



HOUSEHOLD SURVEY DATA

CHALLENGES AND SOLUTIONS FORWARD

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INTRODUCTION

Historically, education indicators have been produced by education institutions or ministries based on administrative data – or records – tailored to each country's needs. However, household and other surveys have become increasingly more available in the past 30 years and have become a complementary source of data on education indicators. In a few situations, for example, using data to understand equity issues, they have become an exclusive source of data. These household and other surveys need to be accommodated by national education statistics systems.

Household and other surveys bring a number of advantages to education statistics, even though their primary aim is not education related:

- *Disaggregation*: Surveys collect information on individual and household characteristics impacting educational effectiveness, such as sex, ethnicity, disability, income or wealth, and family composition.
- *Consistency*: Indicators, such as the population of out-of-school children, have historically combined administrative enrolment counts (numerator) and population data (denominator). Household surveys provide both the numerator and denominator for calculating such indicators, using the same population framework for both components.
- *Representativeness*: Surveys with a nationally representative sample frame (and with geographic and socioeconomic strata) can collect information on selected indicators that is not included in administrative data, e.g. self-reported skills and non-formal training of youth and adults.

The benefits of household and other surveys become more evident when they are part of a regular programme, ensuring the continuous and comparable production of statistics over time. Currently, several regular household and other surveys are available (**Table 1**).

Table 1: Regular household and other surveys relevant for education

Source	Typical frequency	Typical education questions	Typical training questions
Population census	Every 10 years	School attendance Educational attainment Literacy status	Participation in technical and vocational training programmes Certifications and qualifications obtained
National household surveys	Annual or less frequent	As population census, plus: Education spending ICT skills	As population census
Multi-purpose cross-national household survey programmes	Usually every 5 years	Child development School attendance Learning and ICT skills (e.g. MICS) Adult literacy	
Labour force surveys	Annual or more frequent	As population census, plus: Skills and competencies	As population census, but more detailed questions
School surveys	Every 5–10 years	School health and nutrition	

Note: MICS = Multiple Indicator Cluster Survey.

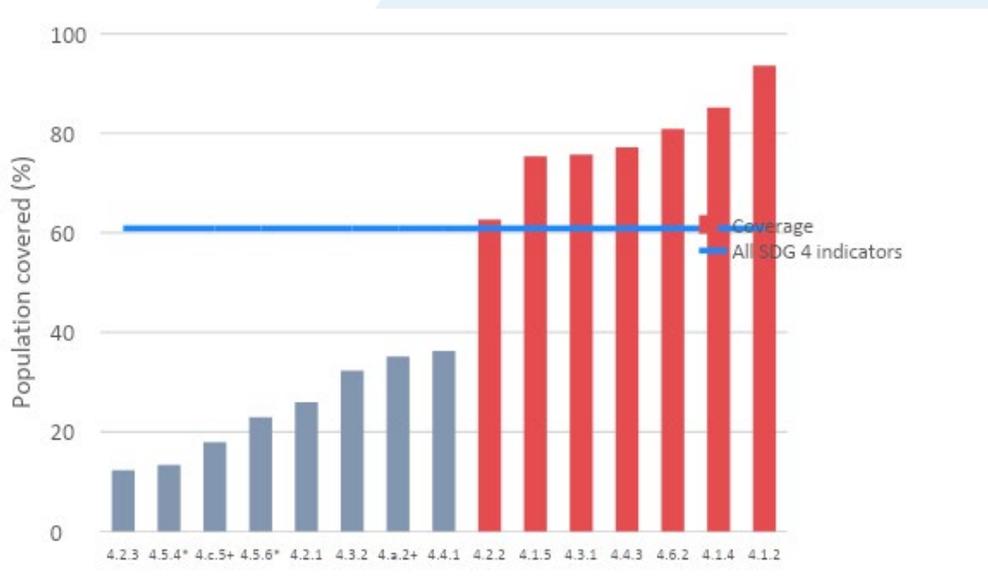
Several SDG 4 indicators can be reported drawing on household and other survey sources (**Table 2**). In fact, survey data cover a large share of the global population for several of these indicators (**Figure 1**).

Table 2: SDG 4 indicators that may be derived using household survey data.

Indicator name	Type
4.1.0 Proportion of children/young people prepared for the future, by sex	Thematic
4.1.2 Completion rate (primary education, lower secondary education, upper secondary education)	Global
4.1.4 Out-of-school rate (1 year before primary, primary education, lower secondary education, upper secondary education)	Thematic
4.1.5 Percentage of children over-age for grade (primary education, lower secondary education)	Thematic
4.2.1 Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex.	Global
4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex	Global
4.2.3 Percentage of children under 5 years experiencing positive and stimulating home learning environments	Thematic
4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	Global
4.3.2 Gross enrolment ratio for tertiary education, by sex	Thematic
4.3.3 Participation rate in technical and vocational programmes (15- to 24-year-olds), by sex	Thematic
4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	Global
4.4.3 Youth/adult educational attainment rates by age group and level of education	Thematic

4.5.4 Expenditure on education per student by level of education and source of funding	Thematic
4.5.6 Expenditure on education by source of funding (public, private, international) as a percentage of GDP	Thematic
4.6.2 Youth/adult literacy rate	Thematic
4.a.2 Percentage of students experiencing bullying in the last 12 months in a) primary and b) lower secondary education	Thematic
4.c.5 Average teacher salary relative to other professions requiring a comparable level of qualification	Thematic

Figure 1. Coverage of SDG 4 indicators produced from surveys as percentage of global population



Notes: * for the household survey component of the indicator; + it includes another source

The UIS publishes indicators estimated from survey data provided by a number of entities (Table 3).

Table 3: SDG 4 indicators that may be derived using household survey data, by provider

Data source/provider	Indicators
UIS Literacy and Educational Attainment Survey: Administers biannually two questionnaires and countries submit responses, drawing on household surveys.	4.4.3, 4.6.2
UIS Education Standards and Methodology Section: Processes microdata from household surveys, mainly DHS and MICS.	4.1.2, 4.1.4, 4.1.5, 4.2.2, 4.3.2, 4.4.3, 4.5.4, 4.5.6, 4.6.2
Economic Commission for Latin America and the Caribbean Processes microdata from household surveys for Latin American countries. ¹	4.1.2, 4.1.4, 4.1.5, 4.2.2, 4.3.2, 4.4.3, 4.6.2
Global Education Monitoring (GEM) Report: Processes microdata from household surveys.	4.1.2, 4.1.4, 4.1.5, 4.2.2, 4.6.2
International Labour Organization (ILO): Provides labour force survey microdata that are processed by UIS. ²	4.3.1, 4.c.5 (denominator)
UNICEF: Collects and processes multipurpose microdata on early childhood development and learning environments.	4.2.1, 4.2.3
International Telecommunication Union (ITU): Processes national household survey microdata on ICT skills.	4.4.1
World Health Organization (WHO): Collects and processes multipurpose microdata from two surveys on school health: the Health Behaviour in School-aged Children (HBSC) survey and the Global School-based Student Health Survey (GSHS).	4.a.2

Note: DHS = Demographic and Health Survey.

CHALLENGES AND POTENTIAL SOLUTIONS

A research and development agenda aimed at enhancing the use of surveys within educational information systems could contribute to a more holistic understanding of educational processes and outcomes, enabling better-informed policies and decisions in countries. But implementing such an agenda at a national level presents significant challenges. This summary explores these constraints and discusses issues related to survey instruments, educational attainment, reference periods, individual background information, literacy and skills.

Non-harmonized survey instruments

¹More details in the conference background document by ECLAC: 1 UIS/ESC/BPHHS.1.

²More details in the conference background document by UIS on labour force surveys: 1 UIS/ESC/BPHHS.3.

The effectiveness of a survey depends on the questions it asks. Questions should be consistent across surveys and follow similar formats when possible. However, variations in response categories can limit the disaggregation of education indicators by level. Additionally, some education programmes, such as pre-primary and technical education, may not be captured in surveys, affecting the calculation of certain SDG indicators. Potential solutions include the following:

- Introduce dialogue in a country between the national statistical office, the education ministry and any technical partner at the drafting stage of the survey questionnaire to ensure that:
 - Education categories in survey items cover all major national education programmes, including non-formal ones, allowing respondents to report current attendance in or attainment of these programmes.
 - The questions are aligned with the International Standard Classification of Education (ISCED) to facilitate comparative analysis.
 - Survey items inquire about the highest grade attained or currently attended and whether the students have completed the highest grade attended.
 - Cross-national surveys ensure that survey items related to education attendance are linked to specific school years to facilitate processing and interpretation.

Different reference periods

Variations in reference periods for educational data collection can affect comparability between surveys. Potential solutions include the following:

- Align reference periods for data collection with SDG 4 indicators, for example to record formal education participation use reporting based on school years.
- Collaborate with ILO to align across labour force surveys the reference period for SDG global indicator 4.3.1.

Quality and comparability of background information

Sufficient data on household and individual background information are essential for disaggregating education indicators and ensuring accurate calculations. Issues like age misreporting and differences in defining socioeconomic factors like household wealth, migration and disability can affect comparability across surveys. Potential solutions include the following:

- Gather data on the respondent's month of birth, along with the interview date, to calculate the age at the beginning of the school year.
- Collect contextual information using existing international guidelines (e.g. the Washington Group on disability questions).
- Work in close collaboration with the Inter-Secretariat Working Group on Household Surveys (ISWGHS).

Literacy, knowledge and skills

Monitoring learning outcomes and skills poses measurement and comparability challenges. Survey-based measurements of literacy vary in terms of self-reported and direct measures, and the choice of questions and populations assessed can affect comparability. Potential solutions include the following:

- Provide guidance with examples of questions that could be used for comparability.

Household education expenditure

Monitoring household expenditure on education is essential for monitoring SDG indicators 4.5.4 and 4.5.6. However, collecting accurate expenditure data via surveys is challenging due to respondents' recall accuracy and willingness to share financial information. Surveys differ in the types of expenses they capture and their recall periods. Potential solutions include the following:

- Develop guidelines for a standard set of questions on education expenditure for household income and expenditure surveys.

Availability and accessibility of survey data

Access to survey and census data, including microdata and metadata, is vital for their effective use. Many countries do not make their data accessible, limiting cross-country analysis. International repositories like the International Household Survey Network (IHSN) provide a platform for data dissemination, but metadata often lack information needed to assess survey methodology and coverage. Potential solutions include the following:

- Grant the UIS, as the custodian agency, data files available for public use upon registration and agreement to basic conditions while ensuring data security and privacy.
- Publish complete metadata publicly, even if microdata accessibility is restricted, within international survey repositories.
- Utilize tools and standards such as the IHSN's NADA software and the Data Documentation Initiative (DDI) international codebook standard to facilitate data cataloguing, repository establishment and metadata alignment.
- Establish and develop a household survey data repository with the collaboration of Member States, ensuring accessibility while maintaining data security and privacy.

Addressing numerous challenges to household survey effective implementation and utilization is essential to ensure reliable and meaningful data for monitoring progress towards SDG 4.

AGENDA FORWARD

Household and other surveys and censuses play a crucial role in monitoring SDG 4. While progress has been made in increasing the availability and relevance of surveys for SDG 4 monitoring, there are still challenges related to data quality, comparability and coverage. To maximize the potential of household surveys for informing SDG 4 monitoring, the agenda forward should include the potential solutions listed in the previous section, by which governments and international partners can unlock the full potential of household surveys in monitoring SDG 4, ensuring the availability of high-quality, comparable and relevant data for informed decision-making and sustainable development.

Implementing these potential solutions for addressing challenges related to using household surveys in education indicators requires a comprehensive strategy that involves collaboration, capacity building and standardization. Here is a summary of the strategies to implement these solutions effectively:

- Raise awareness of the opportunities that surveys offer for generating education statistics:
 - Raise awareness among policymakers, researchers and the public about the importance of high-quality survey-based data on education for evidence-based decision-making.
 - Advocate for continued financial and technical support for household surveys in education.
- Establish a standardized set of modular survey instruments covering all major national education programmes, which can be administered individually or as part of an existing survey:
 - Ensure that questions on education programmes are aligned with ISCED.
 - Ensure that survey questions related to education attendance are linked to specific school years, aligned with the reference periods for SDG 4 indicators.
 - Include the respondent's month of birth and interview date, to calculate the precise age at the beginning of the school year.
 - Integrate simple enumerator-assessed literacy tests alongside self-assessed measures.
 - Ensure that data on education expenditure, including tuition fees and all relevant expenses, follow global guidelines for better comparability. Link education expenditures to individual students within households for more precise data.
- Develop guidelines for data collection and processing to ensure consistency and comparability of education indicators.
 - Expand literacy assessments to all youth and adults, not just those below a certain level of educational attainment.
 - Develop standardized definitions and measures for socioeconomic factors such as household wealth, migration and disability to enhance comparability across surveys.
- Establish and develop the inventory with the collaboration of Member States, ensuring accessibility while maintaining data security and privacy.