"Education is not the filling of a pail…

Early Reading: Igniting Education for All

A report by the Early Grade Learning Community of Practice

REVISED EDITION

…but the lighting of a fire."

—W. B. Yeats

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Contents

Acknowledgments v

Introduction: Reading in the Dark vi

1. The Missing Spark to Learning 1

2. Early Reading: Strike While the Iron is Hot 4

3. Warning Lights: Results of Reading Assessments Around the World 10

4. Assessment: Illuminating the Reading Deficit 18

5. Teaching: Lighting a Fire in Every Child 24

6. Mobilization: Stoke a Movement for Early Grade Reading 34

Conclusion: Lampposts on the Path to Education Quality 42

Appendix: Early Grade Reading Assessments Tracker 47

References 51

Tables

Table 1. Stages of Reading Development 6

Table 2. Summary of National and Regional Early Reading Assessment Findings, 2008–2009 13

Table 3. Summary of Program Evaluation Early Reading Assessment Baseline Findings, 2007–2010 15

Table 4. Early Grade Reading Assessment Components 20

Table 5. Rubric for Early Grade Reading Assessment Approaches 21

Figures

Figure 1. Gross Primary School Enrollment in High-Income and Low-Income Countries, 2000–2008 2

Figure 2. Primary School Completion in High-Income and Low-Income Countries, 2000–2008 2

Figure 3. The Gambia: Percentage of Students Who Could Not Read a Single Word, 2007 and 2009 9

Figure 4. The Gambia: Percentage of Grade 2 Students Reading with At Least 80% Comprehension 9

Figure 5. Percentage of Students Who Could Not Read a Single Word, 2008–2009 12

Figure 6: Percentage of Students Reading with At Least 80% Comprehension in Grade 2, 2008–2010 14

Figure 7. Assessment of Early Grade Reading Deficits Around the World 22

Figure 8. Liberia: Rates of Improvement in Oral Reading Fluency Among Treatment and Control Schools, 2009–2010 27

Figure 9. Liberia: Rates of Improvement in Comprehension Among Treatment and Control Schools, 2009–2010 27

Figure 10. Liberia: Percentage of Grade 2 Students Reading with At Least 80% Comprehension, Baseline and Final Results 28

Figure 11. South Africa: Percentage of Grade 1 Students Who Could Not Read a Single Word or Identify a Single Letter, Pre- and Post-Test Results 31

Figure 12. Mali: Grade 1 and Grade 2 Letter Identification Scores, Baseline and Mid-Term Results 33

Figure 13. Malawi: Percentage of Grade 2 and Grade 4 Students Who Could Not Read a Single Word in Chichewa, Pre- and Post-Test Results 41

Figure 14. Nepal: Percentage of Grade 2 Students Who Could Not Identify Letters or Read Words, Pre- and Post-Test Results 41

Acknowledgments

Children, teachers, and parents in low-income countries around the world are the main focus of this report. Every day they face the challenge of creating learning with minimal materials in austere classrooms and homes. A diverse community of practice—a group of government officials, donor and nongovernmental organization (NGO) staff, and university researchers—has come together under the banner of reading to support these children, teachers, and parents in their pursuit of education quality (a description of this "community of practice" is presented on the back cover). The following report on early grade reading assessment and improvement is a result of their collective efforts to develop and refine assessment tools, pilot interventions, and share practices for scaling up successful models.

This report was authored by Amber Gove and Peter Cvelich of RTI International, with contributions from Elizabeth Adelman (Academy for Educational Development [AED]), Anita Anastacio (International Rescue Committee), Rukmini Banerji (Pratham), Colette Chabbott (George Washington University), Amy Jo Dowd (Save the Children), Burama Jammeh (Ministry for Basic and Secondary Education, The Gambia), and Sara Ruto (Uwezo Initiative). RTI contributors included Michael Costello, Joseph DeStefano, Madeline Garant, Medina Korda, Jessica Mejia, Emily Miksic, Souhila Messaoud-Galusi, Benjamin Piper, Alison Pflepsen, Sarah Pouezevara, Wendi Ralaingita, Carol da Silva, and Carmen Strigel. Peer reviewers included Anda Adams (Center for Universal Education, The Brookings Institution), Penelope Bender (Consultant, The William and Flora Hewlett Foundation), Luis Crouch (RTI), Marcia Davidson (University of Utah), David Edwards (National Education Association), Melinda Taylor (RTI), Sylvia Linan-Thompson (University of Texas at Austin), and Richard Long and Sakil Malik (International Reading Association). The authors are grateful for the editing and comments provided by Myles Elledge, Hiske Leegstra, Ellen Lohr-Hinkel, Erin Newton, and Catherine Raymond, all of RTI. The design of this report was created by RTI's Design Services, with support from Hiske Leegstra and Lauren O'Bray (RTI). Errors or omissions are the sole responsibility of the authors.

INTRODUCTION

Reading in the Dark

Pause for a moment and imagine that you are an illiterate child. A textbook sits on a desk in front of you, and you cannot read it. You are surrounded by a classroom of children. Many of them do not have a book in front of them. In this regard, you are lucky. But to you, the text is still indecipherable. You are accustomed to listening to your school teacher dictate lessons, often in a language that you do not speak or understand and that your parents do not speak with you at home. Without textbooks or training for the basics of teaching reading, your teacher has little choice but to dictate. Now you are presented with a text in an unfamiliar language. Next year, you will be expected to begin learning math and science concepts by reading more books in this language of which you cannot comprehend even one sentence. You are just one of millions of children in low-income countries around the world whose prospects of academic—and with it, economic—success are dimmed because you cannot read.

As necessary as reading is to the success of a child—and entire nations—many low-income countries overlook the fundamental duty of their school systems to produce readers. Galvanized by the Education For All (EFA) mission to provide universal access to primary education by 2015, donors and low-income countries have focused on scaling up inputs to the education process—classrooms, teachers, textbooks. Meanwhile, teachers are not trained to teach reading. Assessments of student performance do not appropriately measure reading. Parents do not demand that their children know how to read. And for too long, low-income countries and the international education community—so focused on universal access—have neglected reading as a gauge of education quality. As a result, nearly whole generations of children at a time are falling behind the learning curve.

This report shines a light on the efforts of the individuals and organizations motivating and modeling a response to the reading crisis. It is the product of a community of practice—governments, international donors, academic institutions, nongovernmental organizations (NGOs), and communities—that has marshaled its resources to assess early grade reading in low-income countries and to test and prove ways to improve reading outcomes. This is the story they will tell you in the following pages:

The quality of education in low-income countries is a crisis for development.

Although campaigns to increase access to primary school have been successful, communities, governments, and donors should not forget about the ultimate goal: increased learning achievement. Assessment data of student performance in low-income countries—sparse as it is—reveals that many students are not mastering the basic skills of reading, thus undercutting economic productivity (see Chapter 1).

Children need to learn to read early to have success in school; success in school is a key factor to escaping poverty. Reading is a fundamental ability for higher learning.

The best opportunity to teach children the skills of reading is in the early grades (1–3), or earlier if possible. If this window is missed, then children who have not begun to read and understand what they read will continue to fall behind unless swift action is taken. In

low-income countries, entire education systems are failing to give reading the attention it is due (see Chapter 2).

The extent of the reading deficits in low-income countries requires immediate attention from the international education community.

Early grade reading assessments reveal that in some countries the majority of students in grade 2 are nonreaders, meaning they cannot correctly read even a single word in a simple paragraph. In such poorly resourced environments, multiple barriers exist to overcoming this deficit (see Chapter 3).

Measurement of reading outcomes is the first step to addressing the problem.

Few low-income countries systematically assess reading in the early grades. A group of donors and NGOs have designed and applied innovative assessment tools in multiple languages that more than 40 countries are using for small, quick, and inexpensive diagnosis of the reading problem. Armed with knowledge of their reading deficits, governments and communities can begin strategizing to reach effective reading goals (see Chapter 4).

There are proven methods to alter the reading trajectory in low-income countries; the greatest opportunity is to improve how reading is taught in the classroom.

After acknowledging the reading crisis in their countries, ministries of education have partnered with international donors and NGOs to train teachers, to support them with materials for reading instruction, and to provide books for students to take home and read with their parents. The significant improvements in reading outcomes from these interventions provide hope for a model of large-scale reading improvement (see Chapter 5).

Any effort to improve the teaching of reading must be supplemented by community- and policy-level dialogues to remove barriers to instructional practices.

Large class sizes, poorly equipped schools, and low-literacy environments are only some of the obstacles that teachers cannot overcome alone. Parents and communities need to be inspired to hold their schools and governments accountable so that their children will actually learn (see Chapter 6).

Reading undergirds the entire learning experience for a child; it needs to be the foundation of any education enterprise. Findings from early grade reading assessments and evidence-based interventions shared in this report can produce improvements not just in reading, but in education quality in general. Early grade reading is an exemplar for improving the overall quality of education.

1 The Missing Spark to Learning

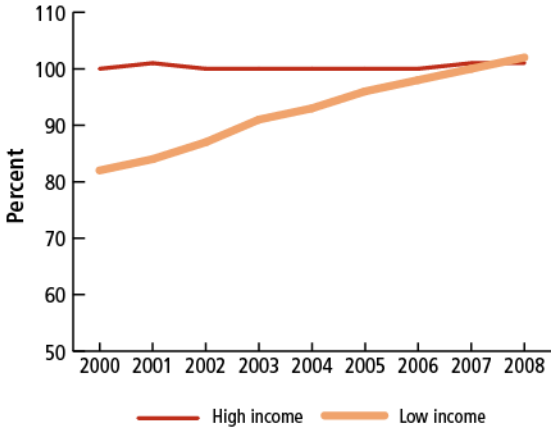
Education quality is at the heart of development. A nation's economic prospects follow the learning curve of its children. Despite the satisfaction of seeing enrollment rates and years of school attainment rise, these education quantity indicators have limited impact on economic outcomes. Recent findings in economic growth accounting research reveal that it is the quality of a school system—measured by the cognitive skills attained by the students—that primarily contributes to a country's economic growth. A country's performance on international learning assessments—covering reading, math, and science—accounts for 64 % of the variation in economic growth trends over decades. A 10 % increase in the share of students reaching basic literacy translates into a 0.3 percentage point higher annual growth rate for that country (Hanushek and Woessman, 2009). But has development assistance for basic education focused on increasing literacy, a basic cognitive skill for economic well-being?

The international education community has long been inspired by the promise that if we build the classrooms and recruit the teachers, the students will come and learn. The EFA initiative was launched in 1990 to "bring the benefits of education to every citizen in every society." After a decade of slow progress, world leaders reaffirmed their commitment to EFA in 2000 at the World Education Forum and at the United Nations Summit, where the Millennium Development Goals were adopted, including the goal that by 2015 all boys and girls should complete a full cycle of primary education. Governments and donors have invested roughly US$15 billion a year to reach these goals in low-income countries (UNESCO, 2010a).

The force of this commitment has made a difference; more students are showing up for class. The enrollment gap has closed considerably in the past decade: by 2008, the average low-income country was enrolling students in primary school at nearly the same rate as the average high-income country[1] (see Figure 1). This is not to say that all children are in school, however. Inevitably, there exist contradictions to this positive global trend within countries and regions (Crouch and Gove, In press). For example, while many of its West African neighbors have increased net enrollment ratios by roughly 20 to 30 percentage points between 1999 and 2007, Liberia's ratio has declined from 42 % to 31 % (UNESCO, 2010a). The EFA Global Monitoring Report estimates that some 67 million children of primary age were out of school in 2008 (UNESCO, 2011). Difficult economic conditions, distance to schooling, denial of access for girls—all are cited as contributing factors for the high numbers of out-of-school children.

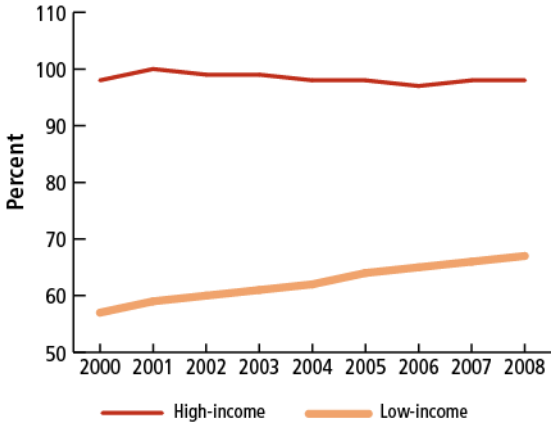
Substantial gains in enrollment, the most measurable of all of the goals, have led many to believe that education in low-income countries is no longer in crisis. However, children in low-income countries are completing primary school at only 64 % of the rate of high-income countries, and progress has been slow; at the current pace of improvement, it would take another three decades for completion rates in low-income countries to catch up to rates in high-income countries[2] (see Figure 2). Attrition begins early. In sub-Saharan Africa and South and West Asia, 9 % and 13 %, respectively, of hopeful first graders will grow into disenchanted dropouts

Figure 1. Gross Primary School Enrollment in High-Income and Low-Income Countries, 2000–2008



Source: EdStats Query, 2010.

Figure 2. Primary School Completion in High-Income and Low-Income Countries, 2000–2008



Source: EdStats Query, 2010.

[1] Authors' calculations of the ratio of low-income to high-income country average gross enrollment rates in 2008 from World Bank EdStats Query database. Country classification based on World Bank country and lending groups (World Bank, 2010).

[2] Authors' calculations of the ratio of low-income to high-income country average primary completion rates from World Bank EdStats Query database. Country classification based on World Bank country and lending groups (World Bank, 2010).

before they even finish their first year of school (UNESCO, 2010a). These children are within the teacher's grasp for a fleeting moment before they are gone. Low-quality schooling is second only to cost as a reason for dropout (El-Zanaty and Gorin, 2007; World Bank, 2007; Crouch, 2005; NPC Nigeria and ORC Macro, 2004; Bedi and Marshall, 2002; Hanushek and Lavy, 1994). With the promise of universal quality primary education, millions of families have sent their children to school, hoping for the most basic of returns on their efforts—a child who can read and write. Have we delivered on that promise?

The EFA campaign's biggest hurdle is that many low-income countries' education systems are not teaching the basic skills to those children who manage to stay in school. The leading international assessments on literacy and numeracy (Progress in International Reading Literacy Study [PIRLS] and Trends in International Mathematics and Science Study [TIMSS]) show that the average student in low-income countries would be scraping along the bottom of the learning curve in high-income countries, only performing at the fifth percentile, which means worse than 95% of the students in Organisation for Economic Co-operation and Development (OECD) classrooms (Crouch and Gove, In press). A child's investment of time in the classroom must prove worthwhile, as measured by the level of learning, if it is not to be wasted. So, while the promise of EFA is resulting in more classrooms, pupils, and teachers, the spark that lights the fire of learning in the minds of all children has not yet been ignited. That missing spark is reading.

India: Discovering the Missing Spark

With more than 93% of children ages 6 to 14 years old enrolled in school, India's picture of an "education for all" was beginning to come into focus in 2005. Billions of dollars had been invested by federal and state governments to build classrooms, recruit teachers, provide school lunches, and buy books. Now 99% of all communities have a primary school located within a one-kilometer distance, according to the United Nations Children's Fund (UNICEF). However, when Pratham, an Indian NGO, conducted its first Annual Status of Education Report (ASER), the picture was less encouraging. Pratham assessed rural schools in 28 of India's 35 states and found

- 75% of teachers showed up for class,[3]
- 71% of students showed up for class, and
- roughly 80% of schools provided textbooks for most of their students.

And…

- only 15% of grade 2 children and 25% of grade 3 children could read a simple paragraph, and
- only 17% of grade 2 children and 32% of grade 3 children could solve a two-digit subtraction problem (ASER, 2005).

More than half of the children in rural India are at least three grade levels behind where they need to be, according to ASER 2010. India's Right to Education Act became law in April 2010, mandating free and compulsory education for all children ages 6 to 14 years. However, most Indian children showing up for class are not learning the basic skills, and they are not alone. This problem is widespread among low-income countries. Learning starts with reading, and effective models of teaching reading and supporting literacy in the community have been shown to boost children's reading performance in leaps and bounds. For a demonstration of the impact of Pratham's *Read India* campaign and interventions in other countries, see Chapters 5 and 6.

[3] This finding is supported and nuanced in a study by All India Primary Teachers' Federation that found, in a sample of three states, a 21% absenteeism rate among teachers in government primary schools: 9.1% were not present for personal reasons, 9.2% were undergoing in-service training, and 2.7% were conducting nonprofessional work (Eswaran and Singh, 2008).

"It is both conventional and convenient in policy discussions to concentrate on such things as years of school attainment or enrollment rates in schools. These things are readily observed and measured.... And, they are very misleading in the policy debates."

—E. Hanushek and L. Woessman (2008)

2
Early Reading: Strike While the Iron is Hot

Reading is the foundation for other learning activities in the classroom. The point of reading is comprehension, and the point of comprehension is learning. Children who fail to learn to read in the first few grades of school are handicapped in later grades because they must absorb increasing amounts of instructional content in print form. Poor readers cannot develop proper writing skills or become self-guided learners in other subject areas. The basic reading skills necessary to become "literate" do not develop naturally; we have to learn to adapt the part of our brain that recognizes images to be able to recognize written letters and words (Wolf, 2007). As has been confirmed by scholars working to understand reading acquisition in multiple languages (Jiménez and O'Shanahan Juan, 2008; Linan-Thompson and Vaughn, 2007; Abadzi, 2006; Sprenger-Charolles, 2004; Chiappe et al., 2002), in almost any alphabetic language in which print can be decoded—broken apart mentally into sounds—being able to read well requires a grasp of five basic skills (National Reading Panel, 2000):

1. **Phonemic awareness**—focusing on, manipulating, breaking apart, and putting together sounds orally;
2. **Phonics (or "alphabetics")**—linking written letters to their sounds and forming spelling patterns;
3. **Fluency**—achieving speed, accuracy, and expression in reading;
4. **Vocabulary**—knowing words (both oral and written) and their meaning; and
5. **Comprehension**—understanding the concepts read or heard.

Reading to learn is the ultimate prize—a combination of fluency, comprehension, and vocabulary skills that allows a person to read independently and to understand and use the information they read. It is the difference between "reading it" and "getting it."

Children must read fluently to comprehend what they are reading. As students weave together the many strands of reading, including background knowledge, vocabulary, language structures (syntax, semantics), and literary knowledge (print concepts and genres) with knowledge of print-sound relationships and decoding, they get closer to skilled reading and comprehension (Scarborough, 2002). A critical strand in this process is oral reading fluency (Fuchs et al., 2001).

Initially students read letter by letter. With practice they recognize letters more quickly and in small clusters. They learn the sounds these letters make and that sounds link to form words. As they train their minds—literally rewiring nerves to activate a new area of the brain—they begin to visually identify word patterns. With more practice, they automatically recognize the spelling and pronunciation of words, which allows them to begin paying attention to the message of the word and not just the print. Understanding the message of words is the first step toward linking them into sentences and comprehending. It is as if a light switch were turned on in their minds that cannot be turned off (Wolf, 2007).

Cognitive neuroscience reveals that the human mind has about 12 seconds of short-term working memory in which to process seven items, or small chunks of data, from visual recognition into a longer term memory bank, similar to how we eat and digest food in small morsels. To comprehend sentences, the mind must digest chunks of words

at a minimum rate of about 35 to 60 words per minute[4] (Abadzi, 2006). Children who read haltingly will begin a sentence but will lose track of where they began if they cannot complete it within the narrow time span allowed by their working memory. They must re-read the sentence, perhaps a few times, before catching on. Although comprehension might eventually ensue, this is a very inefficient process that impedes *effective* comprehension.

Children can, and should, learn to read with understanding within the first few years of schooling. While no two children will develop their reading skills at exactly the same rate, readers will progress through stages in their reading development, some simultaneously. Every reader progresses through the first three stages of reading while simultaneously building and applying comprehension skills. Once students have become proficient readers, their focus will shift to more complex comprehension strategies and interactions with the text. Table 1 describes the stages of reading development, associated with the expected grade level at which an English language learner in a higher income country would pass through each stage. Stages 1–2 focus on the foundation skills of learning to read. At Stage 3, the student begins to use reading as a tool for learning.

Differences in language and setting should mediate our expectations for exactly when children break through to reading to learn. Depending on the complexity of the language—including the visual transparency of the script, consistency of spelling, and word length—children arrive at fluency at different rates.[5] For instance, children learning Italian, Greek, and Spanish as their mother tongue, with the simple and consistent links between letters and sounds in these languages, can master recognition of familiar words and decode new words with near-perfect accuracy by the end of grade 1, if instructed

[4] The minimum fluency for comprehension also depends partly on linguistic complexity. For instance, higher speeds may be necessary for unvoweled, Arabic-scripted languages that require the reader to hold multiple alternative pronunciations of words in working memory to understand a sentence. In contrast, one could potentially read slower and still understand a sentence in a tonal language, such as Thai, with short words and marked tones (Abadzi, 2011).

[5] A review of the scientific literature on factors that influence cross-linguistic comparison of reading results is provided in Abadzi, 2011.

Table 1. Stages of Reading Development

Stage	Name	The Learner
Stage 0: Birth to Grade 1	Emergent Literacy	Gains control of oral language; relies heavily on pictures in text; pretends to read; recognizes rhyme
Stage 1: Beginning Grade 1	Decoding	Grows aware of sound/symbol relationships; focuses on printed symbols; attempts to break code of print; uses decoding to figure out words
Stage 2: End of Grade 1 to End of Grade 3	Confirmation and Fluency	Develops fluency in reading; recognizes patterns in words; checks for meaning and sense; knows a stock of sight words
Stage 3: Grade 4 to Grade 8	Learning the New (Single Viewpoint)	Uses reading as a tool for learning; applies reading strategies; expands reading vocabulary; comprehends from a singular point of view
Stage 4: Secondary and Early Higher Education	Multiple Viewpoints	Analyzes what is read; reacts critically to texts; deals with layers of facts and concepts; comprehends from multiple points of view
Stage 5: Late Higher Education and Graduate School	A Worldview	Develops a well-rounded view of the world through reading

Source: Roskos et al., 2009.

well. However, children learning English as their mother tongue, with all its irregularities, often take two and a half years of schooling to cover the same ground (Abadzi, 2006; Seymour et al., 2003). In countries with linguistically diverse populations, language of instruction policy and practice may hinder the learning process if students are taught at school in a language different from the mother tongue they speak at home and if they are not yet literate in their mother tongue (see Chapter 3). The process takes longer in many low-literacy environments, where children are not exposed to print before they are challenged to begin reading. The level of schooling and literacy of a mother impacts the learning outcomes of her child (Levine et al., 2001). Furthermore, in low-resource settings, malnourishment—which affects one in three children under the age of five in developing countries (UNESCO, 2011)—can impede a child's working memory, delaying their breakthrough to automatic word recognition (Abadzi, 2006).

Given these differences, what should be the expectation for students in low-income countries? An expert panel has recommended to the Fast Track Initiative (FTI)—a global partnership of low-income countries and donors working to achieve the EFA goals—that a reasonable global standard would be for students to read with understanding a grade-level text by the end of grade 2. "Reading with understanding" is defined as a student's ability to both decode (translate print to sound) and know what they read, at the level of words, simple phrases, and sentences. The term is meant to combine fluency with decoding and comprehension. FTI is also considering a second standard for students to read a grade-level text with sufficient fluency and comprehension to "read to learn" by the end of primary school. (These standards exclude the special cases of children with particular learning disabilities.) According to benchmarks for the U.S., students who do not read at least 70 words per minute by the end of second grade are considered "at risk" (DIBELS, 2008); analysis of U.S. results from more than 20,000 students indicated that nearly one-third of grade 2 children fell below this threshold (Hasbrouck and Tindal, 2006).

However, the FTI standard allows countries to define for themselves what sufficient fluency and comprehension is for their students in their languages. What is certain, though, is that no matter the benchmark chosen for fluency and comprehension, if students are not reading with understanding by grade 2, this fact should act as a "warning light" for their teachers and parents, and corrective action should be taken to remedy this lack by grade 3. Moreover, recognizing the current state of learning in low-income countries, it is expected that remedial reading instruction would be required in the upper primary grades as well.

Whatever the normal trajectory for learning to read in a given language, children who fall behind will struggle to catch up. The trajectory of a child's reading progress at the end of first grade holds fairly steady during the course of primary school: a poor reader in first grade continues to be a poor reader in fourth grade, just as a good reader in first grade continues to be a good reader in fourth grade—in the absence of some intervention. In fact, reading skills are self-reinforcing through practice both in and out of school: poor readers read about half as many words as good readers, thus getting half the amount of vocabulary practice and improving their reading skills at a slower rate (Juel, 1988). Without the prompting of supportive parents and teachers and additional high-quality instruction, a poor reader will struggle through every school day and be more likely to drop out, leaving behind potential education opportunities for the more immediate returns of employment or work in the home, perpetuating the intergenerational cycle of poverty.

Breaking the cycle of poor performance requires early intervention. Tackling the reading deficit early can change the whole course of a child's academic future. For students on a low reading trajectory after first grade to catch up with those on a middle trajectory, they must

achieve twice the fluency gains in the following year (Good et al., 1998). In one study, the greatest factor predicting primary school completion in Senegal—surpassing even household wealth—is a child's cognitive skills as tested at the beginning of second grade (Glick and Sahn, 2010). This has an ongoing ripple effect. Research has shown that the better children read at age 15, the greater the likelihood they will continue to post-secondary education and, presumably, greater economic prospects (Knighton and Bussière, 2006). The key is identifying and responding

The Gambia: Beginning to Break the Illiteracy Cycle

In early 2007, the World Bank and the Government of The Gambia partnered with RTI to conduct a rapid assessment of English reading skills of students in grades 1–3. From a sample of 1,200 students across 40 schools from this small country, nearly two-thirds of the students were unable to read even a single word from a simple paragraph. And only 5% of grade 3 students met the fluency benchmark of roughly 50 words read per minute that is standard for grade 1 students at the 50th percentile in the U.S. A survey of students and teachers found significant barriers to effective reading instruction (Crouch and Gove, In press):

- Only 1% of students reported speaking English at home, yet there was no national or local strategy for teaching second-language learners.
- Three-quarters of students reported having no books at home.
- Two-thirds of students' mothers were illiterate.

The Permanent Secretary of Education witnessed the scope of the problem with his own eyes when he visited a school, opened a children's reading book, and asked students to read aloud to him. None could (Bouy, 2007).

Interventions. In response, in 2007, the Government of The Gambia implemented a series of activities to improve reading performance among its nation's schoolchildren. The first step in launching the intervention was the establishment of a task force by the Ministry of Education to design and supervise a plan to improve early grade reading. This task force led a review of documents to identify gaps in instructional materials and teacher training curriculum, as well as to discuss best practices in teaching reading in the early grades.

The second step consisted of the development of a Handbook of Teaching Early Grade Reading Activities, used to conduct a nationwide in-service training of grade 1–3 teachers and their supervisors. During these teacher trainings, 3,000 teachers, head teachers, and cluster supervisors received training in the five foundational reading skills, with special emphasis placed on how to conduct phonics instruction, through support from the Jolly Learning Company.

The Ministry of Education's teacher training intervention in early grade reading was well received and continued at the national, regional, school cluster, and school levels. At the top level, the Ministry continued to implement interventions to improve reading, while local schools took the initiative to launch their own interventions. Some local schools chose to offer trainings for their teachers that mirrored the national intervention, while others invited external professional trainers to facilitate school-based training activities.

Outcomes. In 2009, the Ministry of Education administered a second early grade reading assessment to inform policy makers, curriculum developers, development partners, and practitioners on the impact of the interventions that had been implemented since 2007. The assessment was designed not only to measure changes in students' reading performance, but also to establish a basis to carry out further early reading interventions.

The 2009 sample included 1,200 students from 40 schools, the same schools sampled in the 2007 assessment. The results of the second assessment showed a significant, positive impact on students' mean reading scores, including an increase in the overall mean score for every early grade reading

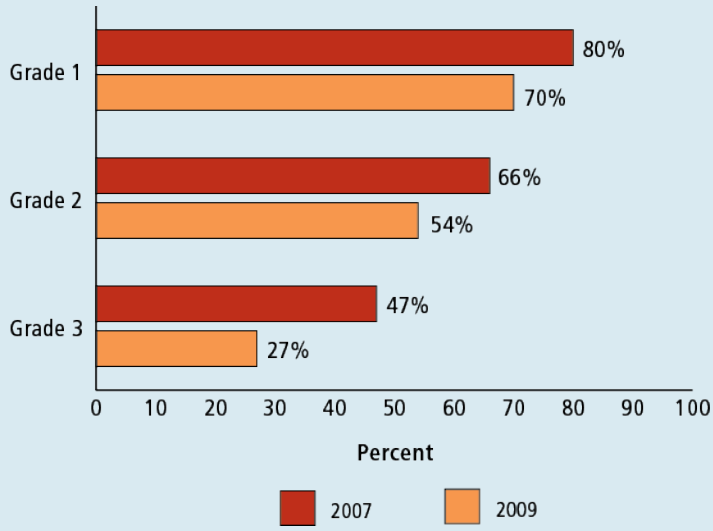
to the problem early. In high-income countries, reading interventions are aimed at individual children who might be struggling, or occasionally at individual schools or districts. In the developing world, *entire education systems* need interventions that aid struggling readers to become successful readers. Although there are factors in the home that influence reading acquisition, these are hard to change systematically. Improving classroom instruction—though still challenging—is a systemic early response that improves outcomes for most children, as The Gambia discovered.

indicator tested. Some key results included

- an increase in the overall average score for knowledge of letter names, from 24.5 letters per minute in 2007 to 33.2 in 2009;
- an increase in the average number of familiar words read correctly, from 2.54 in 2007 to 4.78 in 2009;
- a decrease in the percentage of students who could not read a single word in each grade tested (see Figure 3); and
- a tripling in the percentage of students who could read with understanding (see Figure 4).

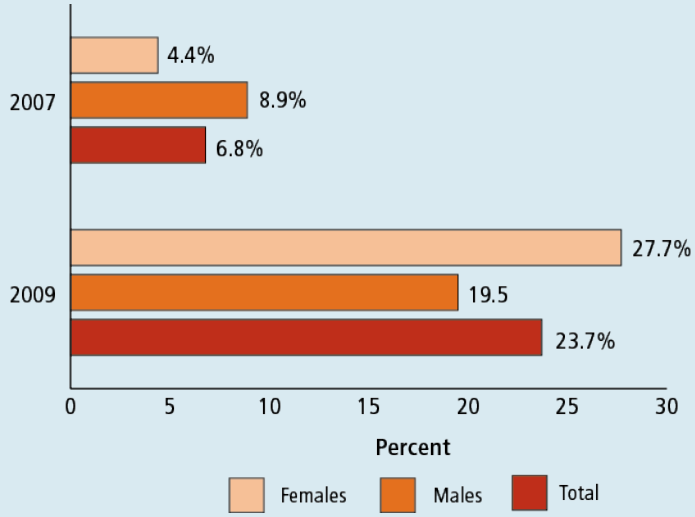
The positive impacts the Gambian interventions have had on early grade reading achievement are encouraging. At the same time, persistently low mean scores on key components of reading suggest that interventions need to be sustained and intensified to continue raising reading achievement in Gambian schools.

Figure 3. The Gambia: Percentage of Students Who Could Not Read a Single Word, 2007 and 2009



Sources: Sprenger-Charolles, 2008; Ministry of Basic and Secondary Education, 2009.

Figure 4. The Gambia: Percentage of Grade 2 Students Reading with At Least 80% Comprehension



Sources: Sprenger-Charolles, 2008; Ministry of Basic and Secondary Education, 2009.


PAKAN TERNAK
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3

Warning Lights: Results of Reading Assessments Around the World

The reading deficit has been largely neglected in many low-income countries. With few national assessments taking place before fourth grade or later, teachers may realize that their students are struggling to read, but they do not see this as a problem because no early reading standards have been communicated to them. Furthermore, the policy makers in many low-income countries are in the dark—not knowing if children are learning to read, especially in the critical early grades. With high primary school dropout rates in many low-income countries, highlighting the problem early is crucial to salvaging the education prospects of the next generation. The cost in time and resources to make up a child's reading deficit in later grades grows each year that schools, governments, and donors delay action.

Over the past several years, there has been a steady increase in using individual, oral assessments of reading skills in the early primary grades to provide timely, actionable information for improving teaching and learning. As will be discussed in Chapter 4, one particular approach—the Early Grade Reading Assessment (EGRA)—was developed by RTI with the support of the U.S. Agency for International Development (USAID) and the World Bank. An international panel of cognitive scientists, early grade reading instruction experts, research methodologists, and assessment experts vetted the instrument in November 2006. Piloting followed in 2007 in The Gambia (English), Senegal (French and Wolof), and Nicaragua (Spanish).[6] Similar

[6] A detailed history of the instrument, its components, and the conceptual framework underpinning the assessment can be found in the Early Grade Reading Assessment Toolkit (RTI, 2009).

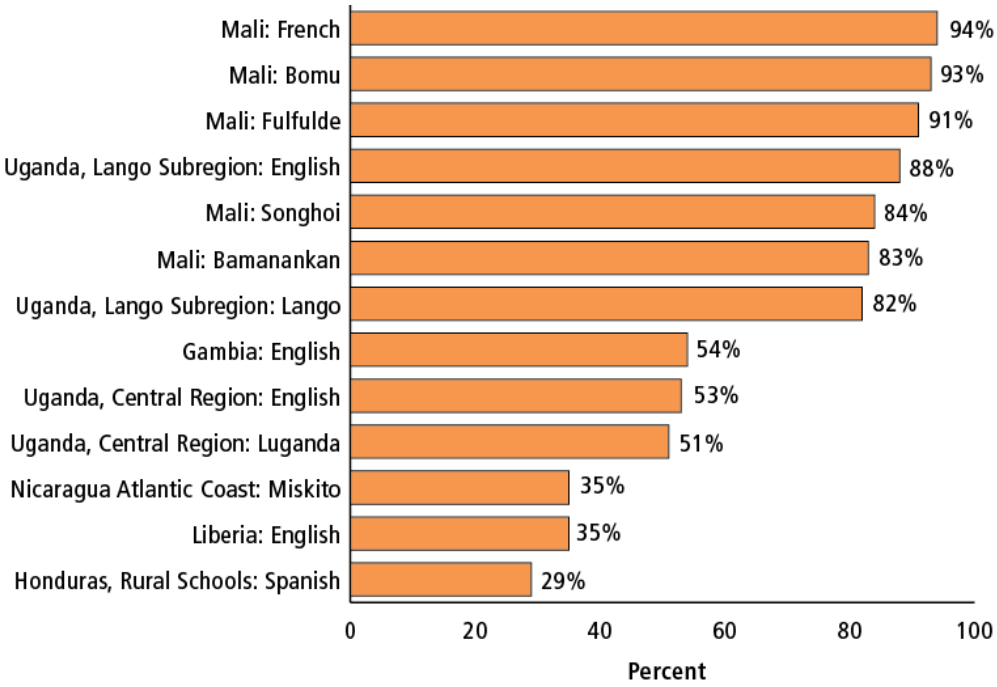
approaches, using many of the same components and designed to inform the implementation of reading programs, have also been developed by other NGOs, such as Pratham, Save the Children, and Plan International. By mid-2010, more than 40 countries had conducted early grade reading assessments (see map, Figure 7).[7]

A consistent pattern has been revealed: worrying proportions of students are not learning to read at all within the critical first two or three years of schooling. To provide an overall sense of reading levels in the countries where early grade reading assessments have been tried, Table 2 reports on the percentage of "non-readers": those students who scored a zero on the oral reading fluency test, which asks them to read a simple paragraph in the language in which they are being taught to read. Because of differences in how local assessors interpret individual student results, as well as differences in language structure that influence reading acquisition (see Chapter 2), it is not appropriate to compare average oral reading fluency rates across languages and countries (Trudell and Schroeder, 2007). Therefore, to facilitate cross-linguistic comparison of reading results, we present the percentage of non-readers (the "zero scores") in charts throughout this report. When showing a change in reading outcomes from an intervention, we supplement the zero scores with measures of comprehension to demonstrate that not only have students moved past zero scores, they are also making strides toward literacy.

In some countries, upward of 70% to 90% of students tested at the end of two to three years of schooling were unable to correctly read a single word within the first line of a simple paragraph. Table 2 shows that in Mali, for example, 94% of grade 2 children receiving instruction in French were unable to read a single word of French text, compared with 83% of children tested in Bamanankan, who were attending schools with Bamanankan as the language of instruction. In Haiti, nearly half of the children tested in Creole or French at the beginning of grade 3 could not read a single word. Figure 5 compares these same zero score results for assessments conducted at the

[7] For a complete listing of early reading assessment applications, please see the Appendix.

Figure 5. Percentage of Students Who Could Not Read a Single Word, 2008–2009



Sources: End of Grade 2 Early Grade Reading Assessments. Complete reports for each country available at www.eddataglobal.org.

Table 2. Summary of National and Regional Early Reading Assessment Findings, 2008–2009

	Language of Assessment	Sample Size	Nonreaders (%)	Primary Completion Rate (%)	Youth Literacy Rate, Age 15–24 (%)	Public Education Spending as % of GDP
Gambia, June 2009 End of grade 2, national level sample	English	788	54	79.1	n/a	2.0
Guyana, Oct 2008 Beginning of grade 3, national level sample	English	898	29	109.7	n/a	6.1
Haiti, May 2009 Beginning of grade 3, regional sample of two districts	French	399	49	n/a	n/a	n/a
	Creole	426	48			
Honduras, Oct 2008 End of grade 2, rural sample of PROHECO schools	Spanish	615	29	89.7	93.9	n/a
Kenya, Oct 2009 End of grade 3, province level sample in Central and Luo-Nyanza provinces						
Central	English	1002	9	90	80.3	7.0
	Kiswahili	1002	13			
	Gikuyu	502	15			
Luo-Nyanza	English	998	19			
	Kiswahili	998	25			
	Dholuo	498	20			
Liberia, June 2008 End of grade 2, national level sample	English	1426	35	57.6	71.8	2.7
Mali, April 2009 End of grade 2, national level sample by language group	French	411	94	56.8	38.8	3.8
	Bamanankan	464	83			
	Bomu	592	93			
	Fulfulde	437	91			
	Songhoi	472	84			
Nicaragua, April 2008 Beginning of grade 3, national sample, excluding small rural schools of less than 20 students per grade	Spanish	2218	1	74.5	87.0	n/a
Nicaragua, Oct 2009 End of grade 2, Atlantic Coast, excluding small rural schools of less than 60 students	Spanish	329	6	n/a	n/a	n/a
	Miskito	171	35			
	Panamahka	35	40			
	Creole	35	49			
Senegal, May 2009 End of grade 3, national sample of schools	French	687	18	56.3	50.9	5.1
Uganda, Oct 2009 End of grade 2, region level sample in Central Region and Lango Subregion.						
Central	English	473	53	56.1	86.3	3.8
	Luganda	474	51			
Lango	English	498	88			
	Lango	500	82			

Note: Nonreaders are students who could not read a single word of a simple paragraph.

Sources: Early grade reading assessments; complete reports for each country available at www.eddataglobal.org; columns 5–7, EdStats Query, 2010, most recent data available.

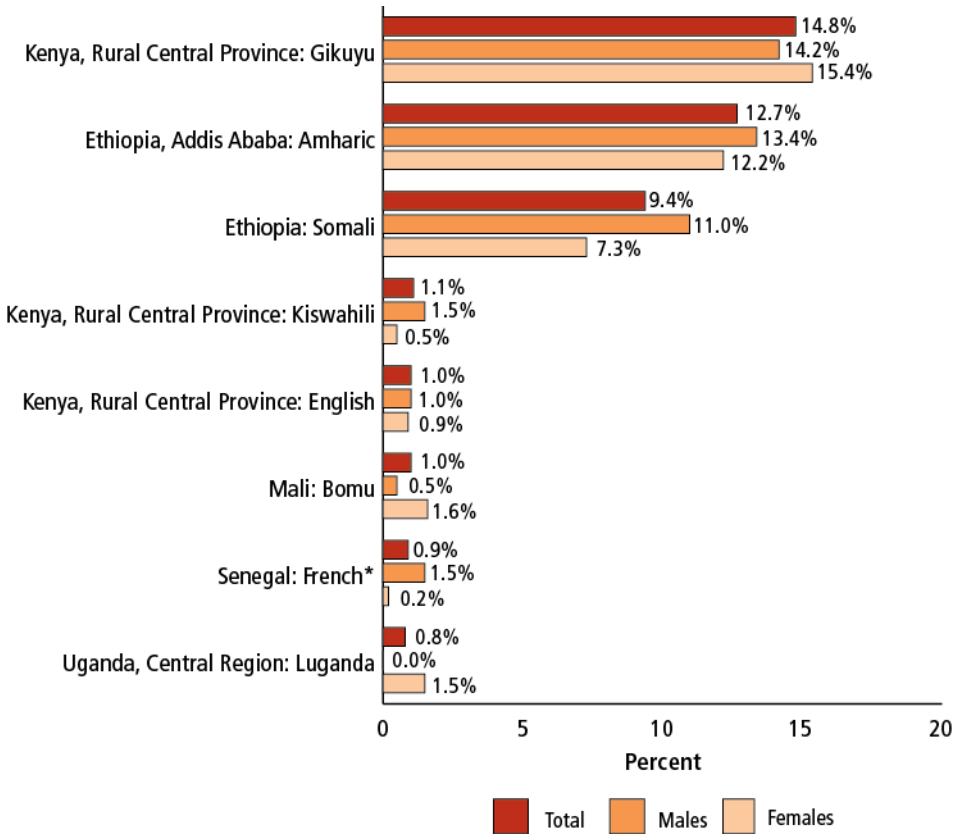
end of grade 2, using only national or regionally representative results. Above the level of zero scores, among those students who could read words, very few were reading with understanding (as shown in Figure 6).[8]

Studies of reading levels in NGO-supported schools reveal similarly low results.

Table 3 provides a summary of baseline results from reading programs in several countries. In each case, data were collected by NGOs, such as Save the Children and CARE, to inform the development of reading programs and assess their impact. Samples were not designed to be representative at the national or regional level and are included in Table 3 for illustration purposes only. Nonetheless, it is useful to observe the proportion of students tested who were unable to read a single word of a simple paragraph. In Pakistan, 91 % of children tested in Pashtu (also commonly referred to as Pashto) and 66 % of children tested in Urdu were unable to read a single word of text (Dowd et al., 2010a). Results from a Save the Children study in the Philippines reveal stark regional differences, with a very small percentage of children unable to read in Filipino and English (1 % and 2 %, respectively) in Manila, compared with 24 % and 30 % of students in Mindanao (Cao, 2010). In Malawi, more than half of children tested in English at the beginning of grade 4 were unable to read a single word (Dowd et al., 2010b).

[8] Oral reading fluency rates, by grade, as well as results for all of the other subtests, can be found in each of the country reports, many of which are on www.eddataglobal.org.

Figure 6: Percentage of Students Reading with At Least 80% Comprehension in Grade 2, 2008–2010



* Senegal French assessed in grade 3.

Sources: End of Grade 2 Early Grade Reading Assessments. Complete reports for each country available at www.eddataglobal.org.

Table 3. Summary of Program Evaluation Early Reading Assessment Baseline Findings, 2007–2010

	Language of Assessment	Sample Size	Non-readers (%)
Afghanistan, 2007, USAID/PACE-A			
End of grade 2	Dari and Pashtu	309	21
Ethiopia, Oct 2009, Save the Children			
Beginning of grade 3	Orromifa	456	36
Guatemala, July 2008, Save the Children			
Midyear grade 3	Spanish	504	4
Honduras, July 2009, CARE			
Midyear grade 3	Spanish	372	8
Malawi, Feb 2009, Save the Children			
Beginning of grade 2	Chichewa	340	95
	English	340	98
Beginning of grade 4	Chichewa	272	28
	English	272	56
Mozambique, July 2010, Aga Khan Foundation			
Midyear Grade 3	Portuguese	649	57
Nepal, Sept 2009, Save the Children			
Midyear grade 2	Nepali	272	79
Pakistan, Dec 2009, Save the Children			
End of grade 2	Pashtu	234	91
	Urdu	234	66
Philippines, Oct 2009, Save the Children			
Midyear grade 3			
Region: Manila	Filipino	160	1
	English	160	2
Region: Mindanao	Filipino	541	24
	English	541	30

Note: Nonreaders are students who could not read a single word of a simple paragraph.

Sources: Adelman et al., 2010; Cao, 2010; Dowd et al., 2010a; Dowd et al., 2010b; Pinto, 2010; Schuh Moore et al., 2010a; Schuh Moore et al., 2010b; Danish and Hoilund-Carlsen, 2009; Stannard, 2008.

Several major factors contribute to these shocking results, including lack of training and support for teachers, minimal instructional time, poorly resourced schools, absence of books in the home, and problematic language of instruction policies and practices. It is beyond the scope of this report to conduct a complete meta-analysis of the dozens of reports underlying the results. Yet there are several salient factors that appear again and again in all of the findings.

1. Teachers in many countries lack training and support. Universal primary education expansion has pushed some systems to the brink in terms of teacher supply. For example, pupil-teacher ratios are on the rise in sub-Saharan Africa at 45:1 in primary schools in 2008, up 9% from 1999 (UNESCO, 2011). The inadequate supply of teachers has resulted in recruiting and hiring uncertified teachers in many countries, putting pressures on both the teacher preparation (pre-service) and teacher professional development (in-service) systems.

A study of eight anglophone countries in sub-Saharan Africa found that with a limited number of qualified applicants, teacher training colleges in many countries have had to lower their already low entry requirements—accepting applicants with the lowest passing grades and even with course failures—and are pushing trainees through the programs in two years or less to try to fill the need for primary school teachers. Training in teaching methods is often theoretical, subject matter instruction poorly aligned with school curriculum, and courses delivered by instructors with little to no experience teaching at the primary level (Mulkeen, 2010).[9] Data from the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) show that in several countries, the average teacher does not perform significantly better on reading tests than the highest performing grade 6 students (UIS, 2006).

[9] The eight anglophone countries included in the study were Eritrea, The Gambia, Lesotho, Liberia, Malawi, Uganda, Zambia, and Zanzibar.

The distribution of better qualified teachers often favors urban areas, and efforts to place teachers in rural and isolated areas—where they are needed the most—have had limited success. Once deployed, new teachers receive little support from their head teachers, who are seldom trained in how to manage staff and are often away from the school. Higher level teacher supervision also falls short of its promise in many sub-Saharan African countries, with inspectors visiting schools sometimes less than once a year and usually focusing their attention on data collection and administrative issues, rather than influencing teaching practices (Mulkeen, 2010).

2. Instructional time is frequently wasted; some studies indicate that less than half of the available time is used for learning. Students' opportunity to learn is decreased by informal school closures (e.g., strikes, inclement weather, ad hoc holidays), teacher and student absenteeism, delayed school openings, early departures, and poor use of classroom time. A USAID-funded study of instructional time wastage revealed that after subtracting for time lost, remaining instructional time (as a percentage of the total days available) only amounted to 31 % in Guatemala, 39 % in Honduras, 34 % in Ethiopia, and 45 % in Nepal (Schuh Moore et al., 2010b).[10] A World Bank study revealed similar results: in Ghana only 39 % of instructional time was used, compared with 63 % in the Brazilian state of Pernambuco, 71 % in Morocco, and 78 % in Tunisia (Abadzi, 2009). Because time for reading practice is crucial to literacy, any instructional time loss detracts directly from outcomes in early grade reading (and other subject areas).

3. Children (and their schools) are poorly equipped with the most basic of resources: books. It seems almost too obvious to write it here, but the availability of reading books, both in school and in the home, is a critical component for learning to read. In Mali, a recent survey revealed that 75 % of students in grade 2 did not have textbooks, and no students had supplementary reading books at school (Evans, 2010), a situation that is not uncommon throughout the developing world. Reading books and libraries are scarce, but when available, they can have a powerful impact on learning to read. In The Gambia, among those students who could read at least 45 words per minute, 90 % had reading books in the home (compared to the remaining students, only 20 % of whom had books) (Sprenger-Charolles, 2008). Through its Literacy Boost interventions in Malawi and Nepal, Save the Children has found that community mobilization activities that bring books into the home lead to better student performance on letter naming, oral reading fluency, and comprehending connected text (Dowd et al., 2010b; Pinto, 2010).

4. Language of instruction policies and approaches do not meet children's learning needs. While many factors affect education quality, the language of classroom instruction fundamentally impacts whether a child is able to read and learn. This is because learning in one's first language is "essential for the initial teaching of reading" (Dutcher and Tucker, 1997, p. 36). Language skills—such as visual awareness, phonemic awareness, and automaticity—developed in a first language are transferrable to a second language (UNESCO, 2008; Bialystock, 2006; Geva, 2006). Yet an estimated 221 million school-age children speak languages not used as the primary medium of instruction in the formal school system (Dutcher, 2004), creating significant obstacles for teaching and learning (Pinnock, 2009a). These children arrive on the first day of school with thousands of oral vocabulary words and considerable phonemic awareness in their mother tongue, but are unable to use and build upon their skills. Dismissing this prior knowledge, and trying to teach children to read in a language they are not accustomed to hearing or speaking, makes the teaching of reading difficult, especially in under-resourced schools. As a result, many

[10] Nepal did not account for teacher absences.

students repeat grades or drop out of school,[11] while those who stay in school lack basic literacy skills and therefore do not master further content knowledge.

Despite growing evidence that mother tongue-based bilingual or multilingual education is crucial to improving education access and quality (UNESCO, 2008; Heugh et al., 2007; Alidou et al., 2006; Fafunwa et al., 1989; Smits et al., 2008), implementation of mother tongue-based education policies continues to be hampered by political debates that are not focused on what best facilitates children's learning. Even in cases where language of instruction policies mandate use of mother tongue in the early primary grades, other barriers to effective reading instruction still persist, including insufficient investment in teacher training and instructional materials in mother tongues. Consequently, the mother tongue policy is not practiced in the classroom, or the transition period between mother tongue and second language is so abrupt that it undermines the transfer of language skills acquired in the early grades. Meanwhile, investments that are made—by donors, governments, and others—are wasted as millions of children are either excluded from school, drop out, repeat a grade, or fail to learn because they do not understand the language used in school.

While these barriers to effective reading instruction persist, children will continue to miss out on opportunities to learn and expand their economic prospects. The numbers presented in the tables and narrative above represent millions of children who may never learn to read. The data are shocking. How can so many children have spent at least two years in school without learning to read a single word? And how can governments and donors in low-income countries continue business as usual when huge numbers of children are failing school? The good news is that although teaching reading is a complex endeavor, it can be done. Chapters 4, 5, and 6 provide some guidance, informed by our findings from around the world, on how to improve the assessment, teaching, and community support for reading, to ensure that children learn to read within the first few grades of primary school.

[11] In one study, analysis of data from 22 developing countries and 160 language groups revealed that children who had access to instruction in their mother tongue were significantly more likely to be enrolled and attending school. Conversely, lack of education in a child's first language was a significant reason for children dropping out (Smits et al., 2008).

"There has been widespread acknowledgement over the past few years of the need to address the issue of the poor quality of education.... The most widespread response to the quality deficit over the past few years has been to strengthen the focus on learning assessments through programmes such as the Early Grade Reading Assessment."

—Desmond Birmingham (2010)

4
Assessment: Illuminating the Reading Deficit

The first step to remediation involves assessment of where children are struggling. The five skills of reading—phonemic awareness, alphabetics, fluency, vocabulary, and comprehension—are all critical to becoming a skilled and independent reader. If certain skills are problematic across a school system, assessment shows policy makers where the major deficits are in reading performance and allows them to revise the curriculum or train teachers in instructional methods that address the deficits (see Chapter 5). In some countries with simple languages, the real value of assessment is general awareness for the teacher of students who are not getting enough reading practice, rather than which component of reading is a stumbling block. Assessment also lets parents and the community know when their school is struggling and needs support (see Chapter 6). This is important because a school's ability to teach reading undergirds its ability to teach other subjects and can be taken as a gauge of the "health" of the school. Assessing early grade reading can serve as an early measure for education quality.

Information about learning outcomes for low-income countries is sparse. In the desire to respond to EFA standards and to compete globally, a handful of low-income countries have participated in large-scale international literacy exams—such as PIRLS and the Program on International Student Assessment (PISA)—through which they can compare their children's performance in core subject areas, like reading and writing, with children's scores in other countries. Clusters of developing countries have also collaborated to adopt common regional assessments: Latin American Laboratory for Assessment of Quality in Education (LLECE), SACMEQ, and Program for the Analysis of Educational Systems of the CONFEMEN (francophone Africa) Countries (PASEC). These assessments are designed to more closely align the test content with the curricula of the participating low-income countries than do the international tests, which are calibrated for high-income country learning goals. However, two-thirds of low-income and half of lower middle-income countries (52 countries in all) have never participated in either a regional or international assessment.[12]

Where they are applied, large-scale assessments face inherent challenges to being effective tools for addressing early grade reading deficits. These assessments are paper-and-pencil tests that assume students can read and write, leading to "floor effects," where it is not possible to tell whether a student scored poorly because they lacked the knowledge being tested, or because they could not read the test. Tests are also rigorously designed, based on several common learning factors, to ensure comparability between nations. Because of this design, evaluators require multiple years for collection and analysis before being able to deliver data back to the country. And because they are administered in later grades, such as fourth and above, these large-scale assessments miss the window of opportunity to alter the learning trajectory for children in the early grades (Wagner, 2010).

Early grade reading diagnosis requires smaller and quicker assessments adapted to the local context and needs of low-income countries. In November 2006, supported by USAID and the World Bank, RTI developed a protocol for a 15-minute, individual oral assessment of the five

[12] Authors' calculations of assessment participation in TIMSS, PISA, PIRLS, PASEC, SACMEQ, or LABORATORIO based on EdStats "Student Learning Assessment Database" (2010). Country classification based on World Bank country and lending groups (World Bank, 2010).

foundational reading skills (see Table 4). The purpose was to give low-income countries a tool for systematically measuring how well children read in the early grades. The resulting tool—EGRA, or Early Grade Reading Assessment—has since been adapted in 74 languages and 41 countries (as of May 2010; see Figure 7). Although several of these adaptations of the tool differ in name, they are reasonably common in their approach, and are thus referred to hereafter as early grade reading assessments. The assessment components are aligned with the essential and teachable reading skills—e.g., letter recognition, phonemic awareness, phonics, oral reading fluency, listening comprehension, and reading comprehension—so that results provide clear guidance for changing instruction methods and offer hope of improvement. Measurements of how quickly and accurately children can read a text out loud, and how much of it they understand, also align with a scientific and a popular understanding of what it means to be able to read.

Table 4. Early Grade Reading Assessment Components

The reading skills measured by early grade reading assessments focus on three early stages of reading acquisition (see Table 1). Although the average rate at which children pass through these phases varies by country and language, the following provides rough guidance for when most children should acquire these skills:

Stage	Test Components*
Stage 0: Emergent Literacy Birth to grade 1	• Concepts about print • Phonemic awareness • Listening comprehension
Stage 1: Decoding Beginning grade 1	• Letter naming • Letter sounds • Syllable naming • Nonsense word reading • Familiar word reading
Stage 2: Confirmation and Fluency End of grade 1 to end of grade 3	• Paragraph reading (oral reading fluency) with comprehension • Dictation

* Not all components are tested in all languages.

Sources: RTI, 2009; Roskos et al., 2009.

The EGRA, and other assessments like it, can give low-income countries and the global community key information about how and when children are learning to read (or not).

The early grade reading assessment approach is not designed to replace internationally comparable, large-scale assessments. It is designed to provide results in "real time" (in a matter of months—or less if conducted by a school or district—not years), so a minister of education, school principal, teacher, or parent gets feedback on the reading progress of students in grades 1–3 and still has the opportunity to change the students' reading trajectory based on the results. The instrument is administered orally to compensate for the floor effects of written tests and is sensitive to the lower end of the achievement range, detecting performance on even early skills like letter naming. And it is adapted to the specific linguistic context of the country where it is being applied, allowing policy makers to build their own standards for reading fluency (for more on standards setting, see Chapter 6).

Despite the challenge of comparing results across countries and languages, finding out at which grade children are typically "breaking through" to literacy, and comparing these grades across countries or regions, is a useful analytical and policy exercise. The early grade reading assessment approach has several applications designed primarily to efficiently deliver information at the level where it is needed to affect change, whether it be to the country's education policy makers, school leaders, or even classroom teachers. It is important to note, however, that in accordance with standards of assessment, test results should only be used for the purpose for which they were intended. Thus, results from informal mastery checks conducted by a small sample of teachers at the classroom level should not be used to inform policy at the national level. Similarly, results of a rapid "snapshot" assessment should not be used to track progress over time for the purposes of program evaluation. See Table 5 for a complete description of the levels and uses of these assessment approaches.

Table 5. Rubric for Early Grade Reading Assessment Approaches

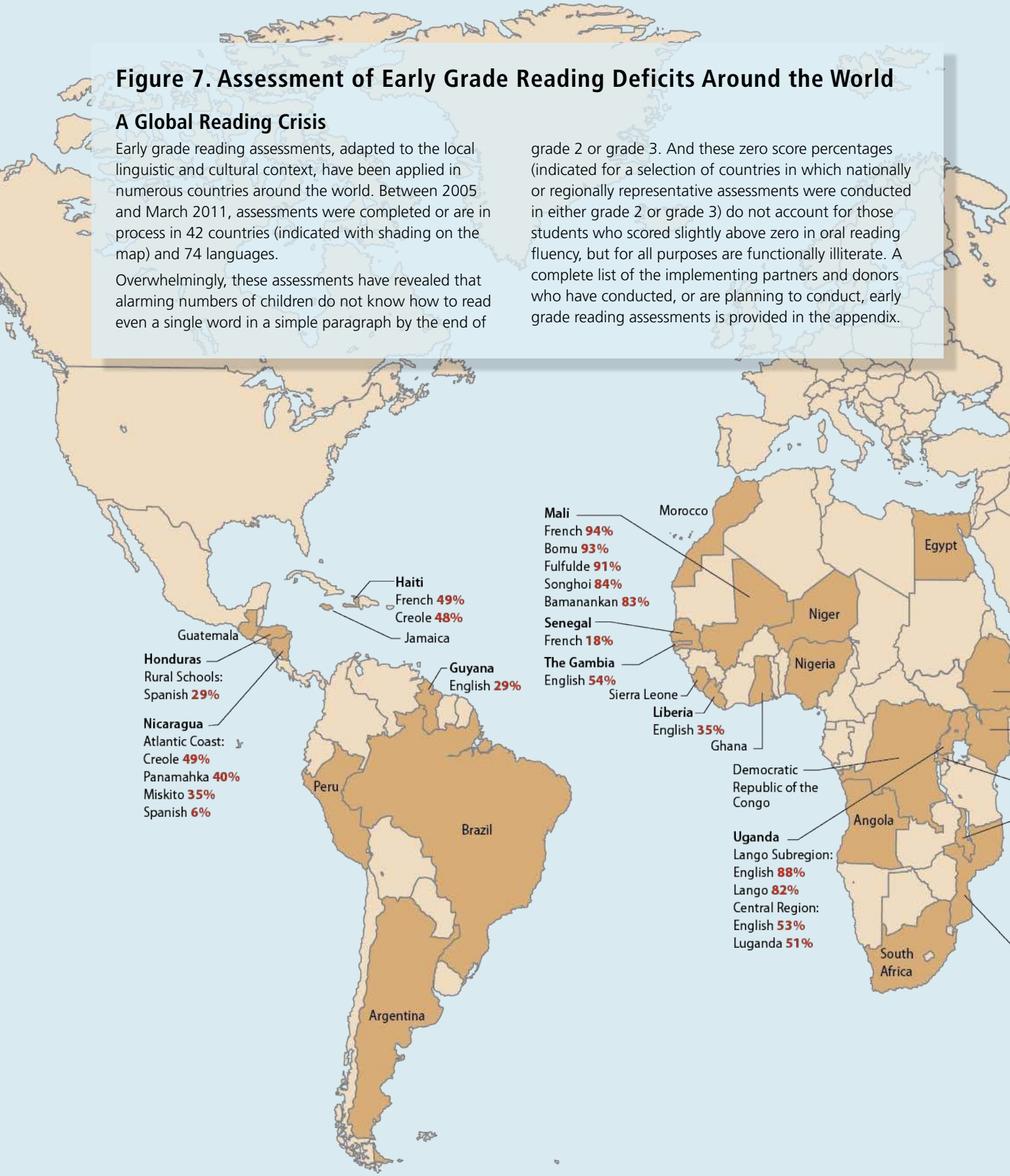
Type of Assessment and Purpose	Pros and Cons	Instrument Design	Sample Specifications	Results and Uses
Reading Snapshot Quickly examine reading levels to raise awareness and spur policy makers, donors, and civil society into action.	**Pros:** minimum design and cost for maximum impact. **Cons:** low statistical significance, cannot make generalizable claims.	Could, but does not need to, include the full battery of skills testing. Limiting to two or three skills, such as letter naming and oral reading fluency with comprehension, may sufficiently raise awareness. Needs to be properly adapted to local context, which may not be cost saving.	Could be as few as 10 students in each of 20 schools (or even fewer if there is no need for system representativity, e.g., if the oral assessment is being used only to nuance understanding of results of an existing pencil and paper assessment), but should be representative of the decision-making unit or region the results seek to influence.	Results could be used to raise awareness, mobilize communities, alert ministry staff and teachers to early reading challenges. Can also be used to nuance or deepen understanding of results of other existing assessments.
National or System-Level Diagnostic Thoroughly examine gaps in reading competencies among students (and instructional approaches among teachers) to inform the improvement of teacher professional development and pre-service programs.	**Pros:** statistical significance (accurate or narrow confidence intervals) assured by larger sample size; careful randomization assures representativity. **Cons**: higher technical requirements and larger sample sizes.	Should include all components that align with curriculum goals. Additional components known to be predictive and to inform instruction (from local or international research) may be included even if they are not specified in the curriculum.	At least 500 students per cell or group of interest (e.g., grade, region). Standard is 10 students in 50 schools.	In addition to the above, can be used to deepen policy dialogue on how to actually use the results. Should be used to identify support needs and additional resources for teachers.
Impact Evaluation Conduct baseline—or "pre-treatment"—assessment and monitor progress of programs that aim to improve reading instruction and outcomes.	**Pros:** can detect change over time resulting from an intervention. **Cons:** higher technical requirements and more effort in creating equated or alternative forms; sample size needs to be larger.	Should include all components that align with curriculum goals and instructional approaches of the program under evaluation. Requires alternate and equated (equal difficulty) forms for the pre-treatment and the post-treatment assessments. Should be complemented with degree of implementation measures (lesson achieved).	At least 500 students per cell or group of interest (e.g., grade, region). Standard is 10 students in 50 schools. Needs to have a control group and treatment group, or have some other way of "identifying" the effect of the intervention, such as staggered introduction into the treatment group. Sample needs to be large enough to detect intervention effect.	Used to detect hypothesized effect of the intervention; requires that minimum detectable effect of intervention be specifically stated ahead of time. Use results to inform program improvements and evaluate program impact on reading outcomes.
Classroom Assessment: Mastery Checks Teachers conduct regular (weekly or monthly) checks to verify that all students are learning skills that have been taught.	**Pros:** can be used to actually drive teaching improvement; low cash cost (though cost in use of teacher time). **Cons:** could be misused for excessive assessment; danger that aggregated results, reported up, could be inappropriately used for national reporting and averaging or for bureaucratic accountability pressure.	Informal mastery checks of student progress. Should reflect scope and sequence of instruction of each teacher and how the teacher intends to meet curriculum and standards.	Whole class.	Results used to inform instruction at the individual classroom level so teachers can modify their practice. Develop teacher capacity to use regular classroom-based assessment measures to identify student needs and inform and modify reading instruction.
Classroom Assessment: Progress Monitoring Teachers conduct regular progress monitoring assessment (every two to three months, including at beginning and end of school year) to compare student progress against norms and benchmarks for grade.	**Pros:** can be used to communicate to school director and parents on a regular basis about progress against benchmarks. **Cons:** could be misused for excessive assessment; danger that aggregated results, reported up, could be inappropriately used for national reporting and averaging or for bureaucratic accountability pressure.	Should reflect scope and sequence of instruction of each teacher and how each teacher intends to meet curriculum and standards.	Subset of class, could target children experiencing difficulties on general outcome measure.	Results used to inform instruction at the individual classroom level, as well as communicate to school community about classroom progress.

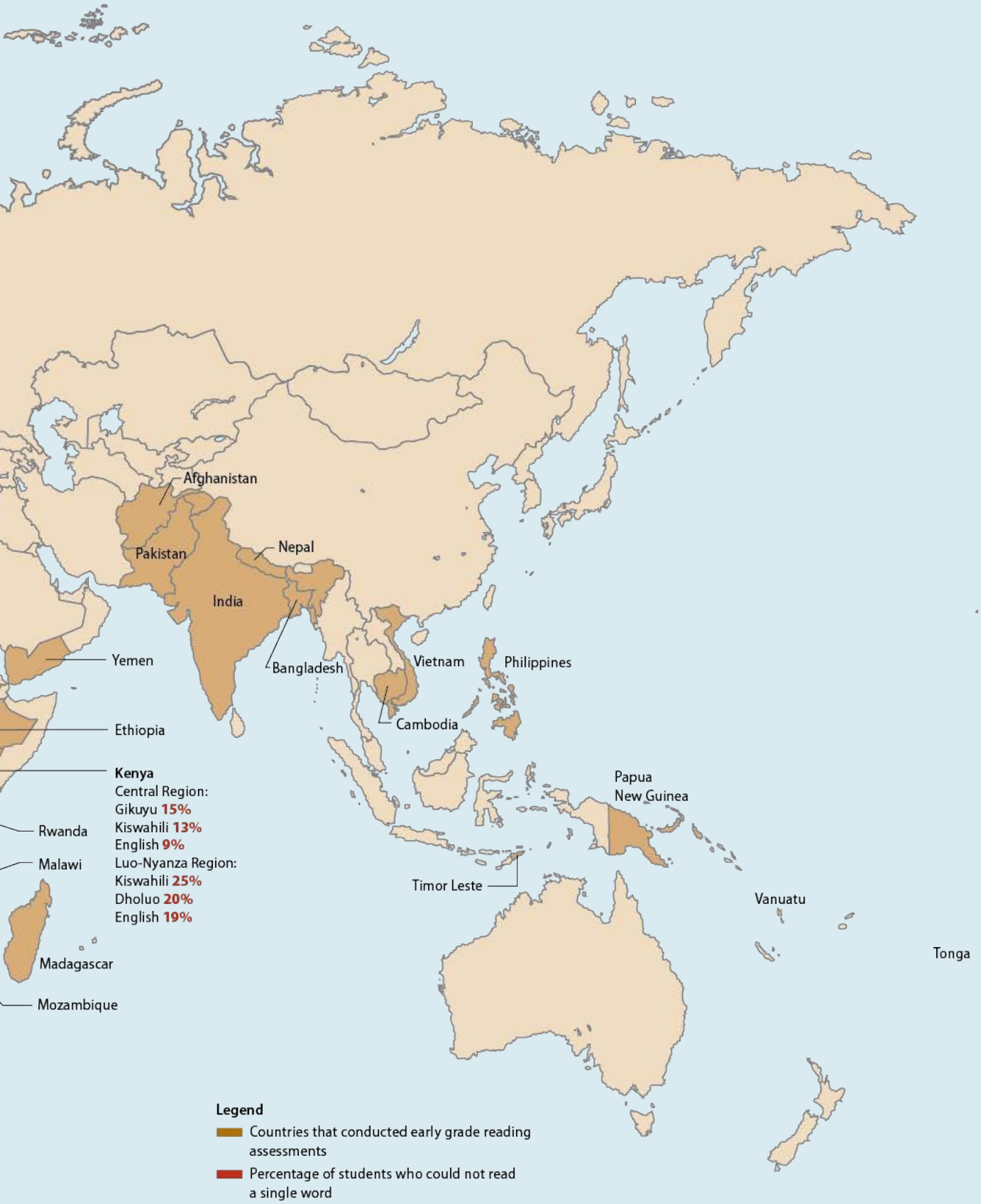
Figure 7. Assessment of Early Grade Reading Deficits Around the World

A Global Reading Crisis

Early grade reading assessments, adapted to the local linguistic and cultural context, have been applied in numerous countries around the world. Between 2005 and March 2011, assessments were completed or are in process in 42 countries (indicated with shading on the map) and 74 languages.

Overwhelmingly, these assessments have revealed that alarming numbers of children do not know how to read even a single word in a simple paragraph by the end of grade 2 or grade 3. And these zero score percentages (indicated for a selection of countries in which nationally or regionally representative assessments were conducted in either grade 2 or grade 3) do not account for those students who scored slightly above zero in oral reading fluency, but for all purposes are functionally illiterate. A complete list of the implementing partners and donors who have conducted, or are planning to conduct, early grade reading assessments is provided in the appendix.




Afghanistan
Pakistan
Nepal
India
Yemen
Bangladesh
Vietnam
Philippines
Cambodia
Ethiopia
Kenya
Central Region:
Gikuyu 15%
Kiswahili 13%
English 9%
Luo-Nyanza Region:
Kiswahili 25%
Dholuo 20%
English 19%
Rwanda
Malawi
Papua
New Guinea
Timor Leste
Vanuatu
Tonga
Madagascar
Mozambique
Legend
Countries that conducted early grade reading assessments
Percentage of students who could not read a single word


Wage and Income
Why People
1) Some People
2) Some People
3) People have
4) People have
5) Some People
People also

5

Teaching: Lighting a Fire in Every Child

Early grade reading assessment should spark a change in schools. Faced with the evidence highlighted in Chapter 3, ministries, NGOs, and schools are working together to use the results of early grade reading assessments to improve reading instruction. With student performance data, school systems are addressing learning deficits by comparing the identified areas of need with existing standards and curriculum to determine whether change is needed in the amount, focus, or quality of instruction. Assessment points out where reading is not happening at all in an education system and where it needs to be "rescued" as a subject. Often, the primary point of intervention is the teacher—the direct interface with the student. Unfortunately, most teachers in low-income countries are not trained to teach reading or do not have real-time information that could help them improve their practice.

Training teachers in how to teach reading can generate immediate reading gains. Taking the results from a system-level diagnostic early grade reading assessment, several low-income countries piloted teacher training interventions to address the reading deficiencies of early grade students. The results of these pilots have shown the power of adapting teaching approaches to remedy the gaps highlighted by early grade reading assessment. With combinations of training, support, instruction materials, and fully specified lesson plans where needed, teachers can and do modify their practice to put improved emphasis on reading, resulting in significant gains in reading outcomes for the students.

Liberia has modeled one of the most rigorously evaluated and effective programs in the developing world to improve reading instruction. In 2008, the World Bank funded a study of how well Liberian children were learning to read in English. It found that on average, students could only read 18 correct words per minute at the end of grade 2, and 28 correct words per minute at the end of grade 3 (Crouch and Korda, 2008). At this rate of improvement, the average Liberian student would be in grade 5 or 6—if he or she made it that far—before breaking through to literacy.

The Liberian Ministry of Education requested assistance to improve student reading skills through evidence-based instruction. In response, USAID funded RTI and the Liberian Education Trust to design and conduct a randomized controlled trial, EGRA Plus: Liberia, as both an intervention and an experiment in early reading improvement in seven districts. Analysis of the World Bank study showed a few key factors in the school and in the home were correlated with improved reading fluency (Crouch and Korda, 2008):

- Teachers who had received in-service training on reading instruction in the past year, read aloud to children in the classroom, and gave children reading practice time.
- A home environment with books and someone who read aloud with a child and had the child read aloud.

EGRA Plus focused on these levers for change. Two levels of intervention—a "light treatment" and a "full treatment"—were applied in schools and then compared against a control group of schools that followed the standard reading instruction approach in Liberia. Pre- and post-tests in all three groups showed whether students receiving the treatment made reading gains significantly greater than those of students in the control group.

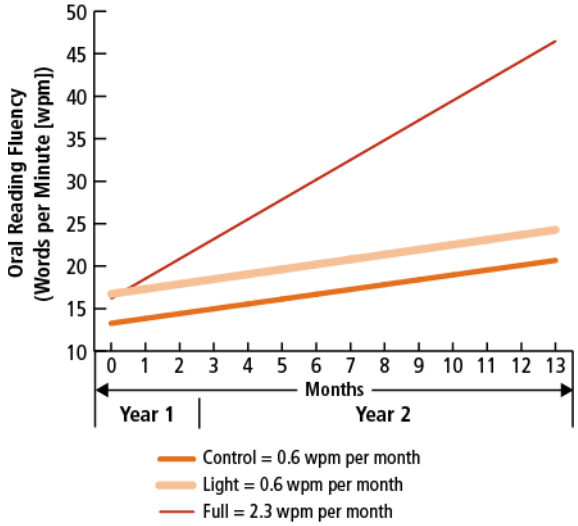
In the light treatment group, reading levels were tested, and schools were informed of the results and shown how to share them with the community through report cards. This minimal intervention was designed to test an "accountability" hypothesis—that simply receiving information about students' reading levels would motivate teachers and parents to focus on reading instruction and lead to student reading gains.

In the full treatment group, reading levels were assessed; parents and communities were informed; teachers were trained on how to continually assess student performance; and teachers were provided frequent school-based teaching support, specified lessons plans, resource materials, and books for students to use in class and take home.

The EGRA Plus experiment was conducted in 180 schools divided into three groups of 60 corresponding to the light treatment, full treatment, and control groups. Grades 2 and 3 were the target of the interventions. A baseline early grade reading assessment found that students in all three groups were starting from similar reading levels (Piper and Korda, 2009). The intervention began in January 2009.

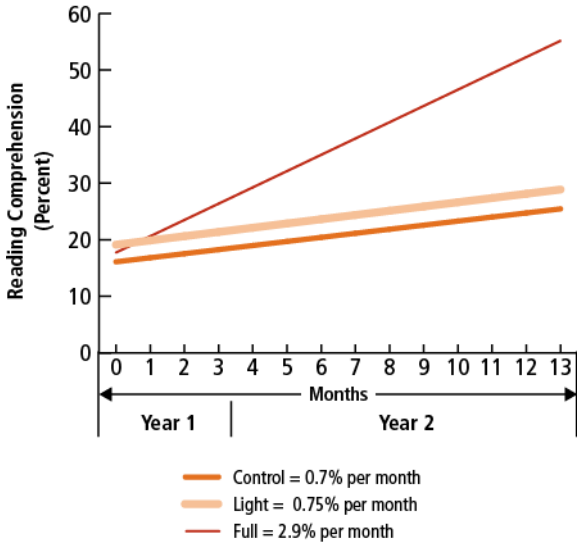
At the final student assessment in June 2010, RTI found that after one-and-a-half years of intervention, students in the full treatment group outperformed their peers in all reading skills. The average student in the full treatment group (grades 2 and 3 combined) had increased their oral reading fluency and reading comprehension at four times the rate of students in the control group (see Figures 8 and 9). The treatment contributed greatly to students' understanding: more than 40 % of students in the full treatment group read a passage with 80 % – 100 % comprehension, compared to less than 20 % of students in the control group (Piper and Korda, 2011).

Figure 8. Liberia: Rates of Improvement in Oral Reading Fluency Among Treatment and Control Schools, 2009–2010



Source: Piper and Korda, 2011.

Figure 9. Liberia: Rates of Improvement in Comprehension Among Treatment and Control Schools, 2009–2010



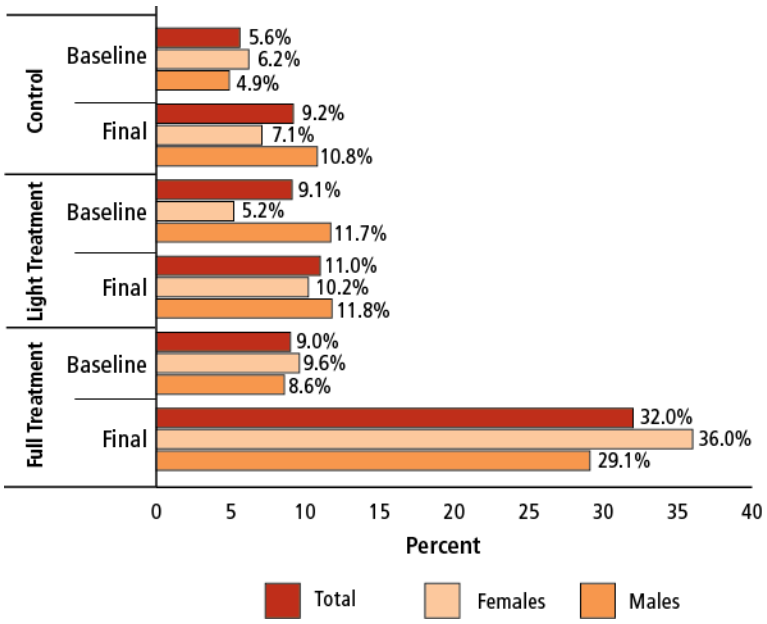
Source: Piper and Korda, 2011.

The full treatment group also improved in nonsense word fluency—sounding out invented words that resemble English words—12 times as fast as the control group, indicating that EGRA Plus had a particularly large impact on improving children's decoding skills, which is a key intermediate step to unlocking fluency and comprehension. The light treatment group did not significantly outperform the control group, indicating that even though assessment can focus teachers on the importance of reading, accountability alone did not improve the teaching and learning process (Piper and Korda, 2011).

Equipped with the methods and materials for proper reading instruction, Liberian teachers helped their students make huge gains in reading skills. The overall effect size of the intervention was a standard deviation of 0.8, considered large for social science projects. This effect was gender, age, and grade neutral. RTI found that the full treatment group also performed slightly, yet consistently, better than light treatment and control groups on an early grade math assessment that was administered at the end of the project. Even though no part of EGRA Plus targeted mathematics, this finding suggests that improved reading instruction can raise education quality in general through some combination of increasing teachers' ability to stay on task and teach new subjects and improving students' ability to read and understand texts for other subjects (Piper and Korda, 2011).

See Figure 10 for comparison of grade 2 students reading with understanding at baseline and final assessment for each of the treatment and comparison groups.

Figure 10. Liberia: Percentage of Grade 2 Students Reading with At Least 80% Comprehension, Baseline and Final Results



Note: Baseline conducted in grade 3 start of school year, Final in grade 2 end of school year.

Source: Piper and Korda, 2011.

Several countries like Liberia are paving the way in reading instruction improvement by demonstrating effective approaches to improve the teaching of reading, including the following:

- **Coaching.** Teachers' training needs to be supplemented with school-based support from coaches. Coaches themselves need to be trained and experienced in the same methods they will use to train teachers. They must be passionate, but also be literate in the language in which teachers will be instructing their students to read. Coaches need supervision to ensure they are delivering training effectively. (Ideally, coaches should not be the same staff to evaluate the performance of teachers, because this can complicate the rapport with teachers, and give the coach an added duty that would distract from supporting teachers.)
- **Materials.** Ideally, teachers should receive manuals containing the scope and sequence of daily reading lessons, to match the actual number of available teaching days. They need decodable books tied to the lesson plans for teaching sounds and library books for children to practice reading at home. A teacher's guide for assessing student performance on a continuous basis is also needed. Other teaching aids, such as sound charts, can be helpful to teachers if they are instructed in how to use them. In addition, coaches need tools to help them conduct school-based support, including classroom observation checklists.
- **Instructional time.** Reading policy should create space in the curriculum for explicit reading instruction (in addition to the standard language arts instructional period) and require teachers to dedicate time to teach reading and students to practice reading every day. Daily reading is crucial for students to train their minds to automatically recognize the visual patterns of words and to begin comprehending what they read.
- **Assessments.** Teachers can be trained to perform classroom-based assessments to check student mastery of reading skills and adjust their teaching practice. In controlled studies, formal assessments of intervention and control schools at baseline and endline are essential to determining whether the intervention is making an impact over time. Informal assessments partway through the intervention can verify the fidelity of implementation.

- **Community participation.** Schools need tools to report individual student reading results to parents, and school-level reading results to the community through parent-teacher association meetings and the local media. Communities can organize activities like reading competitions to boost literacy. With such tools and motivation, parents—even if they cannot read—can foster their child's reading at home.
- **Capacity building.** Government staff need to be trained in how to conduct early grade reading assessment—including performing surveys without bias, entering data, and conducting simple statistical analysis—and in how to teach reading to the point that they can teach these practices to others and sustain effective interventions.

On pages 30–33, the case examples of early grade reading interventions from around the world illustrate various approaches to working with teachers and communities to address reading deficits. Where possible, we have indicated the measured student reading gains attributable to the intervention effect.

The teacher training interventions modeled in Liberia and other countries demonstrate both the tremendous potential and outstanding need to improve reading instruction in the early grades. A strategy to introduce reading instruction practices to teachers should account for several factors, including the following (Garet et al., 2001):

1. **Coherence** between the content of training and the policies for what teachers are expected to teach, including education standards, curriculum, and assessments;
2. **Focus** on building teachers' knowledge of how to teach reading to children (e.g., alphabetics and comprehension), as well as general pedagogy (e.g., classroom management, planning, grouping);
3. **Extended duration** of learning that alternates between intensive training and time for teachers to return to the classroom and begin applying their knowledge, to allow teachers to test and adopt new practices gradually;
4. **Collective participation** of multiple teachers from the same school or area so that they have a support network of peers with which to exchange information when they return to the classroom;
5. **Active learning opportunities** for teachers to observe and be observed, to receive feedback, and to plan their implementation of the new practices with properly trained coaches; and
6. **Intermixed delivery formats** to help accommodate different learning styles, such as large residential workshops; in-class coaching; small, collaborative teacher groups; and technology-enabled distance learning.

Teacher training is but one strategy in a comprehensive approach to scale up early grade reading gains. In many cases, teachers cannot call upon experience with proper reading instruction, nor do their preparation and circumstances support it because

- large class sizes and limited instructional time complicate the task of giving each child reading practice;
- shortage of textbooks does not allow each child to have his or her own; books are frequently unavailable or too expensive for families to purchase them in the local market;
- the curriculum provides for language arts instruction, but not the fundamentals of learning to read; and
- summative assessments do not give teachers useful information to improve their instruction, often because assessments are not matched to the reading skills that early grade students should be demonstrating.

Any effort to improve teachers' ability to teach reading must be conducted in conjunction with a school management and policy reform dialogue to assist in removing barriers to implementing the new instructional practices. The challenges to motivating this dialogue are discussed next in Chapter 6.

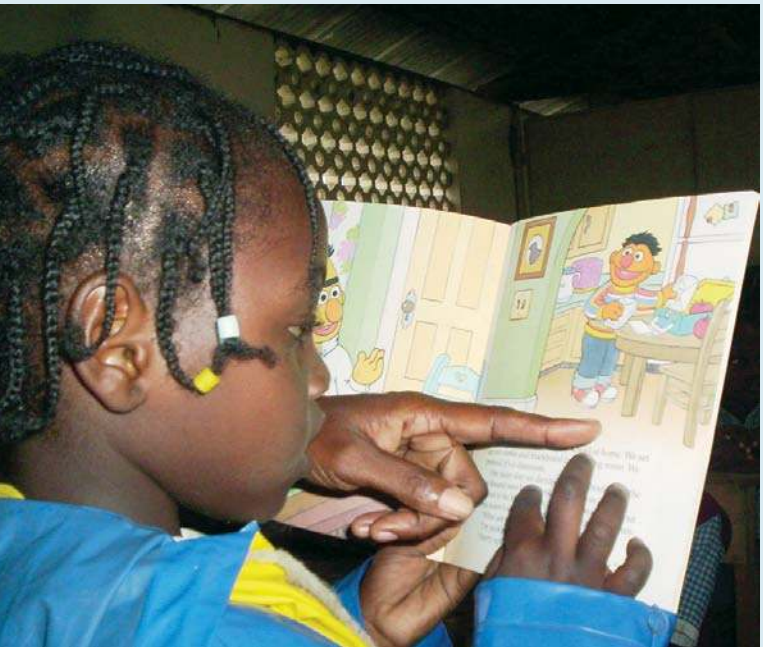
Country Cases

Kenya

The Health and Literacy Intervention (HALI) Project

The HALI project is a cluster-randomized controlled trial evaluating two interventions to improve student achievement over two years in 100 primary schools in coastal Kenya. The health intervention is intermittent screening and treatment against malaria in 50 schools. The literacy intervention is teacher training for improved literacy instruction in 50 schools, half of which also receive the malaria intervention. The project also includes 50 control schools. HALI incorporates collaboration among the Kenyan government and research institutions and universities, including KEMRI/Welcome Trust Collaborative Programme, the Kenyan Ministry of Public Health and Sanitation, the Institute of Tropical and Infectious Diseases at the University of Nairobi, Kenya Medical Research Institute, London School of Hygiene and Tropical Medicine, and Harvard University. The project has received funding from the World Bank and 3ie Impact.

Interventions. The literacy intervention aims to help teachers develop their students' oral language skills (e.g., phonological awareness and vocabulary) and teach the relationship between letters and sounds in a systematic and explicit fashion. It targets teachers and students in grades 1 and 2 in both English and Swahili. Teachers from 32 schools were trained in the intervention's first year, and these teachers then followed the same students from grades 1 to 2. In the second year, a new cohort of teachers in an additional 18 schools was trained. The components of the intervention include a teacher manual with lesson plans, initial 3-day training, two one-day follow-up trainings, weekly text message exchanges, and ongoing monitoring and support. The teacher manual contains two years' worth of lesson plans to be used for 35 minutes daily and are designed for English and Swahili. Topics include recognizing letter sound relationships; blending; spelling; using connected text; and developing a concept of word in text, phonological awareness, vocabulary, and comprehension. Each week teachers are requested to complete a weekly summary sheet that documents which lessons they used, what worked well, and suggestions for improvement. These forms are collected and guide topics in the one-day follow-up trainings.



Thus far, literacy achievement has been assessed at baseline, 4 months, and 12 months. Several literacy tasks were administered in a group format in either English or Swahili. These are receptive language (Swahili), phonological awareness (Swahili beginning sounds), and a qualitative spelling analysis (English). The four other literacy tasks—letter knowledge, word recognition, passage reading, and comprehension—have parallel versions in English and Swahili. In addition to literacy, assessments of mathematics, sustained attention, and non-verbal reasoning are conducted. Differences in teachers were explored with multiple measures, including ongoing tracking of their text message responses and unannounced teacher interviews and classroom observations.

Outcomes. Midpoint through the first year of the intervention, the average child enrolled in a school that received the literacy intervention out performed her peers not enrolled in schools receiving the intervention on assessor-administered spelling tests as well as Swahili letter sound. The same pattern was reflected for English letter naming, but was not significant. The intervention's effect size for spelling was nearly one-third of a standard deviation, and for Swahili letter sound, over four-tenths of a standard deviation, both moderate effect sizes. There appeared to be no differences by gender in either condition for spelling, but girls in the intervention schools outperformed boys in intervention schools on the Swahili sound recognition task. Reading comprehension was not assessed in the midpoint evaluation, and these results also did not account for the potential impact of receiving the malaria intervention in addition to the literacy intervention. Outcomes from the first year of the intervention are currently in analysis.

Mali and South Africa

Systematic Method for Reading Success (SMRS)

The SMRS,[13] implemented in Mali and South Africa, is an approach to building reading skills, starting with phonemic awareness, then slowly introducing letter-sound combinations and eventually common words that the students should recognize on sight. Students learn to read connected text from the first lesson and are never presented with text they cannot read, thus increasing success and motivation to continue. SMRS uses booklets emphasizing monosyllabic words, multisyllabic words, and writing, as well as pictures to replace words the student cannot yet decode; model reading by the teacher; and opportunities to demonstrate listening comprehension. Teachers receive lesson guides on which letters, decodable words, sight words, read-alouds, and independently read stories to use in each lesson group. SMRS is designed for teachers with little preparation, for low-resource schools, and for large class sizes.

Interventions. In 2007, Plan USA began a one-year pilot implementation of SMRS among nearly 1,300 grade 1 students in Mali. Baseline assessments showed that grade 1 students had zero comprehension. Plan USA worked with Institut pour l'Éducation Populaire (IEP) to train teachers in 25 grade 1 classrooms in how to use SMRS to teach reading in the mother tongue of Bamanankan. The programs were conducted for roughly four months, with students receiving 64 lessons of 30 minutes of reading instruction using the SMRS booklets (Mitton, 2008).

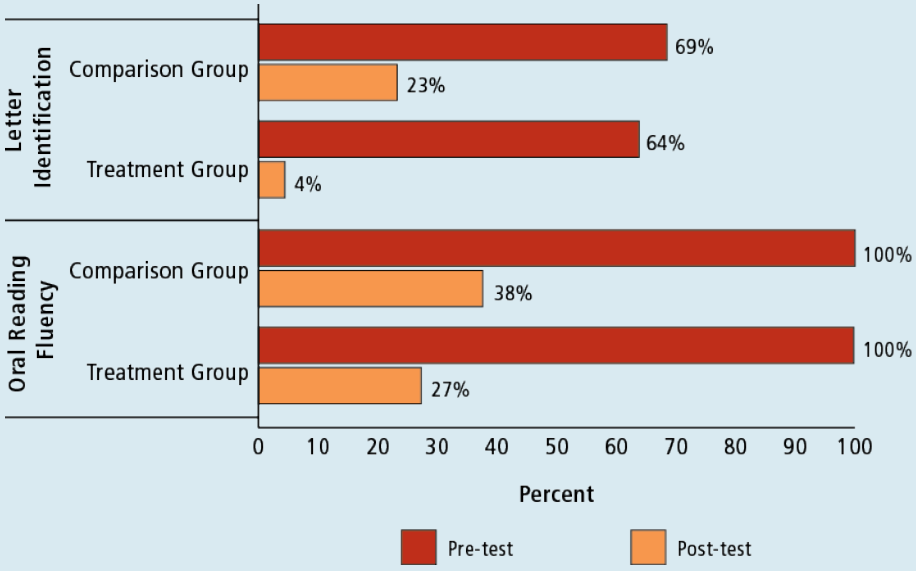
In 2008, the South African Department of Education and the Molteno Institute for Language and Literacy adapted SMRS to the South African context, piloting the tool in grade 1 classrooms in 29 schools across three provinces and three different mother tongues.

At baseline assessment, the grade 1 students showed little reading skills at all: 65% could not identify a single letter sound, and 90% could not identify a single word (Piper, 2009).

Outcomes. Follow-up assessments revealed dramatic results in both countries. In Mali, after only four months of SMRS instruction, 90% of the students in the pilot schools could answer 50% or more of the comprehension questions after reading an unfamiliar passage, compared to 41% of the students in national schools after a full year of standard instruction (Mitton, 2008). Based on these promising results, IEP is expanding the mother-tongue instruction program in four languages to 210 schools, with support from the Hewlett Foundation's Quality Education in Developing Countries initiative.

In South Africa, only 21 of the 45 SMRS lessons were implemented by teachers in the pilot schools, given the constraints of the six-month study timeline. Nevertheless, this was sufficient to show remarkable impact. Compared to their peers in control schools after a half year of school, students in the SMRS pilot performed 2.85 times better on oral reading fluency, and 2.6 times better on reading comprehension (Piper, 2009). See Figure 11 for comparison of zero scores in letter identification and oral reading fluency at pre- and post-test for treatment and control groups.

Figure 11. South Africa: Percentage of Grade 1 Students Who Could Not Read a Single Word or Identify a Single Letter, Pre- and Post-Test Results



Source: Piper, 2009.

[13] SMRS was adapted by Sandra Hollingsworth from the Systematic Instruction in Phonemic Awareness, Phonics, and Sight Words (SIPPS) developed by Dr. John Shefelbine, California State University, Sacramento, and the Developmental Studies Center of Oakland, California.

Afghanistan

Partnership for Advancing Community Education

The Partnership for Advancing Community Education in Afghanistan (PACE-A) is a USAID-funded project (2006–2011) implemented by a consortium of four partners: CARE, the Aga Khan Foundation, Catholic Relief Services, and the International Rescue Committee (IRC). A rapid reading and numeracy test was designed in the fall of 2007 and then implemented in PACE-A community-based primary classes—in Dari or Pashtu, based on the language of the community—in an effort to understand Afghan children's reading and numeracy skill levels. The semi-randomized sample of students and teachers tested was representative of the early grades 1–4 and included just over 900 students in six provinces. The alarming results indicated that only 54% of the students tested were demonstrating sufficient levels of reading fluency to enable comprehension. The average oral reading fluency among grade 2 children was just 13 correct words per minute (Stannard, 2008).

Intervention. PACE-A developed and implemented a focused intervention to provide teachers with specialized training in teaching reading. The partner agencies developed a teacher's guide for use in trainings entitled "Teaching Children to Read," which explicitly outlined activities for teachers to implement in the classroom for 45 minutes every day. Nearly 900 teachers, working with grades 1–4 in the target provinces, received two 5-day trainings within a 6-month period. In addition, PACE-A distributed simple children's reading books to all PACE-A community schools.

Outcomes. Most teachers had only received this focused reading training three months before the second reading test was rolled out in 2008. Assessor bias in some of the areas of the intervention resulted in abnormally high scores on the reading test. After correcting for these anomalies, the assessment results indicated an increase in oral reading fluency among grade 2 students to 28 correct words per minute, while a corresponding improvement in comprehension scores is lagging. Later rounds of the intervention should increase the number of support visits that teachers receive from coaches (Danish and Hoilund-Carlsen, 2009).

Mali

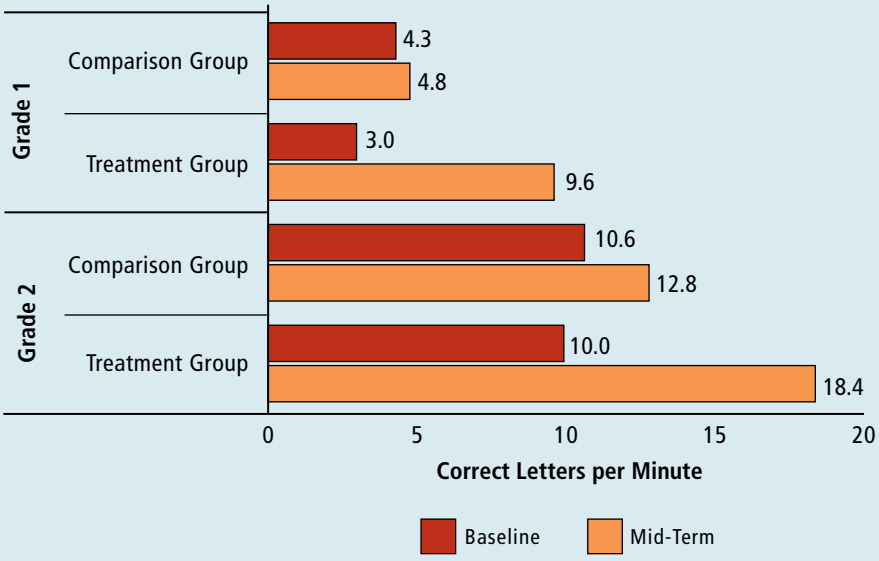
Read-Learn-Lead (RLL) Program

IEP designed the RLL program to support Mali's bilingual curriculum environment with a viable and effective approach to reading instruction in national languages as measured by children's acquisition of foundational reading skills in the early primary grades. The program is funded by the Hewlett Foundation and targets the instruction of reading in Bamanankan, Bomu, Fulfulde, or Songhoi in grades 1 and 2.

Intervention. The RLL program comprises three intervention areas, "Learn to Read," "Read to Learn," and "Learn to Lead," that include materials development, capacity development, internal formative and progress assessment, documentation, and stakeholder participation. The early reading intervention, "Learn to Read," focuses on developing materials and teacher capacity (both in-service and pre-service) for systematic reading instruction and practice in the four national languages. IEP's instructional model, Ciwaras READ, emphasizes activities to promote phonemic awareness, decoding, sight reading, oral reading fluency, and reading comprehension. For each 30-minute lesson, teachers execute seven steps to engage learners in these target skill areas. Teachers can be trained in four days to master the steps. Ciwaras READ also encourages reading at home. Teachers are directed to have children report on what they read at home and who they read to. Community tutors participate by listening as a child reads to them, even if they do not know how to read themselves. Other interventions include "Read to Learn," which focuses on improving instruction and learning in science and language in grades 3 to 6 and math in grades 1 to 6, and "Learn to Lead," which focuses on broadening the range of human resources who are mobilized and equipped to support the implementation of the new curriculum and contribute to children's learning.

Outcomes. During the 2009–2010 school year, RTI conducted an independent, mid-term evaluation using EGRA to help determine the impact of the "Learn to Read" intervention on grade 1 and grade 2 students. The EGRA was adapted to the four targeted national languages and involved a random subset of 80 schools. RTI found that at the halfway point of the RLL intervention, scores on every single outcome in both grades 1 and 2 were higher in treatment schools than in control schools. For example, grade 1 students in the comparison group were able to correctly identify 4.8 letters per minute, whereas their counterparts in the treatment group were able to correctly identify nearly 10 letters per minute (see Figure 12). These differences were robust, consistent across genders, and statistically significant. In grade 1, the treatment effects were large and significant across outcomes and groups. The estimate of the treatment effect overall was a standard deviation of 0.81, a large effect. In grade 2, the treatment effects were more modest, with an overall impact of 0.27, still considered an important magnitude in educational research. With the exception of the results for boys in grade 2, all of the treatment effects were large and statistically significant.

Figure 12. Mali: Grade 1 and Grade 2 Letter Identification Scores, Baseline and Mid-Term Results



Source: Friedman et al., 2010.

> *"...Citizens face substantial constraints in participating to improve the public education system, even when they care about education and are willing to do something to improve it."*
>
> —A. Banerjee et al. (2008)

6

Mobilization: Stoke a Movement for Early Grade Reading

To date, mobilization in the education sector has focused on getting children into school. As discussed in Chapter 1, the EFA movement, including mobilization campaigns at the community, national, and global levels, has centered on the goal of expanding access. Inspired by EFA goals, UNICEF's Meena Communications Initiative in South Asia created a cartoon character to demonstrate that educated girls could be an asset to their families (UNICEF, 2010). In Uganda, the 2007 *Go to school! Back to school! Stay in school!* campaign, also supported by UNICEF, encouraged former child soldiers and current child mothers to return to school, and at the same time, made schools more child friendly, including providing meals, furnishing classrooms, and addressing sensitive issues like corporal punishment that drives children away from school (UNGEI, 2010). Even Global Campaign for Education's *1GOAL* campaign, launched to coincide with the 2010 World Cup, focuses on access to schooling for millions of children out of school and on the value and benefit of education in a broad sense, not on learning per se (GCE, 2010).

Education advocates should learn from the lessons of the health sector to improve mobilization activities and focus on quality, not just access. Social mobilization activities can operate at multiple levels, but are particularly effective for helping governments to mobilize communities and for supporting community organizations to improve outcomes at the local level. Public health research literature has many examples of how social mobilization has been used to motivate parents to improve their children's health and quality of life, e.g., by getting immunized to fight disease and applying the practice of hand washing and using water filtration to reduce the incidence of diarrhea and other ailments, as well as using insecticide-treated bednets to combat malaria. Each of these efforts involves communicating to parents about what they can do to improve the lives of their children—the message is not only about making sure children get to the front door of the health clinic, but also focuses on motivating parents to play an active role in the well-being and growth of their own children. With few exceptions, the education sector has failed to inspire parent involvement beyond ensuring that their children get to the front door of the school building.

Good social mobilization takes good market research, because not all messages work for all audiences. The health efforts described above have involved much greater investments in basic market research and product development than is currently the case in social mobilization for education. For example, there have been multiple randomized trials in dozens of countries on consumer attitudes toward and use of insecticide-treated bednets. One result of this research has been to identify appropriate price points for bednets that are both affordable, in order to maximize the number of households with access to the malaria-prevention product, and also come at some cost to consumers so that they will value and use the bednets. Few such trials exist for reading improvement.[14] Moreover, social mobilization does not work the same way in all contexts and countries; health literature lends some ideas about which factors might influence the success of these types of activities,

Note: This chapter adapted from a forthcoming paper by Colette Chabbott entitled "Social mobilization to promote and support early literacy."

[14] A Google search conducted on August 1, 2010, on "randomized controlled trial" and "insecticide-treated bednets" produced 36,600 hits—a similar search with "randomized controlled trial" and "reading improvement" produced only 189 results.

including local cultural practices, attitudes toward government services, and gender roles and responsibilities within the household.

Measurement against clear goals can motivate actors at all levels—but the measure has to be a good one. Clear indicators are also necessary to help government and communities set goals and benchmarks for learning improvement. Health indicators such as vaccination rates, maternal and child health indices, and disease prevalence have long served as rallying points for the health sector for improving the human condition in the developing world. The widely used Apgar score, which quickly and without any instruments assesses on a simple scale newborns' physical condition right after birth, has led to improvements in neonatal health around the world. Education has, historically, lacked clear measures to motivate learning improvements. As mentioned earlier, FTI is developing the first global-level learning indicators for education, asking countries to report

- the proportion of students who read with understanding by the end of two years of primary schooling, and
- the proportion of students who read with sufficient fluency and understanding to "read to learn" by the end of primary school (between years 4 and 6 of primary schooling).

These indicators are a measure of education quality, and they allow countries to develop benchmarks and goals that are appropriate for their school system and language context, which is consistent with the EFA philosophy. USAID has adopted similar language in new indicators for measuring progress against the reading goal in its new education strategy (USAID, 2011).

While the discussion surrounding global standards for comparing reading achievement internationally continues, it should not hinder countries from setting their own standards to encourage schools and parents to track student progress and enable governments to know which communities need more resources or assistance in meeting their goal. This effort is only now getting started, and more work needs to be done to explain what reading indicators mean to ministries, parents, teachers, and students (see text box about benchmarking in Ethiopia).

Even a good campaign cannot overcome the failings of a weak state. Finally, although social mobilization is useful, the short-term nature of most social mobilization activities may not have the power to overcome a weak education system managed by a weak government with a weak civil society. Several rounds of social mobilization and advocacy activities at multiple levels may be necessary to address issues such as lack of knowledge of the reading process, lack of teacher preparation, lack of materials, and lack of schools, among others. Hope is not lost for countries in such conditions, but these concerns should be taken into account when social mobilization activities are being designed.

Early grade reading assessment can be an ignition switch for starting dialogue in government and communities about education quality. As intuitive indicators of what it means "to read," fluency and comprehension provide clear direction for collective action and encourage communities to bridge gaps between reading goals and the limited public resources invested in them. However, while results from early grade reading assessments have been uniformly low, the response from communities has not been as uniformly enthusiastic for action. Recently, to mobilize a grassroots response, NGOs in several low-income countries have used early grade reading assessments to provide communities with evidence of what skills their students are, or are not, learning. Three such examples are highlighted on pages 38 through 41.

Benchmarking: Defining Fluency for Five Languages in Ethiopia

Benchmarks help an education system track student progress, know when students need more instruction, and report on national indicators. Early grade reading assessment can help a country determine fluency and comprehension levels that should be the benchmark for reading by grade 2 by identifying the minimum fluency needed in their linguistic context to read with understanding.

Funded by USAID, RTI and the Ministry of Education in Ethiopia conducted the largest early grade reading assessment to date, assessing more than 13,000 students in grades 2 and 3 across eight regions and in six local languages. The sample was designed to provide results representative of each region. In November 2010, RTI presented the results of the assessments to five regional language groups to investigate current levels of reading fluency and comprehension and propose benchmarks as targets for policy reform. This will allow Ethiopians to align their education policies with a goal that they own and for which they can truly be held accountable. The regional language groups proposed oral reading fluency benchmarks for the end of grade 2 that correspond to the level of fluency required for at least 80% comprehension in five of the local languages:

- Amharic: 60+ correct words per minute
- Afan Oromo: 70+
- Tigrigna: 60+
- Sidaamu Afoo: 75+
- Hararigna: 60+

Based on these standards, more than 95% of grade 2 students in Ethiopia are performing below the benchmark for fluency in any language (Piper, 2010). As of March 2011, these benchmarks are still under review by Government of Ethiopia authorities.

Examples of NGOs Using Early Grade Reading Assessments to Mobilize Communities

India

Pratham's Annual Status of Education Report (ASER)

Since 2005, Pratham, a large Indian NGO, has implemented an innovative exercise of engaging citizens in understanding and evaluating outcomes by conducting annual, large-scale, rapid, household-based reading and basic arithmetic tests for 6- to 16-year-olds. The results are widely disseminated in India and are available in the ASER. (The word "aser" in many Indian languages means "impact.") The ASER survey—now implemented by the ASER Centre—reaches over 700,000 children across India each year and is the largest survey of basic learning in the country. It is carried out in almost every one of India's 600 rural districts by a network of local organizations that also disseminate the results and push for action at the village level. The findings are also disseminated widely at the national, state (equivalent of a province), and district levels. ASER has become an important input in the educational policies of both the national and state governments (Pratham, 2010a).

Intervention. The initial ASER surveys conducted in 2005 and 2006 prompted the nationwide launch of *Read India* in 2007, a campaign to make sure all grade 1 students know their alphabet and numbers, all grade 2 students can at least read words and do simple addition, and all grades 3–5 students can read simple texts fluently and solve arithmetic problems. The program builds a bridge between teachers in the classroom and community volunteers and maternal and child health (anganwadi) workers outside the classroom. Pratham teams train the teachers and volunteers in a phonics-based approach to teaching reading and supply them with teaching materials—alphabet cards, sound charts, and simple stories. The approach includes a focus on getting children to "say anything, write anything," to move them away from waiting for their teacher to dictate, and to get children to begin engaging with the letters, sounds, and words themselves (Chavan, 2003).

Outcome. In 2003, Pratham piloted *Read India* during the summer vacation period when schools are closed and many children lose learning gains they made during the school year. The 6-week activity reached 46,500 children across multiple states. In this short period, participating students posted large reading gains in Hindi: the percentage of children who could previously read nothing dropped from 35% to 5%, and the percentage of children who could read a story or paragraph correctly increased from a combined 19% to 57% (Chavan, 2003). Since then, *Read India* has been scaled up. In 2008–2009, the campaign reached 33 million children across 19 states. It covered 305,000 out of the 600,000 villages of India and mobilized 450,000 volunteers. Over 600,000 teachers, officials, and government workers have been trained (Pratham, 2010b).

Kenya and Tanzania

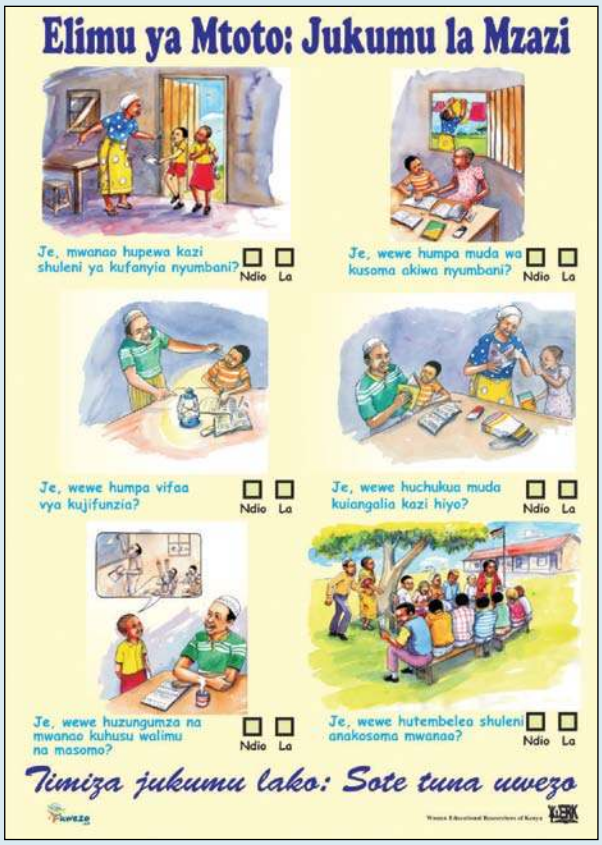
Uwezo's Annual Learning Assessment

ASER is an excellent example for building nationwide local participation, involving ordinary citizens in understanding the current situation in elementary education. ASER tools are now used by several state governments in India and by other NGOs as well. Pratham created the ASER Centre in 2008 to build capacity of individuals from all Indian states in conducting the survey, to prepare communication teams that will facilitate public dialogues on the findings of ASER and ASER-like activities, and to train researchers who will continue to improve the ASER instrument and deepen its analysis each year. The ASER exercise in India has inspired several other national citizen efforts to assess reading. These include Uwezo (which means "capability" in Kiswahili) in Kenya, Tanzania, and Uganda; ASER in Pakistan; and efforts that are emerging in Mali and Senegal.

Uwezo launched its Annual Learning Assessment—an adaptation of ASER—in 2009 to measure the literacy and numeracy skills of 6- to 16-year-olds at the household level in Kenya. The selected households—and often their neighbors—can see immediately what their children have and have not learned in school. Uwezo has developed a 6-item checklist for parents to help improve their children's reading and is communicating with parents through text messages about these and other ideas for improving learning outcomes in their children. The final results of the survey, summarized by district, are compiled by Uwezo and launched in many different forms to many different levels of society: radio talk shows, posters, booths at district-level fairs, and summary presentations to government officials. Results from Uwezo are now available for Kenya and Tanzania.

In Kenya, the Annual Learning Assessment by Uwezo covered 70 out of 158 districts and assessed more than 68,000 children ages 6 to 16 years in basic literacy and numeracy. More than 4,200 volunteers and 70 partner organizations supported the data collection. Some key findings included that one out of three children ages 6 to16 years could not read a grade 2-level story in Kiswahili, and half could not read a grade 2-level story in English (Uwezo Kenya, 2010).

In Tanzania, the Annual Learning Assessment by Uwezo covered 38 out of 133 districts and assessed more than 42,000 children, ages 5 to16 years. Some key findings included the information that by the time they complete primary school, one out of every five Tanzanian children cannot read a grade 2-level story in Kiswahili, and half cannot read a grade 2-level story in English. Furthermore, children whose mothers attended secondary school perform dramatically better than other children. For instance, in grades 3 and 4, these children are five times more likely to be able to read a story in English and more than twice as likely to be able to read a story in Kiswahili (Uwezo Tanzania, 2010).



Uwezo Mobilizes Parents

Uwezo uses this poster during household visits to communicate with parents about what they can do to support their children's learning. Each question, translated below, is accompanied by a simple picture.

- *Do you ever ask if your child is given homework?*
- *Do you make time to allow your child to study while at home?*
- *Do you provide the materials needed by your child?*
- *Do you take time to go through your child's school work?*
- *Do you talk about issues to do with the school or teachers with your child?*
- *Do you ever visit your child's school?*

Source: Ruto, 2010.

Malawi and Nepal

Save the Children's Literacy Boost

Literacy Boost is Save the Children's response to 2007–2008 reading results from several countries, indicating a greater need for support to the development of reading skills in young children. Literacy Boost holistically pursues the goal of literacy in a cycle of three activities: (1) reading assessments to identify gaps in the five key reading skills, (2) community mobilization for reading action, and (3) teacher training focused on teaching the national curriculum with an emphasis on the five key reading skills. Literacy Boost's assessments share letter identification, oral reading fluency, and comprehension with early grade reading assessments used at the national level, but add to these skills concepts about print and home literacy environment information. These additions bridge to Save the Children's early childhood development efforts and targeting of Literacy Boost interventions to local language and literacy environments.

Intervention. The community action component involves assisting community members to create village-level book banks, training community members to oversee book banks, and providing curriculum for conducting reading awareness workshops for parents. Each country program expands reading practice outside of school by choosing strategies that build on local strengths, such as training youth facilitators to host reading camps and working with teachers and parent-teacher associations to pair up and support older and younger students as reading buddies. Literacy Boost's teacher training component features eight monthly training sessions focused on how to teach the five key reading skills and how to follow learners' progress in developing these skills by using formative assessment. The hands-on sessions are adapted to the national curriculum and include model lessons, lesson planning by grade, and group presentation to ensure that teachers leave with concrete ideas for classroom practice. Key strategies for supporting second language learners are highlighted throughout the teacher training modules.

Outcomes. The figures presented below document the proportion of children scoring zero on Literacy Boost assessments in Malawi and Nepal in 2009–2010. In both cases, Literacy Boost and comparison schools were performing at about the same level at the start of the school year. By the end of the year, there were significantly fewer Literacy Boost students with zero scores in each skill (see Figures 13 and 14), suggesting that Literacy Boost is supporting students to demonstrate progress in letter identification (Nepal), oral reading fluency (Nepal and Malawi), and comprehending connected text (Malawi) (Dowd et al., 2010b; Pinto, 2010).

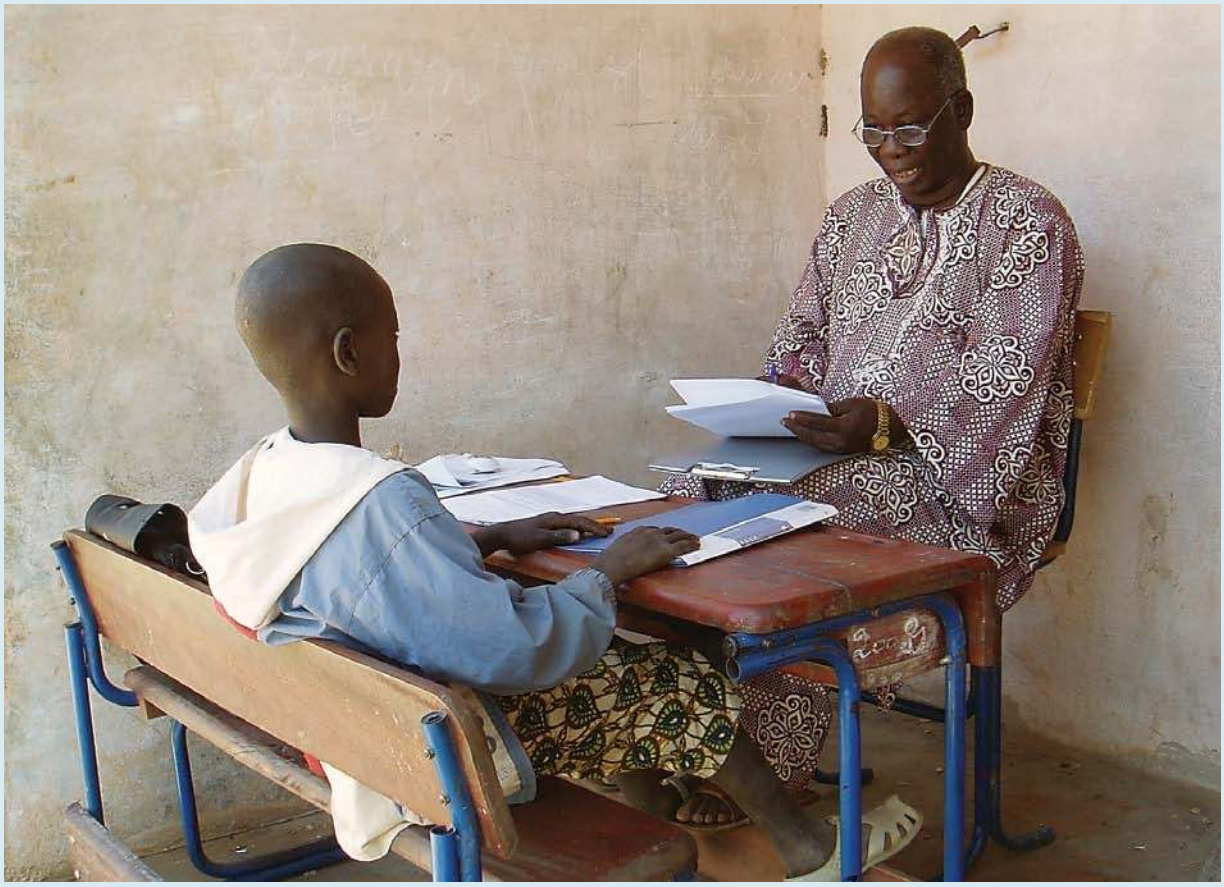
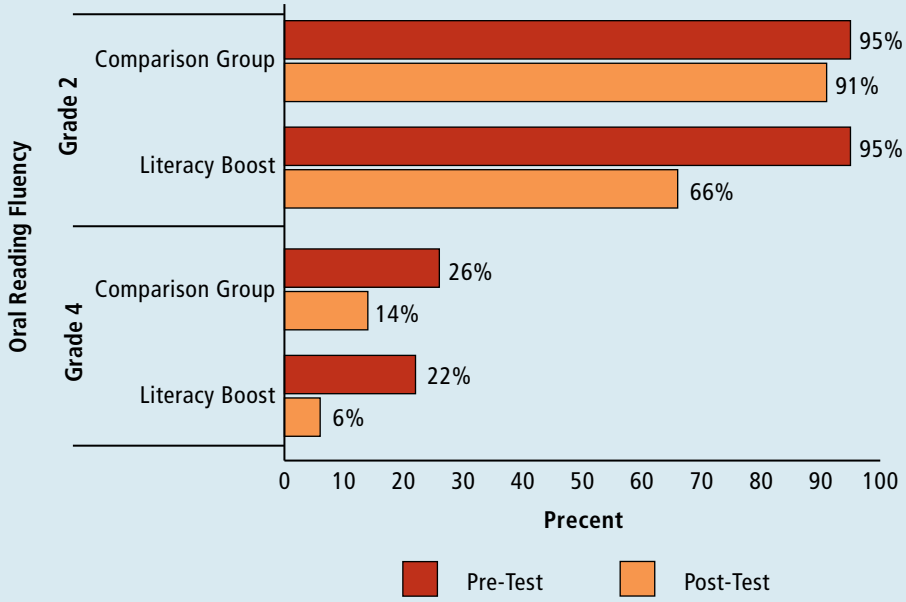
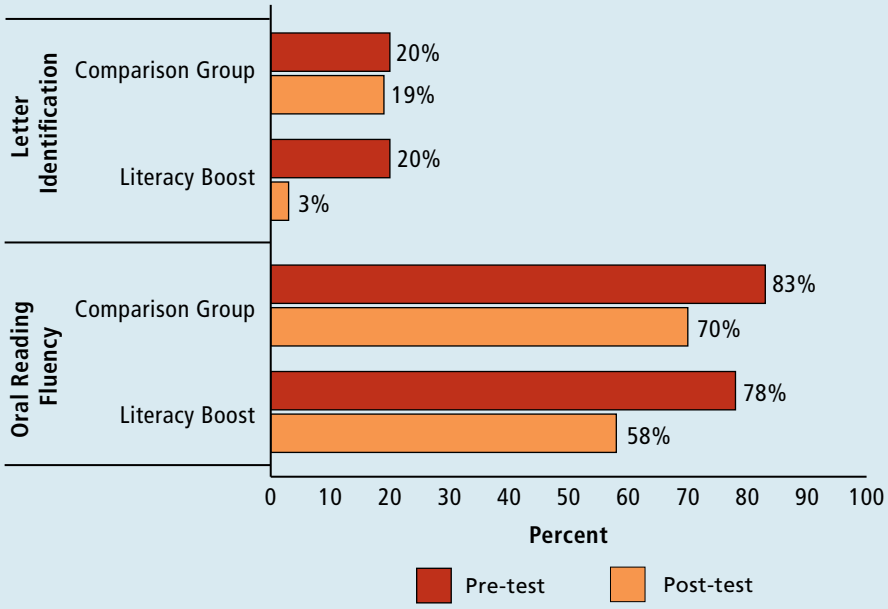


Figure 13. Malawi: Percentage of Grade 2 and Grade 4 Students Who Could Not Read a Single Word in Chichewa, Pre- and Post-Test Results



Source: Dowd et al., 2010b.

Figure 14. Nepal: Percentage of Grade 2 Students Who Could Not Identify Letters or Read Words, Pre- and Post-Test Results



Source: Pinto, 2010.


eva
eva

CONCLUSION

Lampposts on the Path to Education Quality

The development story of the next generations will be written by the children sitting in the classrooms of low-income countries today. Whether they become the catalyst for a nation's social and economic renaissance will depend on whether or not they learn to read. Investing early in quality education is crucial to minimize inequality gaps in countries and between countries. Failure to invest early leads to cumulative effects: to use an old adage, "the rich get richer; the poor get poorer." If one invests in the quality of education before inequalities grow, the benefits will accrue to almost all children, no matter their circumstances. As shown in Chapter 2, reading proficiency affects the long-term education prospects of children and the economic prospects of nations: children who do not learn to read in the early grades ultimately fall behind and lead less economically productive lives. And whole generations of children in low-income countries are threatened with this future, based on the dismal reading results presented in Chapter 3.

The solution to getting children to read better and earlier is not just to spend more on education (though greater resources are required), but to invest in a carefully managed process. Education systems must have a persistent, unyielding focus on reading skills acquisition using proven approaches. And if an approach cannot be shown to produce reading gains, then it must be abandoned in favor of investing in one that does. Measurement of reading outcomes and the dissemination and discussion of those outcomes at the national and international levels, as explained in Chapter 4, is the critical first step in making sure the investment in education produces readers. Assessment alone is not enough, of course. Results must be used to inform policy and direct resources to fill the right gaps—including training teachers in effective methods of reading instruction, equipping classrooms with books, mobilizing community support for reading, and addressing policy hurdles, as described in Chapters 5 and 6. Evidence from research and country case studies presented in this report points to five important recommendations—or "lampposts"—that can guide low-income countries and the international education community in forming their early grade reading agenda. We also mnemonically refer to these as "the five Ts":

1. **Teaching technique: train teachers how to teach reading.** Early grade reading assessments and school management surveys find that teachers lack basic knowledge and support for how to teach reading. Helping teachers adopt practices of good reading instruction can be accomplished through both pre- and in-service programs. These programs can involve face-to-face and technology-enabled distance learning methods to demonstrate specific pedagogical skills for teaching alphabetics and comprehension, for instance. In some cases, low-skilled teachers need and welcome scripted, daily reading lesson plans to guide them. This should be followed up by coaching in the classroom to ensure teachers are adopting good practices. Using these techniques as the core instructional improvement strategy in Liberia, South Africa, and Mali has generated average student reading gains two to four times that of control groups *in a matter of months* (see Chapter 5).
2. **Time use: maximize instructional time in the classroom.** Children in low-income countries often spend only a fraction of their time in the classroom on learning activities, an even smaller sliver of which is spent on reading. Reading must be rescued as a subject in the school day and not mixed in with language arts or other subjects that do not have a precise focus on skills. In some countries, instructional

time is even decreasing. The reasons (and potential solutions) for this are myriad, ranging from a lack of teacher supervision and accountability to national policies of dividing school days into two shifts to accommodate more students. Governments would do well to evaluate and address the causes of instructional time leakage that undermine their investments in education, as well as provide sustainable support for teachers who are ill-prepared to manage, much less instruct, large classrooms of children. But once equipped with proper training, materials, and guidance, teachers must be held accountable through curricular standards and supervision for teaching the basic reading skills.

3. **Texts: put appropriate books in the hands of children and mobilize communities to use them.** Textbook provision continues to be woefully inadequate; reading books are even rarer, both in schools and homes. Furthermore, many cultures have rich oral traditions and do not routinely practice reading. Yet children who report having reading books in the home, not just textbooks, are also more likely to be able to read. For instance, a study in Ethiopia found that having a textbook boosted children's oral reading fluency by 9.6 words per minute, and having other books at home boosted their fluency by 8.3 words per minute (Piper, 2010). Parents need to be engaged in transforming their homes into places where reading is a daily activity. Literacy Boost is one model that is demonstrating impact on reading outcomes through parent workshops, reading festivals, and community book banks. The ongoing efforts of NGOs like SIL International, Lubuto Library Project, the International Book project, and BRAC's Mobile Libraries are laudable, but in many cases are only making a small dent in the chronic undersupply of children's reading books in low-income countries. Pratham Books is one notable exception, developing and supplying hundreds of titles in multiple languages for schools, reading programs, and bookstores across India, while Room to Read has produced more than 4.1 million books in 22 languages in seven countries (Room to Read, 2010). A contributing factor to book shortage is the low capacity of domestic publishing industries and the high cost of printing in many countries. Yet cost-effectiveness is often sacrificed in favor of gloss, color, and graphics that do not necessarily improve reading acquisition and instead turn books into expensive commodities kept out of the hands of children. Room to Read's local language book publishing endeavor and Pratham Books are bright spots in this otherwise dismal picture that could be rectified if the appropriate resources were invested.

4. **Tongue: implement appropriate language policies and provide mother tongue-based instruction.** Primary education programs that begin in children's mother tongue help students gain early reading skills more quickly, as well as transfer key skills to a second language. When students learn in a language that is familiar to them, they also are more likely to attend school (Smits et al., 2008) and significantly less likely to drop out or repeat a grade—50 % less likely to repeat in some bilingual schools in Guatemala (Bender et al., 2007; Patrinos and Velez, 2009). Importantly, classroom instruction in languages that are familiar to students raises their academic achievement and provides a foundation for learning in a second language (Heugh et al., 2007; UNESCO, 2008; Alidou et al., 2006; Fafunwa et al., 1989; Dutcher, 2004).

   Given this evidence, governments, donors, and other education stakeholders in many countries must implement and support policies and programs that provide children with the opportunity to learn to read in their mother tongue.[15] Thoughtful and thorough planning

[15] Language and education experts recommend that the mother tongue be used as a medium of instruction throughout primary school (Heugh, 2006b; Dutcher and Tucker, 1997; UNESCO, 2008; UNESCO, 2010b).

in the implementation of language polices is important for ensuring that all actors (teachers, parents, school principals) understand the value of mother tongue-based education and that sufficient resources will be allocated to support effective implementation. This process should involve consultations with language specialists, NGOs, and teachers; advocacy to parents on the benefits of mother tongue instruction; meaningful investment in materials, such as leveled readers in local languages; training for teachers in local language instruction; and development of reading instruction methodologies that are appropriate for specific languages (Pinnock, 2009b).[16]

The growing availability of assessments and learning materials in local languages is an important resource for practitioners working to improve instruction in multilingual environments. And the challenges and costs that will be encountered are not insurmountable: recent analysis shows that a 4 %–5 % increase in a country's education budget would cover the immediate costs associated with mother tongue instruction and reduce education costs in the long run. For example, in the case of a bilingual versus French-only program in Mali, costs were reduced by 27 % and resulted in higher academic achievement (Bender et al., 2007; Heugh, 2006a). In several countries, ministry officials and other stakeholders are increasingly vocal about the importance of transitional bilingual programs for learning in the early grades. Clear communication with parents about the benefits of mother tongue instruction also has led to community support, as in the case of Pratham in India and School for Life in Ghana.[17]

5. **Test: measure reading skills.** The path to reading improvement begins with measurement of reading outcomes to define the problem and direct response strategies, and ends with measurement to evaluate progress and re-direct responses, as needed. Therefore, reading tests must have two main qualities. First, they must be targeted to the early grades, where school systems have the best opportunity to correct students' trajectories. Second, they must be easy to understand and useful for teachers to inform their instruction, for supervisors monitoring teachers, and for communities and policymakers that receive the results and need to know whether their investments are paying off. Country- and language-specific early grade reading assessments have these qualities.

However, following these "five Ts" can be impossible for education systems without the demand for improved learning outcomes that motivates and facilitates reforms. For instance, nearly 75 % of teachers in Mali reported that having a child read an unfamiliar text is an inappropriate goal before grade 4 (Evans, 2009). Anecdotal evidence from parents and even policy makers points in a similar direction: many do not seem to expect that children can, or should, learn to read in their first few years of primary school. Raising communities' and governments' expectations is a critical step toward increasing demand for education reforms that increase literacy. And these expectations need to be codified in official reading benchmarks that are aligned with the curriculum and against which actual performance can be measured.

[16] Because language families have unique linguistic properties, no one reading methodology fits all languages (Trudell and Schroeder, 2007). Ministries and development practitioners need to take this into consideration when designing early grade reading interventions, rather than relying on "off the shelf" materials, which are often based on European languages.

[17] UNESCO's "Advocacy Kit for Promoting Multilingual Education" provides information and advice on communicating with stakeholders about multilingual education (UNESCO, 2007).

Many are waking up to the reality of the early grade learning crisis and responding with targeted policies and investments. There continue to be many barriers to universal access to basic education, including a US$16 billion annual financing gap to meet the EFA goals in low-income countries (UNESCO, 2011). However, donors and governments are beginning to realize that increased investments without a tighter focus on learning outcomes are ultimately unproductive. USAID's new education strategy models many of the recommendations in this report by setting as one of its three goals the improvement of reading skills for 100 million children in primary grades by 2015 through better reading instruction, school system management, and community and parental engagement (USAID, 2011). The Brookings Institution is developing a Common Policy Agenda on Learning with a wide range of actors to shift and maintain the international education community's focus on quality and equality in education, with an explicit goal of building foundational skills in reading and math in the early grades.

Importantly, several low-income countries are themselves taking a stand for early grade reading. In Peru, the president has made a pledge to have all children reading by the end of grade 2. Liberia is scaling up the effective EGRA Plus intervention to more than 2,000 schools. The Gambia and Mali are revamping their teacher professional development to support training and materials for reading instruction in local languages. And Malawi is redesigning its textbooks and instructional materials to reflect best practices in reading pedagogy that fit the local Chichewa language. With these commitments coming forward, early grade reading is being brought out of the shadows of education policy to help drive a movement for quality schooling that launches all children toward a life of learning and economic well-being.

APPENDIX

Early Grade Reading Assessments Tracker

A current version of this tracker is available at www.eddataglobal.org.

Africa

Angola

Languages	Portuguese
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2011

Burundi

Languages	Kirundi
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2011

Congo, Democratic Republic of the

Languages	French
Approach	Program evaluation
Donor	USAID
Implementer	RTI International
Year	2010

Ethiopia

Languages	Kunama, Tigrigna
Approach	Program evaluation
Donor	International Rescue Committee (IRC)
Implementer	IRC
Year-	2011
Languages	Amharic, Afaan Oromo, Tigrigna, Somali, Sidamigna, Hararigna
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/EdData
Year	2010
Languages	Oromiffa
Approach	National or system-level diagnostic
Donor	USAID and Save the Children
Implementer	AED and Save the Children
Year	2008
Languages	Not available
Approach	National or system-level diagnostic
Donor	DFID
Implementer	University of Oxford Department for International Development
Year	2009

Gambia, The

Languages	English
Approach	Snapshot
Donor	World Bank
Implementer	RTI International
Year	2007
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2008

Gambia, The *(continued)*

Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2009
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	The Gambia Ministry of Education
Year	2009

Ghana

Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2009

Kenya

Languages	English, Kiswahili, Gikuyu, Dholuo
Approach	National or system-level diagnostic
Donor	The William and Flora Hewlett Foundation
Implementer	RTI International, EADEC
Year	2009
Languages	English, Kiswahili
Approach	Program evaluation
Donor	USAID
Implementer	RTI International/EdData, EADEC
Year	2007, 2008

Liberia

Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	RTI International
Year	2008
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2009
Languages	English
Approach	Program evaluation
Donor	USAID
Implementer	Education Development Center and RTI International
Year	2009, 2010, 2011

Liberia *(continued)*

Languages	English
Approach	Program evaluation
Donor	USAID
Implementer	RTI International/EdData
Year	2008, 2009, 2010

Madagascar

Languages	Malagasy
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2009

Malawi

Languages	Chichewa
Approach	National or system-level diagnostic and program evaluation
Donor	USAID
Implementer	Creative Associates International, RTI International
Year	2010, 2011, 2012
Languages	Chichewa, English
Approach	Program evaluation
Donor	Save the Children
Implementer	Save the Children
Year	2009, 2010

Mali

Languages	French, Shenara, Bamanankan
Approach	Classroom-based assessment
Donor	Save the Children
Implementer	Save the Children
Year	2010
Languages	French
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/PHARE
Year	2010
Languages	Bamanankan, Bomu, Fulfulde, Songhoi
Approach	National or system-level diagnostic
Donor	The William and Flora Hewlett Foundation
Implementer	RTI International
Year	2009
Languages	French, Arabic
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/PHARE
Year	2009
Languages	Bamanankan
Approach	Program evaluation
Donor	Plan USA
Implementer	Institut pour l'Éducation Populaire (IEP)
Year	2007

Mali *(continued)*	
Languages	Bamanankan, Bomu, Fulfulde, Songhoi
Approach	Program evaluation
Donor	The William and Flora Hewlett Foundation
Implementer	RTI International
Year	2009, 2010
Languages	French, Bamanankan, Shenara
Approach	Program evaluation
Donor	Save the Children
Implementer	Save the Children
Year	2010

Mozambique	
Languages	Portuguese
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank
Year	2011
Languages	Portuguese
Approach	Program evaluation
Donor	USAID
Implementer	AED, Aga Khan Foundation
Year	2010

Namibia	
Languages	English
Approach	National or system-level diagnostic
Donor	European Commission
Implementer	TBD
Year	2011

Niger	
Languages	Zarma
Approach	Classroom-based assessment
Donor	Plan USA
Implementer	VIE
Year	2009

Nigeria	
Languages	English
Approach	National or system-level diagnostic
Donor	DFID
Implementer	ESSPIN
Year	2009

Nigeria *(continued)*	
Languages	English
Approach	National or system-level diagnostic
Donor	USAID
Implementer	Creative Associates International, RTI International, Johns Hopkins University-Center for Communication Programs (JHU/CCP), and School to School (STS)
Year	2010
Languages	English, Hausa
Approach	National or system-level diagnostic
Donor	USAID
Implementer	Creative Associates International, RTI International, Johns Hopkins University-Center for Communication Programs (JHU/CCP), and School to School (STS)
Year	2010

Rwanda	
Languages	Kinyarwanda
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/EdData
Year	2011
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2009

Senegal	
Languages	French, Wolof
Approach	Snapshot
Donor	World Bank
Implementer	RTI International
Year	2007
Languages	French
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2010

Senegal *(continued)*	
Languages	French, Wolof, Pulaar
Approach	National or system-level diagnostic
Donor	The William and Flora Hewlett Foundation
Implementer	RTI International
Year	2009

Sierra Leone	
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2008

South Africa	
Languages	English, IsiXhosa, IsiZulu, Sepedi, Tshivenda, Xitsonga
Approach	National or system-level diagnostic
Donor	Government of South Africa
Implementer	Government of South Africa
Year	2007
Languages	IsiZulu, Setswana, Sepedi
Approach	Program evaluation
Donor	USAID
Implementer	RTI International; Molteno Institute of Language and Literacy
Year	2009

Uganda	
Languages	English, Luganda, Lango
Approach	National or system-level diagnostic
Donor	The William and Flora Hewlett Foundation
Implementer	RTI International
Year	2009

Zambia	
Languages	Bemba
Approach	Snapshot
Donor	USAID
Implementer	RTI International/EdData
Year	2011

North Africa/Middle East

Egypt	
Languages	Arabic
Approach	Program evaluation
Donor	USAID
Implementer	GILO (Girls' Improved Learning Outcomes)/RTI International
Year	2008, 2009, 2011

Morocco	
Languages	Arabic
Approach	Snapshot
Donor	USAID
Implementer	RTI International/EdData
Year	2011

Yemen	
Languages	Arabic
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/EdData
Year	2011

Asia

Afghanistan

Languages	Dari, Pashtu
Approach	Program evaluation
Donor	USAID
Implementer	CARE, IRC, AKF, and CRS
Year	2007, 2008, 2009

Bangladesh

Languages	Bangla
Approach	Classroom-based assessment
Donor	Save the Children
Implementer	Save the Children
Year	2008

Languages	Bangla
Approach	National or system-level diagnostic
Donor	BRAC
Implementer	BRAC
Year	2007

Cambodia

Languages	Khmer
Approach	Program evaluation
Donor	FTI
Implementer	Cambodia Ministry of Education
Year	2010

India

Languages	Not available
Approach	National or system-level diagnostic
Donor	DFID
Implementer	University of Oxford Department for International Development
Year	2009

Languages	Bengali, English, Gujarati, Hindi, Kannada, Khasi, Kokborok, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Tamil, Telungu, Urdu
Approach	National or system-level diagnostic
Donor	Pratham
Implementer	Pratham
Year	2008, 2009

Languages	Bengali, English, Garo, Gujarati, Hindi, Kannada, Khasi, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Tamil, Telungu, Urdu
Approach	National or system-level diagnostic
Donor	Pratham
Implementer	Pratham
Year	2007

India *(continued)*

Languages	Bengali, English, Gujarati, Hindi, Kannada, Konkani, Malayalam, Marathi, Nepali, Oriya, Punjabi, Telungu, Urdu
Approach	National or system-level diagnostic
Donor	Pratham
Implementer	Pratham
Year	2005, 2006

Nepal

Languages	Nepali, Tharu, Rana Tharu, Doteli, Magar, Bajang
Approach	National or system-level diagnostic
Donor	USAID
Implementer	EQUIP2/AED and Save the Children
Year	2009

Languages	Nepali, Tharu
Approach	Program evaluation
Donor	Save the Children
Implementer	Save the Children
Year	2009, 2010

Pakistan

Languages	Urdu and Pashtu
Approach	Program evaluation
Donor	Embassy of the Kingdom of the Netherlands
Implementer	Save the Children
Year	2009

Papua New Guinea

Languages	Not available
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank
Year	2010

Philippines

Languages	Tagalog, English, Magindanoan, Ilongo, T'boli
Approach	Program evaluation
Donor	Save the Children
Implementer	Save the Children
Year	2009

Timor Leste

Languages	Portuguese, Tetum
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank
Year	2009

Tonga

Languages	Tongan
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank
Year	2009

Vanuatu

Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank
Year	2010

Vietnam

Languages	Vietnamese
Approach	National or system-level diagnostic
Donor	DFID
Implementer	University of Oxford Department for International Development
Year	2009

Languages	Vietnamese
Approach	Program evaluation
Donor	JSDF
Implementer	Save the Children
Year	2010
Donor	World Bank
Implementer	World Bank, local NGOs, technical advisor Luis Crouch
Year	2006

Latin America and the Caribbean

Argentina	
Languages	Spanish
Approach	Classroom-based assessment
Donor	Fundación Centro de Estúdios en Políticas Públicas (CEPP)
Implementer	Fundación Centro de Estúdios en Políticas Públicas (CEPP)
Year	2009

Brazil	
Languages	Portuguese
Approach	Classroom-based assessment
Donor	Graded School, São Paulo, Brazil
Implementer	Graded School, São Paulo, Brazil
Year	2009

Guatemala	
Languages	Spanish
Approach	Classroom-based assessment
Donor	Amigos de Patzun
Implementer	Amigos de Patzun
Year	2009
Languages	Spanish, Mam, K'iche, Ixil
Approach	National or system-level diagnostic
Donor	USAID
Implementer	EQUIP2/AED and Save the Children
Year	2008

Guyana	
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	RTI International
Year	2008

Haiti	
Languages	Haitian Creole, French
Approach	Program evaluation
Donor	USAID
Implementer	AIR
Year	2009
Languages	Haitian Creole, French
Approach	Program evaluation
Donor	World Bank
Implementer	RTI International
Year	2009

Honduras	
Languages	Spanish
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	RTI International, CIASES
Year	2008
Languages	Spanish
Approach	National or system-level diagnostic
Donor	USAID
Implementer	EQUIP2/AED and CARE
Year	2009

Jamaica	
Languages	English
Approach	Snapshot
Donor	USAID
Implementer	RTI International/EdData; University of the West Indies
Year	2007

Nicaragua	
Languages	Spanish, Miskito, Kriol and Panamakha
Approach	Snapshot
Donor	World Bank
Implementer	RTI International/EdData, CIASES
Year	2009
Languages	Spanish
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/EdData, CIASES
Year	2008
Languages	Spanish, Miskito
Approach	National or system-level diagnostic
Donor	USAID
Implementer	RTI International/EdData, CIASES
Year	2008

Peru	
Languages	Spanish
Approach	Snapshot
Donor	USAID
Implementer	RTI International/EdData, Fundación para el Desarrollo Agrario (FDA)
Year	2007
Languages	Spanish, Quechua
Approach	Snapshot
Donor	World Bank
Implementer	World Bank, local nongovernmental organizations
Year	2007
Languages	Spanish
Approach	National or system-level diagnostic
Donor	DFID
Implementer	University of Oxford Department for International Development
Year	2009

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Early Grade Learning Community of Practice Members

The Early Grade Learning Community of Practice is a group of educators, government officials, and development practitioners working together, with varying degrees of affiliation, toward the common goal of improved learning in the early grades in low-income countries. Members of the Community of Practice include government officials of more than 40 countries, university researchers in the U.S. (California, Massachusetts, South Carolina, Texas, Utah, and Washington, DC), Chile, Egypt, France, South Africa, Spain, the United Kingdom, and the United Arab Emirates, as well as individuals associated or working with the following institutions and initiatives:

- Academy for Educational Development (AED)
- Aga Khan Foundation
- American Institutes for Research (AIR)
- Amigos de Patzún (ADP)
- Bangladesh Rural Advancement Committee (BRAC)
- CARE
- Catholic Relief Services (CRS)
- Centre de Promotion de la Citoyenneté pour le Développement Durable à la Base (CEPROCIDE)
- Centro de Investigación y Acción Educativa Social (CIASES)
- ChildFund International
- Creative Associates International
- U.K. Department for International Development (DFID)
- East African Development Consultants (EADEC)
- Education Development Center (EDC)
- Education Sector Support Programme in Nigeria (ESSPIN)
- Fast Track Initiative (FTI)
- Focus Africa
- Fundación Centro de Estúdios en Políticas Públicas (CEPP)
- Fundación para el Desarrollo Agrario (FDA)
- Grupo de Análisis para el Desarrollo (GRADE)
- Graded, The American School of São Paulo
- L'Institut pour l'Éducation Populaire (IEP)
- International Reading Association (IRA)
- International Rescue Committee (IRC)
- Johns Hopkins University Center for Communication Programs (JHU/CCP)
- Liberia Education Trust (LET)
- Makerere Institute of Social Research (MISR)
- The Molteno Institute for Language and Literacy
- Plan USA
- Pratham
- Room to Read
- RTI International
- Save the Children
- School to School
- UNESCO Institute for Statistics (UIS)
- United Nations Educational, Scientific and Cultural Organization (UNESCO)
- U.S. Agency for International Development (USAID)
- Uwezo Initiative
- Volontaires pour l'Intégration Educative (VIE)
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- The World Bank

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