



# EdData II

## Education Data for Decision Making

[www.eddataglobal.org](http://www.eddataglobal.org)

### What is EdData II and why is it needed?

It is commonplace for education systems around the world to make policy and planning decisions without sufficient accurate, relevant, or timely education data, particularly on quality or learning issues. At the same time, what data do exist are often underused.

EdData II is a contract mechanism whose principal role, according to the award document, is to improve *“the accuracy, timeliness, and accessibility, [and use] of data for basic education policy and program planning.”*

This goal is accomplished by collecting primary data and by working to increase *“in-country human and institutional capacity for education data collection, analysis, and dissemination for policy making, systems development, and program planning, monitoring and evaluation at all levels.”*

### What types of services are available?

The following are examples of activities that are within the scope of the contract and appropriate for EdData II:

- Collect primary education data (via household, school, or community surveys) on issues of access, quality, or management.
- Collect data as a baseline measure only, or at multiple points for comparison over time and/or routine monitoring for projects or ministry programs.
- Analyze or evaluate existing data systems or data sets.
- Generate, evaluate, or assess the formulation of interventions at the national, district, school, or classroom

level; experiment with data-intensive instructional models to demonstrate impact of data on instruction.

- Develop innovative data collection instruments, techniques, and software.
- Build capacity to collect, analyze, use, or disseminate education data at the donor, ministry, district, or classroom level.
- Design and deliver research and training for Missions and Bureaus on topics related to the USAID Education Strategy 2011–2015 goals of improved reading, improved mathematics, routine monitoring, work-force development, and education access.

### How does EdData II improve education data collection and use?

#### **Support for Education Strategy Goal I.**

Because of its mandate and history, EdData II has been called upon especially for implementing Goal I of the Education Strategy: *Improved reading skills for 100 million children in primary grades by 2015*. The project has intensified its investigations of ways to effectively and efficiently improve student and teacher performance in reading. Among the research topics are incentive and accountability programs; use of communications and social marketing to improve impact; costs of initiating, scaling up, and sustaining reading programs; and setting of reading-improvement targets for USAID and host governments to apply. Another key area is exploring ways to monitor reading programs and gauge the effectiveness with which they are applied, including long term. The project team uses its existing approaches (see below) as well as devising new ones as appropriate.

**Innovative instruments.** EdData II has developed innovative survey instruments to

evaluate student performance in literacy and numeracy in the early grades, and to evaluate school management effectiveness and district management capacity. Researchers can use the findings to identify both the quality of learning taking place in schools and the factors (at school and at home) that are impacting learning. Once these factors are known, stakeholders and policy makers can use them to guide their efforts to improve learning.



**Data gap assessments.** Project teams have assessed host countries' capacity to collect, process, analyze, and use data for national education sector planning. Systems examined monitor student achievement, education finances, teacher supply and deployment, school administration, and household and business demands on the school system. The teams document deficiencies and facilitate dialogue among government, civil society, and other donors about ways to close data gaps and streamline collection and reporting.

**Research on reading and mathematics interventions.** Many countries are interested in using the instruments described above as a



springboard to improve student outcomes in reading and mathematics, and have redesigned their teacher training accordingly. EdData II has sponsored experiments that combine interventions to improve instruction with data collection to evaluate changes in reading and/or mathematics performance over time.

**Evaluation of mother-tongue instruction.**

There is widespread interest in data-based examinations of the effectiveness of teaching the youngest learners first in their mother tongue rather than a national language. This type of information is relevant to countries with a complex linguistic landscape that have adopted formal mother-tongue policies and programs. To evaluate the effectiveness of mother-tongue instruction, EdData II has assessed student performance, conducted interviews, inventoried teaching and learning materials, and observed classroom instruction in locations such as Ethiopia, Ghana, Haiti, Kenya, and Rwanda. The resulting data can show policy makers where mother-tongue program implementation and performance gains may or may not match intent, and why.



**Information dissemination.** EdData II tasks also are charged with communicating and disseminating significant information that they generate, through methods such as in-country presentations, interactive policy dialogue workshops, and publications in host-country languages. For example, the 2010 Nigeria Education Data Survey (NEDS), which was co-funded by the British Department for

International Development, canvassed nearly 27,000 households and linked the education data to a recent Demographic and Health Survey to obtain cross-sectoral data on the sampled households. The findings were released at a national dissemination event



attended by the Vice President and more than 20 news media outlets, an indicator that interest in policy and strategy applications for the data was very high. In 2013, RTI was asked by the Nigeria Federal Ministry of Education and USAID to prepare additional analyses and publications based on the 2010 data set. Products will include education profiles by state; profiles on factors associated with participation in various types of religious schooling; and brochures on education expenditures, access, and children with disabilities.

**Innovative monitoring of school system quality.** EdData II has conducted research on the use of lot quality assurance sampling (LQAS) as a way for local supervision jurisdictions to monitor their education programs. This concept was adapted from manufacturing processes for accurately yet efficiently testing the quality of large batches of produced goods. During a recent pilot test in Ghana, EdData II investigated simple student assessment approaches, prepared a short list of crucial yet easy-to-score indicators, discussed sample size options, and prepared a draft LQAS instrument accordingly. Data were collected by trained assessors in a sample of schools, tabulated, and presented to local partners. The pilot application resulted in local interest in

adopting LQAS for routine monitoring, as well as suggested improvements and further refinements for this approach.

## More about the assessment instruments

Since 2006, EdData II has promoted assessments that are easy to use, have a scientific underpinning, and have a “common-sense” meaning to parents. As a result, several instruments have been developed under EdData II to capture essential, reliable, and valid education data, while limiting study complexity and cost. They have been administered worldwide, with funding from both USAID and other donors. The project also has introduced technology (software programmed on handheld devices) to improve time and cost effectiveness in data collection and analysis.

The **Early Grade Reading Assessment (EGRA)** is a one-on-one oral assessment requiring about 15 minutes per child. It is a simple diagnostic of individual student progress in reading. The EGRA instrument typically is adapted for use in a particular country and



language. A primary use of EGRA is to establish national or regional reading performance measures. The results then can feed into policy dialogue activities to inform education stakeholders of the current status of students’ reading performance and to raise awareness about the importance of reading in the early grades.

The **Early Grade Mathematics Assessment (EGMA)** is the math equivalent of EGRA. This

assessment tool measures students' foundational skills in numeracy and mathematics, including number identification, quantity discrimination (larger and smaller), missing-number identification, word problem solving, addition and subtraction, shape recognition, and pattern extension. The skills EGMA assesses assist in building the math foundation that students need in order to accomplish further tasks, such as retrieving information from graphs or measuring. By assessing children earlier than third or fourth grade, EGMA can help ensure that children obtain the understanding they will need for success in subsequent grades.

The **Snapshot of School Management Effectiveness (SSME)** paints a multifaceted picture of school management practice. Management data collected by the SSME include pedagogical approach; time on task; interactions among students, teachers, administrators, district officials, and parents; record keeping; discipline; availability and condition of school infrastructure; availability of pedagogical materials; and safety. Data are collected via direct classroom and school observation; student assessment; and interviews with parents, teachers, principals, and parents. By collecting information on



just the most crucial school effectiveness factors and by applying innovative and simple data-collection methodologies, the SSME produces a rich data set at low cost. A small team can assess a school in just one day.

Although the basic SSME methodology can be applied in any school system, the SSME is designed to be adapted to reflect the issues and the structures unique to each country.

The **Education Management Assessment (EMA)** is used to identify what management skills educators have and what management-related training they feel they need. Such information is required at both the national and subnational levels (e.g., provinces, districts, schools) in countries wishing to both decentralize and improve education. Participants assess their strengths and weaknesses in particular skills, and rate their own performance on “objective” indicators. For example, the instrument rates capacity in curriculum planning and management, teacher support, and operation of education management information systems, and asks how long it takes districts to give curriculum-related advice to schools. The results show the government which capacities are most lacking across all districts or schools, and therefore require the most technical support, by level.

### Demand for EdData II Tools

Countries and organizations with a high level of interest in the EdData II methodologies are continually adapting and applying them on their own initiative and with their own sources of funds, in some cases with RTI technical support. In all, as of July 2013, EdData II assessments—EGRA, EGMA, SSME—or similarly inspired tools had been applied in over 50 countries and in nearly 100 languages.

### More Information

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*EdData II is implemented by RTI International, EHC-E-00-04-00004-00, September 2004–November 2016.*