Sources of Education data

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Sources of education data

- Administrative data collection
  - Regular (School census, reporting)
  - Ad-hoc
- School inspection
- Sample surveys
- Population censuses
- Research and case studies

Sources of education data

Supply-side Information

Schools

- **School info**
- **Student info**
- **Teacher info**
- **Achievement**

Administrative data collection and school inspection

Education providers

- Provision to education (finance)
- Management
- Policy
- Curriculum

Reports

Demand-side Information

Households

- **Socio-economic**
- **Health and nutrition**
- **Relevant info for student's participation, achievement, drop-out**
- **Awareness and value to education**
- **External efficiency (link to labour market**

Censuses and Surveys

Research and case studies - Findings

Administrative data collection

- Main source of education data
- Data are collected by both regular and ad-hoc manner
- Regular
  - School census (can be more than once a year)
  - Other types of reporting (financial, performance data, etc..)
- Ad-hoc
  - Sometimes depend on the need, data are collected by ad-hoc way (e.g.. Urgent policy intervention)

Administrative data collection

- For effective and efficient resource allocation

- To measure the performance of education system

- Institutional-based data

- Some of the key indicators which can be produced from the data collected by this methods are:
  - Resource allocation (Pupil-teacher ratio, student-text book ratio, class size)
  - Performance (Repeaters, promotes)
  - Teachers (Quality and experience of teachers)
  - Education finance (Contribution and allocation of education finance)

Administrative data collection

- Issues on accuracy and coverage of the data

- However, it is an institutionalized mechanism and data are based on actual counts

- Useful for administrative planning and resource allocation which requires actual data

- Data can be available in time-series (annually)

School inspection

- Useful way to assess the quality of education provided at school level
- However, it requires systematic procedures to transform observations and findings to measurable indicators
- Required to develop appropriate checklist, forms, questionnaires, experience and skill of inspectors are important (tools as well as capacity building)
- This approach is useful to assess the indicators like
  - Governance of school resources
  - Teaching-learning practices
  - Teachers and learners' characteristics
  - School discipline
  - Environmental and physical school situation which effect the quality of teaching-learning

Surveys

- **Educational surveys** – to gather a set of educational information together with other socio-economic data to answer specific policy questions (Student assessment survey, Literacy assessment survey)

- **Surveys which include an module on education** – also collect educational data to support main objective of the survey (Labour force survey, Household expenditure survey)

- Provide a snapshot of the situation at specific time

- Could be used to cross-check the data from other data collections (e.g. Administrative data collection)

Educational Surveys

- Most popular way of assessing quality of education
- There are many large-scale multi-national surveys to assess the learners' performance
  - PISA, TIMMS, PIRLS, IALS
- Costly, complicated, required special skills and expertise
- If properly done, it can provide very reliable and comprehensive information on quality of education especially learning achievement

Surveys with an educational module

- Main purpose is to collect educational data to support the main survey's objectives

- Can provide some kinds of information on quality aspect as well as socio-economic background of learners

- Useful as supplementary information to analyze the quality of education data

- Measuring external efficiency

- Cost-effective to include special module designed to assess the quality of education (module on literacy assessment)

Household and population censuses

- Provide baseline data
- Main sources of population data
- Educational related data which are collected in censuses:
  - Literacy
  - Educational attainment
  - Attendance
- Additional sample survey can be conducted by targeting sub-set of population from the census to have more in-depth information

Research and case studies

- Data are collected in connection with studies of educational problems

- Availability and coverage of the data would be limited

- Focus on specific subject area to address specific issues

- As a supplementary information to understand the specific issues in more in-depth

Key Indicators that can be calculated using HH surveys

- Adult Literacy Rate (for population aged 15 and above).
- Youth Literacy Rate (for population aged 15-24).
- Illiteracy rates for various sub-groups in the population, especially for vulnerable groups such as females, ethnic minorities, disabled persons, and those from poor families and remote areas.
- Educational attainment, measured by the number of years attended school or the highest level of schooling or the proportion of adult population who completed primary or secondary school (adult primary and secondary school completion rates).
- Gross and net intake rates for primary grade one.
- Gross and net Attainment rates by education level or by age.
- Transition rates (from primary to lower secondary, and lower to upper secondary level).
- Student flow rates (promotion, repetition and dropout rates), and
- out of school children.

Administrative data and Census/Household Data Complement each other
Make best Use of them for better understanding of Education Phenomena

SDG-4 Indicators
(can be derived from Household Surveys and Censuses)

Indicator number	Indicator clause	HHS is only the source	HHS is one of the sources
Target 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes			
4.1.3	Gross intake ratio to the last grade (primary education, lower secondary education)		√
4.1.4	Completion rate (primary education, lower secondary education, upper secondary education)	√	
4.1.5	Out-of-school rate (primary education, lower secondary education, upper secondary education)		√
4.1.6	Percentage of children over age for grade (primary education, lower secondary education)		√
Target 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education			
4.2.1	Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	√	
4.2.2	Participation rate in organized learning (one year before the official primary entry age), by sex	√	√
4.2.3	Percentage of children under 5 years experiencing positive and stimulating home learning environments	√	
4.2.4	Gross early childhood education enrolment ratio in (a) pre-primary education and (b) early childhood educational development		√

SDG-4 Indicators
(can be derived from Household Surveys and Censuses)

Indicator number	Indicator clause	HHS is only the source	HHS is one of the sources
Target 4.3 By 2030, ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university			
4.3.1	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex		√
4.3.2	Gross enrolment ratio for tertiary education by sex		√
4.3.3	Participation rate in technical vocational programmes (15 to 24 year olds) by sex		√
Target 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship			
4.4.1	Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill		√
4.4.3	Youth/adult educational attainment rates by age group, economic activity status, levels of education and programme orientation		

SDG-4 Indicators
(can be derived from Household Surveys and Censuses)

Indicator number	Indicator clause	HHS is only the source	HHS is one of the sources
Target 4.5 By 2030, eliminate sex disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations			
4.5.1	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict affected, as data become available) for all education indicators on this list that can be disaggregated		
4.5.2	Percentage of students in primary education whose first or home language is the language of instruction		√
4.5.4	Education expenditure per student by level of education and source of funding		
Target 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy			
4.6.1	Percentage of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex		√
4.6.2	Youth/adult literacy rate	√	
4.6.3	Participation rate of illiterate youth/adults in literacy programmes		√

SDG-4 Indicators
(can be derived from Household Surveys and Censuses)

Indicator number	Indicator clause	HHS is only the source	HHS is one of the sources
Target 4.7. By 2030, that all learners acquire the knowledge and skills needed to promote sustainable development, including among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development			
4.7.1	Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) student assessment		√
4.7.2	Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability		√
4.7.3	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience		√
4.7.4	Percentage of schools that provide life skill-based HIV and sexuality education		√
4.7.5	Extent to which the framework on the World Programme on Human Rights Education is implemented nationally		√