The Data Challenge

Quality education data are essential to inform government planning and policy decisions. Without quality data, it is impossible to build effective, resilient and accountable education systems. Equally, aggregated data are critical to monitor progress on the Sustainable Development Goal for education (SDG 4).

Most developing countries, however, lack agile education management information systems (EMIS) and the tools to communicate data in a way that governments and their development partners can use to focus resources on the areas of greatest need.

Why a Roundtable on Education Data Solutions?

GPE supports governments of developing countries to strengthen their education systems and provides funding to improve their data collection and analysis. The education data challenge is pervasive and urgent. In February 2018, GPE launched the Education Data Solutions Roundtable to leverage the expertise of national, private and development partners to improve the availability and use of accurate and timely education data at the country and global level. The group met several times and held its final meeting in April 2019. It visited Ethiopia and The Gambia to understand better the education data challenges in these countries, and to recommend solutions to these challenges that would be of global and country use.

“Without current data on how many children are not in school and the learning progress of those in school, governments are essentially flying blind.”

—Alice Albright, CEO, Global Partnership for Education
Who Participated in the Roundtable?

Members of the Roundtable included senior representatives from developing country governments; the business community (HP Inc., Econet, Intel, Tableau, Mastercard and Microsoft); private foundations (Michael and Susan Dell Foundation, Aga Khan Foundation); donor governments; the World Bank; UNICEF; UNHCR; UNESCO and its institutes (UIS and IIEP); the African Union Commission; ADEA and civil society.

What Was the Focus of the Roundtable and What Solutions Were Identified?

In response to data collection bottlenecks identified by developing countries, the Roundtable focused on developing sustainable solutions and capacity building strategies to address issues affecting education data systems.

1. Better tools for education data systems
   Developing country governments often use “off the shelf” data systems that are not designed to deal with the scope and scale of their information needs. But customized solutions can be expensive and ineffective. The different data systems used in the education sector are often not compatible and data therefore cannot be aggregated at a regional or global level.

   Solutions:
   • Formulate minimum standards for the technical specifications and functionalities of these systems to improve the integration of data sharing systems, usability and accuracy.
   • Support countries in the development of a technology upgrade path that would both encourage more effective deployment of their existing technologies and define a pathway to leverage new technologies.

2. Better education data communication and visualization tools
   It is vital that education data are effectively communicated to all users in order to have an impact. Decision makers tend to associate data systems with large, raw datasets compiled in technical reports. Here, the key to effective communication is to present analyzed data in an impactful way to identify gaps, demonstrate results and build the political will for additional investments in education.

   Solutions:
   • Promote a demand-driven data culture by showing the value of actionable insights from data by using analysis and visualization tools for planning and policy making, and reinforcing community-led accountability by supporting school-level management.
   • Encourage policy makers to support investments in EMIS, and improve EMIS management at country, community and school level.
   • The Roundtable supported the idea of working with developing countries to derive actionable insights for their policy and planning cycle, and to transfer knowledge and skills.

3. Integration of data across different systems to produce holistic school-level information
   Education data from various systems in developing countries, such as those for learning assessments and financial and personnel management, typically cannot be integrated. Even so, it is essential that governments, district authorities and schools have a comprehensive view of each school as a management unit.

   Solutions:
   • Ensure data are accessible to communities, schools and all other levels of the education system.
   • Identification numbers for schools (and perhaps also for students and teachers)
   • Include new and existing data into EMIS to provide a better picture of schools.

4. An enabling environment for long-term sustainability and fostering political will to improve data, systems and management within a country.

   Solutions:
   • Develop an institutional framework on education data policy that includes an implementation strategy and clarifies responsibilities within ministries of education and across other ministries.
   • Support the knowledge transfer of core information technology and data science skills to boost EMIS capacity at all levels. This could mean creating a pool of information technology specialists and data scientists to support EMIS in the short term, while preparing a sustainable human resource plan in the long term.