Improving Education Statistics Systems:
Challenges and Opportunities

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Do we have systems to monitor the education SDGs?

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<th>MDGs</th>
<th>SDGs all disaggregated</th>
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<td>Primary and secondary education and outcomes</td>
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<td>Gender parity in education</td>
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<td>TVET and tertiary education and outcomes</td>
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<td>Teachers</td>
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Education data eco-system

Lack of systemic approach/integration

Administrative data (EMIS): students, teachers, financing
- Data quality issues, e.g. coverage across govt. units, private sector
- Limited disaggregation
- Limited outcome measures

Assessment data: pupil performance and selection, adult skills
- Mainly for basic education
- Limited disaggregation
- Fragile capacity

Household surveys and census data
- Little use of data
- Limited outcome measures
- Lack of harmonisation across national surveys

System level information (rules and norms)
- Limited disaggregation
- Fragile capacity
- Little use of data
- Lack of harmonisation across national surveys
Data quality: what is the starting point?

- Efficient use of resources
- Validity and reliability
- Consistency over time
- Relevance to policy
- Accessibility and affordability
- Potential for disaggregation
- Comparability through standards
- Timeliness and punctuality
- Clarity and transparency
- Coherence across sources
- Completeness
Assessing data quality

• **Purpose**
  – to improve the process and outcomes of data system
  – To understand current situation
  – To link toward link to a specific action/programme

• **International tools (based on IMF)**
  – Education DQAF and family of assessment tools (UIS)
  – SABER EMIS (World Bank)

• **Good practices**
  – The assessment should be country driven and owned
  – The assessment must be linked to an action plan and resources
Main Page

This Wiki is about statistical data quality in general and more specifically about education data quality. It is a knowledge portal constitu- tuted from the Data Quality Assessment Framework developed by UNESCO Institute for Statistics and the World Bank for assessing the quality of education statistics and quality management. The objective of the project is to provide an interactive platform for anyone interested in participating to the development of this repository.

The DQAF Manual

This section of the wiki is dedicated to the Data quality assessment operations that UIS is engaged in close collaboration with various international organisations and national authorities. The operations are mainly quality assessment missions conducted in a country over a two weeks period by a group of specialists in education statistics and quality management. A report is presented to the national authorities in charge of Education and generally includes recommendations and proposals for a plan of actions aiming at durable quality improvement. The assessment is technically based on a quality assessment framework (DQAF) developed originally by the IMF to assess the quality of major national macro-economic statistics. This manual is intended to mainly inform on what the DQAF is and How to use it.

The UIS Education DQAF

From here is presented the framework that the assessment team uses to evaluate the quality of the production and management of education information for the education sector in the reviewed country. UIS and the World Bank built a prototype of that frame for the Education sector based on the framework developed by IMF. It identifies practices relevant to assess the quality; these practices are classified into indicators (3 digits), sub-chain: 0 Pre-requisites of quality, 1 Integrity, 2 Methodological soundness, 3 Accuracy and reliability, 4 Serviceability, 5 Accessibility; these subchain. The prototype was progressively improved as presented in Main evolutions in the DQAF Methodology. At the time of the review, the prototype is Observed, Largely observed, Largely not observed and Not observed.

DQAF Events

One might access from this page onward the whole list of achieved DQAF fact finding missions and, when approved by national authorities, as well as an executive summary of the report content presenting the findings, the recommendations and the proposals for a plan of actions. All meetings is also available from there.

Good practices

In addition to assisting individually reviewed country in improving the quality of its education management information, this Education sector goods practices in reviewed countries and letting them known to other countries as well as identifying documents presenting practical actions plans might introduced at country level. Recognised good practices are used in the scoring mechanisms. Good practices are also part of the repository.
Strengthening national capacity to implement data quality reviews

• Establish pool of regional experts and support Community of Practice in order to:
  – conduct education DQAF studies
  – promote South-South cooperation to share knowledge, experience and expertise
  – develop relevant training materials,
  – organize technical workshops to enhance skills and experience of country teams
A way forward?

“...call for a data revolution for sustainable development, with a new international initiative to improve the quality of statistics and information available to citizens. We should actively take advantage of new technology, crowd sourcing, and improved connectivity to empower people with information on the progress towards the targets.”

- High Level Panel
Big data and education monitoring

- Potential for integrating data sources
- Link multiple sources through the use of common identifiers for individuals, households, schools
- For instance, linking socioeconomic data on households to:
  - to schools for children and youth
  - results from student assessments
Advancing the agenda

• For each data source
  – Reach consensus on survey methods
  – Field trials
  – Training in use of data
  – Policy dialogue to ensure sustainability
  – And others

• Consider a limited number of steps

• Fixed sources, fixed steps, known input costs

• Process can be more achievable
Country-level requirements

• Existence of demand – many efforts to improve data are from the supply side, and many are not sustained
• Where demand is not part of the process, then capacity building and supply-side ideas won’t take hold
• In many cases there is some demand, but limited... but this can be a starting point
Conclusions

• New pressures, challenges, and opportunities
• To sustain it, requires mapping the starting points, identifying gaps and developing technical capacity, demonstrating effects and collaboration
• Demand is a vital pre-condition