EDDATA II

EGRA: Frequently Asked Questions

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Early Grade Reading Assessment (EGRA)

Why early grade reading? The ability to read and understand a simple text is one of the most fundamental skills a child can learn. Without basic literacy there is little chance that a child can escape the intergenerational cycle of poverty. Yet in many countries, students enrolled in school for as many as six years are unable to read and understand a simple text. Recent evidence indicates that learning to read both *early* and at a sufficient *rate* are essential for learning to read well. Acquiring literacy becomes more difficult as students grow older; children who do not learn to read in the first few grades are more likely to repeat and eventually drop out.

What is the Early Grade Reading Assessment? Most national and international assessments are paper-and-pencil tests administered to students in grades four and above (that is, they assume students can read and write). Results for those few low-income countries that participate in PISA or TIMSS (and inferring from the results of regional assessments such as PASEC and SACMEQ)[1] indicate that the median child in a developing country performs at about the third or fourth percentile of a developed-country distribution. From these results we can tell what students did not know, but not ascertain what they *did* know (often because they scored so poorly that the test could not pinpoint their location on the knowledge continuum). In contrast, EGRA is designed to orally assess the *most basic foundation* skills for literacy acquisition in grades 1–3, including pre-reading skills such as listening comprehension. The test components are based on recommendations made by an international panel of literacy experts and include timed, 1-minute assessments of letter naming, nonsense and familiar words, and paragraph reading. Additional (untimed) segments include comprehension, relationship to print, and dictation. EGRA meets psychometric standards as a reliable and valid measure of early reading skills.

How will the EGRA be administered? EGRA is an individually administered oral assessment of foundation literacy skills requiring about 15 minutes per child. It has been designed as an inexpensive and simple diagnostic of individual student progress in reading. In addition, district personnel can use the results to identify schools with particular needs and develop instructional approaches for improving foundation skills (e.g., poor results on the nonsense-word activity may indicate the need for additional decoding practice).

Where has EGRA been used and what do the results look like so far? To date EGRA has been field tested in twelve languages in half a dozen countries with EdData II involvement; additional efforts are also under way (see table below). Results thus far indicate generally low levels of student acquisition of foundation literacy skills. For example, in one country, students at the end of grade 2 were correctly able to name about 23 letters in English in one minute. For the sake of comparison, in the United States, reading norms state that children reading at fewer than 40 correct letters per minute at the end of kindergarten should be considered at some risk, while those reading at less than 27 are definitely at risk. Thus, the *average* level of letter reading fluency in the tested country was, in grade 2, *half* of what in the United States would be considered to put the child at some risk at the end of kindergarten.

To provide an overall sense of levels of reading in developing countries where EGRA has been tried, one can focus on what is perhaps the most important (the most leveraged, in terms of predictive power over cognitive development in later grades) indicator of learning in the early grades: fluency in reading of connected text, in terms of accurate words per minute in reading orally. The table below shows reading levels in the first few grades, by grade, in a few countries. Note that we have been enjoined, for now, not to mention countries' names, as we don't want to

[1] Organisation for Economic Co-Operation and Development's Program for International Student Assessment (PISA); Trends in International Mathematics and Science Study (TIMSS); Programme d'Analyse des Systems Educatifs de la Confemen (PASEC); Southern Africa Consortium for the Measurement of Educational Quality (SACMEQ).

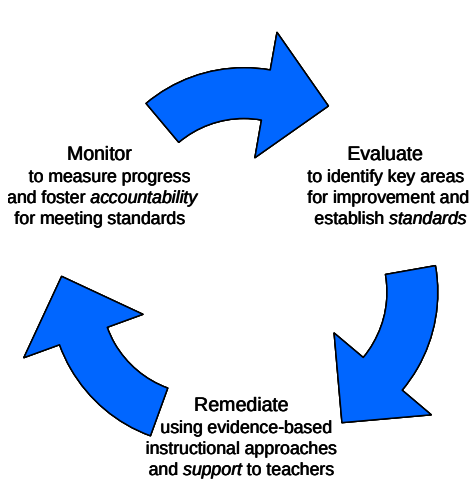
necessarily create a sense of making kids "race" in their reading. Thus, if this is to be shared widely, we can send a file where the country names are eliminated.

Oral Reading Fluency Levels (Correct Words Per Minute) in EGRA Pilot Countries

Country	Grade			
	1	2	3	4
Senegal (semi-formal sample)				
Male	2.4	17.8	28.7	
Female	3.3	17.0	35.6	
Grade-wise average across genders	2.9	17.4	32.4	
Grade-wise standard deviation	5.9	17.4	23.5	
Average inter-grade gain		14.8		
The Gambia (formal nationally representative sample)				
Male	1.9	4.3	9.9	
Female	2.4	3.6	8.6	
Grade-wise average across genders	2.2	4.0	9.2	
Grade-wise standard deviation	9.3	12.4	19.9	
Average inter-grade gain		3.5		
Jamaica (formal sample)				
Male		59.8	66.8	
Female		58.3	78.7	
Grade-wise average across genders		59.0	73.1	
Grade-wise standard deviation		46.8	48.1	
Average inter-grade gain		14.1		
Pakistan (formal sample)				
Male	23.2	30.4	50.3	68.3
Female	28.2	36.2	58.1	90.2
Grade-wise average across genders	25.3	33.1	53.9	78.1
Grade-wise standard deviation	30.5	34.4	39.2	46.5
Average inter-grade gain		17.6		
Peru (less formal sample, broadly representative)				
Grade-wise average across genders	9.2	29.3		
Grade-wise standard deviation	16.9	30.7		
Average inter-grade gain		20.1		
Kenya (formal representative sample in Malindi district)				
Male		11.5		
Female		11.2		
Grade-wise average across genders		11.4		
Grade-wise standard deviation		16.2		
Average inter-grade gain		NA		

What can be concluded from this table? Well, one can note the following striking fact. In a few of these countries (mostly in rural areas) the oral reading fluency in Grade 2 is around 20 words per minute. In the US, this would be considered at risk in Grade 1. The languages being tested here are simpler than English. Taking Peru, for example, with an easier language such as Spanish (reading fluency about 30 at the end of Grade 2), one can note that children in Spain seem to achieve about 60 at the end of Grade 1—double the fluency one grade earlier.) The

difference accumulates and widens. Our research shows that by the time children are about 15, the **average** children in the poorest countries are achieving at the level of children in the 3rd percentile in the rich countries. That's in later grades. But early grade reading seems to predict later skills quite well (correlation somewhere between 0.7 and 0.9), at least judging from US studies. Thus, a key task in the developing world is to get the children reading well and by grade 1 or at the latest by grade 2 when scripts are complicated and poverty is rampant. Yet, in the poorer areas of Kenya, we find that it is not until grade 5 or 6 that one can claim that "90% of kids are reading." That is a colossal inefficiency, and is a waste of the children's potential. It is important to note that there is considerable variation between countries. In some countries children are reading much better than in others. More work needs to be done to assess where things are going badly and where things are going well.



The continuous cycle of improving student learning. EGRA can be used to *evaluate, remediate* and *monitor* progress toward improving student learning outcomes.

Can EGRA results be used to compare results across languages and countries? Preparation of the EGRA instrument for use in a particular country generally involves some adaptation, including translation into the language of instruction. It is important to recognize that this limits the ability to make comparisons across countries. One reason for this stems from the research on reading acquisition, which indicates that while all children move through the same stages when learning to read, the rate at which they move through them differs by language (and the degree to which these languages vary in their orthographic complexity). Another reason is related to the technical standards for making such comparisons, which require evidence that translation and other adaptations do not change the difficulty level of the test and hence the meaning of the scores across systems. 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, will be a useful analytical and policy exercise.

Once EGRA identifies the areas for improvement, what can be done to improve learning outcomes? EdData II has developed a strategy for improving student learning using research-based instructional approaches to remedy critical areas identified by the EGRA instrument. For example, based on the EGRA results, teachers may be taught to monitor students' oral reading fluency and practice decoding strategies. This approach is currently being tested in 40 randomly selected schools (20 treatment and 20 control) in Kenya with plans for development in Liberia. This continuous cycle for improving student learning, including evaluation together with specific support for teachers and monitoring for accountability, is a process (depicted above) that has generated average student learning gains on the order of 30 percent or more in South Africa (District Development Support Program) and Zambia (Break Through to Literacy). Efforts in Mali and Niger using EGRA to inform the development of materials and sequenced, scripted teaching and continuous assessment strategies have demonstrated very promising results, even for large classrooms (all children reading within a few months). Research in the United States indicates that early acquisition of foundation literacy skills is an important predictor of later school success; teachers can promote that success by strengthening those skills identified as needing improvement by the EGRA instrument.

How can USAID Missions "buy into" EdData II and how much will it cost? RTI International holds the current EdData II task order contract from USAID/Washington. EdData II is a USAID-funded program that has supplied survey-based data on education in countries worldwide since 1997. The data are used for planning, monitoring, and evaluating education policies and programs. Missions can issue a Request for Task Order Proposals (RFTOP) as part of EdData II, detailing the proposed number of schools and students to be evaluated and the degree of representation

required for sampling. Costs for application of the EGRA instrument will vary by country and are highly dependent on local inputs of labor and transportation. In countries where ministry staff or other salaried officials are trained as enumerators, the cost of application can be significantly reduced. As a purely illustrative example, local assessment costs (excluding international technical assistance) in The Gambia in 2007 for a baseline testing of 1200 students in 400 schools was about $25,000 (included workshop costs, per diems, printing, and transportation for Ministry staff; paid enumerators were not used for this task). Additional information, supporting documentation and references, and sample instruments can be found at www.eddataglobal.org.

Funder(s) (direct and indirect)	Basic Task	Country—Language(s)	Approx. Dates	Results Through September 2007	Actors Involved	Main Purpose
World Bank	Use EGRA to assess children's reading in context of sector assessment and policy dialogue	Peru—Spanish and Quechua	2005 and 2006	Great attention to issue from President, Ministries of Finance and Education. Good debate. Some bureaucratic resistance. Further testing in progress.	World Bank, local nongovernmental organizations, technical advisor Luis Crouch	Policy dialogue, eventual improvement in children's reading, ongoing work in this area at regional level, additional World Bank loans/projects
USAID/Washington	Develop methodology in EGRA	Methodological development: first pilot application in Nicaragua—Spanish	2006 onward	Expert consultation; methodology developed and documented, pilot testing planned for Nicaragua.	USAID/Washington, RTI	Methodological affirmation, testing
USAID/Nicaragua	Adapt and employ EGRA methodology to track performance of schools within various education-related projects, and performance of project schools against standard public schools	Nicaragua—Spanish and Miskitu	2007 onward	Ministry has agreed to go forward. Draft work plan developed; application planned for April 2008 and 2009.	USAID, RTI	Methodological tweaking, but with interest in actual results. Application of methodology as a way to assess various projects' contributions to early childhood reading
Government of South Africa and USAID/South Africa	Measure reading of children to track national progress. USAID provided basic technical assistance. The South African government is continuing with measurement and intervention on its own.	South Africa—English and 5 local languages	2007 onward	Seminar provided to South Africans, who are proceeding on their own; Minister of Education announced initiative in her annual budget speech to Parliament.	USAID/South Africa, RTI	Tracking of actual reading progress in national reading initiative
World Bank	Fast-track applications and develop EGRA in French, English, and one African language	Senegal—French and Wolof; The Gambia—English	2006 and 2007	Seminars/workshops in skills involved in EGRA provided. Reasonably large-scale pilot tried (~40 schools each country).	World Bank, RTI	Compendium of experience in Africa on how to test on this issue; development of simple protocols for testing and information for remediation; development of toolkit
World Bank—Honduras, Haiti and Guyana	Use reading measures as a basic element of outcome tracking	Haiti—Creole and French Guyana—English Honduras—Spanish	2008	Workplan developed, implementation about to begin.	World Bank, USAID, RTI	Basic quality tracking
No current funding	Make recommendations to USAID (and other donors) on quality tracking	Various	2007 onward	Initial discussions held.	Basic Education Coalition (BEC)	Recommendations to USAID (and other donors) on quality tracking (i.e., it is not a foregone conclusion that BEC will recommend EGRA)
USAID/Kenya and USAID/Washington	Apply EGRA in Education for Marginalized Children in Kenya (EMACK II) project	Kenya—English and Kiswahili	2007 onward	Seminar provided for Kenyan officials and Aga Khan Foundation.	USAID/Washington, USAID/Kenya, RTI, Aga Khan Foundation	Tracking of progress of EMACK II project using early grade reading. Development of instructional approaches and pilot in treatment schools; comparison against control schools
USAID/Washington	Complete a Snapshot of School Management Effectiveness (SSME), EGRA short form (Task Order 1)	Jamaica—English; Peru—Spanish	2007	Paragraph reading tested in Jamaica; Peru testing planned for October.	USAID/Washington, USAID/Jamaica, USAID/Peru, RTI	As part of SSME, testing of simple measures of early reading
Bangladesh Rural Advancement Committee (BRAC) and The IRC	Develop a simple EGRA assessment and pretest in schools	Bangladesh—Bangla; Afghanistan—Dari, Pashto	2007 onward	Reduced version developed and pretested in several schools in both countries.	Colette Chabbott, BRAC University–Institute for Educational Development (BU–IED)	Development of EGRA in local scripts; design of simple reading approaches, possibly through literacy tutors (possible youth employment program)
PLAN International	Apply EGRA as a baseline in treatment and control schools and develop/test instructional approaches	Mali and Niger and—French and local languages	2007 onward	EGRA adapted from application in Senegal. Plans in place to test in several additional countries.	Penelope Bender, Mali Institute for Popular Education (IEP), IRA	Adaptation building on French version of EGRA; development of instructional approaches for literacy acquisition in French and mother tongue
World Bank	Adapt and apply EGRA, develop instructional approaches and monitoring plan	Liberia—English	2008	Workplan developed.	World Bank, USAID	Response to Fast-Track Initiative plan calling for early reading assessment; work with government to emphasize foundation literacy skills