





Creating a Global Sharing Network for Strengthening Education Data: edu2030/countrySTAT

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Summary

The purpose of the project is to create a Global Data-Sharing Network (edu2030/countrySTAT). Applications and tools will be made available through the network for data aggregation, statistical analyses and dissemination. It would serve as a platform to submit data to the UNESCO Institute for Statistics (UIS) and to validate indicators.

Building on successful examples in other sectors, such as agriculture, the main objective is to improve the dissemination of education data with a special emphasis on Sustainable Development Goal 4 (SDG 4) data to monitor progress in education and to enable countries to make informed decisions based on facts.

The design is critical to fulfil stakeholder needs (national, regional and global) by building on ideas through brainstorming sessions and by an approach that tests solutions to gather feedback, something done through design-based thinking and rapid prototyping workshops.

To provide added value, the project builds country ownership; enables access to existing data through a single online access point; serves as a powerful instrument for strengthening decisionmaking based on facts; facilitates the exchange of data and metadata based on international standards; and enhances national capacity building and strengthens institutional processes while serving to monitor national, regional and global initiatives.

The duration of the project is about 30 months in six pilot countries, with a cost of approximately US\$6 million. Once piloted, the project could be scaled-up to all regions.

The deliverables will include:

- The edu2030/countrySTAT platform with a data exchange mechanism;
- Improved data collection and validation;
- Availability of key baseline data and indicators; and
- Improved SDG 4 data coverage.

Partnerships will be strengthened and are critical to the project's success. Communication activities will play an important role in promoting the project.



1. Why an education data-sharing network?

Global challenges in improving education require fast, informed and targeted decisions. In order to develop polices based on sound evidence, decisionmakers need information such as:

- ✓ What are children and youth learning and not learning?
- ✓ Why are they not learning?
- ✓ Where are the children with special needs?

What is needed to answer these questions are:

- ✓ Mobilisation of the national and international community; and
- ✓ High-quality, comparable and timely data.

However, unfortunately, there is still a long way to go, because more often than not countries face challenges such as:

- ✓ Lack of harmonisation between data and metadata;
- ✓ Poor data dissemination systems;
- ✓ Restrictive or unclear data and data use policies;
- ✓ Gaps between data produced and its availability;
- ✓ Unclear protocol on privacy and anonymity;
- ✓ Failure of systems that equally accept both highly-formal and less-formal submissions to provide curated efforts to distinguish or warn about quality and reliability; and
- ✓ Lack of a culture of using the data.

The consequences are:

- ✓ Data are not fully exploited; and
- ✓ Data are not widely accessible or shared and thus there is no integrated system of information in education.

Therefore what is needed to support improvements?

- ✓ Education data should be available as a global public good because of its value in informing interventions and guiding policies, including related to equity;
- ✓ Ensure harmonisation between national and international levels for reporting; and
- ✓ Take into account expert knowledge and user requirements in the design of operational solutions, especially concerning I.T.

The UIS has proposed the creation of a global network to share successful examples from other sectors such as <u>agriculture</u>. The platform *edu2030/countrySTAT* aims to make high-quality statistics widely available to support monitoring and measuring of education goals and specifically SDG 4. The vision is to boost ownerships of countries, NGOs and researchers and contribute to the improvement of statistical data collection, exchange and effective use of information, in order to meet the needs and expectations of all statistical data users.

We are currently seeking partners and donors for the *edu2030/countrySTAT* platform to finalise design, implementation and control. While the aim is to have global coverage, the project will start with selected countries in all regions.



2. What, more specifically, is edu2030/countrySTAT?

edu2030/countrySTAT is a web-based system for both national and sub-national levels that supports collection, analysis and dissemination of data, using adequate tools and international standards. It would support multiple-sourced data integration and harmonisation based on international standards and contribute to improve data quality and reliability.

edu2030/countrySTAT will replicate successful examples from the agricultural sector. Its objective is twofold. First, it allows countries to better organize, harmonise and standardise data from multiple sources and integrate them into a common platform (a one-stop data centre). Second, it would serve as a platform to submit data to the UIS and to validate indicators. This would reduce costs for both the UIS and countries in submitting globally-comparable data and would increase consistency and error-trapping.

Specific objectives are to:

- ✓ Increase accessibility to quality and timely information;
- ✓ Strengthen capacity to develop and carry out multi-sector data analysis;
- ✓ Improve data exchanges at national, sub-national and regional levels;
- ✓ Support data analysis and evidence-based decisionmaking;
- ✓ Ensure long-term sustainability by developing capacity of regional and national experts; and
- ✓ Play an active role in the establishment and consolidation of a global information community.

3. How does it operate?

Easily accessible online, it would enable researchers, policymakers, development organizations and the private sector to design and implement better policies and reduce transaction costs and asymmetries of information. In each country, the national government will have to make a substantial contribution to ensure the deployment of the system, along with continued training and maintenance.

A design-based thinking and prototyping approach is critical to fulfil stakeholder needs (national, regional and global) by building on ideas through brainstorming sessions and by testing solutions rapidly to gather feedback. This may pose contracting problems, and thus, partnerships are needed rather than relying on traditional contractors or I.T. suppliers.

The objective is to design a network structure that can be relevant and useful to countries, stakeholders and to the UIS by addressing global changes in data dissemination, new technologies and systems, the different needs of countries, and the relevance of the platform considering the UIS strategic objectives and the 2030 SDG Agenda.

There is also a particular challenge in data use: decisionmakers know what data are needed for their routine managerial tasks and accountability as defined in laws and policies for which they are already held to account, but they are less clear about using data for decisionmaking and implementation, or important issues outside of their routine accountability.

Developing such skills, along with periodic user-producer workshops and training on the use of data, will increase the awareness of policymakers of the importance of good statistics in their work, which in turn will positively affect the sustainability of the statistical system by ensuring appropriate budget allocations. There is a need to



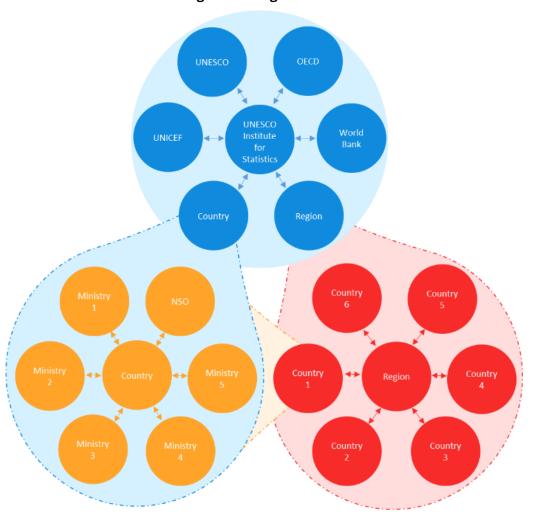
show policymakers and managers how data can help them be transparent and accountable, while addressing managerial challenges.

edu2030/countrySTAT is a platform for sharing composed of three components: data policy, statistical governance, and procedures and tools. These components are based on: an institutional framework, data management, and data availability. The data-sharing network includes:

- ✓ Enabling data exchanges at all levels;
- ✓ Creating a common technical language across data owners, statisticians, analysts, etc.;
- ✓ Availability of methods and tools to interpret and understand data, their reliability and their exact meaning (metadata); and
- ✓ Enabling data harmonisation and integration within and across countries and regions.

The website itself is, in some sense, the least interesting aspect. It will include datasets, key indicators, metadata, links and documents.

Figure 1. Flow between countries and regional and global actors





An institutional framework will be structured to avoid work in isolation and duplication of efforts, reduce transaction costs and ensure that reliable information across national institutions can be consolidated to inform policy decisions. The approach is strengthen networks of national and regional partners as a community.

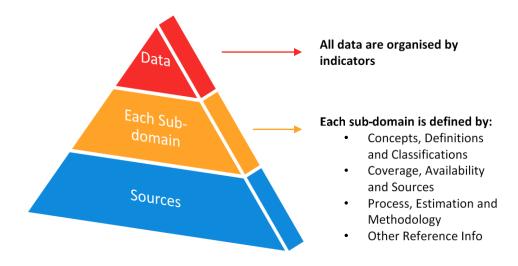
It will be necessary to have country partners (national statistics offices, ministries, policymakers, researchers, the private sector and other users), resource partners (bilateral and multilateral donors) and international institutions that lead in standard setting (the UIS).

4. What are data levels?

The edu2030/countrySTAT database would embed the following levels of data:

- ✓ National core data: data that have been aggregated to the national level using methodology for international comparability. The data will be presented in a standard data structure set by the UIS according to the hierarchies of its indicator system.
- ✓ Thematic modules: relevant national modules that are not included in the core but are very important at the national level tailored to country's data needs.
- ✓ Global reporting and validation: key set of indicators and metadata, including a reporting and validation platform.

Figure 2. Flow between sources, concepts and data



Census and Surveys

- Overview
- Design
- Operation and Quality Control
- Statistical Report

Administrative Records

- Responsible Agency
- Description of the contained info
- Data Sources



5. The added value of *edu2030/countrySTAT*

National institutions can sometimes find it challenging to regularly disseminate official statistics concerning education, especially given the more complex demands of the 2030 Agenda. This is evident in the highly-variable nature of country submissions to the UIS but also in the highly-variable quality of official, national education information websites. In some countries searchable downloads are possible, in others the most that can be obtained is a relatively old PDF. edu2030/CountrySTAT strengthens the ability of national statisticians to harmonise data from various local sources by providing a common methodology and international classification and coding systems. It also assists countries in integrating and organizing their national statistics to make them internationally comparable and available in comparable formats online to themselves (e.g. government departments), other ministries, citizens and the global community.

With the overall goal of helping countries monitor education trends in an effort to implement better policies, edu2030/countrySTAT can:

- ✓ Reduce the burden of completing questionnaires by facilitating electronic data collection;
- ✓ Reinforce national statistical capacities by providing methodology, classification and coding systems to support the **collection**, **standardisation** and **harmonisation** of data from various local sources;
- ✓ Promote **partnerships** between the main statistical institutions providing data within countries;
- ✓ Assist countries in integrating and organizing national data in order to make them comparable at the international level; and
- ✓ Help countries disseminate data through communication and information tools at national and subnational levels.

6. How much does it cost?

Project timeline: 30 months starting as soon as funding is available.

Activities involve:

- 1. Institutional capacity building at national and regional levels, which implies supporting existing national and regional institutional frameworks.
- 2. Strengthening of statistical methodologies and data collection/processing;
- 3. I.T. support to countries and regions to facilitate data storage, harmonisation, processing, exchange and dissemination and increased efficiency of the platform for data analysis and sharing; and
- 4. Implementation of a communication strategy to share knowledge.

The total project cost for the implementation and development of the platform in six pilot countries, including the funding for regional coordination and the UIS as coordinating agency, is US\$6 million. The key components of the budget are:

- ✓ Country and UIS Headquarters activities, training and technical assistance;
- ✓ Design-based thinking and rapid prototyping workshops to define user needs;
- ✓ Equipment (expendable and non-expendable);
- ✓ Translation;
- ✓ Regional and international staff/consultants;
- ✓ Administrative support and general operating expenses and supplies; and
- ✓ Local contracts, Internet/communications.