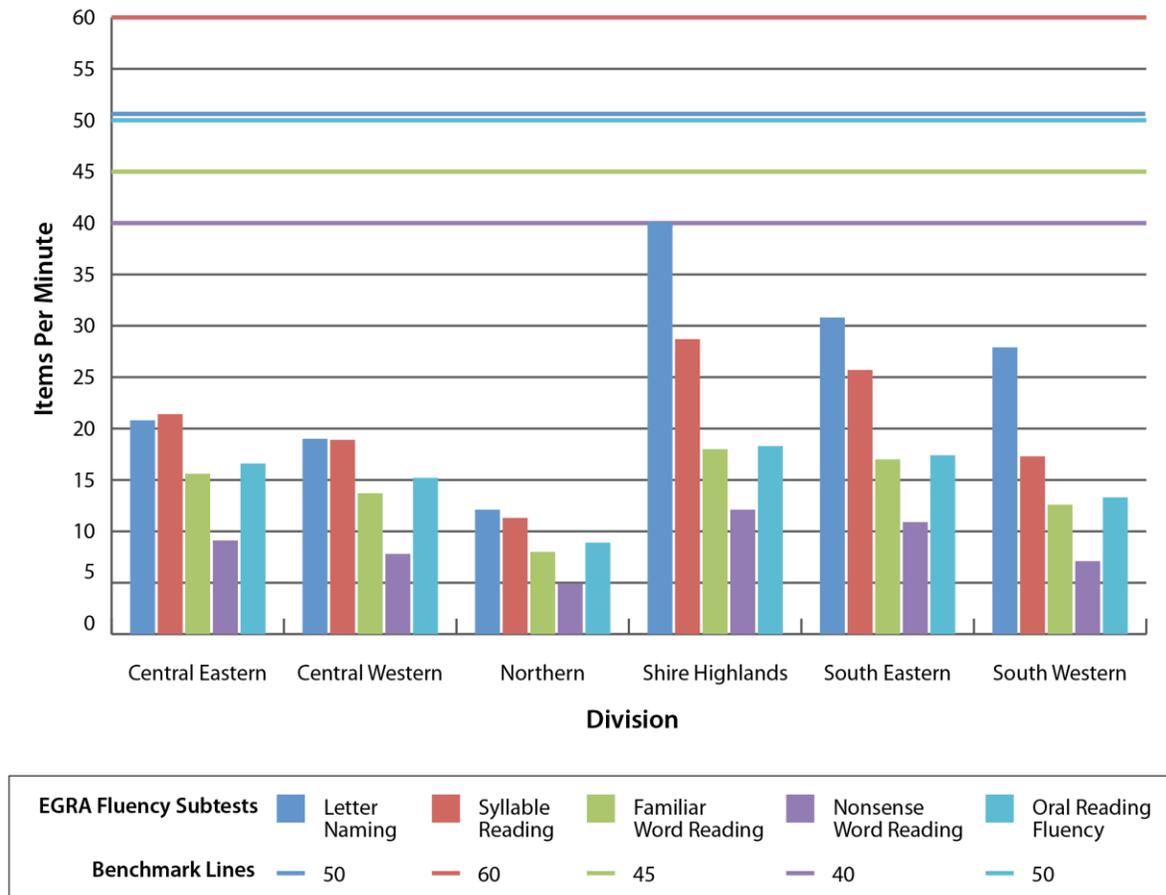
2.5 Division

The sampling strategy for the 2011 EGRA midterm assessment maximized the ability of the study to correctly represent results at the division level (see **Figures 5** and **6** and **Tables 9** and **10**). In each division, 25 schools were randomly selected.

Figure 5. Subtest Results, by Division, Standard 2**Table 9. Subtest Results, by Division, Standard 2**

	Letter Naming	Syllable Reading	Familiar Word Reading	Nonsense Word Reading	Oral Reading Fluency
Central Eastern	2.6	0.5	0.3	0.2	0.2
Central Western	1.8	0.5	0.3	0.2	0.2
Northern	1.7	1.0	0.7	0.3	0.6
Shire Highland	4.3	0.9	0.6	0.3	0.5
South Eastern	4.5	1.3	0.7	0.5	0.6
South Western	4.0	0.4	0.3	0.1	0.2

Standard 2 results on fluency were low across all divisions. The benchmark lines included in **Figures 5** and **6** represent the standards recently set by the Ministry, meant to measure improvement toward quality education in Malawi (for more information, see Section 6, Benchmarks and Targets). At this time, the average Standard 2 learner does not achieve anywhere near the end-of-year benchmarks for Standard 1.

Figure 6. Subtest Results, by Division, Standard 4**Table 10. Subtest Results, by Division, Standard 4**

	Letter Naming	Syllable Reading	Familiar Word Reading	Nonsense Word Reading	Oral Reading Fluency
Central Eastern	20.8	21.4	15.6	9.1	16.6
Central Western	19.0	18.9	13.7	7.8	15.2
Northern	12.1	11.3	8.0	4.9	8.9
Shire Highland	40.1	28.7	18.0	12.1	18.3
South Eastern	30.8	25.7	17.0	10.9	17.4
South Western	27.9	17.3	12.6	7.1	13.3

Looking at Standard 4 results, learner achievement differed according to division. This is particularly noticeable for the skills of letter naming and syllable reading. On those skills, the Shire Highlands and the South Eastern divisions fared the best. The Central Eastern and Western divisions were in the middle, while the Northern division fared least well.

In looking at the oral reading fluency results, a similar pattern emerges in terms of which divisions performed better or worse. However, the average reading scores in all six divisions were low. Average

reading fluency for all divisions ranged from 13 to 19 cwpm, with the exception of the Northern division, which came in lower, at 9 cwpm. It is only in letter naming that learners beginning Standard 4 averaged scores at more than half of the benchmark scores (set for Standard 3, end-of-year).

The low performance of the Northern division, when compared to other districts, is statistically significant. Focusing on the key indicator of oral reading fluency in Standard 4, we find that the average performance of the Northern division is significantly lower (p -value < 0.05) when compared to each of the other five divisions separately. If excluding the South West and Shire (p -value of 0.04 and 0.02, respectively), the significance is even greater (p -value < 0.01). A significant difference (p -value < 0.05) is also detected between South Western division, which is the second lowest division on oral reading fluency, and Shire Highlands, which is the highest. Comparisons for oral reading fluency in Standard 2 did not yield significant differences, because the average score for all divisions was close to zero.

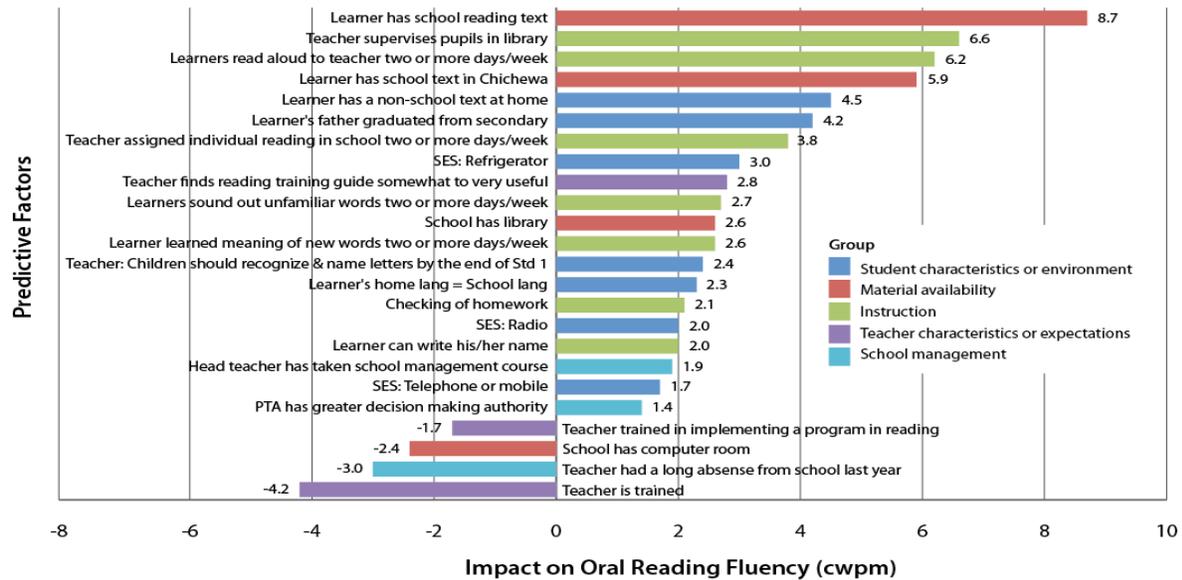
It is not easy to offer an explanation for these differences. It is possible that the relatively poor performance of the North was related to the high proportion of learners for whom Chichewa was not their home language. However, performance also was relatively weak in Central East and Central West, where almost all learners responded in the supplemental learner interview that they also speak Chichewa at home. In these divisions, another explanation should be sought for understanding the relatively weak performance.

4. Factors Predicting Achievement, EGRA 2011

This section presents factors and learner characteristics that were found to predict achievement or, on the contrary, to be negatively correlated with learner achievement. This information is helpful because educators and policy makers can use it to prioritize actions. However, the results should not be taken to mean that the relationships are necessarily causal or exhaustive. Certain factors may simply vary along with learner achievement, and other factors exist that were not measured in this study.

With that caveat, the following findings are the result of a regression analysis using oral reading fluency (cwpm) as the outcome. The results represent individual regressions. All of the predictors of interest are presented in **Figure 7**. The orientation of the bar, either to the left or right of the center line, indicates the direction of the relationship, with left being negative (correlating with a decrease in learner fluency) and right being positive (correlating with an increase in learner fluency). The strength of the relationship is indicated by the length of the bar. The number provided is in cwpm in oral reading fluency; it shows how much variation in cwpm is accounted for by the particular factor presented.

Figure 7. Factors That Correlate with Reading Performance on EGRA



The regression model shows that the most predictive factor out of all of those collected was whether the learner had a school reading text. Learners with a text outperformed learners without a text by 8.7 cwpm. This is roughly equal to the gains made over a year of schooling (calculated by taking the difference between average oral reading fluency in Standards 2 and 4, and dividing the difference by 2, which is approximately 7.25 cwpm). Of course, learners must have reading materials in order to learn to read. This finding has clear implications for prioritizing future investment in the availability of textbooks and supplementary reading materials.

Three additional factors accounted for more than 5 cwpm of variation: (1) teacher supervision of learners in the library, (2) learners reading aloud to their teachers two or more days a week, and (3) availability of a school reading textbook in Chichewa. These factors appear to tell a story about the importance of active learner engagement with appropriate reading materials. Learners who said they spent time with a teacher supervising them in a library read 6.6 cwpm more than learners without supervision. Learners who responded that their teachers take the time to give individual attention by listening to learners while they practice reading could read 6.2 cwpm better than learners whose teachers did not listen to them practice. Learners who indicated that they had the Chichewa school textbook could read 5.9 cwpm better than learners who either had a book in a language other than Chichewa, or had no text at all.

The following two factors, accounting for between 4 and 5 cwpm, are related to the learners' home environment: (i) If learners had a book at home that was not a school text, they performed 4.5 cwpm better than learners without; and (ii) if their father graduated from secondary school, they were able to read about 4.2 cwpm better on average than learners whose father did not graduate from secondary school. Learners with more reading material at home will be more likely to have exposure to reading and practice outside of school, especially if they have parents who can read. This is positive evidence for after-school or weekend activities for learners, particularly those who may not have that same advantage in the home.

Eleven factors positively correlated with a difference of between 2 and 4 cwpm in reading achievement. These factors could be grouped into four categories: literacy instruction, learner characteristics, materials, and teacher expectations. Five were related to literacy instruction:

- teacher assigned individual reading in school 2 or more days per week (3.8 cwpm),
- learners were asked to sound out unfamiliar words 2 or more days per week (2.7 cwpm),
- learners learned the meaning of new words 2 or more days per week (2.6 cwpm),
- teacher checks homework (2.1 cwpm), and
- learners are able to write their name (2 cwpm).

Given these findings, it is clearly important for teachers to spend time on foundational literacy skills, such as sounding out unfamiliar words, and for teachers to use a variety of strategies in school and outside of school to support reading skills. Individual reading practice, which showed the highest relation to reading in this subgroup, is a key aspect of learning to read. After learning new skills, learners are normally given a regularly scheduled time to read individually, with appropriate material. Practicing what they have learned builds fluency. When teachers check homework, they have the opportunity to give learners the critical feedback they need to correct their errors and misconceptions. Furthermore, the fact that these teachers give homework in the first place and that learners spend time reading outside of class may be important in that both activities show teacher and learner dedication.

Three predictive factors related to learner characteristics, correlating with 2 to 4 cwpm. Having a refrigerator (3 cwpm) or a radio (2 cwpm) was a socioeconomic factor that predicted achievement, meaning that learners in better resourced homes were reading better. Learners who responded that their home language was the same as the language used in school read 2.3 cwpm better than learners who responded the opposite. (The question of language is explored further in Section 4.2.)

Two other significant factors involved materials. Teachers who said they found the literacy teacher's guide (Malawi Institute of Education, 2007, 2009) to be somewhat useful had learners who read 2.8 cwpm more than average. If the school had a library, learners read 2.6 cwpm faster than learners in schools with no library.

The remaining factor relates to teacher expectations. Learners whose teachers expected them to be able to recognize and name letters by the end of Standard 1 read 2.4 cwpm faster than learners whose teachers did not expect this skill to be mastered in the first year of school.

Of the three factors that correlated with scores between 1 and 2 cwpm, two were related to school management and the third was a socioeconomic status variable. Head teachers having taken a school management course correlated positively with 1.9 cwpm, parent–teacher associations (PTAs) that had more decision-making authority correlated positively with 1.4 cwpm, and the learner's family having a telephone or mobile phone correlated positively with 1.7 cwpm.

The biggest mystery was that achievement for learners with a trained teacher had a negative correlation—that is, it corresponded with 4.2 *fewer* cwpm in reading fluency. Furthermore there was a negative correlation with teachers trained in implementing a reading program (1.7 cwpm). It is possible to speculate about why teacher training would be negatively affecting learner achievement. The

methods, for example, may not be effective or efficient for learner learning in Malawi. Another possible explanation is that untrained teachers, who are still undergoing training, are observed to prepare more thoroughly and teach more conscientiously since they are still undergoing supervision and assessment.

It is not surprising, however, that achievement for learners with teachers who reported a long absence from school last year correlated negatively at 3 cwpm (i.e., learners with absent teachers scored 3 cwpm less in fluency than learners whose teacher was present). It has been thoroughly documented in literature that learners need a minimum “opportunity to learn” in order to achieve (see review by DeStefano, 2012). Some of the most important “opportunity-to-learn” factors include schools being open, teachers being on time and present each day, learners being on time and present each day, the appropriate amount of class time being respected, and learners focusing on important skills and knowledge during the majority of their time in the classroom.

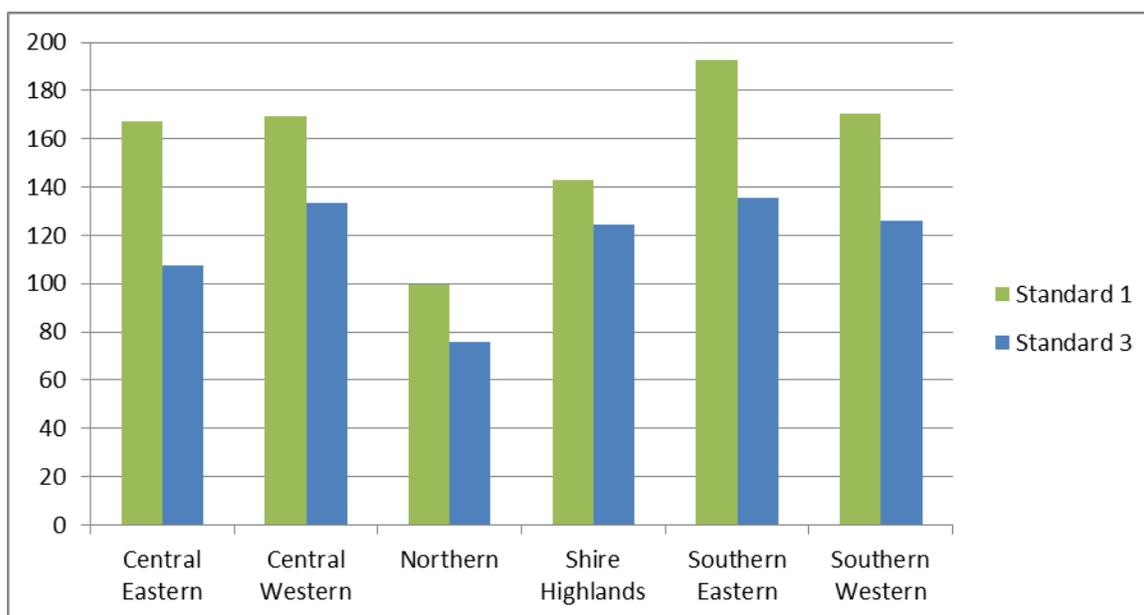
Finally, schools with a computer room correlated negatively with 2.4 cwpm in reading achievement. This finding is difficult to explain, and further study would likely be needed to determine the reason or to validate this unexpected result.

4.1 Learner–Teacher Ratio

This section explores the relationship of learner–teacher ratio to reading achievement. Before we look at the analysis of learner–teacher ratio, it is helpful to have some current information on class size in Malawi. Class size was determined by dividing the enrollment (for Standard 1 or 3) by the number of streams (classes) in that Standard.

It is important to note that the EMIS data referenced in this section were gathered during the 2010–2011 school year, and the variables extracted were from Standards 1 and 3. This is because achievement of learners at the beginning of Standards 2 and 4 (our sample) reflected the learning they had accomplished over a full year in Standards 1 and 3, respectively (in the 2010–2011 school year). **Figure 8** shows class sizes by Standard and division, based on 2010–2011 EMIS data. With the exception of the Northern division, all divisions appear to have had class sizes in both Standard 1 and Standard 3 that were over 100 learners per classroom on average. Four divisions had average class sizes in Standard 1 that were above 160 learners per class. It is notable that all Standard 1 classrooms had larger class sizes than Standard 3.

Dropout rates are high in the early grades. For example, the 2011 EMIS statistics (Government of Malawi 2011a) reported that 14% of learners dropped out in Standard 1, without ever progressing any further. In smaller schools that are staffed on the basis of one teacher per standard, this inevitably means that class sizes decrease in each successive standard. However, it is also true that there is a tendency to place a higher value on higher class levels (like Standard 4 over Standard 1) and therefore to allocate more and better resources to higher-level classes. Such attitudes must be challenged, as skills learned in Standards 1 and 2 are the foundation for all future learning.

Figure 8. Class Size, by Standard and Division

Given the complexities of studying class size (given high dropout and repetition rates among learners, and the variety of ways in which large class sizes are managed in Malawi), we do not report on class size and performance. However, it is notable that performance was worst in the Northern division and yet class size was smallest there. This suggests that the other factors determining poor performance in the North are stronger than any class size effect.

Information from the EMIS database were used along with oral reading fluency scores to study whether there was a relationship between learner–teacher ratio and reading achievement. Learner–teacher ratio was determined by dividing the number of learners in a grade by the number of teachers of that grade. Table 11 presents the results of a logistic regression using the variables learner–teacher ratio and oral reading fluency. The results indicate a very strong positive relationship (p -value < 0.000), indicating that the larger the class size or larger the learner–teacher ratio, the higher the probability the students would have a score of zero on the oral reading fluency subtest. For every additional learner per teacher, the probability of the child having a zero on oral reading fluency went up by 1%. This can be seen in Table 11, in the Odds Ratio column. The number displayed is 1.01, signifying an increase of 1 learner which gives a 1.01% chance of a zero score (as opposed to not increasing by 1 learner). So, for example, a child with 50 classmates more than another learner would be 50% more likely to have a zero in oral reading fluency.

Table 11. Zero Scores on Oral Reading Fluency and Learner–Teacher Ratio, Grade 4 (Logistic Regression)

	Odds Ratio	Standard Error	$p > t $	95% Confidence Interval	
Learner–teacher ratio	1.01	0.001	0.000	1.009	1.014
Constant	0.79	0.114	0.109	0.597	1.054

From these results, it is clear that learner–teacher ratio makes a difference for reading achievement in Malawi, and for this reason, initiatives aimed at reducing class size, especially in lower grades, should be pursued vigorously. The MoEST made efforts to reduce class sizes for the 2011–2012 school year. A new policy circular released in 2011 (MoEST, 2011b) instructed head teachers to reduce Standard 1 class sizes to 60 learners per teacher or less. However, anecdotal evidence suggests that implementation of this directive has been inconsistent. Collecting EGRA data in the future should make it possible to examine how the changes in these variables relate to reading across multiple years.

4.2 Language

This section explores the relationship between language and reading ability in Chichewa. Much has been written about the positive effects of learning in the mother tongue (for example, see Thomas & Collier, 2002; Yohannes, 2009). As noted, for the first few years of schooling in Malawi, the language that children learn to read is Chichewa, according to curriculum policy and practice. However English is also taught as a separate subject during this time. Teachers are expected to use the learners’ home language as the medium of instruction for all subjects in Standards 1–4. In the majority of schools the medium of instruction is Chichewa; however, in certain regions of the country, other home languages predominate (for example, Chitumbuka in the Northern division and Chiyao in Mangoche district of the South Eastern division). In such places it is still Chichewa in which learners are expected to master reading skills and in which all textbooks are written. Children in these areas may, therefore, be learning Chichewa through the medium of another local home language.

Although most learners may understand what the teacher says, they could still be facing difficulties in learning to read Chichewa. A clear example would be difficulty in learning sounds of the Chichewa letters, which may not exist in other local language, such that sounding out words may be difficult. Encountering too much new vocabulary (and possibly, grammar) in Chichewa would certainly be an obstacle to reading comprehension. But not knowing the meaning of words would present difficulties even for word-level reading (decoding printed words), since the learners would have trouble connecting the meaning with words they were reading from the printed page, and therefore, would not know whether they were reading correctly or incorrectly.

Going a step further, if one can count these learners as disadvantaged, we should look at the possible scale of this disadvantage. According to SIL International, which maintains the authoritative website Ethnologue.com, Chichewa is the first language of approximately seven million out of 13 million Malawians (a little over half of the population; see Lewis, 2009). Other prominent languages include Chitumbuka and Chiyao, each spoken by approximately one million people.

This study explored the relationship between language of instruction and learner performance. Schools were then classified as Chichewa or non-Chichewa based on the EMIS data on schools’ language of instruction in the early grades. The data for these two groups were then compared in terms of performance on the EGRA assessment.

Assuming that schools were following the local language policy, the schools that reported using Chichewa in Standard 1 should have been composed of a majority of local speakers of Chichewa. So, hypothetically, what we are exploring now is the relationship between (1) Chichewa speakers (and those in proximity to Chichewa-speaking populations) and their ability to read a Chichewa text, and (2) a

majority non-Chichewa speakers’ ability to read Chichewa text. It may then be possible to get a sense of whether non-Chichewa speakers are at a disadvantage when asked to read Chichewa text.

Limitations to this analysis included two assumptions: first, that schools were following the local-language policy and accurately reporting these data, and second, that no other unmeasured factors differed between the Chichewa-speaking and non-Chichewa-speaking populations. Furthermore, there was a clustering of non-Chichewa schools in the Northern division, so there could be factors related to the location of schools that are influencing the results. The analysts did make an effort to control for socioeconomic status based on the demographic data collected for the students included in the sample. Finally, the categorization of Chichewa and non-Chichewa schools does not account for the fact that schools may have had a mix of Chichewa and non-Chichewa speakers. But hypothetically, mixing these groups would lead to less difference between the two groups, making the differences harder to detect. So, this would not contradict findings of differences between the groups, which is what we are interested in.

According to the EMIS data, the schools in our sample that reported using a language other than Chichewa as the language of instruction were mainly based in the Northern division (see **Table 12**). It is notable that no schools in our sample in that division reported using Chichewa as a language of instruction and that in two other divisions, the Central Western and Shire Highlands, all schools reported using Chichewa as the language of instruction.

Table 12. Percentage of Chichewa versus Non-Chichewa Schools, by Division

Division	Schools using Chichewa as the Language of Instruction
Central Eastern	93%
Central Western	100%
Northern	0%
Shire Highlands	100%
South Eastern	96%
South Western	97%

The first logistic regression (see **Table 13**) looked at the odds that Standard 4 learners in the two types of schools, Chichewa and non-Chichewa, would be able to read at least one word correctly on the oral reading fluency passage. This statistic employed the important category of children with zero scores (learners who could not even begin to read) and compared them to learners who could read something. We found that Standard 4 learners in Chichewa-speaking schools were 2.4 times more likely to be able to read at least one word correctly than those in non-Chichewa schools.

Table 13. Logistic Regression, Chichewa versus Non-Chichewa Schools (Standard 4)

Language	Odds Ratio	Standard Error	$p > t $	95% Confidence Interval	
Chichewa	2.42	0.444	0.000	1.687	3.481
Non-Chichewa	0.60	0.098	0.002	0.437	0.830

Another linear regression model was used to better understand the relationship between the language of instruction, and learner achievement in oral reading fluency. **Table 14** shows that learners in Chichewa-speaking schools were performing better than learners in non-Chichewa schools. Learners in Chichewa speaking schools read, on average, 2.73 more words per minute than learners in non-Chichewa schools. This is a statistically significant difference.

Table 14. Linear Regression, Chichewa versus Non-Chichewa Schools (Standards 2 and 4)

Language	Coefficient	Standard Error	t	$p > t $	95% Confidence Interval	
Intercept/ Constant ^a	4.59	0.665	6.90	0.000	3.375	5.904
Chichewa ^b	2.73	0.751	3.63	0.000	1.244	4.212

^a “Constant” refers to the y-intercept, or the average number of correct words per minute for a child at a non-Chichewa speaking school

^b “Chichewa” refers to the average gain over the y-intercept above; thus $4.59 + 2.73 = 7.32$ correct words per minute for students in Chichewa speaking schools.

Table 15 shows the mean scores of learners in Chichewa-speaking and non-Chichewa-speaking schools in Standards 2 and 4. In Chichewa-speaking schools, learners read approximately 7.7 cwpm, and in non-Chichewa speaking schools, approximately 5.5 cwpm.

Table 15. Oral Reading Fluency, Chichewa versus Non-Chichewa Schools (Standards 2 and 4)

Language	Mean	Standard Error	95% Confidence Interval	
Chichewa	7.74	0.392	6.968	8.519
Non-Chichewa	5.45	0.605	4.254	6.647

In summary, it is not possible to say definitively that language caused the differences between these schools. However, given the importance of language to the reading process, and the measurable differences described above, it is a likely hypothesis that should be further studied and considered with respect to decision-making in school policy and practice.

5. Comparison of 2010 and 2011 EGRA Data

One of MTPDS’s objectives is to look at changes in reading results over time. In order to establish a trend, it is necessary to have data from at least three time-points. For the three-year MTPDS project, those data points are being collected in November of each year, including the baseline (completed in

2010), midterm (2011, current data), and final (planned for 2012). Comparing the baseline and the midterm results allows MTPDS to get critical feedback on overall national changes in literacy achievement. Furthermore, the 2011 results can be viewed more generally as a validation of 2010 results, if they reveal the same patterns and the results are similar for the most part. The fact that the sample size was larger in 2011 lends strength to the results.

5.1 Technical Notes

In comparing 2010 and 2011 EGRA data, the first step is to verify that we are comparing two assessments with nearly the same difficulty level. As explained in Section 1.1, Research Design, most subtests were adapted simply by changing the order of the items presented. Due to this and other steps taken in the initial design (presented previously), the change in difficulty across versions should be minimal.

Three sections were more difficult to update and therefore require post-test adjustment: oral reading fluency, reading comprehension, and listening comprehension. For each of these assessments, in order to determine the relative difficulty level between the EGRA instruments used in 2010 and 2011, a pilot test was conducted to gather these data. More information on this pilot process is in Section 1.1. Using these pilot results, a coefficient of difficulty was calculated by comparing how individual learners performed across the two tests, and the 2011 results were multiplied by that coefficient.

Table 16 uses the equated results in a comparison of 2010 and 2011 learner achievement data.

Table 16. Subtest Results, 2010 Compared with 2011, and Effect Sizes

Subtest	No. of Items	Standard	Mean or %	Mean or %	Effect Size
			Correct 2010	Correct 2011	
Letter naming	—	2	2.3	3.1	0.116
		4	21.3	24.0	0.125
Syllable segmentation	10	2	46.6%	27.5%	-0.558*
		4	66.5%	52.7%	-0.364*
Initial sound identification	10	2	5.2%	3.9%	-0.103
		4	15.0%	7.9%	-0.357*
Syllable reading	—	2	1.3	0.8	-0.117
		4	19.2	20.2	0.043
Familiar word reading	—	2	0.8	0.5	-0.113
		4	11.5	14.0	0.151
Nonsense word reading	—	2	0.5	0.3	-0.108
		4	7.8	8.5	0.059
Oral reading fluency	—	2	0.8	0.4	-0.144

Subtest	No. of Items	Standard	Mean or % Correct 2010	Mean or % Correct 2011	Effect Size
		4	11.5	13.9	0.140
Reading comprehension	5	2	0.8%	0.2%	-0.172
		4	8.5%	10.3%	0.113
Listening comprehension	5	2	30.9%	46.3%	0.686*
		4	50.3%	63.7%	0.562*

* Denotes a medium or large effect size.

5.2 Data Comparisons

Table 16 above shows the mean results on the EGRA assessments from 2010 and 2011, as well as the effect size of the differences between the two years. For most of the subtests, little to no change was found between 2010 and 2011 (effect sizes were 0.15 or lower). The subtests that appear to show a change between 2010 and 2011 are syllable segmentation, initial sound identification, and listening comprehension.

For the phonological awareness subtests—syllable segmentation and initial sound identification—the effect size is medium to strong and negative, showing a performance decrease. In real terms, these two assessments were composed of 10 items, and the change is approximately 1.5 items on syllable segmentation (2 items in Standard 2, and 1 in Standard 4) and less than 1 item in initial sound identification. So, the change in real terms is relatively low. A couple of explanations for this change follow; they assume that teaching practice remained largely unchanged between 2010 and 2011. First, it is possible that the two cohorts of learners were simply different from each other. These kinds of changes are not uncommon in educational research. Second, a bias may have been caused by alterations in assessment administration between 2010 and 2011. For example, we know that one main difference was the personnel administering the assessment. In the first year, data collectors were hired, while in the second year, MoEST personnel performed the function of data collectors as well as supervisors. This could cause bias if Ministry personnel were, for example, more skilled in distinguishing sounds and syllables (and thus better able to pick up errors).

Although the results show a possible 1- to 2-item decrease in achievement, the real concern with these phonological awareness skills is that learners clearly are not showing improvement. The skills measured in these assessments are described in reading research as pre-reading or very early reading skills. This would be an argument for teaching them early in Standard 1, or even before Standard 1. The MoEST benchmark for the end of Standard 1 is currently 70% correct (syllable segmentation) and 80% correct (initial sound identification).

There appears to have been a strong positive change in listening comprehension from 2010 to 2011. The amount of change is 15.4% in Standard 2 and 13.4% in Standard 4. Explanations for this change could include the effectiveness of the national programs mentioned below, or differences between cohorts (as explained previously). The 2012 EGRA may be able to shed light on whether this is a temporary change

(fluctuations moving with a particular learner cohort) or a trend of increasing achievement in comprehension among the nation’s learners.

Between the 2010 and 2011 school years, two interventions took place at a national level, funded by USAID, which aimed to improve literacy learning outcomes. MTPDS and the MoEST implemented a two-day continuous professional development (CPD) training in literacy for all teachers in Standards 1–4 delivered in December 2010. The Tikwere Interactive Radio Instruction (IRI) program continued to broadcast daily radio programs with literacy content into classrooms nationwide.

It is important to keep in mind that by most accounts, it takes several years to change educational achievement in a measurable way on a national scale. This is because many different factors must align correctly in order to produce achievement: time on task, appropriate materials, effective teaching methods, and good use of continuous assessment, among other things. Apparently, existing efforts to improve learner performance on a national level have yet to achieve measurable impact.

6. Benchmarks and Targets

On October 27, 2011, the MoEST and other education stakeholders were convened as a body called the National EGRA Coordination Committee. They agreed on an initial set of literacy benchmarks that will serve as key indicators of progress in developing the quality of education services (see **Annex D**). In setting these benchmarks and targets, the committee members considered what targets were realistically attainable for the majority of Malawian learners in the light of international norms of achievement, with the realization that the attainment of these benchmarks will depend on the provision of a minimum level of support to learners, which is currently unavailable to the majority of them.

In the future, these or similar indicators are expected not only to assist the Ministry to track literacy achievement, but also to provide a way for teachers and parents to chart progress against approved standards. If early grade reading achievement data are collected over several years, they will provide a richer and fuller picture of, for example, what high-achieving children can do in less well-resourced environments. This, in turn, can help refine standards. This section provides an overview of learner performance on the EGRA assessment in 2010 and 2011 as compared with the relevant benchmarks.

6.1 Percentage of Learners Reaching Benchmarks in 2011

In 2011, more than 10% of learners reached the benchmarks for letter naming (Standard 4), syllable segmentation (Standards 2 and 4), and listening comprehension (Standards 2 and 4). For the other subtests, the percentages reaching the benchmark were lower. It is notable, therefore, that less than 10% of learners reached the level expected in subtests that required decoding, which included syllable reading, familiar word reading, nonsense word reading, and oral reading fluency.

6.2 Percent Change in Learners Reaching Benchmarks from 2010 to 2011

To discuss the percent change in learners reaching the benchmark, effect sizes were classified as low (0.0 to 0.19), moderate (0.2 to 0.39), or strong (0.4 and up). On most subtests, the study showed little change in the percentage of learners reaching the benchmark (**Table 17**).

Table 17. Medium and Large Effect Sizes: Percentage of Learners Reaching Benchmarks from 2010 to 2011

Subtest	Standard	Benchmark	% Reaching Benchmark, 2010	% Reaching Benchmark, 2011	Effect Size
Letter naming	2	24+ clpm	2.3%	2.1%	-0.011
	4	50 clpm	11.2%	14.3%	0.086
Syllable segmentation	2	70% correct	42.3%	24.7%	-0.413*
	4	80% correct	52.1%	36.0%	-0.313*
Initial sound identification	2	80% correct	0.1%	0.7%	0.091
	4	90% correct	0.0%	0.8%	0.095
Syllable reading	2	30 cspm	1.8%	0.4%	-0.167
	4	60 cspm	9.8%	7.3%	-0.086
Familiar word reading	2	20 cwpm	1.8%	0.6%	-0.139
	4	45 cwpm	3.5%	5.2%	0.078
Nonsense word reading	2	15 cwpm	1.4%	0.5%	-0.116
	4	40 cwpm	0.6%	1.2%	0.063
Oral reading fluency	2	20 cwpm	1.6%	0.4%	-0.157
	4	50 cwpm	2.8%	2.1%	-0.039
Reading comprehension	2	40% correct	1.4%	0.0%	-0.251*
	4	80% correct	0.2%	0.0%	-0.082
Listening comprehension	2	60% correct	19.5%	24.2%	0.117
	4	80% correct	23.4%	21.7%	-0.037

* Denotes medium or strong effect size.

clpm = correct letters per minute; cspm = correct sounds per minute; cwpm = correct words per minute.

The only subtests that showed a moderate or strong effect size were syllable segmentation (Standards 2 and 4) and reading comprehension (Standard 2). For these subtests, the number of learners reaching the benchmark decreased.

For all subtests, the real (practical) change between 2010 and 2011 was minimal.

7. Conclusions and Recommendations

The results of the 2011 national midterm EGRA revealed that the average Standard 2 and 4 learner in Malawi was unable to read a simple story with understanding, let alone read school textbooks. In examining skills and knowledge that might be expected of Malawian learners reading in Chichewa, the

2011 study showed that learners who could respond correctly to at least 60% of reading comprehension questions had an average oral reading fluency of 55 cwpm. However, the average reading fluency of beginning Standard 4 learners was a dismal 15 cwpm. Not surprisingly, comprehension in the same grade was 15% correct, which corresponds to less than 1 reading comprehension question answered correctly out of 5.

The study detected gaps in learning at the earliest and most basic level. By the beginning of Standard 2, learners should be able to master some of the basic skills, such as knowing letter sounds, naming all the letters of the alphabet, and reading at least some words. Instead, on average, learners could name only 3 letters correctly in a minute, 86% could not name the first sound in words presented orally (initial sound identification subtest), and 96% of learners could not read one word of the story (oral reading fluency subtest).

Clearly, the majority of children are not reading well enough to be able to learn from their school textbooks. In this situation, children can gain new information only by listening to the teacher. The inability to read books strongly undermines gains in access to schooling, making learning ineffective. In contrast, children who can read and understand their books can learn much more rapidly, and are exposed to richer and more complex vocabulary and ideas. They are able to learn outside of the classroom and contribute more inside the classroom.

Learner–teacher ratios in Malawi during the 2009–2010 school year were studied in terms of their relationship to the oral reading fluency of learners at the beginning of the 2010–2011 school year. For every additional learner in the classroom, the likelihood of a child being unable to read even one word went up by 1%. So with 50 more learners, a child was 50% more likely to score 0. This finding lends strong support for the new policy communicated by MoEST to schools in 2011 mandating that Standard 1 class sizes be reduced to 60 or fewer learners. As schools put this policy into practice, there is hope that it will be possible to see a reduction of zero scores in reading across the country.

This study analyzed learner results by language, specifically in comparing schools where the language of instruction was in Chichewa and schools where it was not. Learners in Chichewa-speaking schools had higher reading performance. Looking at the combined results for Standards 2 and 4, learners in Chichewa schools could read 2.7 more cwmp than learners in other schools. A possible explanation, based on research in reading, is that learners whose native language is Chichewa have an advantage in learning to read Chichewa over learners whose native language is something else, like Chiyao or Chitumbuka. This puts a large proportion of Malawian learners at a disadvantage. Ways to remedy this situation could include creating more local-language programs, or providing more and better learning opportunities for children who must learn to read Chichewa.

Average learner reading fluency in urban areas was similar to that of rural areas, although it appeared to be higher in urban areas. Our hypothesis is that enlarging the sample size would confirm the urban–rural disparity and the importance of working toward equity in learning opportunities for rural learners. At the same time, the results showed that learners in all parts of the country, urban and rural, require a great deal more support.

There were no significant differences between males’ and females’ mean performance on most reading skills. This is not to say that there are no gender inequalities in learning; rather, in fundamental reading

ability, these inequalities are not pronounced. Efforts to ensure gender-sensitive curriculum development and teacher education should be maintained and strengthened.

The November 2011 assessment results revealed a picture similar to that presented for 2010 and may be considered to verify those results. Apparently, efforts to improve learner performance on a national level have yet to achieve measurable impact. Recent reviews of international experience in improving early literacy⁴ show that effective interventions must combine a number of vital components, including teacher training that explicitly addresses literacy instructional techniques, supervision and coaching support for teachers, the setting and enforcing of standards,⁵ increased time on task for learners, and ensured availability of appropriate reading material. These various elements have yet to be assembled consistently on a national scale. The *Maziko a Kuwerenga* intervention implemented during 2011 in Salima and Ntchisi and subsequently scaled up to five more districts in 2012 does include each of these elements and may provide a scalable model for intervention.⁶ Reading is a lifelong skill that stays with learners no matter where they go or how long they stay enrolled in school. It is critical that expectations are set for teachers and learners in the early grades, and investments are made to help them meet expectations. This report publicizes the recently established benchmarks for learners in Standards 1 and 3 (see **Annex D**, Benchmarks and Targets, 2012–2017). These benchmarks should be used to begin a national discussion on actions by all stakeholders that can lead to achievement of these important standards. Together, the benchmarks and standards should form the foundation of a national early literacy strategy.

The following recommendations are intended to inform the development of a national early literacy strategy. If a recommendation was also previously made in the EGRA 2010 baseline report, this is noted and any significant developments in the intervening year are reported.

1. Start teaching the alphabet and letter sounds at the beginning of Standard 1

The earlier that learners acquire literacy skills, the better. However, the EGRA 2011 midterm study showed that at the beginning of Standard 2, learners could name fewer than 4 letters. It is therefore likely that children in Standard 1 are not being taught the letters of the alphabet. One contributing factor may have been that the current Standard 1 (Ministry of Education, 2004) curriculum expects learners to learn only vowels in Chichewa. Curriculum revisions are now under way to include all letters of the alphabet. The next challenge will be to provide information to teachers about when and how to teach the letters and related skills, like writing them and pronouncing letter-sounds. The EGRA 2010 baseline report also recommended that teaching of early literacy skills commence as early as possible in Standard 1, and this concern has now been partially addressed through the curriculum review process spearheaded by MIE (2011–2012). Previously, the Standard 1 curriculum devoted the whole of the first term (14 weeks) to the “Introduction to School Life and Learning” program, which aims to prepare

⁴ See, for example, USAID’s Education Strategy for 2011–2015 (USAID, 2011); and Gove and Wetterberg (2011).

⁵ However, standards should be enforced only if teachers receive at least minimal instruction in what they need to know, and schools are granted the minimal resources necessary to bring learners up to the standard. See Korda and Piper (2011), which shows that accountability does not work if teachers do not have the means to meet expectations.

⁶ More information about the *Maziko a Kuwerenga* intervention can be found on the MTPDS website, at <http://mtpds.org/result-areas/result-iii-improved-early-grade-literacy>.

learners to begin formal learning. During the curriculum review this period was reduced to 7 weeks, and it is anticipated that this change will be implemented during the 2012–2013 school year.

2. Teach decoding skills to early-grade learners

As elaborated in the 2010 EGRA report (MTPDS, 2010), decoding skills must be taught in order for learners to read quickly and accurately. When learners can read with ease, they are able to focus more on comprehension. In order for learners to arrive at decoding, they must learn what sounds the letters represent, and how to blend letters into words, among other skills. Then they must also have daily practice in decoding. During the year (since this recommendation was previously made in the EGRA 2010 baseline report), the importance of teaching decoding skills has been communicated to all Standard 1–4 teachers nationwide through the delivery of a national CPD module titled *Developing Literacy: Effective Teaching Techniques* (MoEST, 2012b). Implementation of this training must be reinforced through future CPD and through other available channels.

3. Promote proven best practices in early reading instruction

In this EGRA 2011 midterm report, a number of reading instruction practices were shown to predict higher learner reading ability. These instructional practices included teaching specific reading skills, like sounding out unfamiliar words (practice decoding); teaching the meaning of new words (vocabulary/comprehension); and having learners write their own name (writing). Other important teaching practices included assessing learner reading and checking homework.

4. Maximize time on task for reading practice

The 2011 midterm assessment also showed that providing the opportunity for reading practice is very important. This includes independent reading, reading with teacher supervision, and reading in the home environment. Learners who read aloud to their teachers, and learners who were supervised in a library, were able to read about 5 cwpm more than learners who did not have these opportunities. Furthermore, learners who had a non-school text at home, and learners whose father graduated from secondary school, were able to read about 4.3 cwpm faster than those who did not. This indicates that learners should maximize the time spent on reading, and should read with modeling and guidance as well as independently. The EGRA baseline report based on data collected in 2010 recommended a lengthening of the school day. We repeat this recommendation based on the 2011 data.

5. Minimize the turnover of specialist teaching staff in the early grades

During the preparation of this report it came to light that the efforts of existing training interventions under MTPDS have been frustrated by widespread turnover of staff between higher and lower grades at the school level. It should be recognized that the teaching of reading in early grades requires a specific skill-set on the part of teachers, which can be acquired through training, but which is also honed and practiced by teachers over an extended period of time. For this reason, the reallocation of staff trained in these techniques to higher grades should be avoided (see Schiefelbein, Wolff, & Schiefelbein, 2000).

6. Prioritize investment in provision of appropriate early grade reading materials

The availability of textbooks for learners was the strongest predictive factor in the EGRA 2011 midterm study, when looking across factors related to learners, teachers, and head teachers. It accounted for 8 cwpm of reading ability, roughly equivalent to the gain of an entire year of schooling. It is not possible

to learn to read without materials to read. Investment is recommended in making suitable materials widely available, such as the *Nditha Kuwerenga* reader developed by MTPDS, and the numerous other supplementary reading titles developed under the Read Malawi project. It is clearly also important that learners have access to textbooks. The EGRA 2010 report recommended a review of textbooks, and MIE is now nearing completion of a comprehensive review of textbooks and teachers' guides in Standards 1–4, with support from MTPDS. Substantial revisions have been made to the Chichewa textbooks which render them much more useful for the teaching of essential decoding skills to learners. The challenge remains to ensure that these new materials are printed and nationally distributed.

7. Strengthen efforts to reduce class size

This study presents clear evidence of the impact of class size (specifically, learner–teacher ratio) on learner achievement, yet the largest class sizes continue to be found in the early years. Since this recommendation was previously made in the EGRA 2010 baseline report, strategies for reducing class size were set forth by the MoEST in the aforementioned circular of 2011 (MoEST, 2011b). These strategies include ensuring that learners enroll at the expected age of 6 years; enforcing measures to minimize repetition; redeploying teachers within the school to ensure a maximum class size of 60 in the early grades; promoting use of double shifting; deploying only one trained teacher per class; and, where not all teachers are trained, prioritizing the deployment of trained teachers to the early grades. Efforts to implement these strategies must be maintained and strengthened together with efforts to build classrooms and improve the supply of trained teachers.

8. Review and develop strategies to address the needs of non-Chichewa-speaking learners

It is now widely accepted that children learn early reading skills most effectively in their mother tongue. This study shows that children in non-Chichewa-speaking communities may be at a disadvantage in acquiring reading skills. Strategies should be developed to support reading acquisition among these learners.

9. Focus on the needs of learners currently assessed with zero scores

Children scoring zero on oral reading fluency should be viewed as a disadvantaged subgroup on their own. In the 2011 EGRA midterm assessment, they formed a majority of all learners in Standard 2. It is essential that teachers' time be focused on this group. Teachers must focus teaching and assessment on reducing this group to 20% or less of all learners (recognizing that a small proportion of learners may have disabilities). This means that teachers should devote more attention to assessing and re-teaching reading skills until a great majority of children have achieved mastery, before progressing through the curriculum. Syllabus coverage should not be accorded higher priority than the mastery of its content. Learners who do not learn to read by Standard 4 may never have an opportunity to be successful in school, or to harvest the economic benefits that go hand-in-hand with this important life skill.

10. Intensify coaching and supervision of teachers to support improved early grade reading

The EGRA 2010 baseline report recommended a review of in-service professional development in literacy. Through MTPDS, CPD materials are now being developed and delivered nationally to strengthen early literacy teaching skills in serving teachers (MoEST, 2012b). Provision of follow-up coaching and support to teachers will be critical for the implementation of this training. This requires that PEAs and

head teachers set clear expectations for providing such supervision, and receive the necessary training and resources to execute this task.

11. Review pre-service teacher training curriculum to strengthen early literacy acquisition

The existing Teacher Training College curriculum omits many fundamental skills of early literacy acquisition. Action is required to ensure that these gaps are addressed in the ongoing revision to the pre-service teacher training curriculum.

12. Expand comprehensive reading interventions

International research on literacy shows that multiple conditions are necessary for improvement in reading performance on a wide scale (USAID, 2011). Among those conditions are: (1) training on good teaching practice that focuses on key skills, (2) follow-up coaching and support for teachers, (3) use of continuous assessment, (4) access to reading materials, (5) increased time spent on task, (6) use of the learners' home language, and (7) enhanced community support for literacy. Interventions that meet these conditions in an integrated manner are more likely to be successful. The expansion of the *Maziko a Kuwerenga* intervention from two to a total of 1,310 schools in seven districts, at the beginning of 2012, is a welcome development in this regard.

13. Publicize and monitor literacy benchmarks

In response to the recommendations from the EGRA 2010 Baseline Report, in October 2011 the National EGRA Coordination Committee developed literacy benchmarks for Standards 1-4. A key subset of these benchmarks and associated targets now needs to be publicized to educators nationwide. These expected standards should be monitored at the school level through inspection and advisory services. MoEST's recent adoption of EGRA as an integral part of the *National Primary Curriculum Monitoring and Evaluation Strategy* (MoEST, 2011c) will ensure the institutionalization of EGRA as a tool for monitoring learner achievement. At the school level, through CPD, teachers also need to be empowered with tools and skills to monitor the progress of their learners against these explicitly stated benchmarks. However, it is important to keep in mind that accountability must be accompanied by a minimum of necessary support to schools, teachers, and learners.⁷ For example, teachers must have minimum skills and knowledge to teach literacy, and learners must have sufficient appropriate materials as well as time to learn.

14. Develop, document, publicize, and implement a National Early Literacy Strategy

It is now widely acknowledged that there is a crisis in the teaching of reading in Malawian primary schools. The time is ripe for developing and implementing a National Early Literacy Strategy. This could bring together all the recommendations outlined above within a coherent framework, with clearly allocated responsibilities and implementation timeframes. The implementation of the strategy should be prioritized and continuously monitored across all directorates and institutions concerned with primary education. Through a mass media campaign, all sectors of society should be mobilized to support literacy development.

⁷ "...attention and focus on reading and increased accountability, by both teachers and communities, are powerful but insufficient; training and skills are also necessary" (Korda & Piper, 2011, p. 97).

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Annex A. EGRA 2011 Instrument



Ministry of Education
MALAWI

**Malawi Early Grade Reading Assessment: Student Response Form
Administrator Instructions and Protocol, October 2011**

Chichewa

Malangizo:

Muyenera kukhazikitsa ubwenzi wabwino ndi wophunzira amene mukumuyesa kudzera mu nkhani zifupizifupi komanso zosangalatsa kuti aone mafunsowa ngati sewero chabe osati ntchito yovuta. Nkoyenera kuwerenga zigawo zokhazo zomwe zili mumabokosi mokweza, momveka bwino ndi modekha.

Uli bwanji? Dzina langa ndi _____ ndipo ndimakhala ku _____. (Chezani ndi wophunzira munjira yomwe ingathandize kuti amasuke).

Kupempha chilolezo

- Ndikuuze chifukwa chimene ndabwerera kuno. Ndimagwira ntchito ku Unduna wa za Maphunziro, za Sayansi ndi Luso. Ndikufuna kudziwa m'mene inu ophunzira mumaphunzirira kuwerenga. Mwa mwayi ive wasankhidwa kuti ndicheze nawe.
- Ndikufuna kuti tikambirane pa zimenezi koma ngati sukufuna utha kubwerera m'kalasi.
- Tichita sewero lowerenga. Ndikufunsa kuti undiwerengere malembo, mawu ndi nkhani mokweza.
- Ndigwiritsa ntchito wotchi iyi kuti ndiwone nthawi yomwe utenge powerenga.
- Awa simayeso, ndipo sizikhudzana ndi zotsatira za maphunziro ako.
- Ndikufunsanso mafunso ena okhudzana ndi banja la kwanu monga, chiyankhulo chomwe mumayankhula kunyumba kwanu ndi zinthu zina zomwe muli nazo kwanu.
- Sindilemba dzina lako ndipo palibe amene adziwe zimene tikambirane.
- Ndibwerezanso kuti uli ndi ufulu woyankha mafunso kapena ayi. Ngakhale tili mkati mwa kucheza uli ndi ufulu kukana kuyankha mafunso.
- Uli ndi funso tisanayambe? Tikhoza kuyamba?

Chongani mukabokosika ngati ophunzira wavomereza kuyesedwa: INDE

(Ngati wophunzira sanavomereze kuyesedwa, muthokozeni ndi kuitana ophunzira wina pogwiritsa ntchito chipepala chomwechi.)

A. Tsiku la Mayeso	Tsiku : _____ Mwezi : _____		H. Kalasi	<input type="radio"/> 1 = Sitandade 2 <input type="radio"/> 2 = Sitandade 4
B. Dzina la Woyesa				
C. Dzina la Sukulu			I. Dzina la Mphunzitsi	
D. Dera			J. Sitilimu	
E. Boma			K. Nambala ya Chinsinsi ya Ophunzira	
F. Chigawo			L. Zaka zakubadwa	
G. Mtundu wa Sukulu :	<input type="radio"/> 1 = Tsiku lonse <input type="radio"/> 2 = M'mawa <input type="radio"/> 3 = Masana		M. Mwamuna kapena Mkazi	<input type="radio"/> 1 = Mwamuna <input type="radio"/> 2 = Mkazi
			N. Nthawi Yoyambira	____ : ____

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

1

Gawo 1. Kudziwa Dzina la Lembo

Onetsani ophunzira pepala la malembo mu buku la ophunzira. Nenani:

Ili ndi tsamba la malembo a m'Chichewa. Ndiuze maina a malembo amene ungate.

Mwachitsanzo, dzina la lembo [lozani lembo la 'L'] ndi L

Tiye tiyesere: ndiuze dzina la lembo ili [lozani lembo la 'E']

Ngati ophunzira ayankhe bwino nenani: **Wakhoza dzina la lembo ili ndi 'E':**

Ngati ophunzira alephere kuyankha molondola, nenani: **Dzina la lembo ili ndi 'E'**

Tsopano yesera lembo lina: ndiuze dzina la lembo ili [lozani lembo la 'F']:

Ngati mwana wayankha molondola, nenani: **Wakhoza, dzina la lembo ili ndi "EFF"**

Ngati mwana walephera kuyankha molondola, nenani: **dzina la lembo ili ndi "EFF"**

Kodi ukudziwa chomwe ukuyenera kuchita?

Ndikanena kuti "Yamba" Chonde tchula dzina la lembo lili lonse mofulumira ndi mosamala. Yamba pano ndipo ndi kupitiriza motere [Lozani lembo loyamba mu mndandanda woyamba pamathero a chitsanzo ndipo lozetsani chala pa mzere woyamba. Ngati wafika pa lembo lomwe sukulidziwa, ndikuza dzina lake. Ndikakuwuza udzipitiriza. Wakonzeka? Yamba tsopano.



Yambani kuwerengera nthawi pamene ophunzira wawerenga lembo loyamba. Yendetsani pensulo ndi kuchonga moyenera yankho lolakwa pogwiritsa ntchito pensulo polemba chizindikiro ichi (/). Werengerani lembo limene walikonza yekha ngati lolondola. Ngati mwachonga kale mayankho odzikonza yekha ngati olakwa, zunguzani mzere pa lembolo ndi kupitirira. Khalani chete pokhapokha akamapereka mayankho motere: ngati ophunzira adodoma kuyankha pa masekandi atatu, Pereyani dzina la lembo, lozani lembo lotsatira ndi kunena, Pitiriza. Chongani lembo lomwe mwapereka kwa mwana. Ngati ophunzira apereke liwu la lembo osati dzina lalembo, mpatseni dzina lalembo ndi kunena: Tandiuze dzina lalembo ili. Izi ziyenera kuchitika kamodzi kokha.

PAKATHA MASEKONDI MAKUMI ASANU NDI LIMODZI nenani "lekeza pomwepo." Chongani lembo lomalizira ndi chizindikiro ichi (I) PAKUTHA PA MASEKONDI 60 NENANI "lekeza pomwepo".

Lamulo loyamba: Ngati ophunzira alephere kupereka yankho lolondola limodzi mu mzere woyamba, nenani "Zikomo" siyilani pomwepo ntchitoyi ndipo chongani mu kabokosi komwe kali pamapeto ndi kupitiriza ndi ntchito ina.

Chitsanzo : L e F

1	2	3	4	5	6	7	8	9	10	
p	N	i	m	K	e	m	h	t	i	(10)
z	a	t	R	f	t	H	R	o	e	(20)
d	e	E	U	f	r	A	T	D	o	(30)
L	n	l	C	e	d	n	h	U	a	(40)
O	C	g	P	e	W	h	C	r	o	(50)
A	N	T	N	e	l	a	a	E	r	(60)
t	A	G	s	B	E	C	o	t	H	(70)
y	t	V	T	T	i	S	y	S	l	(80)
n	N	S	l	O	i	l	o	J	e	(90)
S	w	E	H	e	L	d	s	U	a	(100)

Lembani nthawi yomwe yatsala pa wotchi pamapeto (nambala ya masekandi) :

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa ophunzira analibe mayankho olondola mu mzere oyamba.

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

2

Gawo 2. Maphatikizo a Malembo

Ntchito iyi ndiyongomvera chabe. Ndikuuza mawu ndipo undiuzo maphatikizo omwe ali m'mawuwo. Mwachitsanzo, m'mawu oti "ola" muli maphatikizo awa: "o – la". Mu ntchito imeneyi ndikufuna kuti undiuzo maphatikizo amene uwamve m'mawu. Nditchula mawuwa kawiri. Umvetsere kenako undiuzo maphatikizo omwe ali m'mawuwo.

Tiye tiyesere. Kodi maphatikizo omwe ali m'mawu oti "mayi"? "mayi" ndi chiyani?

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza**, maphatikizo a mawu oti "mayi" ndi "ma – yi".

Ngati mwana walephera kuyankha molondola, nenani: Mveranso kachiwiri: "mayi". Maphatikizo omwe ali m'mawu oti "mayi" ndi "ma-yi."

Tsopano yesera ena: Kodi ndi maphatikizo omwe ali m'mawu oti "khwanya"? "khwanya" ndi chiyani?.

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza**, maphatikizo a mawu oti "khwanya" ndi "khwa - nya".

Ngati mwana walephera kuyankha molondola, nenani: Mveranso kachiwiri: "khwanya". Maphatikizo omwe ali m'mawu oti "khwanya" ndi "khwa - nya."

Kodi ukudziwa chomwe uyenera kuchita?

[Ngati ophunzira anene kuti ayi, muuzeni kuti]: **Yesetsa mmene ungathere.**

Werengani ndi kutchula mawu oyenera kachiwiri. Lolani yankho lokhalo lili ndi liwu lolondola. Ngati ophunzira akanike kuyankha m'masekondi atatu, chongani "Palibe yankho" ndipo pitirizani kutchula mawu otsatira. Tchulani momveka bwino koma musatsindike kwambiri paphatikizo loyamba la mawu ena aliwonse.

Langizo loyamba : Ngati ophunzira alephera kuyankha molondola kapena kulephera kuwerenga mawu asamu oyambirira, nenani kuti "Zikomo", ndipo musapitirize ntchiyoyi ndipo mukatero chongani m'kabokosi kali pamapeto a tsamba lino ndi kuyamba ntchito yotsatirayo.

Kodi ndi maphatikizo ati omwe ali mmawu awa? [Bwerezani mawuwo kawiri]					
Mkaka	Mka - ka	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Ana	A – na	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Bola	Bo – la	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Mwamuna	Mwa – mu - na	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Boola	Bo-o – la	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Kankha	Ka-nkha	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Mnkhwani	Mnkhwa – ni	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Kakamiza	Ka – ka – mi – za	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Mbola	Mbo - la	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Nama	Na – ma	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho

(mawu 5)

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa ophunzira analibe mayankho olondola mu mawu asamu oyamba :

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

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Gawo 3. Kutchula liwu loyamba

Ntchito iyi siyofunika kuwerengera nthawi ndipo **PALIBE TSAMBA LA WOPHUNZIRA**. Werengani mawu aliwonse kawiri ndipo mufunse ophunzira kuti atchule liwu loyamba m'mawu amenewa. kumbukirani kutchula maliwu moyenera : /p/ osati /pu/ monga: /p/, ---- “puh” kapena “pe.” Nenani:

Ntchito iyi ndiyomvera chabe. Ndikufuna kuti undiuze liwu loyamba m'mawu ena aliwonse. Mwachitsanzo, m'mawu oti 'galu', liwu loyamba ndi "/g/". Mu ntchito imeneyi, ndifuna undiuze liwu loyamba limene ukulimva m'mawu ena aliwonse. Nditchula mawuwo kawiri. Umvetsere mawuwo, kenaka undiuze liwu loyamba lomwe likumveka m'mawuwo.

Tiye tiyesere. Kodi liwu loyamba m'mawu oti “mayi”? “mayi” ndi chiyani?

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza**, liwu loyamba mu mawu oti “mayi” ndi /mmmm/
[Ngati ophunzira sanayankhe molondola, nenani]: **mvetsera** kawiri: “mmmayi”. Liwu loyamba mu mawu oti “mayi” ndi /mmmm/.

Tsopano yesera mawu ena: Kodi ndi liwu loyamba m'mawu oti “nzimbe”? “nzimbe” ndi chiyani?

Ngati mwana wayankha molondola, nenani: **Wakhoza**, liwu loyamba mu mawu oti “nzimbe”ndi “/n/”
Ngati mwana walephera kuyankha molondola, nenani: mveranso kaciwiri: **liwu loyamba la mu mawu oti “nzimbe” ndi /n/**

Kodi ukudziwa chomwe uyenera kuchita?

[Ngati wophunzira anene kuti ayi, muzeni kuti]: **Yesetsa mmene ungathere.**

Werengani ndi kutchula mawu oyenera kawiri. Lolani yankho lokhalo lili ndi liwu lolondola. Ngati ophunzira akanike kuyankha m'masekondi atatu, chongani “Palibe yankho” ndipo pitirizani kutchula mawu otsatira. Tchulani momveka bwino koma musatsindike kwambiri liwu loyamba la mawu ena ali wonse.

Langizo loyamba: Ngati ophunzira alephere kuyankha molondola kapena kulephera kuwerenga mawu asanu oyambirira, nenani kuti “Zikomo”, ndipo musapitirize ntchiyoyi ndipo mukatero chongani m'kabokosi kali pamapeto a tsamba lino ndi kuyamba ntchito yotsatirayo.

Tchula liwu loyamba m'mawu awa ndi chiyani [Tchulani mawuwo]					
Bala	/b/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Kala	/k/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Atate	/a/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Khala	/kh/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Dona	/d/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Gwada	/g/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Wada	/www/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Nola	/n/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Mana	/mmm/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho
Gada	/g/	<input type="radio"/> wakhoza	<input type="radio"/> walakwa	<input type="radio"/> sakudziwa	<input type="radio"/> palibe yankho

(mawu 5)

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa ophunzira analibe mayankho olondola mu mawu asanu oyamba :

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

Gawo 4. Kuwerenga Maphatikizo

Onetsani wophunzira pepala la maphatikizo kuchokera m' buku la ophunzira. Nenani,

Awa ndi maphatikizo a malembo. Ndikufunsa kuti uwerenge maphatikizo ochuluka mmene ungathere. Mwachitsanzo, phatikizo ili ndi: “se”.

Tiye tiwerenge phatikizo ili: [lozani phatikizo loti “go”]:

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza**, phatikizo ili ndi “go”

[Ngati ophunzira alephere kuyankha molondola, nenani]: **phatikizo ili ndi “go”**

Yesa phatikizo lina: werenga phatikizo ili [lozani phatikizo loti “kwa”]

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza**, phatikizo ili ndi “kwa”

[Ngati ophunzira alephere kuyankha molondola, nenani]: **phatikizo ili ndi “kwa”**

Ndikanena kuti yamba, uwerenge maphatikizo mofulumira ndi mosamala. Werenga maphatikizo ali pa mzere uli wonse. Ndikhala chete kukumvetsera pokhapokha ukafuna chithandizo. Kodi ukudziwa zomwe ukuyenera kuchita? Ngati wakonzeka tiye tiyambepo.



Yambani kuwerengera nthawi pamene ophunzira wawerenga phatikizo loyamba. Yendetsani pensulo ndi kuchonga moyenera yankho lolakwa pogwiritsa ntchito pensulo polemba chizindikiro ichi (/). Werengerani phatikizo lomwe wazikonza yekha ngati lolondola. Ngati mwachonga kale mayankho odzikonza yekha ngati olakwa, zunguzani mzere pa phatikizolo ndi kupitiriza. Khalani chete pokapokha akamapereka mayankho motere: ngati ophunzira adodoma kuyankha pa masekondi atatu, lozani phatikizo lotsatira ndi kunena, pitiriza. Izi ziyenera kuchitika kamodzi kokha. Chongani phatikizo lomwe mwapereka kwa mwana.

PAKATHA MASEKONDI MAKUMI ASANU NDI LIMODZI nenani “lekeza pomwepo.” Chongani phatikizolomalizira ndi chizindikiro ichi (1) **PAKUTHA PA MASEKONDI 60 NENANI** “lekeza pomwepo”.

Lamulo loyamba: Ngati ophunzira alephere kupereka yankho lolondola limodzi mu mzere woyamba, nenani “Zikomo” siyilani pomwepo ntchitoyi ndipo chongani mu kabokosi komwe kali pamapeto ndi kupitiriza ndi ntchito

Chitsanzo : se go kwa

1	2	3	4	5	6	7	8	9	10	
ya	la	mbe	yi	mle	phu	nkha	tu	se	mfu	(10)
pa	fu	zi	bwa	re	fi	ki	va	be	ke	(20)
ku	nga	nja	nzi	mnya	thu	tsa	ra	u	li	(30)
mbi	fa	ye	me	na	i	mda	chi	kwe	mphu	(40)
na	dzi	da	e	le	pi	bwi	po	dya	ba	(50)
za	lo	wo	si	ngi	cha	mwa	ti	mkha	wi	(60)
pe	ne	a	kwa	wu	mba	mu	tsi	da	go	(70)
mbo	zo	ngo	te	no	ta	ndu	kho	lu	ni	(80)
ko	tho	ka	ma	sa	ndi	nyu	dza	ri	wa	(90)
mse	ntha	tso	yo	mi	nkho	ndo	o	mo	nda	(100)

Lembani nthawi yomwe yatsala pa wotchi pamapeto (nambala ya masekandi:)

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa ophunzira analibe mayankho olondola mu mzere oyamba.

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

5

Gawo 5. Kuwerenga Mawu Odziwika

Onetsani ophunzira pepala la malembokuchokera m'buku la ophunzira. Nenani,

Awa ndi mawu a m'Chichewa. Ndipo ndikufuna iwe undiwerengere mawu ambiri omwe ungate. Mwachitsanzo, mawu awa: "chili".

Tiye tiwerenge mawu awa: [lozani mawu oti "gona."]:

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza, mawu awa ndi "gona"**

[Ngati ophunzira alephere kuyankha molondola, nenani]: **mawu awa ndi "gona."**

Yesa mawu ena: werenga mawu awa [lozani mawu oti "fodya"]

[Ngati ophunzira ayankhe molondola, nenani]: **Wakhoza, mawu awa ndi "fodya"**

[Ngati ophunzira alephere kuyankha molondola, nenani]: **mawu awa ndi "fodya"**

Ndikanena kuti yamba, uwerenge mawu mofulumira ndi mosamala. Werenga mawuwo pa mzere uli wonse. Ndikhala chete kukumvetsera pokhapokha ukafuna chithandizo. Kodi ukudziwa zomwe uchite? Ngati wakonzeka tiye tiyambepo.



Yambani kuwerengera nthawi pamene ophunzira wawerenga mawu woyamba. Yendetsani pensulo ndi kuchonga moyenera yankho lolakwika pogwiritsa ntchito pensulo polemba chizindikiro ichi (/). Werengerani mawu odzikonza yekha ngati olondola. Ngati mwachonga kale mayankho odzikonza yekha ngati olakwa, zunguzani mzere pa lembolo ndi kupitiriza. Khalani chete pokhapokha akamapereka mayankho motere: ngati ophunzira adodoma kuyankha pa masekondi atatu, werengani mawuwo ndi kunena, pitiriza. Izi ziyenera kuchitika kamodzi kokha. Chongani mawu omwe mwapereka kwa mwana.

PAKATHA MASEKONDI MAKUMI ASANU NDI LIMODZI nenani "lekeza pomwepo." Chongani mawu omalizira ndi chizindikiro ichi (Q) PAKUTHA PA MASEKONDI 60 NENANI "lekeza pomwepo").

Lamulo loyamba: Ngati ophunzira alephere kuwerenga mawu amodzi mu mzere woyamba, nenani "Zikomo" siyilani pomwepo ntchitoyi ndipo chongani m'kabokosi komwe kali pamapeto ndi kupitiriza ndi ntchito ina.

Chitsanzo: chili gona fodya

	1	2	3	4	5	
bwino	ana	zambiri	lina	mbalame		(5)
akulu	mphunzitsi	chimanga	koma	zina		(10)
tsiku	mbewu	nyumba	mlendo	mbatata		(15)
kudziwa	iwo	anthu	lata	mitengo		(20)
ambiri	adali	kwa	mbozi	ndi		(25)
atate	iye	kalulu	pamanda	agogo		(30)
kwambiri	zinthu	kuti	zovala	kusamala		(35)
mnyamata	mutu	chakudya	abambo	izi		(40)
nkhalingo	amayayi	monga	ena	chiwala		(45)
mlonda	fisi	zipatso	zakudya	malangizo		(50)

Lembani nthawi yomwe yatsala pa wotchi pamapeto (nambala ya masekandi):

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa ophunzira analibe mayankho olondola mu mzere oyamba.

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

6

Gawo 6. Kuwerenga Mawu Opeka

Onetsani wophunzira pepala la malembo kuchokera m' buku la ophunzira. Nenani,

Awa ndi mawu ongopeka m'Chichewa. Ndipo ndikufuna undiwerengere mawu omwe ungate. Mwachitsanzo, "biva".

Yesera kuwerenga mawu awa: [lozani mawu oti "ndodi"]:

[Ngati wophunzira anene kuti "ndodi" nenani]: **Wakhoza, mawu awa ndi "ndodi"**

[Ngati wophunzira alephere kuwerenga mawu woti "ndodi" nenani] **Mawu awa timatchula kuti "ndodi"**

Yesera mawu ena: werenga mawu awa [lozani mawu woti "yono"]:

[Ngati wophunzira anene kuti "biva" molondola, nenani]: **Wakhoza, mawu awa ndi "yono"**

[Ngati wophunzira alephere kutichula "biva" molondola nenani]: **"Mawu awa timatchula kuti "yono"**

Ndikanena kuti yamba, uwerenge mawu mofulumira ndi mosamala. Uwerenge mawuwo kuyambira mzere woyamba. Ndikhala chete kumvera pamene ukuwerenga, ukalephera kuwerenga mawu ena ndikuthandiza. Ngati wakonzeka yamba.



Yambani kuwerengera nthawi pamene ophunzira wawerenga lembo loyamba. Yendetsani pensulo ndi kuchonga moyenera yankho lolakwa pogwiritsa ntchito pensulo polemba chizindikiro ichi (/). Werengerani ngati cholondola pamene wophunzira wadzikonza yekha. Ngati munachonga kale mayankho wodzikonza yekha ngati olakwa, zunguzani mzere pa mawuwo ndi kupitirira. Khalani chete wophunzira akamawerenga, ngati wophunzira wadodoma kuwerenga mawu pa masekondi atatu, werengani mawuwo ndipo lozani mawu otsatira ndikumuuza kuti "pitiriza". Chongani mawu omwe mwapereka kwa wophunzira. Ngati wophunzira awerenga mawu asanu molakwitsa, asapitilize ndipo chongani mkabosi komwe kali patsamba lotsatira

PAKATHA MASEKONDI MAKUMI ASANU NDI LIMODZI NENANI "lekeza pomwepo." Chongani mawu omalizira ndi chizindikiro ichi ()

Lamulo loyamba: Ngati wophunzira walephere kuwerenga mawu a mumzere woyamba, nenani "Zikomo" siyilani pomwepo ntchitoyi ndipo chongani m'kabokosi komwe kali pamapeto ndi kupitiriza ndi ntchito ina.

Chitsanzo : **biva** **ndodi** **yono**

	1	2	3	4	5	
leta	tapuli	juje	pwika	mng'ene		(5)
goju	popo	mphwika	faano	zeepi		(10)
geba	fese	nthibe	sati	chizi		(15)
soola	mvuvu	mnapa	bwazo	ngogo		(20)
deeni	aza	tchefe	zefa	ntchuka		(25)
mpholi	bzyata	iso	phena	nyanu		(30)
udo	boolu	thobi	suule	omo		(35)
upa	atu	tetu	ono	ilu		(40)
uto	nkhiki	eze	khuda	thyata		(45)
mnkhawi	ndwigo	laafi	nkhwena	patu		(50)

Lembani nthawi yomwe yatsala pa wotchi pamapeto (nambala ya masekandi):

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa wophunzira analibe mayankho olondola mu mzere woyamba.

Wachita bwino. Tsopano tiye tipite ku gawo lotsatira.

7

Gawo 7a. Kumvetsera nkhani

Iyi ndi nkhani yayifupi. Ndifuna iwe undiwerengere mokweza, mofulumira koma mosamala. Ukatha kuwerengako ndikufunsa mafunso pa zomwe wawerenga. Yamba kuwerenga.

 Yambani kuwerengera nthawi pamene wophunzira wawerenga mawu oyamba. Yendetsani pensulo ndi kuchonga moyenera yankho lolakwa pogwiritsa ntchito pensulo polemba chizindikiro ichi (/). Werengerani ngati cholondola pamene wophunzira wadzikonza yekha. Ngati munachonga kale mawu wodzikonza yekha ngati olakwa, lembani mzere mozungulira mawuwa ndi kupitirira. Khalani chete wophunzira akamawerenga, ngati wophunzira wadodoma kuwerenga pa mphindi zitatu, muwerengereni mawuwo kenak lozani mawu otsatira ndikumauza kuti “pitiriza”. Chongani mawu omwe mwapereka kwa wophunzira. Izi ziyenera kuchitika kamodzi kokha.

PAKATHA MASEKONDI MAKUMI ASANU NDI LIMODZI NENANI
“lekeza pomwepa.” Chongani mawu omalizira ndi chizindikiro ichi (!)

Lamulo loyamba: Ngati wophunzira walephere kuwerenga mawu a munzere woyamba, nenani “Zikomo” siyila pomwepa kuwerenga. Ndipo chongani m’kabokosi komwe kali pamapeto ndi kupitiriza ndi ntchito ina.

Gawo 7b. Kuwerenga ndi kumvetsa nkhani

Pakatha masekandi 60 kapena wophunzira akatsiriza kuwerenga ndime m’ masekandi zosaposeera 60, chotsani ndimeyo patsogolo pa ophunzira ndipo werengani funso loyamba.

Mpatseni wophunzira masekandi 15 kuti ayankhe funsola, chongani yankho la wophunzira ndi kumuwerenga funso lotsatira.

Werengani mafunso a mzere uliwonse mpaka pamene ophunzira walekeza kuwerenga.

		Tsopano ndikufunsa mafunso angapo okhudza nkhani yomwe wawerenga.		
		wakhoza	walakwa	Palibe yankho
Lachisanu m'mawa Mada anakonzeka kupita kusukulu.	6	Kodi nkhanayi inachitikira kuti ? [Nkhanayi imachitikira ku sukulu. Tsiku lotsekera sukulu]		
Tsikuli lidali lotsekera sukulu. Mafumu ndi makolo anafika ku sukulu ya Kaliza kuti adzawonerere luso lowerenga.	22	Nanga chimachitikira pa tsikuli ndi chiyani? [Ophunzira a Sitandade 1 amawonetsa luso lowerenga.]		
Iyeyu adali ndi nkhwawa chifukwa adali mtsikana wamng'ono ndipo anali kuyamba kumene sitandade 1.	36	Kodi n'chifukwa chiyani Mada anali ndi nkhwawa? [Mada anali ndi nkhwawa chifukwa anali mtsikana wamng'ono. Kunali kuyamba kumene sitandade 1]		
Mada anawerenga mopatsa chidwi poyerekeza ndi msinkhu wake. Anthu adasangalala kwambiri ndipo anamusupa.	49	Tchulani chifukwa chimene mbiri ya Mada inapita patali? [Mada amawerenga mopatsa chidwi poyerekeza ndi msinkhu wake.]		
Mbiri ya Mada idapita patali.	54	Kodi anthu amamusupa chiyani Mada ? [Anthu adamusupa Mada ndalama]		

Lembani nthawi yomwe yatsala pa wotchi pamapeto (nambala ya masekandi) :

Chongani m'kabokosi ngati ntchitoyi sinapitirizidwe chifukwa wophunzira analibe mayankho olondola mu mzere woyamba

Gawo 8. Kumvetsa Nkhani

Ntchito iyi siyofunika kugwiritsa ntchito TSAMBA LA WOPHUNZIRA. (Werengani ndimeyi mokweza kawiri mopatsa chidwi.)

Ndiwerengera ndime yayifupi kawiri kenaka ndidzakufunsa mafunso angapo. Chonde umvetsere bwino pamene ndikuwerengera nkhanayi. Uyenera kuyankha mafunsowa m'mene ungathere. Kodi ukudziwa chomwe ukuyenera kuchita? Kodi uli wokonzeka? Tiyeni tiyambe tsopano.

Tsiku lina ndimapita ku mtsika kukagula nyama. Mphepete mwamsewu ndinaona chikwama ndipo ndinachitola. Mkati mwa chikwamacho munali ndalama ndi makadi a ku banki. Nditawauza mayi anga iwo anandilangiza kukapereka chikwamacho kwa Mfumu. Tsiku lina mayi anga anayitanidwa kwa Mfumu. Kumeneku tinakumana ndi abambo ena omwe anali mwini chikwama chija. Bambowa anathokoza ndi ndalama zokwana K5000.00 ndi kulonjeza kupereka chithandizo pa maphunziro anga.

Tsopano ndikufunsa mafunso angapo okhudza nkhanu yomwe wawerenga.			
	wakhoza	walakwa	palibe yankho
Kodi nkhanayi idachitika kuti? <i>[Inachitika kumudzi, mphepete mwa msewu, popita ku msika]</i>			
Kodi mkati mwa chikwama munali chiyani? <i>[munali ndalama ndi makadi a ku banki]</i>			
Chifukwa chiyani chikwama anakachipereka kwa Mfumu? <i>[kuti chisungike chinthu a mfumu amayenera kudziwa]</i>			
Kodi kwa mfumu kunabwera ndani? <i>[Kunabwera, mwini wa chikwama]</i>			
Ndi mpatso yanji yomwe mwini chikwama uja anapereka? <i>[mpatso ya ndalama zokwana K5000.00 ndi chithandizo pa maphunziro]</i>			

|

Gawo 9. Kucheza ndi ophunzira

Funsani ophunzira funso lililonse momveka bwino monga mmene amachitira pocheza. Musawerenge mayankho onse kwa ophunzira mokweza. Dikirani ophunzira kupereka yankho ndipo mulilembe pa mpata womwe waperekedwa kapena kulemba mzere wozungulira chizindikiro cha yankho lomwe wophunzira wapereka. Ngati palibe malangizo ena otsutsana, yankho limodzi ndi limene likuloledwa.

1a	Kodi chiyankhulo chomwe umaphuzirira kusukulu ndi chimenenso mumayankhula kunyumba?	Ngati ayi, funsani funso 1b.....0 Inde1 Sakudziwa/Palibe yankho9
1b	<i>[Ngati yankho la funso 1a likhale Ayi,] Kodi ndi chiyankhulo chiti chimene umayankhula kunyumba? [Mayankho angapo ndi oloedwa]</i>	Chichewa1 Tumbuka.....2 Yao3 Chingelezi.....4 China (fotokozani):.....5 Sakudziwa/Palibe yankho99
Kodi kunyumba kwanu kuli zinthu ngati izi:		Inde Ayi Sakudziwa/Palibe yankho
2	walesi?	1 0 99
3	telefoni kapena telefoni ya m'manja?	1 0 99
4	magetsi?	1 0 99
5	televizyoni?	1 0 99
6	filiji?	1 0 99
7	chimbudzi cha mnyumba?	1 0 99
8	njinga?	1 0 99
9	njinga ya moto?	1 0 99
10	galimoto, galimoto ya lole, thilakita kapena bwato la injini, ngolo, golosale, chigayo?	1 0 99
11	Kodi unalowapo sukulu ya mkaka usanayambe kalasi yoyamba?	Ayi0 Inde1 Sakudziwa/Palibe yankho99
12	Kodi unali kalasi iti chaka chatha?	Sindinali pa sukulu0 Sitandade 12 Sitandade 23 Sitandade 34 Sitandade 45 Sakudziwa/Palibe yankho99
13	Kodi chaka chatha unajombapo kusukulu kupyola sabata imodzi?	Ayi0 Inde1 Sakudziwa/Palibe yankho99
14	Kodi uli ndi mabuku owerenga a sukulu?	Ayi0 Inde1 Sakudziwa/Palibe yankho99

15	Kupatula mabuku a kusukulu, kodi pali mabuku ena, nyuzipepala kapena zinthu zina zowerenga kunyumba kwanu?	Ayi0 Inde1 Sakudziwa/Palibe yankho99
	[Ngati inde, Funsani funso 15] chonde Perekani zitsanzo.	(sikoyenera kulemba mayankho)
16	[Ngati inde ku funso 15] Kodi mabuku amenewa kapena zinthu zimenezi zili mu chiyankhulo kapena ziyankhulo zANJI ? [Iolani mayankho ochuluka]	Chingezezi.....1 Chichewa2 Tumbuka.....3 Zina (fotokozani):8 Sakudziwa/Palibe yankho99
17	Kodi kunyumba kwanu umakhala ndi yani ?	Makolo anga0 Amayi anga.....1 Atate anga2 Agogo3 Amalume4 Azakhali5 Achimwene6 Achemwali7 Ena (fotokozani).....8
18	Kodi amayi ako kapena okuyang'anira ako analekezera pati sukulu?	Palibe0 Sukulu ina.....1 Anatsiriza sukulu ya pulaimale.....2 Anafika ku sukulu ya sekondale3 Anatsiriza sukulu ya sekondale4 Sukulu ya za umisili5 Sukulu ya ukachenjede.....6 Zina (fotokozani)8 Sakudziwa/Palibe yankho99
19	Kodi abambo ako kapena okuyang'anira ako analekezera pati sukulu?	Palibe0 Sukulu ina.....1 Anatsiriza sukulu ya pulaimale.....2 Anafika ku sukulu ya sekondale3 Anatsiriza sukulu ya sekondale4 Sukulu ya za umisili5 Sukulu ya ukachenjede.....6 Zina (fotokozani):8 Sakudziwa/Palibe yankho99

**Nthawi yomaliza kuyesa
ophunzira:**

____ : ____ (maola 24)

Annex B. Additional Sample Description and Summary Statistics

Sample description tables

Table B-1. Number of Students, by Gender

No. of Students		
Male	Female	Total
1,526	1,493	3,019

Table B-2. Number of Schools, by Division, and Number of Students, by Division and Standard

Division	No. of Schools	No. of Students		Total no. of Students
		Std. 2	Std. 4	
Central Eastern	25	252	247	499
Central Western	25	251	251	502
Northern	25	253	257	510
Shire Highlands	25	254	249	503
South Eastern	25	264	247	511
South Western	25	252	242	494
Totals	150	1,526	1,493	3,019

Table B-3. Number of Schools and Students Having Urban or Rural Designation, by Division

Division	Rural		Urban	
	Schools	Students	Schools	Students
Central Eastern	24	479	1	20
Central Western	23	461	2	41
Northern	23	461	2	49
Shire Highlands	25	503	0	0
South Eastern	23	471	2	40
South Western	18	357	7	137
Totals	136	2,732	14	287

Table B-4. Results by Standard and Gender

Measure	Subtest	Standard	Gender	Observations	Mean	Standard Error	Confidence Interval		
							Lower	Upper	
Fluency (items correct per minute)	Letter naming	2	Male	762	3.14	0.33	2.49	3.79	
			Female	764	2.98	0.33	2.33	3.64	
		4	Male	764	23.78	0.87	22.04	25.51	
			Female	729	24.29	1.05	22.21	26.37	
	Syllable reading	2	Male	762	0.76	0.17	0.43	1.09	
			Female	764	0.76	0.20	0.37	1.15	
		4	Male	764	19.87	0.99	17.92	21.82	
			Female	728	20.53	1.07	18.42	22.65	
	Familiar word reading	2	Male	761	0.48	0.10	0.28	0.68	
			Female	763	0.45	0.13	0.19	0.72	
		4	Male	764	13.71	0.72	12.29	15.12	
			Female	729	14.27	0.77	12.74	15.79	
	Nonsense word reading	2	Male	760	0.274	0.06	0.15	0.40	
			Female	764	0.29	0.93	0.092	0.46	
		4	Male	764	8.29	0.45	7.41	9.18	
			Female	729	8.65	0.48	7.69	9.61	
	Oral reading fluency	2	Male	761	0.41	0.11	0.19	0.63	
			Female	764	0.35	0.13	0.09	0.60	
		4	Male	761	14.61	0.77	13.09	16.12	
			Female	726	15.12	0.85	13.43	16.81	
	Percent correct	Syllable segmentation	2	Male	762	26.5%	1.4%	23.7%	29.3%
				Female	764	28.4%	1.6%	25.3%	31.5%
			4	Male	764	54.6%	1.5%	51.7%	57.6%
				Female	729	50.9%	1.6%	47.8%	54.1%
Initial sound		2	Male	762	4.1%	12.4%	3.1%	5.1%	
			Female	764	3.7%	12.2%	2.7%	4.7%	
		4	Male	764	8.7%	0.8%	7.2%	10.3%	
			Female	729	7.1%	0.6%	5.8%	8.3%	
Reading comprehension		2	Male	761	0.4%	0.1%	0.2%	0.7%	
			Female	764	0.3%	0.1%	0.1%	0.5%	
		4	Male	761	15.3%	0.9%	13.5%	17.1%	
			Female	726	15.1%	1.0%	13.0%	17.1%	
Listening comprehension		2	Male	761	51.4%	1.1%	49.2%	53.7%	
			Female	764	50.0%	1.2%	47.8%	52.3%	
		4	Male	762	71.5%	1.0%	69.4%	73.5%	
			Female	729	68.4%	1.1%	66.2%	70.6%	

Table B-5. Results by Division and Standard

Central Eastern

Measure	Subtest	Standard	Observations	Mean	Standard Error	Confidence Interval	
						Lower	Upper
Fluency (per minute)	Letter naming	2	252	2.6	0.0	1.7	3.4
		4	247	20.8	1.7	17.3	24.3
	Syllable reading	2	252	0.5	0.2	0.1	0.9
		4	247	21.4	2.2	16.7	26.1
	Familiar word reading	2	252	0.3	0.1	0.1	0.6
		4	247	15.6	1.6	12.3	19.0
	Nonsense word reading	2	252	0.2	0.1	> -0.1	0.4
		4	247	9.0	1.0	7.0	11.1
Oral reading fluency	2	252	0.2	0.1	>0.1	0.5	
	4	245	16.6	1.9	12.8	20.5	
Percent correct	Syllable segmentation	2	248	33.3%	2.0%	29.2%	37.5%
		4	251	57.2%	2.2%	52.6%	61.8%
	Initial sound identification	2	248	12.0%	2.2%	7.6%	16.5%
		4	251	18.6%	2.4%	13.6%	23.6%
	Reading comp.	2	247	0.2%	0.1%	-0.1%	0.5%
		4	250	17.7%	2.2%	13.3%	22.9%
	Listening comp.	2	247	54.1%	2.3%	49.3%	58.9%
		4	251	72.7%	1.9%	68.8%	76.7%

Central Western

Measure	Subtest	Standard	Observations	Mean	Standard Error	Confidence Interval	
						Lower	Upper
Fluency (per minute)	Letter naming	2	251	1.8	0.4	1.0	2.5
		4	251	19.0	2.0	14.7	23.2
	Syllable reading	2	251	0.5	0.2	>0.1	0.9
		4	251	18.9	2.2	14.3	23.5
	Familiar word reading	2	251	0.3	0.1	>0.1	0.5
		4	251	13.7	1.6	10.3	17.0
	Nonsense word reading	2	251	0.2	0.1	>0.1	0.3
		4	251	7.8	0.9	5.8	9.7
Oral reading fluency	2	251	0.2	0.1	> -0.1	0.4	
	4	251	15.2	1.8	11.5	18.9	
Percent correct	Syllable segmentation	2	247	26.1%	3.6%	18.6%	33.6%
		4	255	53.3%	3.0%	47.0%	59.6%
	Initial sound identification	2	247	1.1%	0.4%	0.2%	2.0%
		4	255	2.4%	0.8%	0.7%	4.0%
	Reading comp.	2	247	0.2%	0.1%	-0.01%	0.4%
		4	255	16.5%	2.3%	11.7%	21.3%
	Listening comp.	2	247	52.5%	1.8%	48.8%	56.3%
		4	255	73.3%	2.0%	68.9%	77.6%

Northern

Measure	Subtest	Standard	Observations	Mean	Standard Error	Confidence Interval	
						Lower	Upper
Fluency (per minute)	Letter naming	2	253	1.7	0.5	0.6	2.9
		4	257	12.1	1.6	8.9	15.4
	Syllable reading	2	253	1.0	0.7	-0.4	2.4
		4	257	11.3	1.6	8.0	14.7
	Familiar word reading	2	253	0.7	0.5	-0.3	1.7
		4	257	8.0	1.2	5.4	10.7
	Nonsense word reading	2	253	0.3	0.2	-0.1	0.9
		4	257	4.9	0.7	3.1	6.7
Oral reading fluency	2	253	0.6	0.5	-0.4	1.6	
	4	257	8.9	1.3	6.1	11.7	
Percent correct	Syllable segmentation	2	257	10.4%	1.7%	6.9%	13.9%
		4	253	34.1%	2.4%	2.9%	39.0%
	Initial sound identification	2	257	0.7%	0.2%	0.2%	1.2%
		4	253	3.0%	0.5%	1.9%	4.0%
	Reading comp.	2	257	0.6%	0.4%	-0.2%	1.4%
		4	253	6.7%	4.5%	4.5%	8.9%
	Listening comp.	2	257	31.0%	3.1%	24.7%	37.4%
		4	253	54.8%	3.0%	48.5%	61.1%

Shire Highlands

Measure	Subtest	Standard	Observations	Mean	Standard Error	Confidence Interval	
						Lower	Upper
Fluency (per minute)	Letter naming	2	254	4.3	0.7	2.8	5.8
		4	249	40.1	1.7	36.5	43.7
	Syllable reading	2	254	0.9	0.3	0.3	1.4
		4	249	28.7	1.6	25.3	32.1
	Familiar word reading	2	253	0.6	0.2	0.1	1.0
		4	249	18.0	1.2	15.5	20.5
	Nonsense word reading	2	253	0.3	0.1	0.1	0.6
		4	249	12.0	0.8	10.3	13.8
Oral reading fluency	2	253	0.5	0.2	0.1	0.9	
	4	248	18.3	1.3	15.6	21.0	
Percent correct	Syllable segmentation	2	256	34.7%	3.4%	30.3%	44.5%
		4	247	62.0%	3.2%	55.5%	68.6%
	Initial sound identification	2	256	3.2%	0.6%	1.7%	4.3%
		4	247	6.8%	1.0%	4.7%	8.9%
	Reading comp.	2	255	0.4%	0.2%	0.02%	0.8%
		4	246	20.4%	1.5%	17.3%	23.5%
	Listening comp.	2	256	60.0%	2.0%	55.9%	64.0%
		4	247	77.3%	1.5%	74.2%	80.5%

South Eastern

Measure	Subtest	Standard	Observations	Mean	Standard Error	Confidence Interval	
						Lower	Upper
Fluency (per minute)	Letter naming	2	264	4.5	0.7	3.0	6.0
		4	247	30.8	2.3	26.0	35.6
	Syllable reading	2	264	1.3	0.4	0.4	2.2
		4	246	25.7	2.2	21.2	30.2
	Familiar word reading	2	264	0.6	0.3	0.1	1.2
		4	247	17.0	1.5	14.0	20.1
	Nonsense word reading	2	264	0.5	0.2	0.1	0.9
		4	247	10.9	0.9	9.0	12.7
Oral reading fluency	2	264	0.6	0.3	> -0.1	1.2	
	4	244	17.4	1.6	14.0	21.0	
Percent correct	Syllable segmentation	2	265	27.6%	2.1%	23.4%	31.9%
		4	246	55.5%	2.6%	50.2%	60.8%
	Initial sound identification	2	265	3.9%	0.7%	2.3%	5.4%
		4	246	11.9%	1.8%	8.1%	15.6%
	Reading comp.	2	263	0.7%	0.3%	0.1%	1.3%
		4	245	17.2%	2.0%	13.2%	21.3%
	Listening comp.	2	264	48.1%	2.9%	42.2%	54.1%
		4	246	66.8%	2.0%	62.5%	71.1%

South Western

Measure	Subtest	Standard	Observations	Mean	Standard Error	Confidence Interval	
						Lower	Upper
Fluency (per minute)	Letter naming	2	252	4.0	1.0	1.8	6.1
		4	242	27.9	2.2	23.3	32.4
	Syllable reading	2	252	0.4	0.2	>0.1	0.8
		4	242	17.3	1.8	13.6	21.0
	Familiar word reading	2	251	0.3	0.1	0.1	0.5
		4	242	12.6	1.4	9.8	15.4
	Nonsense word reading	2	252	0.1	0.1	>0.1	0.2
		4	242	7.1	0.8	5.4	8.8
Oral reading fluency	2	252	0.2	0.1	>0.1	0.4	
	4	242	13.3	1.6	9.9	16.6	
Percent correct	Syllable segmentation	2	253	28.8%	2.3%	23.9%	33.6%
		4	241	56.8%	2.9%	50.8%	62.7%
	Initial sound identification	2	253	3.0%	0.8%	1.4%	4.6%
		4	241	8.3%	1.2%	5.9%	10.8%
	Reading comp.	2	253	0.2%	0.1%	-0.03%	0.3%
		4	241	12.8%	1.7%	9.2%	16.3%
	Listening comp.	2	252	56.9%	2.1%	52.6%	61.2%
		4	241	74.8%	1.7%	71.2%	78.3%

Annex C. Reliability and Validity of EGRA Instrument

Adaptation and Pilot Testing

The EGRA assessments of letter naming, syllable segmentation, initial sound identification, syllable reading, familiar word reading, and nonsense word reading used in 2011 reused the same items as appeared in the EGRA 2010 baseline assessment. For further information on steps taken on reliability and validity of these subtests, please refer to the *Early Grade Reading Assessment: National baseline report* (MTPDS, 2010). The sections on oral reading fluency, reading comprehension, and listening comprehension were piloted and analyzed to determine the best stories for the 2011 EGRA. As described in the Research Design section of this report, five reading passages with comprehension and five listening comprehension passages were piloted in a way that all passages of a single type were given to each child assessed. The results were reviewed using Rasch analysis to determine which were best constructed (had relatively low ceiling and floor effects, and few “misfit” items that did not fit the data model). The reading fluency, reading comprehension, and listening comprehension passages were chosen based on the results of the Rasch analysis.

Enumerator Training, Fieldwork, and Data Entry

Enumerator Training: One important focus for EGRA reliability is the consistency and accuracy of enumerator performance. The enumerators who administered EGRA in 2011 went through a rigorous training, including an introduction to the instruments, practice with each other, and pilot data collection with children in schools. Furthermore, enumerators were required to take an inter-rater reliability (IRR) test, which assessed the degree to which they agreed in their scoring of the same observation. Repeated IRR assessment and feedback ensure that we have at least 90% agreement between raters on the scoring of the same observation by the end of the training. IRR is conducted by pre-coding errors into an assessment sheet, then administering it in small groups to enumerators. Enumerators’ scoring sheet should agree with the pre-coded error sheet. It is scored at an item level. Eighty percent is considered good. Any enumerator in training for the 2011 EGRA who did not meet the requirement was not permitted to collect data. Furthermore, enumerators were observed in relation to variables in assessment administration, including (1) correct use of a stopwatch, (2) standardized instruction to learners, and (3) proper and timely marking of forms.

Enumerator-Learner Interaction: One of the performance criteria for selection and retention of enumerators is their ability to interact in a friendly and respectful way with learners. Enumerators must smile, introduce themselves, and make sure that the child is comfortable and responsive from the outset of the assessment. Enumerators are observed by supervisors during practice assessment in schools, and results are recorded on an “Enumerator Observation Protocol.” Enumerators who are unfriendly with learners are not permitted to collect data.

Furthermore, almost all assessment components included an example that enumerators would illustrate and then ask the child to attempt prior to beginning the assessment activity. This way the learner knew what was expected of him or her.

Fieldwork: In the field, the reliability of the data was protected by the supervisors. Supervisors received training and practice in both administering the assessment and supervising the team. Officials from MoEST and the MTPDS program team observed the administration—on a random sample basis—and monitored assessments to be sure of consistent application. Additionally, since the enumerators in 2011 were mainly Primary Education Advisors (PEAs), who supervise schools as part of their role under the MoEST, the project reduced the potential for bias by assigning them to schools they did not supervise.

Data Entry: At least 10% of data were double-checked during entry to be sure that data entry was of a consistently high quality.

Reliability Testing

The 2011 Malawi EGRA instrument was analyzed to determine reliability of instruments in obtaining data on the reading skills assessed.

To determine reliability, the study team performed the Cronbach’s Alpha reliability test. The overall reliability of the instrument was 0.87, which is more than acceptable for this type of instrument (**Table C-1**).

Table C-1. Cronbach’s Alpha for EGRA 2011

Item	No. of Obs.	Item-Test Correlation	Item-Rest Correlation	Covariance	Alpha
Letter naming	3019	0.90	0.83	45.40	0.85
Syllable segmentation	3019	0.40	0.36	75.99	0.88
Initial sound identification	3019	0.24	0.22	78.70	0.89
Syllable reading	3018	0.97	0.95	41.80	0.83
Familiar word reading	3017	0.97	0.96	50.55	0.82
Nonsense word reading	3017	0.95	0.93	59.24	0.84
Oral reading fluency	3012	0.96	0.94	49.51	0.83
Reading comprehension	3012	0.85	0.85	77.69	0.88
Listening comprehension	3016	0.33	0.32	78.46	0.89
Overall test				61.9261	0.8743

Pearson correlations between the 2011 EGRA subtests for each of Standard 2 and Standard 4 are presented below, in **Tables C-2** and **C-3**. There are noticeably high correlations between letter naming, syllable reading, familiar word reading, nonsense word reading, and oral reading fluency. Reading comprehension also correlated highly with all word-reading subtests. However, correlations between the text-reading subtasks and the phonemic awareness subtests of syllable segmentation and initial sound identification were low. This may reflect the difficulty learners had with phonemic awareness, or may show that they assess a different set of skills than in the other subtests. Listening comprehension also did not correlate highly with other subtests, reflecting that the skills measured in this subtest are different from those in the other subtests.

Table C-2. Pearson’s Correlation, EGRA 2011, Standard 2

	Syllable segmentation	Initial sound identification	Letter naming	Syllable reading	Familiar word reading	Nonsense word reading	Oral reading fluency	Reading comprehension	Listening comprehension
Syllable segmentation	1								
Initial sound identification	0.2411***	1							
Letter naming	0.2389***	0.1467***	1						
Syllable reading	0.2557***	0.1914***	0.7716***	1					
Familiar word reading	0.2328***	0.1758***	0.7438***	0.9293***	1				
Nonsense word reading	0.2338***	0.1667***	0.7169***	0.9095***	0.9364***	1			
Oral reading fluency	0.2218***	0.1661***	0.7214***	0.9039***	0.9581***	0.9161***	1		
Reading comprehension	0.2635***	0.2045***	0.6452***	0.7667***	0.7911***	0.7492***	0.8191***	1	
Listening comprehension	0.1878***	0.1165***	0.2152***	0.1563***	0.1408***	0.1342***	0.1436***	0.2107***	1

* Significant at the alpha = .05 level; ** Significant at the alpha = .01 level; *** Significant at the alpha = .001 level.

Table C-3. Pearson’s Correlation, EGRA 2011, Standard 4

	Syllable segmentation	Initial sound identification	Letter naming	Syllable reading	Familiar word reading	Nonsense word reading	Oral reading fluency	Reading comprehension	Listening comprehension
Syllable segmentation	1								
Initial sound identification	0.2573***	1							
Letter naming	0.2230***	0.1184***	1						
Syllable reading	0.1182***	0.0812**	0.5570***	1					
Familiar word reading	0.1003***	0.0679**	0.5066***	0.8670***	1				
Nonsense word reading	0.1031***	0.0667**	0.4844***	0.8666***	0.9265***	1			
Oral reading fluency	0.0893***	0.0542*	0.4829***	0.8556***	0.9434***	0.9001***	1		
Reading comprehension	0.0822**	0.0553*	0.4070***	0.8107***	0.7911***	0.7611***	0.8076***	1	
Listening comprehension	0.2385***	0.1765***	0.1632***	0.0959***	0.0942***	0.0916***	0.0762**	0.0811**	1

* Significant at the alpha = .05 level; ** Significant at the alpha = .01 level; *** Significant at the alpha = .001 level.

Annex D. Benchmarks and Targets for EGRA, 2012–2017

Subtest	Measure	Suggested Benchmark Std. 1	Suggested Benchmark Std. 3	Possible	Std. 1 2017	Std. 3 2017	Std. 1 2013	Std. 3 2013	Std. 1 2012	Std. 3 2012
Letter naming	correct letters per minute (clpm)	24+ [2.3%]	50	(unlimited)	60%	60%	25%	25%	10%	10%
Syllable segmentation	% correct	70 [0%]	80 [3.6%]	10/20/30...100	60%	70%	40%	50%	20%	30%
Initial sound identification	% correct	80 [0%]	90 [0%]	10/20/30...100	30%	30%	10%	10%	5%	5%
Syllable reading	correct syllables per minute (cspm)	30 [1.8%]	60 [9.7%]	(unlimited)	50%	60%	20%	30%	10%	20%
Familiar word reading	correct words per minute (cwpm)	20 [1.7%]	45 [3.7%]	(unlimited)	50%	50%	25%	25%	10%	10%
Nonsense word reading	correct words per minute (cwpm)	15 [1.3%]	40 [0.6%]	(unlimited)	30%	30%	10%	10%	5%	5%
Oral reading fluency	correct words per minute (cwpm)	20 [1.6%]	50 [2.7%]	(unlimited)	50%	50%	25%	25%	10%	10%
Reading comprehension	% correct	40 [1.6%]	80 [0.8%]	20/40/60/ 80/100	30%	30%	10%	10%	5%	5%
Listening comprehension	% correct	60 [6%]	80 [24.1%]	20/40/60/ 80/100	60%	60%	40%	40%	30%	30%

Note: Benchmarks and targets agreed at the MoEST-convened EGRA Coordinating Committee Meeting, Crossroads Hotel, Lilongwe, October 27 2011