

“Education is not the filling of a pail...

# Early Reading: Igniting Education for All

A report by the Early Grade Learning Community of Practice

...but the lighting of a fire.”

—W. B. Yeats

## Acknowledgments

Children, teachers, and parents in low-income countries around the world are the main contributors to this report. Every day they are faced with the challenge of creating learning with minimal materials in austere classrooms and homes. A diverse community of practice—a group of government officials, donor 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.

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 INTRODUCTION
 

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# 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, most 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 on 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—low-income country 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.**



While 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

early grade reading 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 and support them with materials for reading instruction and 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 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 just some of the obstacles that teachers cannot overcome alone. Parents and communi-

ties 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. The early grade reading assessment findings 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.



Comunicación  
Integral

2

Comunicación  
Integral

2

CUADERNO  
DE TRABAJO



# 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 (United Nations Educational, Scientific, and Cultural Organization [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<sup>1</sup> (see Exhibit 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 %. The EFA Global Monitoring Report estimates that some 72 million children of primary age have never enrolled (UNESCO, 2010a). Difficult economic conditions, distance to schooling, denial of access for girls—all have been 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 67 % of the rate of high-income countries and progress has been slow; at this rate, it would take another three decades for completion rates in low-income countries to catch up to rates in high-income countries<sup>2</sup> (see Exhibit 2). Attrition begins early. In sub-Saharan Africa and South and West Asia, 9 % and 13 %, respectively, of hopeful first graders will grow into disenfranchised dropouts 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 5th 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. So, while the promise of EFA is resulting in 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.

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

<sup>2</sup> 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).

### 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 the 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,<sup>3</sup>
- 71% of students showed up for class, and
- roughly 80% of schools provided textbooks for most of their students.

And...

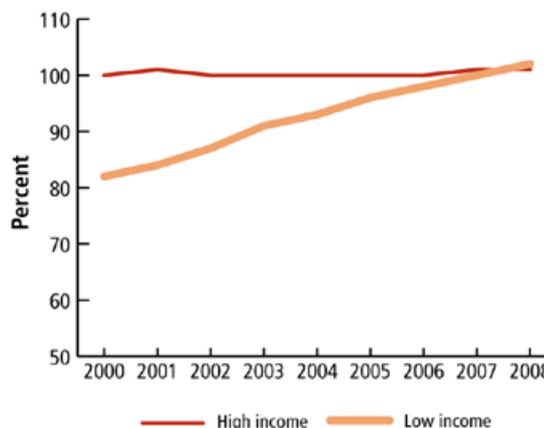
- only 15% of grade 2 children and 25% of grade 3 children could read a simple paragraph, and
- only 17% of grade 2 children and 32% of grade 3 children could solve a two-digit subtraction problem (ASER, 2005).

Half of the children in rural India are at least three grade levels behind where they need to be, according to ASER 2009. 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.

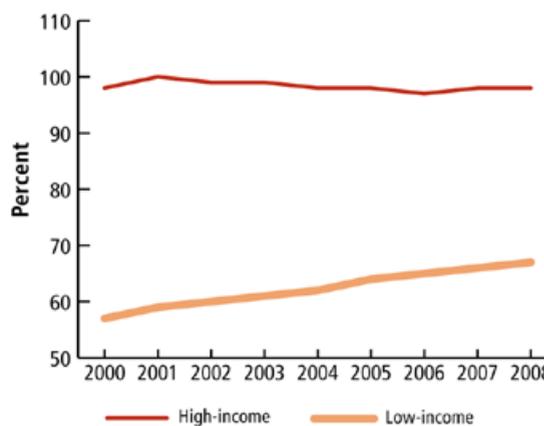
<sup>3</sup> This finding is supported and nuanced in a study by All India Primary Teachers' Federation that found, in a sample of three states, a 21% absenteeism rate among teachers in government primary schools: 9.1% were not present for personal reasons, 9.2% were undergoing in-service training, and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

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



Source: EdStats Query, 2010.

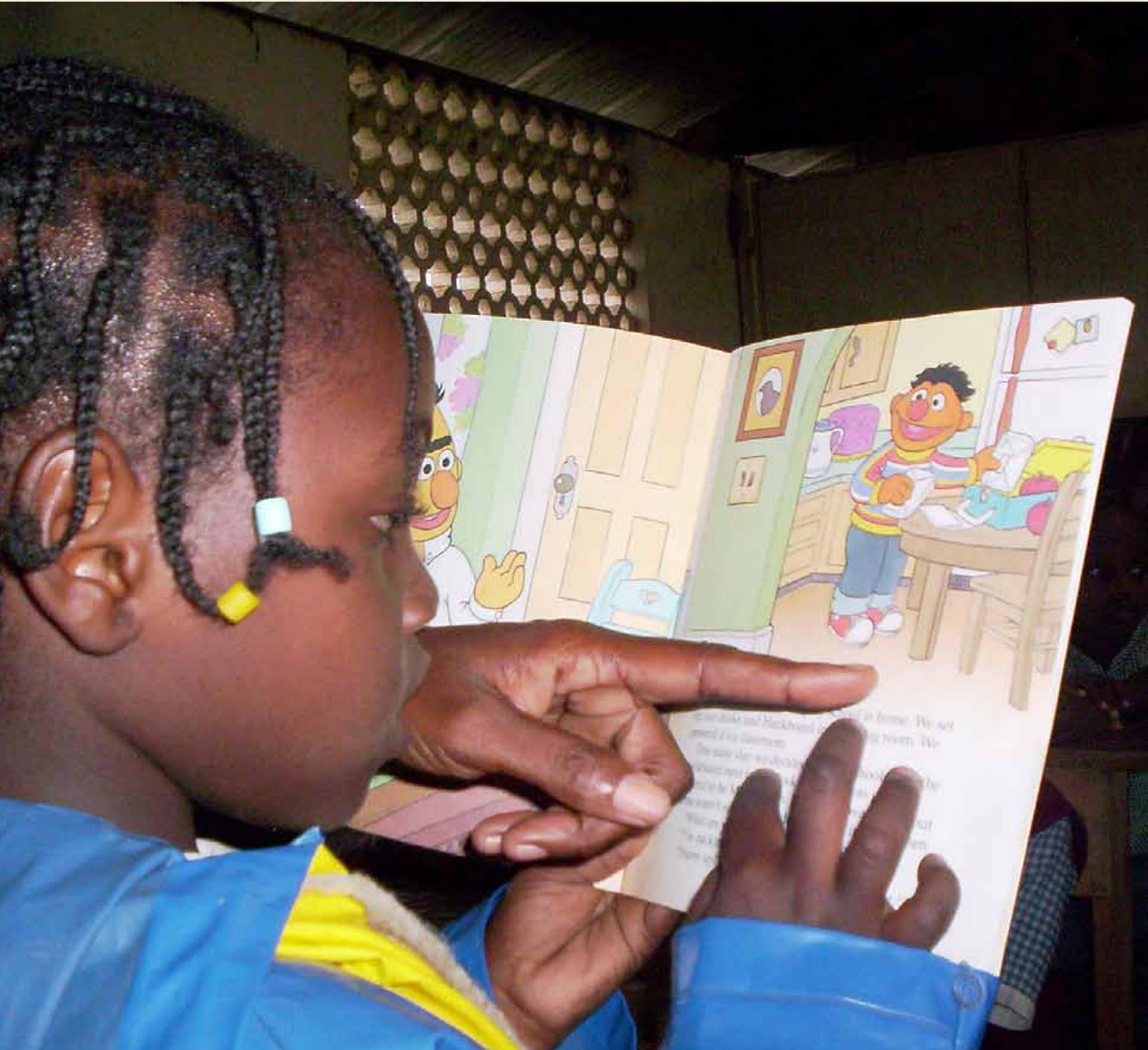
**Exhibit 2. Primary School Completion in High-Income and Low-Income Countries, 2000–2008**



Source: EdStats Query, 2010.

***“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 to 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 as they must absorb increasing amounts of instructional content in print form. Poor readers cannot develop proper writing skills and 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 (Jimenez and O’Shanahan Juan, 2008; Linan-Thompson and Vaughn, 2007; Abadzi, 2006; Sprenger-Charolles, 2003; Chiappe et al., 2002), in almost any alphabetic language in which print can be decoded 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**—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.

**All children can, and should, learn to read within the first few years of schooling.** No two children will develop their reading skills in exactly the same way, in the same time frame, but all readers will progress through a series of phases in their reading development, some simultaneously. Exhibit 3 describes the phases of reading development. The first three phases focus on the foundation skills of learning to read.

**Exhibit 3. Stages of Reading Development**

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

Source: Roskos et al., 2009.

Once children learn to apply the foundational reading skills with a certain level of reflex or automaticity, they can move beyond the task of decoding a text (Stage 1) to begin deriving its meaning (Stage 2). As children learn sounds that link to form words, they can begin connecting those sounds to printed words and the idea behind those words. Then they can link words to form sentences, paragraphs, and stories. In other words, children transition from *learning to read* to *reading to learn* (Stage 3 and beyond). Comprehension is the ultimate prize—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, as measured by the number of words read correctly per minute (Fuchs et al., 2001).

Cognitive neuroscience reveals that the human mind has about 12 seconds of short-term working memory in which to process data in small chunks from visual recognition into a longer-term memory bank, similar to how we eat and digest food in small morsels. To understand, the mind must digest chunks of words at a minimum rate of about 35 to 60 words per minute (Abadzi, 2006). When children who read haltingly begin a sentence but cannot complete it within the narrow span of time allowed by their working memory, their mind has lost track of where it began. 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.

Depending on the complexity of the language—including the transparency of the script, consistency of spelling, and pronunciation rules—

children arrive at fluency at different rates. For instance, children learning Italian, Greek, and Spanish, with the simple and consistent links between letters and sounds in these languages, if instructed well, can master recognition of familiar words and decode new words with near-perfect accuracy by the end of grade 1. Meanwhile, 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, even if they receive good instruction (Abadzi, 2006; Seymour et al., 2003). The process can also take longer in low-resource settings, where children are not exposed to print in their mother tongue before they are challenged to begin reading in a second official language, such as English.

**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—unless instruction is improved (Juel, 1988). In fact, reading skills are self-reinforcing: 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. Without the prompting of supportive parents and teachers and additional 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. But this only perpetuates the intergenerational cycle of poverty.

**Breaking the cycle of poor performance requires early intervention.** For students on a low 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). Research indicates that the more children learn, the longer they stay in school (Patrinos and Velez, 2009): In one study,

the greatest factor—surpassing even household wealth—predicting primary school completion in Senegal is a child’s success in second grade (Glick and Sahn, 2010). Tackling the reading deficit early can change the whole course of a child’s academic trajectory. Research has shown that the better children read at age 15, the greater the likelihood they will continue on to post-secondary education and, presumably, greater economic

prospects (Knighton and Bussière, 2006). The key is identifying 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 the interventions that aid struggling readers to become successful readers.

### The Gambia: Beginning to Break the Illiteracy Cycle

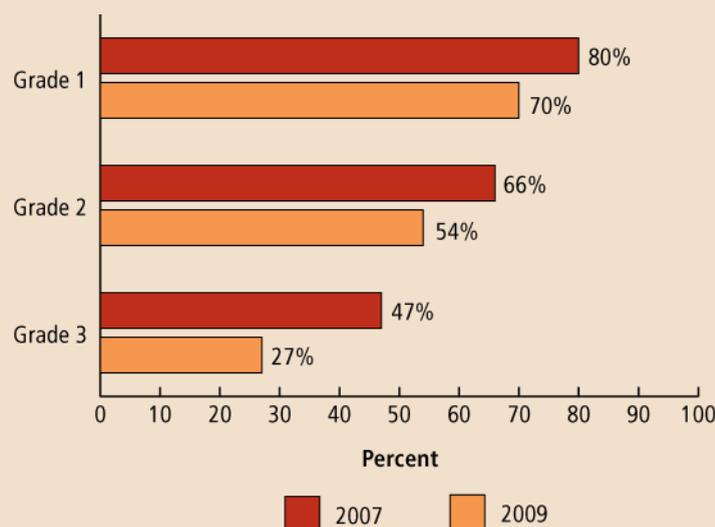
In early 2007, the World Bank and the government of The Gambia partnered to conduct a rapid assessment of English reading skills of students in grades 1–3. From a sample of 1,200 students across 40 schools from this small country, nearly two-thirds of the students were unable to read even a single word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

- Only 1% of the students reported speaking English at home, yet there was no strategy in the school for teaching second-language learners;

- Three-quarters of students reported having no books at home; and
- Two-thirds of students’ mothers were illiterate.

The Permanent Secretary of Education witnessed this 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). So, in response, in August and September 2007, the Ministry of Education rolled out nationwide in-service training for teaching the five foundational reading skills for all grade 1–3 teachers and their monitors. A follow-up assessment in July 2009 revealed the impact of this effort: a substantial reduction in the percentage of nonreaders in grades 1–3 (see Exhibit 4).

**Exhibit 4. 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.



## Warning Lights: Results of Reading Assessments Around the World

**The reading deficit has been largely neglected in many low-income countries.**

Although teachers may realize that their students are struggling to read, with few national assessments taking place before fourth grade or later, 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 of making up a child’s reading deficit in later grades grows each year that schools, governments, and donors delay action.

**Over the past several years, a steady increase has been noted 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).<sup>4</sup> Similar approaches, using many of the same components and designed to inform the implementation of

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<sup>4</sup> 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).



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, Exhibit 10).<sup>5</sup>

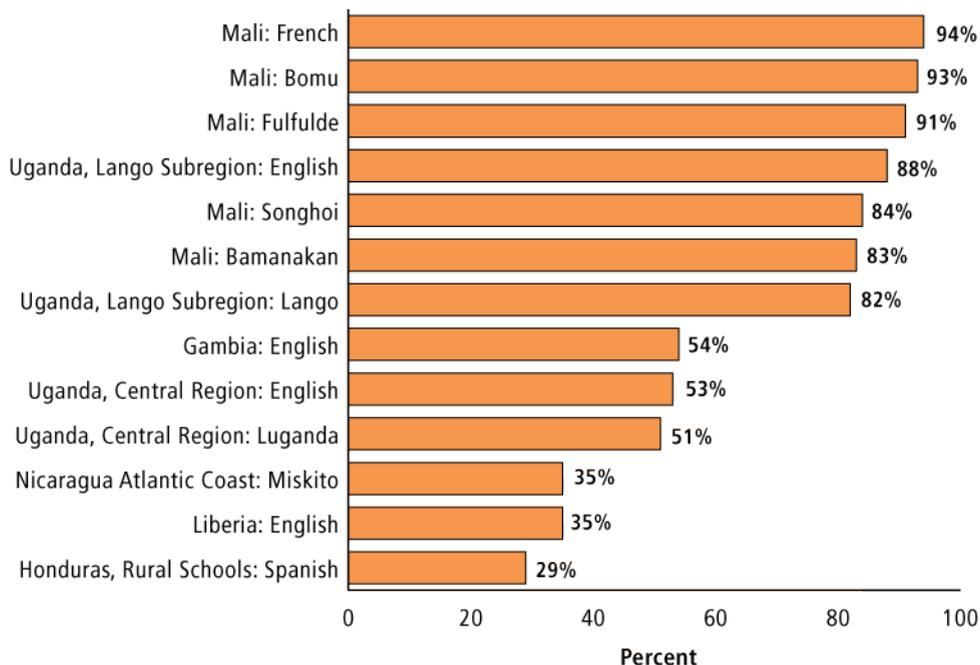
**A consistent pattern has been revealed: Worrying proportions of students are not learning to read at all within the critical first two or three years of schooling.** To provide an overall sense of levels of reading in the countries where early grade reading assessments have been tried, Exhibit 6 reports on the percentage of students tested who scored a zero on the oral reading fluency portion of the assessment, which asks students to read a simple paragraph in the language in which they are being taught to read. 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. 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 Bamanakan, who were attending schools with Bamanakan 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. Exhibit 5 compares these same zero score results for assessments conducted at the end of grade 2, using only national or regionally representative results.

**Studies of reading levels in NGO-supported schools reveal similarly low results.** Exhibit 7 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

<sup>5</sup> For a complete listing of early reading assessment applications, please see the Appendix.

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



**Exhibit 6. 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
<b>Gambia, June 2009</b> End of grade 2, national level sample	English	788	54	79.1	n/a	2.0
<b>Guyana, Oct 2008</b> Beginning of grade 3, national level sample	English	898	29	109.7	n/a	6.1
<b>Haiti, May 2009</b> Beginning of grade 3, regional sample of two districts	French	399	49	n/a	n/a	n/a
	Creole	426	48			
<b>Honduras, Oct 2008</b> End of grade 2, rural sample of PROHECO schools	Spanish	615	29	89.7	93.9	n/a
<b>Kenya, Oct 2009</b> 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			
<b>Liberia, June 2008</b> End of grade 2, national level sample	English	1426	35	57.6	71.8	2.7
<b>Mali, April 2009</b> End of grade 2, national level sample by language group	French	411	94	56.8	38.8	3.8
	Bamanakan	464	83			
	Bomu	592	93			
	Fulfulde	437	91			
	Songhoi	472	84			
<b>Nicaragua, April 2008</b> 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
<b>Nicaragua, Oct 2009</b> 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			
<b>Senegal, May 2009</b> End of grade 3, national sample of schools	French	687	18	56.3	50.9	5.1
<b>Uganda, Oct 2009</b> 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](http://www.eddataglobal.org); columns 5–7, EdStats, 2010, most recent data available.

their impact. Samples were not designed to be representative at the national or regional level and are included 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 the Philippines comparing Save the Children and comparison group schools in Manila versus Mindanao reveal stark regional differences, with a very small percentage (1 and 2 %, respectively) of children unable to read in Filipino and English 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).

**These descriptions of reading results should be treated with caution.** Because of differences in how local assessors interpret individual student results, as well as differences in language structure (word length and orthography) that influence reading acquisition, it is not appropriate to compare average oral reading fluency rates across languages and countries (Trudell and Schroeder, 2007).<sup>6</sup> Detailed reports for a broad selection of the early grade reading assessments, by country, can be found at [www.eddataglobal.org](http://www.eddataglobal.org).

**Several major factors contribute to these shocking results, including lack of support for teachers, minimal instructional time, poorly resourced schools, absence of books in the home, and the language of instruction policies.** 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.

**Exhibit 7. Summary of Program Evaluation Early Reading Assessment Baseline Findings, 2007–2010**

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

<sup>6</sup> 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 on [www.eddataglobal.org](http://www.eddataglobal.org).

**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 (UIS, 2006). 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).<sup>7</sup> 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).

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 not trained in how to manage staff and are often away from the school to fulfill administrative duties at the district 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., because of strikes, inclement weather, extra holidays), teacher and student absenteeism, delays, 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., 2010).<sup>8</sup> 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). 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 a textbook, 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 they are available, 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

<sup>7</sup> The eight anglophone countries included in the study were Eritrea, The Gambia, Lesotho, Liberia, Malawi, Uganda, Zambia, and Zanzibar.

<sup>8</sup> Nepal did not account for teacher absences.

20% of whom had books) (Sprenger-Charolles, 2008). Through its *Literacy Boost* interventions in Malawi and Nepal, Save the Children has found that greater participation in community mobilization activities to bring books into the home leads 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). 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, 2009).

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 in developing countries. As a result, many students repeat or drop out of school,<sup>9</sup> while those who stay in school lack basic literacy skills and have not mastered 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, 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, leading to insufficient investment in teacher training and instructional materials in local languages. Furthermore, 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.**

Each of the numbers presented 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 continue business as usual when huge numbers of children are failing school in low-income countries? The good news is that although teaching reading to all children is a complex endeavor, it can be done. The following 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 all children learn to read within the first few grades of primary school.

<sup>9</sup> 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)



## Assessment: Illuminating the Reading Deficit

**The first step to remediation involves precise assessment of which skills children are struggling to master.** The five skills of reading—phonemic awareness, phonics, 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). Assessment also lets parents and the community know that 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 a proxy measure for education quality in general.

**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 the performance of their children 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. 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.<sup>10</sup>

**Where they are applied, large-scale assessments face inherent challenges to being effective tools for addressing early grade reading deficits.** They 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 for, 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, developing countries.** In November 2006, RTI, USAID, and the World Bank developed a protocol for a 15-minute individual oral assessment of the five foundational reading skills (see Exhibit 8). 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 Exhibit 10).

<sup>10</sup> Authors’ calculations of assessment participation in TIMSS, PISA, PIRLS, PASEC, SAQMEC, of LABORATORIO based on EdStats “Student Learning Assessment Database” (2010). Country classification based on World Bank country and lending groups (World Bank, 2010).

Although 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, 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.

The early grade reading assessment approach is also 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.

**The early grade reading assessment approach is not designed to replace internationally comparable large-scale assessments, but it can give low-income countries and the global community key information about how and when children are learning to read (or not).** 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. Nonetheless, it is important to note 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 Exhibit 9 for a complete description of the levels and uses of early grade reading assessment approaches.

#### Exhibit 8. Early Grade Reading Assessment Components

The reading skills measured by early grade reading assessments focus on three early stages of reading acquisition (see Exhibit 3). Although the 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*
<b>Stage 0: Emergent Literacy</b> Birth to grade 1	<ul style="list-style-type: none"> <li>• Concepts about print</li> <li>• Phonemic awareness</li> <li>• Listening comprehension</li> </ul>
<b>Stage 1: Decoding</b> Beginning grade 1	<ul style="list-style-type: none"> <li>• Letter naming</li> <li>• Letter sounds</li> <li>• Syllable naming</li> <li>• Nonsense word reading</li> <li>• Familiar word reading</li> </ul>
<b>Stage 2: Confirmation and Fluency</b> End of grade 1 to end of grade 3	<ul style="list-style-type: none"> <li>• Paragraph reading (oral reading fluency) with comprehension</li> <li>• Dictation</li> </ul>

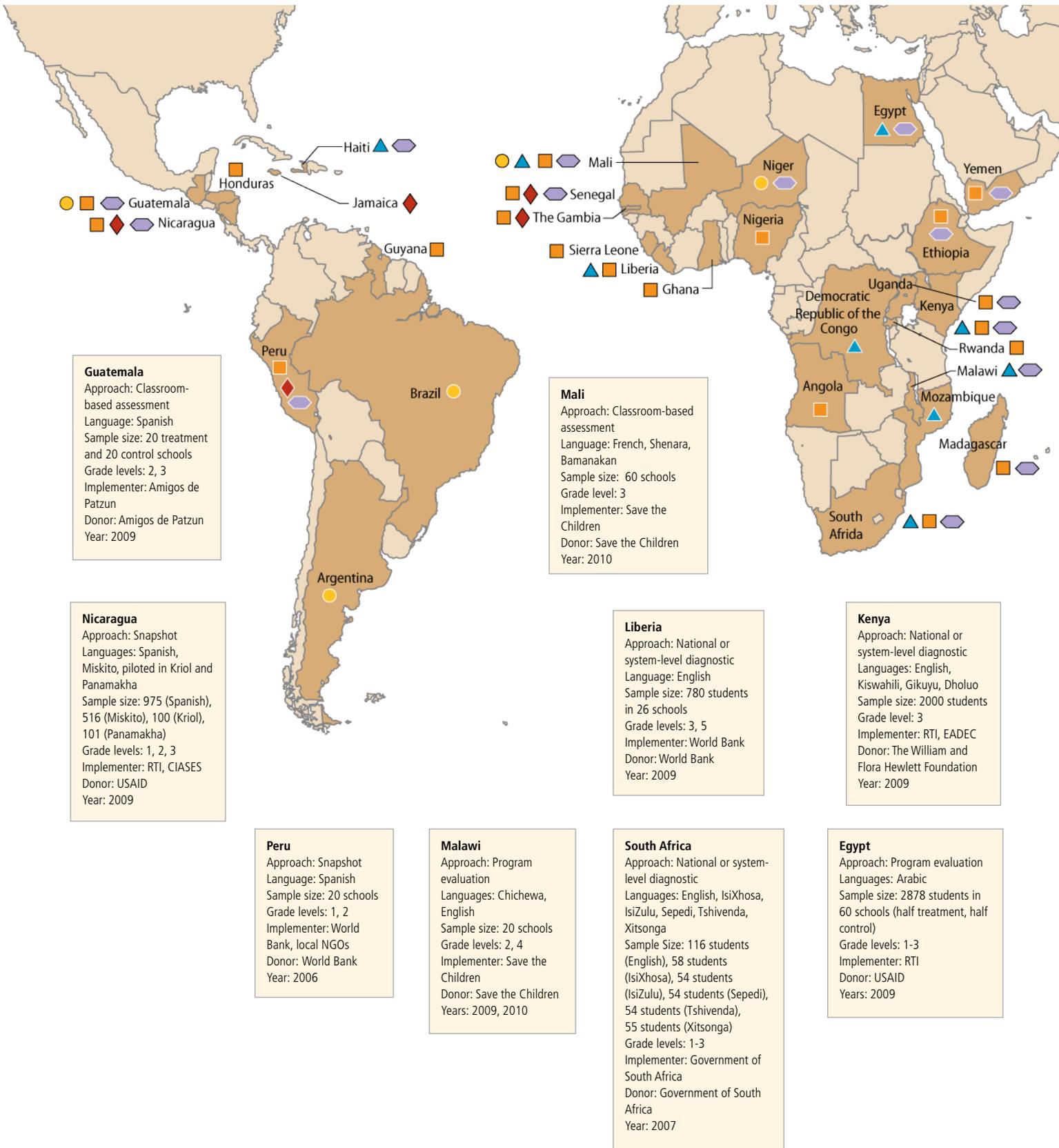
\* Not all components are tested in all languages.

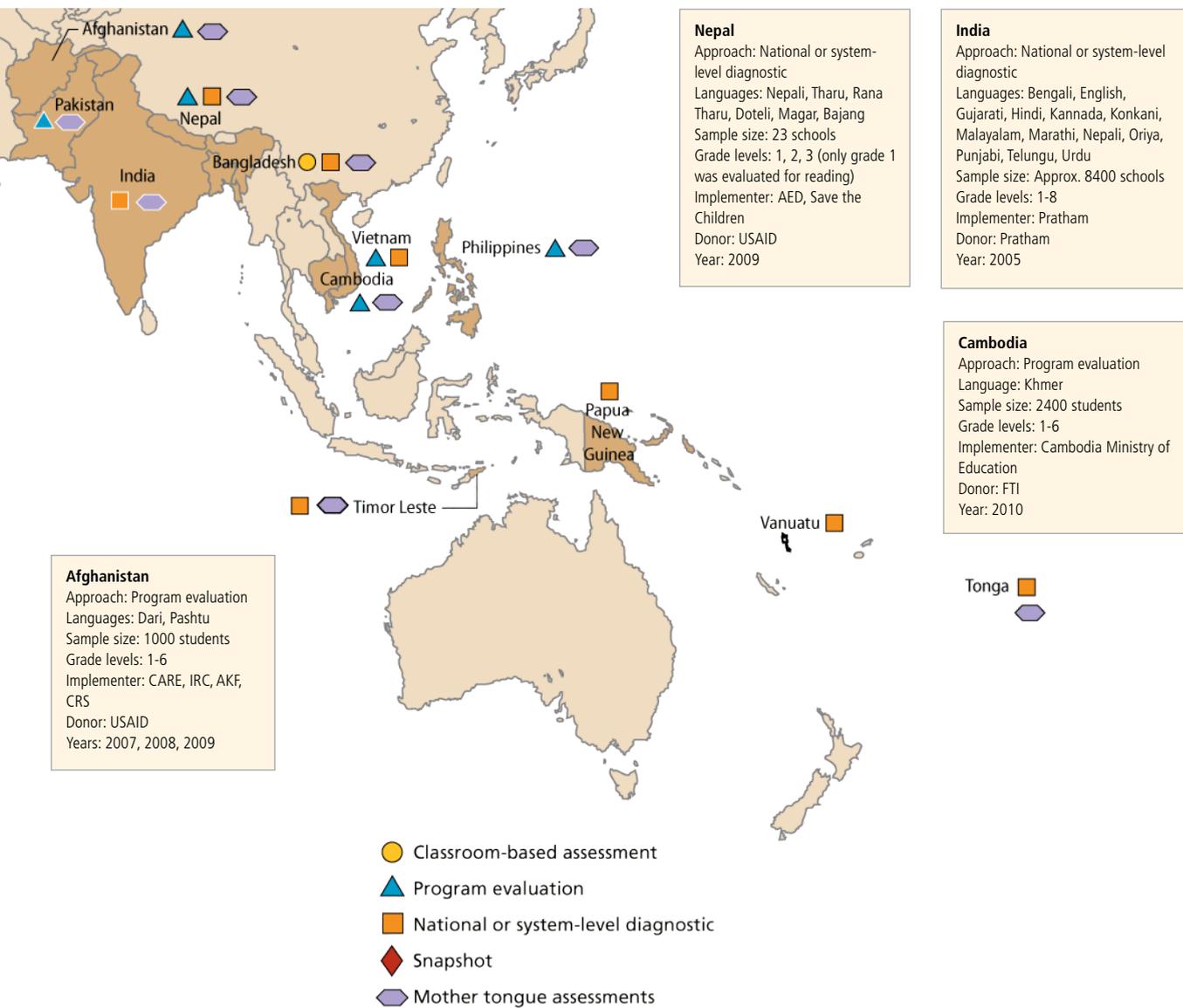
Sources: RTI, 2009; Roskos et al., 2009.

**Exhibit 9. Rubric for Early Grade Reading Assessment Approaches**

Type of Assessment and Purpose	Pros and Cons	Instrument Design	Sample Specifications	Results and Uses
<b>Reading Snapshot</b> Quickly examine reading levels to raise awareness and spur policy makers, donors, and civil society into action.	<b>Pros:</b> minimum design and cost for maximum impact. <b>Cons:</b> 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.
<b>National or System-Level Diagnostic</b> 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.	<b>Pros:</b> statistical significance (accurate or narrow confidence intervals) assured by larger sample size, careful randomization assures representativity. <b>Cons:</b> 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.
<b>Impact Evaluation</b> Conduct baseline—or “pre-treatment”—assessment and monitor progress of programs that aim to improve reading instruction and outcomes.	<b>Pros:</b> can detect change over time resulting from an intervention. <b>Cons:</b> 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.
<b>Classroom Assessment: Mastery Checks</b> Teachers conduct regular (weekly or monthly) checks to verify that all students are learning skills that have been taught.	<b>Pros:</b> can be used to actually drive teaching improvement; low cash cost (though cost in use of teacher time). <b>Cons:</b> 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.
<b>Classroom Assessment: Progress Monitoring</b> 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.	<b>Pros:</b> can be used to communicate to school director and parents on a regular basis about progress against benchmarks. <b>Cons:</b> 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.

## Exhibit 10. Early Grade Reading Assessment Applications Around the World





### A Global Movement

Early grade reading assessments are designed to be adapted to the setting in which they are applied. Since 2005, early grade reading assessments have taken many forms around the world. On this map we draw attention to a sample of these assessments to demonstrate the variety of locations, languages, and approaches in which numerous governments, donors, and NGOs have

applied the tool. A more complete list is provided in the appendix. As of May 31, 2010, assessments were completed or in process

- by 29 implementing partners,
- in 41 countries,
- in 74 languages,
- with funding from 16 donors.



Wage and Income

- Why people
- 1) Some people
  - 2) Some people
  - 3) People have
  - 4) People have
  - 5) Some people
  - 6) People also

## Teaching: Lighting a Fire in Every Child



**Early grade reading assessment leads to action.** Faced with the evidence highlighted in Chapter 3, ministries, NGOs, and schools are using the results of early grade reading assessments to improve reading instruction. Using student performance data, school systems can address 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. Early grade reading 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 given the 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 have decided to pilot 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 instruction materials, support, 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. A strategy to introduce new reading instruction practices to teachers should

account for several factors, including the following (Garet et al., 2001):

1. **Coherence** between the content of the 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., phonics and comprehension), as well as general pedagogy (e.g., classroom management, planning, grouping).
3. **Extended duration** that alternates between intensive training and opportunities for teachers to return to the classroom and begin applying their knowledge, to account for teachers adopting new practices gradually and testing them before wholeheartedly accepting them.
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 front lines of 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.
6. **Intermixed delivery formats** to help accommodate different learning styles, such as large residential workshops; in-class coaching; small, collaborative teacher groups; or 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;
- Not enough textbooks 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
- Formal, summative assessments do not give teachers useful information to improve their instruction, 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.

**Several countries are paving the way by demonstrating effective approaches to improve the teaching of reading, including the following:**

- **Training:** Teachers' classroom training needs to be supplemented with school-based support from coaches. Coaches need to be trained with the same method they will use to train teachers. They must be passionate, but also be able to speak the language in which teachers will be instructing their students to read. Coaches need supervision to ensure they are delivering training effectively.
- **Materials:** Teachers should receive manuals containing a scope for and sequence of daily reading lessons, to match the 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.

- **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:** Teachers 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. Parents, even if they cannot read, can foster their child's reading at home. Communities can organize activities like reading competitions to boost literacy.
- **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 using the teacher's manual to the point that they can teach these practices to others and sustain the intervention.

The following 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.



## Country Cases

### Kenya

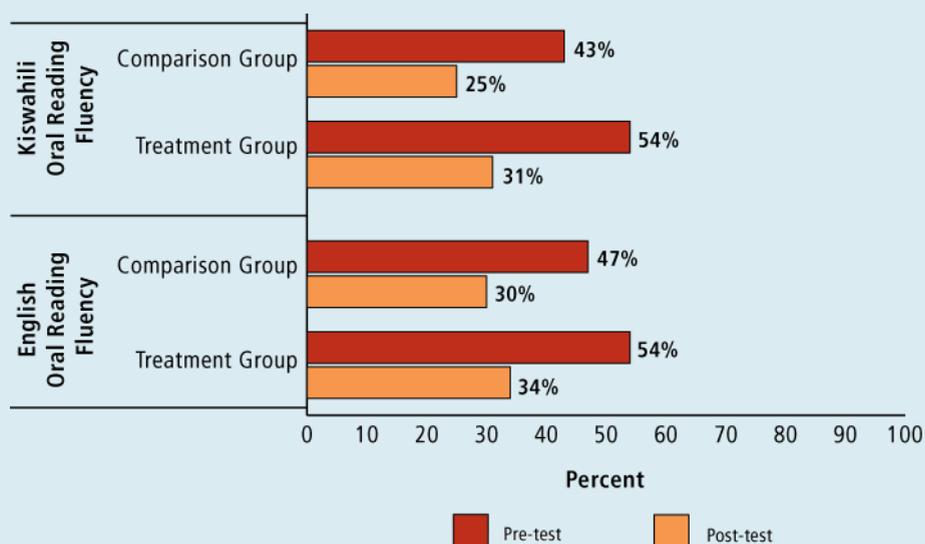
#### Malindi District Experiment

Partnering with the Kenyan Ministry of Education; USAID; and Education for Marginalized Children in Kenya (EMACK II) project, led by the Aga Khan Foundation, RTI led an investigation in 2007 of early grade reading outcomes in Malindi, one of the poorest districts on Kenya's coast. With 40 schools in Malindi, RTI conducted a baseline assessment of second grade students' foundational reading skills, using its Early Grade Reading Assessment (EGRA). The EGRA revealed that the students read roughly 11 words per minute in both Kiswahili and English, far from the grade-level goal for fluency of 45 words per minute.

**Intervention:** In response, RTI and colleagues from Aga Khan Foundation and the Ministry of Education designed a package of lesson-by-lesson, week-by-week instructional plans for the second-grade teachers to improve the children's weakest reading skills, as identified by the EGRA. The training focused on the scope (what), sequence (when), and instructional model (how) to teach reading, and was supplemented by monthly school visits by trainers to support the teachers. The Aga Khan Foundation trained teachers at 20 schools to use the new lesson plans over the next year.

**Outcomes:** When the impact on student reading ability was measured against a control group of 20 schools that did not receive the intervention, the results were promising. The second grade students were reading twice as fluently as they had been at the time of the baseline assessment. However, the control schools appeared to have improved nearly as much as the treatment schools. Through follow-up interviews, Aga Khan Foundation and RTI found that teachers from control schools were motivated to improve their students' reading performance after hearing about the baseline EGRA results (an "accountability effect" that has been investigated in Liberia, described below). When teachers heard about the new instruction methods their peers were using to teach reading, they began to copy the methods, essentially taking corrective action themselves (Crouch et al., 2009). Very large improvements in reading in control schools could thus be forensically tracked to direct copying of techniques across schools. Although this leakage of the intervention complicated RTI's study, it testified to the practicality and effectiveness of the EGRA-informed teaching methods. See Exhibit 11 for a comparison of zero score in oral reading fluency results for treatment and control schools in Kiswahili and English.

**Exhibit 11. Kenya: Percentage of Grade 2 Students Who Could Not Read a Single Word, Pre- and Post-Test Results**



Source: Crouch et al., 2009

## Liberia

### Early Grade Reading Assessment Plus Intervention

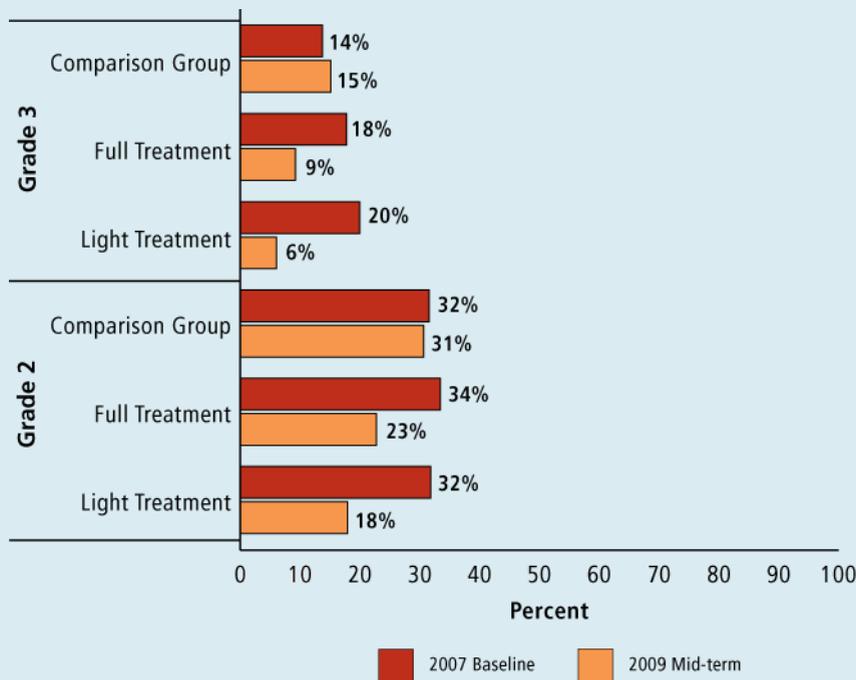
In 2008, the Liberian Ministry of Education requested assistance to improve student reading skills through evidence-based reading instruction. In response, RTI and the Liberian Education Trust designed and conducted a randomized controlled trial, EGRA Plus: Liberia, as both an intervention and an experiment in early reading improvement in seven districts.

**Intervention:** The intervention was targeted to grades 2 and 3. In the control group of 60 schools, a baseline EGRA was conducted, but not followed up by an intervention, and there was no mention of potential follow-on measurements, so as to reduce any likely accountability effect. In the “light” treatment group of 60 schools, teachers assessed students using a progress-monitoring EGRA, and the community was informed about reading achievement levels through a student report card. In these schools, teachers were informed about additional rounds of testing. Finally, in the “full” treatment group of 60 schools, reading levels were assessed; teachers were trained on how to continually assess student performance; teachers were provided frequent school-based pedagogic support, resource

materials, and books; and parents and communities were informed about student performance.

**Outcomes:** After only some three and a half months of effective implementation of the EGRA reading interventions, RTI conducted a follow-up EGRA in the experiment schools. Both sets of treatment schools outperformed control schools on all tasks tested, notably in oral reading fluency, a predictor of later reading success. At the mid-term assessment, children in full treatment schools were reading 29.5 words per minute (51% over baseline), and children in light treatment schools were reading 27.1 words per minute (29% over baseline)—gains of 7.2 and 6.1 words per minute, respectively, over control schools. Students were not yet decoding fluently (using 60 words per minute as the benchmark), but as they approach competency in that skill, their comprehension scores are expected to rise (Piper and Korda, 2009). And the significant impact among the light treatment schools affirms the “accountability effect” that providing data on student performance does motivate improvements in teaching practice and community support for reading. See Exhibit 12 for comparison of zero scores in oral reading fluency at baseline and mid-term for each of the treatment and comparison groups.

**Exhibit 12. Liberia: Percentage of Grade 2 and 3 Students Who Could Not Read a Single Word, Baseline and Mid-Term Results**



Source: Piper and Korda, 2009.

## Mali and South Africa

### Systematic Method for Reading Success (SMRS)

The Systematic Method for Reading Success (SMRS),<sup>11</sup> implemented in Mali and South Africa, is an approach to building reading skills, starting with phonemic awareness, then the slow introduction of 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 scripted lessons, including which letters, decodable words, sight words, read-alouds, and independently read stories to use in each lesson. SMRS is designed for teachers with little preparation, for low-resource schools, and for large class sizes.

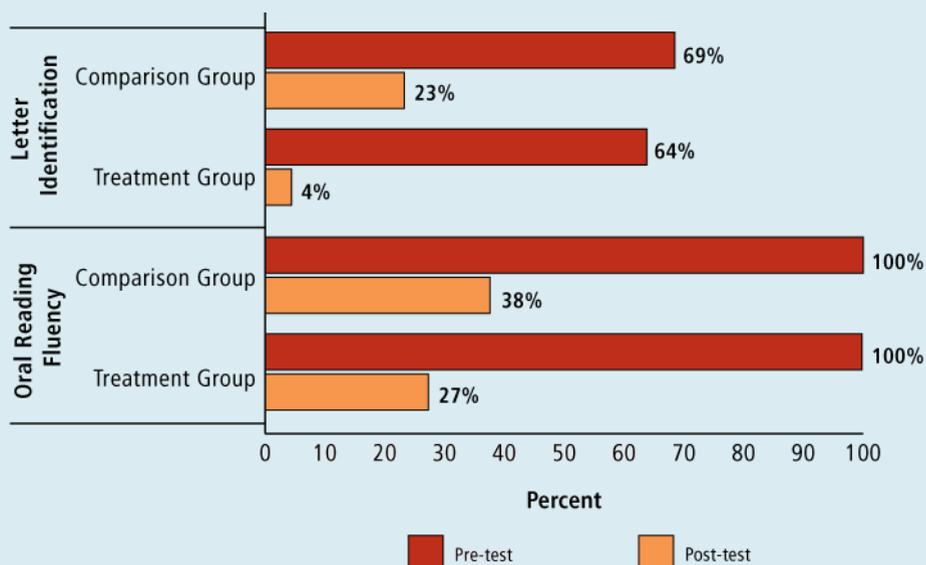
<sup>11</sup> SMRS was adapted by Sandra Hollingsworth from the Systematic Instruction in Phonemic Awareness, Phonics, and Sight Words (SIPPS) developed by Dr. John Shefelbine, California State University, Sacramento, and the Developmental Studies Center of Oakland, California.

**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 Bamanakan. 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

**Exhibit 13. South Africa: Percentage of Grade 1 Students Who Could Not Read a Single Word, Pre- and Post-Test Results**



Source: Piper, 2009.

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 class, 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 Exhibit 13 for comparison of zero scores in letter identification and oral reading fluency at pre- and post-test for treatment and control groups.

## 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 five-day

trainings within a six-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).



***“...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)



## 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 the recent Global Campaign for Education's *IGOAL* campaign, launched to coincide with the 2010 World Cup, focuses on access to schooling for the 72 million children out of school and on the value and benefit of education in a broad sense, not on learning per se (GCE, 2010).

**Education should learn from the lessons of the health sector to improve mobilization activities and focus on quality, not just access.**

Education advocates should take full advantage of lessons from social mobilization in the health sector. 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 rather 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 towards 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.<sup>12</sup> Moreover, social mobilization does not work the same way in all contexts and countries; health literature

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

<sup>12</sup> 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.

lends some ideas about which factors might influence the success of these types of activities, 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. Only recently, the Fast Track Initiative (FTI)—a global partnership of low-income countries and donors to achieve the EFA goals—developed the first global-level learning indicator for education, asking countries to report the proportion of students who, after two years of schooling, are able to read with enough fluency and comprehension that they are able to “read to learn” (FTI, 2010). This indicator allows countries to develop benchmarks and goals that are appropriate for their school system and language context. Setting such benchmarks encourages schools and parents to track student progress and enables governments to know which communities need more resources or assistance in meeting their goal. This effort is only just getting

### Benchmarking: Defining Fluency for Four Languages in Kenya

The EFA Fast Track Initiative (FTI) has adopted two indicators of early grade reading achievement in FTI countries that are intended as a proxy measure for the quality of basic education:

1. Proportion of students who, after two years of schooling, demonstrate sufficient reading fluency and comprehension to “read to learn.”
2. Proportion of students who are able to read with comprehension, according to their countries' curricular goals, by the end of primary school.

Now each FTI country has the challenge of defining specific goals (or “benchmarks”) in fluency and comprehension that are appropriate for their language and context. 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 scores needed in their linguistic context to obtain sufficient comprehension.

Funded by the Hewlett Foundation's Quality Education in Developing Countries initiative, in March 2010, RTI conducted a benchmarking exercise with education leaders and ministry staff in Kenya to help them define oral reading fluency standards—correct words read per minute—for a desired comprehension level (e.g., 80% to 100%) in each language of instruction used in the school system. This will allow Kenyans to align their education policies with a goal that they own and for which they can truly be held accountable. For grade 3, Kenya has proposed oral reading fluency benchmarks that correspond to the level of fluency required for comprehension, according to assessments of Kenyan students (see Exhibit 14).

**Exhibit 14. Proposed Kenya Oral Reading Fluency Benchmarks**

Language	Grade 3 Benchmarks (Correct Words Per Minute)			
	Zero	Low	Moderate	Benchmark
English	0	1-39	40-99	100+
Dholuo	0	1-29	30-55	55+
Gikuyu	0	1-29	30-59	60+
Kiswahili	0	1-29	30-59	65+

started, however, and more work needs to be done to explain what this indicator means to ministries, parents, teachers, and students (see Exhibit 14 about benchmarking in Kenya).

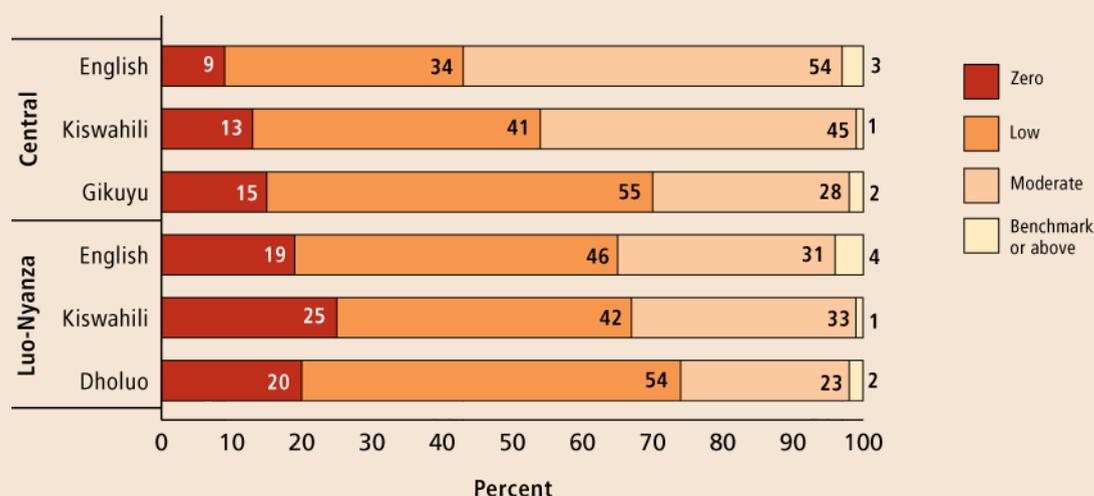
**Even a good campaign cannot overcome the failings of a weak state.** Finally, although social mobilization is useful, the short-term nature of most social mobilization activities may not have the power to overcome a weak education system managed by a weak government with a weak civil society. Several 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 here.

As of September 2010, these benchmarks are still under review by ministry authorities. Based on these standards, more than 96% of grade 3 students in Central and Luo-

Nyanza provinces in Kenya are performing below the benchmark for fluency in any language (see Exhibit 15).

**Exhibit 15. Kenya: Grade 3 Student Performance Against Fluency Benchmarks in Two Provinces**



Note: Percentages may not add up to 100% due to rounding.

## 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).

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).

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 six-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).

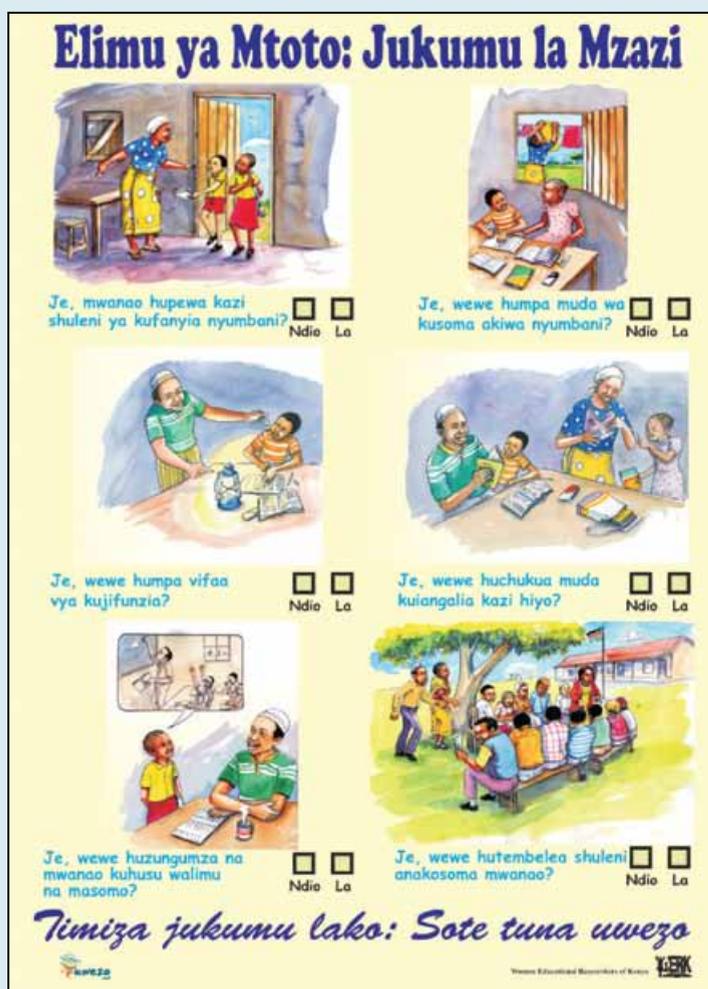


## Kenya

### 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, as well as 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 6–16 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 six-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 in 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 (see Uwezo, 2010) and are due for release in Uganda and Tanzania in late 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?*

## Malawi and Nepal

### Save the Children's Literacy Boost

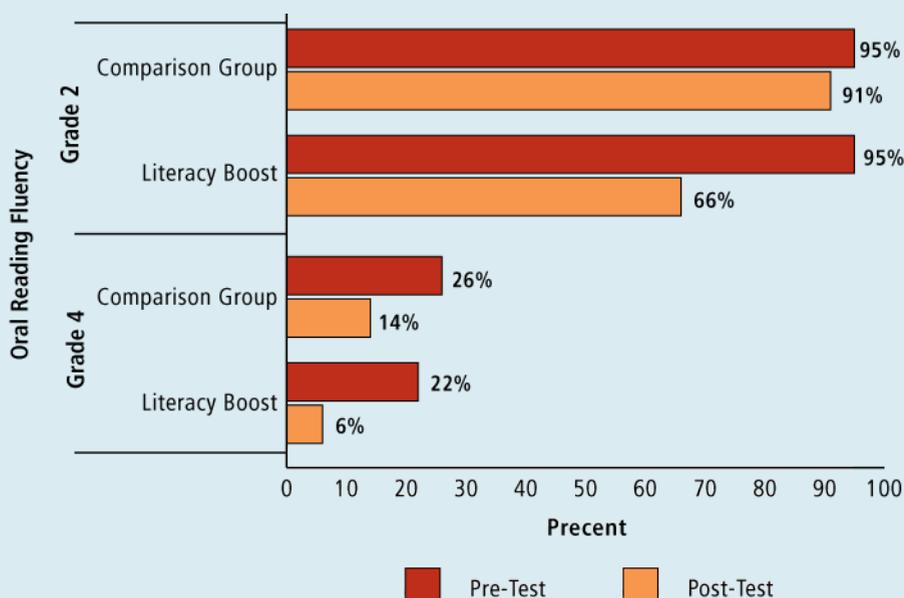
*Literacy Boost* is Save the Children's response to 2007–2008 reading results from several countries, indicating a greater need for support to the development of reading skills in young children. *Literacy Boost* holistically pursues the goal of literacy in a cycle of three activities: (1) reading assessments 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.

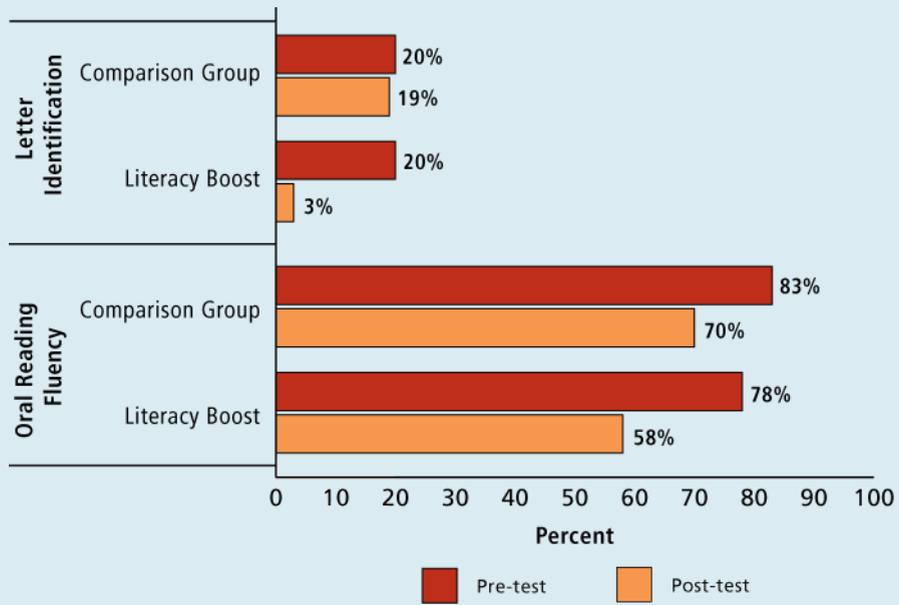
**Outcomes:** The figures presented below document the proportion of children scoring zero on *Literacy Boost* assessments in Malawi and Nepal in 2009–2010. In both cases, *Literacy Boost* and comparison schools were performing at about the same level at the start of the school year. By the end of the year, there were significantly fewer *Literacy Boost* students with zero scores in each skill (see Exhibits 16 and 17), 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).

**Exhibit 16. Malawi: Percentage of Grade 2 and Grade 4 Students Who Could Not Read a Single Word in Chichewa, Pre- and Post-Test Results**

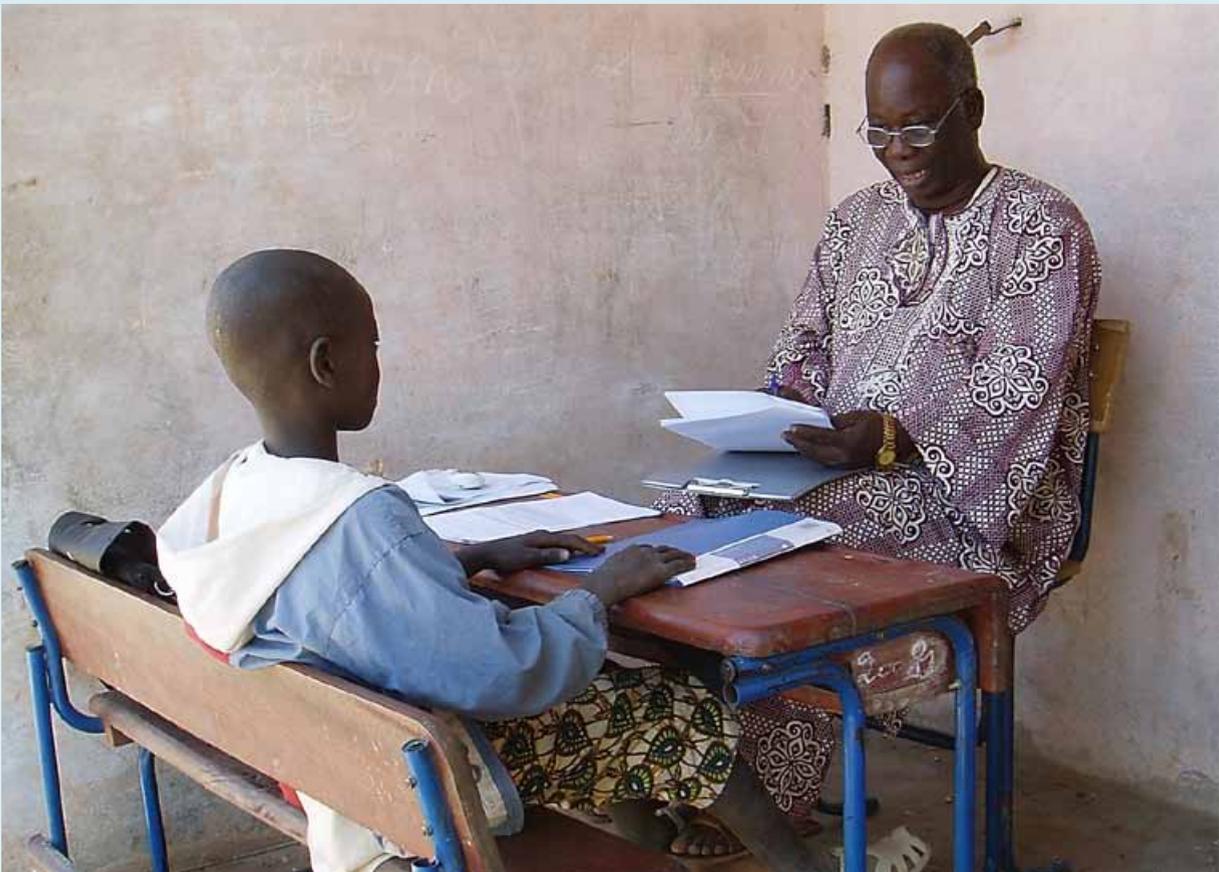


Source: Dowd et al., 2010b.

**Exhibit 17. Nepal: Percentage of Grade 2 Students Who Could Not Identify Letters or Read Words, Pre- and Post-Test Results**



Source: Pinto, 2010.





## 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 may be required), but to invest in a carefully managed process.**

Measurement of learning 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:

1. **Foster demand for improved learning outcomes.** Nearly 75% of teachers in one francophone African country report that having a child read an unfamiliar text is an inappropriate goal before fourth grade. 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 within the first few years of primary school. Raising communities’ and governments’ expectations is a critical step toward increasing demand (and accountability) for improving reading outcomes. And expectations need to be codified in official reading benchmarks that are aligned with the curriculum and against which actual performance can be measured.
2. **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 with videos and coaching through both pre- and in-service programs. In one experiment in Kenya, teachers in control schools obtained strategies and materials from their peers who were receiving the reading training. The control school teachers were able to successfully begin using these materials on their own, muddying the evaluation but demonstrating that good teaching strategies can be contagious and that motivated teachers will access existing knowledge (Crouch et al., 2009).

### 3. 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 to transfer key skills—such as visual awareness, phonemic awareness, and automaticity—to a second language (UNESCO, 2008; Bialystock, 2006; Geva 2006). 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, 1996). 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.<sup>13</sup> Thoughtful and thorough planning in the implementation of language policies is important. This includes, among other things, consultations with language specialists, NGOs, and teachers; advocacy to parents on the benefits of mother tongue instruction; 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.<sup>14</sup>

<sup>13</sup> 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).

<sup>14</sup> 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 rely on “off the shelf” materials, which are often based on European languages.

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 may 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.

4. **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 more likely to be able to read. 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 Room to Read, 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 tragic undersupply of children's reading books in low-income countries. Pratham Books is one notable exception, developing 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 this shortage is the low capacity of domestic publishing industries and in many countries the high cost of printing. Room to Read's local language book publishing endeavor and Pratham Books are bright spots in this otherwise dismal picture that could be rectified quickly if the appropriate resources were invested.

**5. 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. In some countries instructional time is even decreasing. The reasons and potential solutions for this are myriad, ranging from the banal—a lack of teacher supervision and accountability—to the calamitous—malnourished and ill students who are less able to learn because of their ailments. 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 often overwhelmed by the dysfunction of school systems that leave them standing—without proper training, materials, and guidance— in front of large classrooms of children.

There continue to be many barriers to universal access to basic education. Low-income countries and donors alike must increase their financial commitments to fill the estimated US\$16 billion annual financing gap to meet the EFA basic education goals (UNESCO, 2010a). However, increased investments will require increased coordination to be productive. Taken together, the recommendations in this report provide a simple yet coherent path for governments and donors to follow towards resolving the early grade reading crisis and achieving the core of EFA's goals: that all children would have their basic education needs met through quality schooling that launches them toward a life of learning and economic well-being.



## APPENDIX

## Early Grade Reading Assessments Tracker

## Africa

Angola	
Languages	Portuguese
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2010
Burundi	
Languages	Kirundi
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2010
Congo, Democratic Republic of the	
Languages	French
Approach	Program evaluation
Donor	USAID
Implementer	RTI International
Year	2010
Ethiopia	
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	TBD
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
Languages	English
Approach	National or system-level diagnostic
Donor	World Bank
Implementer	World Bank/Consultants
Year	2009

Gambia, The (continued)	
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
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, English
Approach	Program evaluation
Donor	Save the Children
Implementer	Save the Children
Year	2009, 2010
Mali	
Languages	French, Shenara, Bamanakan
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	Bamankan, Bomu, Fulfulde, Songhoy
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	Bamanakan
Approach	Program evaluation
Donor	Plan USA
Implementer	Institut pour l'Éducation Populaire (IEP)
Year	2007
Languages	Bamankan, Bomu, Fulfulde, Songhoy
Approach	Program evaluation
Donor	The William and Flora Hewlett Foundation
Implementer	RTI International
Year	2009, 2010
Languages	French, Bamanakan, 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	2010
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
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	TBD
Approach	Snapshot
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
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
Tanzania	
Languages	Kiswahili
Approach	National or system-level diagnostic
Donor	TBD
Implementer	TBD
Year	2010
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	TBD
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	TBD
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	2010

## 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	TBD
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	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

India (continued)	
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

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	2006

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

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	TBD
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

<b>Argentina</b>		<b>Guyana</b>		<b>Nicaragua</b>	
Languages	Spanish	Languages	English	Languages	Spanish, Miskito, Kriol and Panamakha
Approach	Classroom-based assessment	Approach	National or system-level diagnostic	Approach	Snapshot
Donor	Fundación Centro de Estudios en Políticas Públicas (CEPP)	Donor	World Bank	Donor	World Bank
Implementer	Fundación Centro de Estudios en Políticas Públicas (CEPP)	Implementer	RTI International	Implementer	RTI International/EdData, CIASES
Year	2009	Year	2008	Year	2009
<b>Brazil</b>		<b>Haiti</b>		<b>Nicaragua</b>	
Languages	Portuguese	Languages	Haitian Creole, French	Languages	Spanish
Approach	Classroom-based assessment	Approach	Program evaluation	Approach	National or system-level diagnostic
Donor	Graded School, São Paulo, Brazil	Donor	USAID	Donor	USAID
Implementer	Graded School, São Paulo, Brazil	Implementer	AIR	Implementer	RTI International/EdData, CIASES
Year	2009	Year	2009	Year	2008
<b>Dominican Republic</b>		<b>Honduras</b>		<b>Peru</b>	
Languages	TBD	Languages	Spanish	Languages	Spanish
Approach	Snapshot	Approach	National or system-level diagnostic	Approach	Snapshot
Donor	USAID	Donor	World Bank	Donor	USAID
Implementer	RTI International/EdData	Implementer	RTI International	Implementer	RTI International/EdData, Fundación para el Desarrollo Agrario (FDA)
Year	2011	Year	2009	Year	2007
<b>Guatemala</b>		<b>Jamaica</b>		<b>Peru</b>	
Languages	Spanish	Languages	English	Languages	Spanish, Quechua
Approach	Classroom-based assessment	Approach	Snapshot	Approach	Snapshot
Donor	Amigos de Patzun	Donor	USAID	Donor	World Bank
Implementer	Amigos de Patzun	Implementer	RTI International, CIASES	Implementer	World Bank, local nongovernmental organizations
Year	2009	Year	2008	Year	2007
Languages	Spanish, Mam, K'iche, Ixil	Languages	Spanish	Languages	Spanish, Quechua
Approach	National or system-level diagnostic	Approach	National or system-level diagnostic	Approach	Snapshot
Donor	USAID	Donor	USAID	Donor	World Bank
Implementer	EQUIP2/AED and Save the Children	Implementer	EQUIP2/AED and CARE	Implementer	World Bank, local nongovernmental organizations
Year	2008	Year	2009	Year	2007
		<b>Jamaica</b>		<b>Peru</b>	
		Languages	English	Languages	Spanish
		Approach	Snapshot	Approach	National or system-level diagnostic
		Donor	USAID	Donor	DFID
		Implementer	RTI International/EdData; University of the West Indies	Implementer	University of Oxford Department for International Development
		Year	2007	Year	2009
		Languages	English		
		Approach	Program evaluation		
		Donor	USAID		
		Implementer	TBD		
		Year	2010		

Note: A current version of this tracker is available at [www.eddataglobal.org](http://www.eddataglobal.org).

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Inside back cover

## 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
- UK 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 Estudios 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 (JHUCCP)
- 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)
- The William and Flora Hewlett Foundation
- The World Bank

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