Monitoring, Evaluation, and Research in International Education

Monitoring, evaluation, and research experts at RTI International work across the globe with national and local governments, as well as the donor community, to generate and interpret data to inform education program design and implementation. We develop innovative and sustainable monitoring methods; measure the impact of education programs; collect actionable and rigorous, high-quality data; and help link the results to improvements in program effectiveness. Our principal areas of expertise are in measurement of student performance in reading, mathematics, and social-emotional learning; equity; school management; teaching practice; and resource allocation. We develop education management information systems and promote local collaboration and training to ensure that applied approaches will be sustained. We support data collection and monitoring for the United Nations Sustainable Development Goals.

Tools

**EGRA.** The Early Grade Reading Assessment (EGRA) is an oral student assessment designed to measure the most basic foundational skills for literacy acquisition in the early grades: recognizing letters of the alphabet, reading simple words, understanding sentences and paragraphs, and listening with comprehension.

**EGMA.** The Early Grade Mathematics Assessment (EGMA) is an oral assessment designed to measure a student’s foundational skills in numeracy and mathematics in the early grades, including number identification, quantity discrimination, missing-number identification, word problem solving, addition and subtraction, shape recognition, and pattern extension.

**SSME.** The Snapshot of School Management Effectiveness (SSME) provides education stakeholders with data on pedagogical approach; time on task; interactions among students, teachers, administrators, and district officials; record keeping; discipline; school infrastructure; pedagogical materials; and safety.

**LEMA (LQAS).** The Local Education Monitoring Approach (LEMA), an adaptation of Lot Quality Assurance Sampling (LQAS), is designed as a simple, effective, and sustainable school monitoring approach for use by local governments. This approach uses binary indicators and small school sample sizes to quickly collect and process local data on school and student performance to inform decision making and improve program effectiveness.

**GALA and GAMA.** The Group Administered Literacy Assessment (GALA) and Group Administered Mathematics Assessment (GAMA) are orally administered, paper-and-pencil assessments designed to measure foundational skills similar to those of the EGRA and EGMA. These assessments were designed as routine education monitoring tools that can be administered and scored with relative ease at the local government level. Group administration of these tests requires less time and funding than individual administration. Thus far, these assessments have been used in conjunction with LEMA (see above) to ascertain whether or not students are meeting proficiency standards.
Household Survey. Household surveys cover topics such as the age of children at first school attendance and dropout, reasons for over-age first-time enrollment in school, reasons for never enrolling in school, and the frequency of and reasons for pupil and student absenteeism, among other indicators.

Highlighted Projects

Jordan. Funded by USAID, RTI supported the Ministry of Education (MoE) to conduct a national EGRA/EGMA/SSME survey in 2012. In response to the results of that survey, RTI aided the MoE in piloting two intervention activities by means of a randomized controlled trial (RCT) methodology. Emboldened by the results of the interventions, the MoE, again with RTI support, immediately incorporated aspects of the interventions into its textbooks, and is taking the intervention pedagogies to scale, targeting 13,000 teachers and more than 400,000 children.

Ghana. Also funded by USAID, RTI partnered with the Ghana Education Service (GES) to administer two national EGRA and EGMA surveys in 12 languages, plus two National Education Assessments. Additionally, RTI and the GES began a LEMA pilot program in 12 districts. The LEMA tools were administered along with RTI-designed school-level instruments (e.g., school observation instrument, school report, GALA). Via RTI’s targeted capacity-building program, GES officials gained tangible skills in all aspects of survey work, from instrument development through analysis and dissemination.

Tanzania. RTI has worked with several donors in Tanzania to produce actionable data to inform nationwide teacher and curriculum reforms, as well as regional program initiatives. In 2013, through USAID funding, RTI worked with the Ministry of Education, Science, and Technology (MoEST) to conduct a national baseline for Reading, Writing, and Arithmetic (referred to as the 3Rs) using EGRA, EGMA, and SSME. Based on the study findings, the MoEST developed and adopted national benchmarks. The MoEST used the results to inform teacher training and curricular reforms, and a pair of follow-up national studies (2016 and 2018) track the progress of these reforms. RTI has also worked at a smaller scale with UNICEF on studies in schools in three UNICEF-supported regions focusing on life skills and water, sanitation, and hygiene.

Indonesia. A USAID-funded, nationally and regionally representative EGRA and SSME of nearly 5,000 students allowed for varying levels of disaggregation and provided insight into different types and levels of reading ability, even within classrooms, among the students assessed. Dissemination workshops led to increased focus on early grade reading across the country, which supplied the needed context for the Ministry of Education and Culture to approve interventions such as teacher training modules at universities and the development of leveled readers.

Research methods

- Complex survey design
- Cluster sampling
- Program evaluation
- Impact evaluation
- Randomized controlled trials
- Experimental and quasi-experimental methods
- Mixed methods
- Data analysis
  - Descriptive and inferential statistics
  - Multivariate regression
  - Logistic regression
  - Difference-in-differences modeling
  - Item response theory

More Information
Amy Mulcahy-Dunn, Director
Monitoring, Evaluation, and Research Team
International Education
+1.919.541.8892 amulcahy-dunn@rti.org
http://SharEd.rti.org Follow @RTI_EdWork Follow @RTI_INTL_DEV

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