

Serbia

Region: Europe and Central Asia
Income Group: Upper Middle Income

Source for region and income groupings: World Bank 2018

National Education Profile 2018 Update



OVERVIEW

In Serbia, the academic year begins in September and ends in July, and the official primary school entrance age is 7. The system is structured so that the primary school cycle lasts 4 years, lower secondary lasts 4 years, and upper secondary lasts 4 years. Serbia has a total of 807,000 pupils enrolled in primary and secondary education. Of these pupils, about 269,000 (33%) are enrolled in primary education. Figure 3 shows the highest level of education reached by youth ages 15-24 in Serbia. Although youth in this age group may still be in school and working towards their educational goals, it is notable that approximately 0% of youth have no formal education and 2% of youth have attained at most incomplete primary education, meaning that in total 2% of 15-24 year olds have not completed primary education in Serbia.

FIG 1. EDUCATION SYSTEM

School Entrance Age:

Primary school - Age 7

Duration and Official Ages for School Cycle:

Primary : 4 years - Ages 7 - 10

Lower secondary : 4 years - Ages 11 - 14

Upper secondary : 4 years - Ages 15 - 18

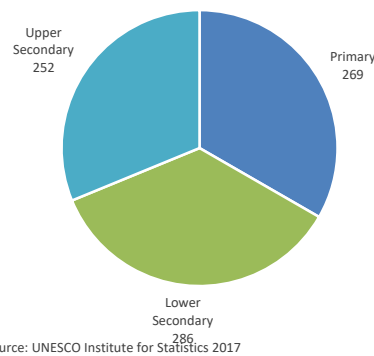
Academic Calendar:

Starting month : September

Ending month : July

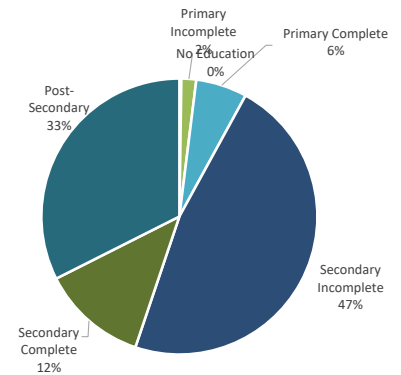
Data source: UNESCO Institute for Statistics

FIG 2. NUMBER OF PUPILS BY SCHOOL LEVEL
(IN 1000S)



Data Source: UNESCO Institute for Statistics 2017

FIG 3. EDUCATIONAL ATTAINMENT, YOUTH
AGES 15-24

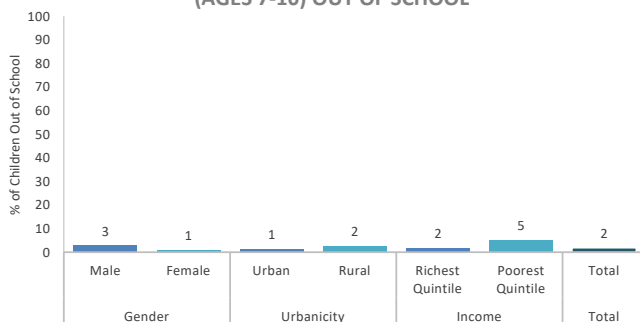


Data source: EPDC extraction of MICS dataset 2011

SCHOOL PARTICIPATION AND EFFICIENCY

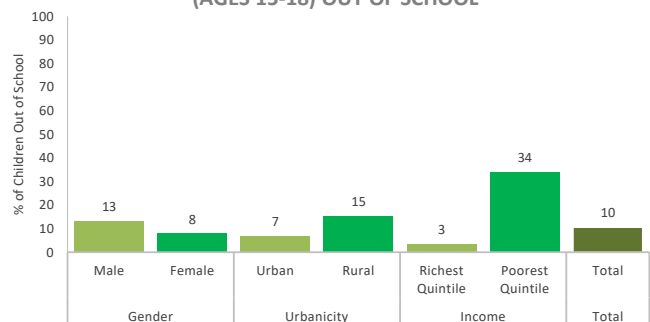
The percentage of out of school children in a country shows what proportion of children are not currently participating in the education system and who are, therefore, missing out on the benefits of school. In Serbia, 2% of children of official primary school ages are out of school as shown in Figure 4, which also considers the proportion of children out of school by different characteristics wherever data is available. For example, Figure 4 shows that approximately 3% of boys of primary school age are out of school compared to 1% of girls of the same age. For children of primary school age in Serbia, the biggest disparity can be seen between the poorest and the richest children. Figure 5 looks at the percentage of youth of secondary school ages who are out of school in Serbia. Nearly 8% of female youth of secondary school age are out of school compared to 13% of male youth of the same age. For youth of secondary school age, the biggest disparity can be seen between the poorest and the richest youth.

FIG 4. PERCENTAGE OF CHILDREN OF PRIMARY SCHOOL AGE
(AGES 7-10) OUT OF SCHOOL



Data source: EPDC extraction of MICS dataset 2011

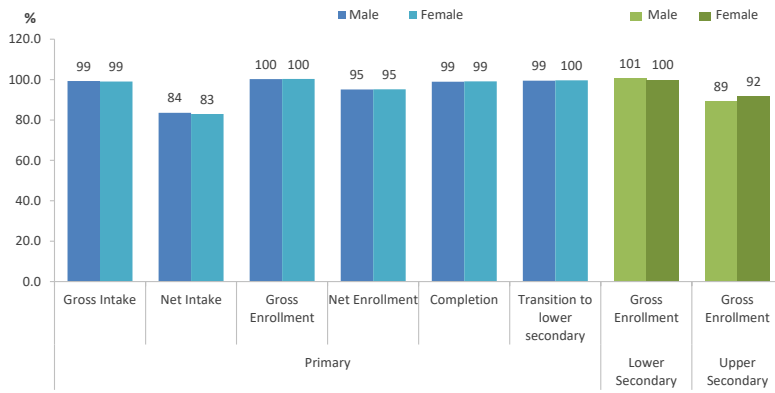
FIG 5. PERCENTAGE OF CHILDREN OF SECONDARY SCHOOL AGE
(AGES 15-18) OUT OF SCHOOL



Data source: EPDC extraction of MICS dataset 2011

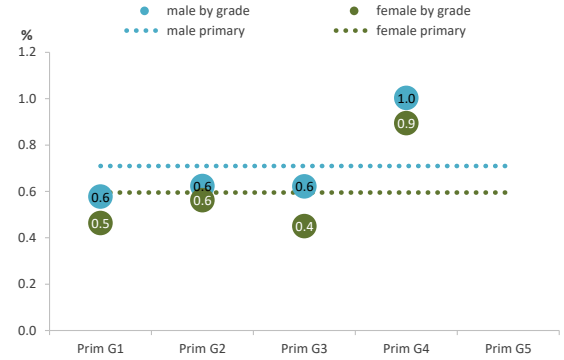
Figures 6 and 7 look at indicators of participation, completion, and progression in the education system. Figure 6 displays gross indicators (which include under- and over-age students) and net indicators (which include only on-time students of official school age) for student intake, participation, and flows. In Serbia, the gross enrollment rate in primary education is 100% for both girls and boys combined. This increases to 100% in lower secondary, with a student transition rate to secondary school of 100%. In Serbia, the primary net enrollment rate is 95% and the primary completion rate is 99%. Both of these indicators provide a sense of the progress a country is making towards universal primary education -- a key UN Millenium Development Goal -- and, for Serbia, suggest that the country has yet to achieve universal primary education. Figure 7 displays the repetition rate in primary education, showing the specific grades in which students are more likely to repeat. It suggests that of the first 5 grades of primary in Serbia, students are more likely to repeat grade 4. The repetition rate in grade 4 is 1.0% (for both males and females), which is 0.3 points higher than the average repetition rate across primary grades of 0.7%.

FIG 6. STUDENT INTAKE AND FLOW FROM PRIMARY TO SECONDARY SCHOOLS



Data sources: UNESCO Institute for Statistics (UIS), EPDC calculation based on UIS data (see Data Table for year)

FIG 7. STUDENT REPETITION BY GRADE AND LEVEL IN PRIMARY SCHOOL

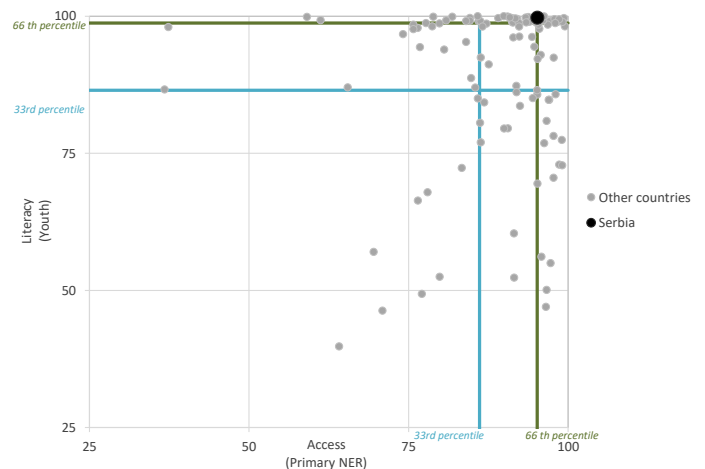


Data source: EPDC calculation based on UIS data (see Data Table for year)

LEARNING

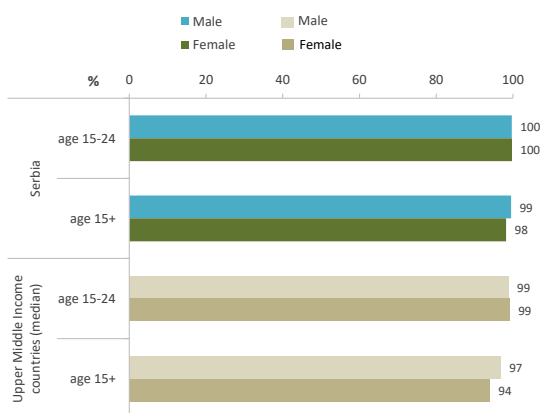
This section provides information on indicators of learning, which lend insight into the quality of educational provision. In this profile, learning is measured through literacy rates, which are important because literacy is a foundational skill needed to attain higher levels of learning, and national performance on learning assessments. Figure 8 demonstrates where Serbia stands in comparison to other low and middle income countries in access to education, measured as the primary school net enrollment rate, and youth literacy. Compared to other countries, Serbia ranks at the 68 percentile in access and at the 90 percentile in learning. Figure 9 compares youth and adult literacy rates and shows that, in Serbia, the literacy rate is 100% among the youth population; this is higher than the average youth literacy rate in other upper middle income countries. Figure 10 looks at the most recent TIMSS math assessment results for Serbia in Grade 4, administered in 2015. It displays the percentage of test takers that have fallen below the lowest performance levels and the percentage of test takers that have exceeded the highest performance levels in these assessments. To learn about assessment data and what competencies correspond with performance benchmarks, see www.epdc.org/data-about-epdc-data/about-epdc-learning-outcomes-data.

FIG 8. COMPARISON OF ACCESS AND LITERACY



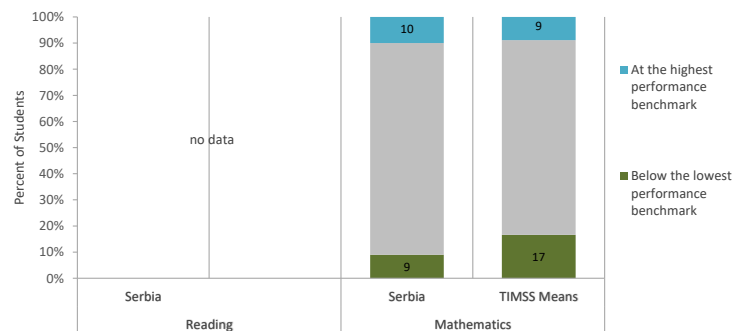
Data source: UNESCO Institute for Statistics (UIS) (see Data Table for year)

FIG 9. LITERACY RATE AMONG YOUTH AND ADULT POPULATION



Data source: UNESCO Institute for Statistics (UIS) (see Data Table for year)

FIG 10. PERFORMANCE ON LEARNING ASSESSMENTS

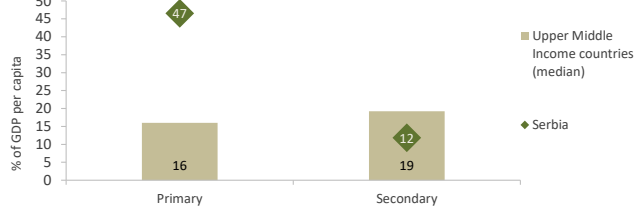


Data source: TIMSS 2015

EDUCATION EXPENDITURE

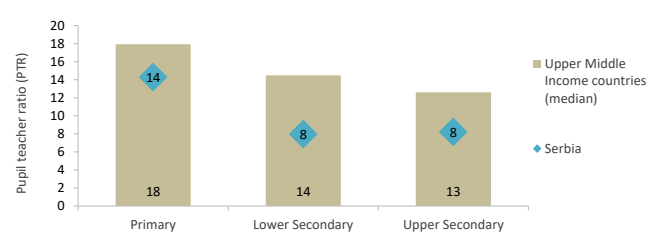
Figures 11 and 12 compare Serbia's per pupil expenditure (PPE) and pupil teacher ratio (PTR), where data is available, to those of other upper middle income countries. PPE indicates a country's commitment to education at each school level. In Serbia, PPE in primary education as a percentage of GDP per capita is 47%, higher than the median PPE in primary for upper middle income countries, which is 16%. In Serbia, the PPE in primary is higher than the PPE in secondary. PTR is a proxy learning quality and resource availability indicator. In Serbia, the PTR in primary education is 14.3, meaning that on average there is one teacher for every 14.3 primary school students. This is lower than the median PTR in primary for upper middle income countries, which is 18. In Serbia, the PTR in primary is higher than the PTR in secondary.

FIG 11. PER PUPIL EXPENDITURE (PPE) BY SCHOOL LEVEL (% OF GDP PER CAPITA)



Data source: UNESCO Institute for Statistics (UIS) (see Data Table for year)

FIG 12. PUPIL TEACHER RATIO (PTR) BY SCHOOL LEVEL



Data source: UNESCO Institute for Statistics (UIS) (see Data Table for year)

DATA TABLE

In this table, the values of different education indicators for Serbia are compared to all countries, to Europe & Central Asia, and to low and middle income countries. The percentile rank that is given indicates Serbia's standing relative to these country groups. A higher percentile rank indicates better relative performance than a lower percentile rank. Percentile rankings above 66% are considered high and colored in green, rankings between 33% and 66% are considered average and colored in yellow, and rankings below 33% are considered low and colored in red. For example, the gross enrollment rate for females in primary education in Serbia is 100%. For this indicator, Serbia ranks in the 41st percentile relative to all countries, meaning that 41% of countries have lower gross enrollment rates than Serbia.

KEY

<- needs improvement ----- can improve further -->

below 33% between 33th and 66th percentile above 66%

PERCENTILE RANK RELATIVE TO...

| INDICATOR | VALUE | YEAR | PERCENTILE RANK RELATIVE TO... | | | DATA SOURCE |
|--|-------|------|--------------------------------|-----------------------|------------------------|--|
| | | | All Countries | Europe & Central Asia | Low and Middle Income† | |
| Literacy rate, 15+, Female | 98 | 2016 | 78% | 33% | 83% | UNESCO Institute for Statistics (UIS) |
| Literacy rate, 15+, Male | 99 | 2016 | 87% | 44% | 89% | UNESCO Institute for Statistics (UIS) |
| Literacy rate, 15-24, Female | 100 | 2016 | 84% | 44% | 89% | UNESCO Institute for Statistics (UIS) |
| Literacy rate, 15-24, Male | 100 | 2016 | 85% | 50% | 89% | UNESCO Institute for Statistics (UIS) |
| Gross intake rate, Primary, Female | 99 | 2017 | 40% | 56% | 37% | UNESCO Institute for Statistics (UIS) |
| Gross intake rate, Primary, Male | 99 | 2017 | 37% | 62% | 32% | UNESCO Institute for Statistics (UIS) |
| Net intake rate, Primary, Female | 83 | 2017 | 66% | 66% | 75% | UNESCO Institute for Statistics (UIS) |
| Net intake rate, Primary, Male | 84 | 2017 | 68% | 66% | 75% | UNESCO Institute for Statistics (UIS) |
| Gross enrollment rate, Primary, Female | 100 | 2017 | 41% | 41% | 42% | UNESCO Institute for Statistics (UIS) |
| Gross enrollment rate, Primary, Male | 100 | 2017 | 32% | 47% | 32% | UNESCO Institute for Statistics (UIS) |
| Gross enrollment rate, Lower Secondary, Female | 100 | 2017 | 61% | 82% | 74% | UNESCO Institute for Statistics (UIS) |
| Gross enrollment rate, Lower Secondary, Male | 101 | 2017 | 60% | 70% | 76% | UNESCO Institute for Statistics (UIS) |
| Gross enrollment rate, Upper Secondary, Female | 92 | 2017 | 61% | 52% | 81% | UNESCO Institute for Statistics (UIS) |
| Gross enrollment rate, Upper Secondary, Male | 89 | 2017 | 63% | 41% | 82% | UNESCO Institute for Statistics (UIS) |
| Net enrollment rate, Primary, Female | 95 | 2017 | 62% | 68% | 71% | UNESCO Institute for Statistics (UIS) |
| Net enrollment rate, Primary, Male | 95 | 2017 | 60% | 68% | 72% | UNESCO Institute for Statistics (UIS) |
| Net enrollment rate, Secondary, Female | 93 | 2017 | 81% | 81% | 96% | UNESCO Institute for Statistics (UIS) |
| Net enrollment rate, Secondary, Male | 92 | 2017 | 81% | 81% | 97% | UNESCO Institute for Statistics (UIS) |
| Repetition rate, Primary, Female [‡] | 1 | 2016 | 73% | 24% | 80% | Education Policy and Data Center (EPDC)* |
| Repetition rate, Primary, Male [‡] | 1 | 2016 | 77% | 24% | 83% | Education Policy and Data Center (EPDC)* |
| Dropout rate, Primary, Female [‡] | 2 | 2016 | 81% | 59% | 92% | Education Policy and Data Center (EPDC)* |
| Dropout rate, Primary, Male [‡] | 1 | 2016 | 90% | 89% | 99% | Education Policy and Data Center (EPDC)* |
| Survival rate, to Prim G5, Female | | | | | | |
| Survival rate, to Prim G5, Male | | | | | | |
| Completion rate, Primary, Female | 99 | 2017 | 66% | 56% | 71% | UNESCO Institute for Statistics (UIS) |
| Completion rate, Primary, Male | 99 | 2017 | 69% | 56% | 75% | UNESCO Institute for Statistics (UIS) |
| Transition rate, to Secondary, Female | 100 | 2016 | 77% | 76% | 85% | Education Policy and Data Center (EPDC)* |
| Transition rate, to Secondary, Male | 99 | 2016 | 76% | 58% | 87% | Education Policy and Data Center (EPDC)* |
| Pupil teacher ratio, Primary [‡] | 14 | 2017 | 74% | 83% | 92% | UNESCO Institute for Statistics (UIS) |
| Pupil teacher ratio, Lower Secondary [‡] | 8 | 2017 | 90% | 85% | 96% | UNESCO Institute for Statistics (UIS) |
| Pupil teacher ratio, Upper Secondary [‡] | 8 | 2017 | 90% | 85% | 94% | UNESCO Institute for Statistics (UIS) |
| Public education expenditure per pupil (% of GDP per capita), Primary | 47 | 2015 | 98% | 100% | 98% | UNESCO Institute for Statistics (UIS) |
| Public education expenditure per pupil (% of GDP per capita), Secondary | 12 | 2015 | 20% | 15% | 25% | UNESCO Institute for Statistics (UIS) |
| Percentage of children out of school, Primary, Poorest Quintile [‡] | 5 | 2011 | 79% | 50% | 80% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Secondary, Poorest Quintile [‡] | 34 | 2011 | 54% | 15% | 55% | EPDC extraction of DHS dataset |
| Percentage of children out of school, Primary, Richest Quintile [‡] | 2 | 2011 | 69% | 50% | 70% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Secondary, Richest Quintile [‡] | 3 | 2011 | 87% | 36% | 88% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Primary, Urban [‡] | 1 | 2011 | 95% | 86% | 95% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Secondary, Urban [‡] | 7 | 2011 | 89% | 36% | 88% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Primary, Rural [‡] | 2 | 2011 | 90% | 79% | 89% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Secondary, Rural [‡] | 15 | 2011 | 77% | 22% | 76% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Primary, Male [‡] | 3 | 2011 | 77% | 67% | 84% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Secondary, Male [‡] | 13 | 2011 | 77% | 15% | 78% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Primary, Female [‡] | 1 | 2006 | 91% | 100% | 99% | Multiple Indicator Cluster Survey (MICS Dataset) |
| Percentage of children out of school, Secondary, Female [‡] | 8 | 2011 | 87% | 36% | 86% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Primary, Total [‡] | 2 | 2011 | 84% | 79% | 91% | EPDC extraction of MICS dataset |
| Percentage of children out of school, Secondary, Total [‡] | 10 | 2011 | 82% | 29% | 83% | EPDC extraction of MICS dataset |

† Includes World Bank classified low and middle income countries

‡ Lower data values indicate better performance on these indicators

* EPDC calculation based on UIS data

GLOSSARY

INDICATORS AND DEFINITIONS

| | |
|---|---|
| Completion Rate | The total number of students completing (or graduating from) the final year of primary or secondary education, regardless of age, expressed as a percentage of the population of the official primary or secondary graduation age. |
| Dropout Rate | Proportion of pupils from a cohort enrolled in a given grade at a given year who are no longer enrolled in the following school year. |
| Educational Attainment | The highest level of education an individual has achieved. |
| Gross Enrollment Rate (GER) | Total enrollment in a specific level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education in a given school-year. Often higher than 100% because of repetition and overage students. |
| Gross Intake Ratio (GIR) | Total number of new entrants in the first grade of primary education, regardless of age, expressed as a percentage of the population at the official primary school-entrance age. |
| Literacy Rate | The ability to read and write with understanding a simple statement related to one's daily life. Literacy often involves a continuum of reading and writing skills. |
| Net Enrollment Rate (NER) | Enrollment of the official age-group for a given level of education expressed as a percentage of the corresponding population. |
| Net Intake Rate (NIR) | New entrants in the first grade of primary education who are of the official primary school entrance age, expressed as a percentage of the population of the same age. |
| Percentage of Children Out of School | Proportion of children of a given age group who are not currently enrolled in any schooling. |
| Public Education Expenditure per Pupil (PPE) | Total number of pupils/Total education budget. |
| Pupil Teacher Ratio (PTR) | Average nationally of: Total number of pupils/Total number of teachers. Rates may vary significantly throughout the country. |
| Repetition Rate | Proportion of pupils from a cohort enrolled in a given grade at a given school-year who study in the same grade in the following school-year. |
| Survival Rate | Percentage of a cohort of pupils enrolled in the first grade level or cycle of education in a given school year who are expected to survive through a certain grade regardless of repetition. |
| Transition Rate | The number of pupils admitted to the first grade of a higher level of education in a given year, expressed as a percentage of the number of pupils enrolled in the last grade of the lower level of education in the previous year. |
| Both | Measures using "Both" in their title combine male and female rates. |
| Poorest Quintile | Proportion of pupils who belong to the bottom 20% of a country's population, based on household wealth measured by an index of household assets. |
| Richest Quintile | Proportion of pupils who belong to the top 20% of a country's population, based on household wealth measured by an index of household assets. |

DATA SOURCES AND LEARNING ASSESSMENTS

| | |
|--|---|
| Demographic and Health Survey (DHS) | Nationally-representative household surveys that provide data for a wide range of indicators in the areas of population, health, and nutrition. They have large sample sizes (between 3,000 to 50,000 households) and are typically conducted about every 5 years in developing countries. It is funded by USAID and implemented by ICF International. |
| Multiple Indicator Cluster Survey (MICS) | Household surveys that produce internationally comparable estimates of a range of indicators in the areas of health, education, child protection and HIV/AIDS. It is developed by UNICEF to provide statistically rigorous data on the situation of children and women. Since the mid-1990s, there has been 4 rounds of the MICS survey, with the latest in 2009-2011. |
| UNESCO Institute for Statistics (UIS) | Statistical office of UNESCO and the primary UN depository for cross-nationally comparable statistics on education, science and technology, culture, and communication covering more than 200 countries and territories. It was established in 1999 and collects data directly from the national statistics agencies of its members. |
| Analysis Programme of the CONFEMEN Education Systems (PASEC)* | PASEC has been administered in 13 countries in Francophone West Africa. PASEC is designed to assess student abilities in mathematics and reading French. The program is managed by CONFEMEN (La Conférence des Ministres de l'Éducation des pays ayant le français en partage) and has been in place since 1993. It is typically administered to students in 2nd and 5th grades. |
| Progress in International Reading Literacy Study (PIRLS)* | The PIRLS reading assessment, which is carried out by the International Association for the Evaluation of Educational Achievement (IEA) is an assessment of reading comprehension skills. In most countries, PIRLS is administered in school to children in the 4th grade of formal school, every five years since 2001. In a small number of countries, it may be administered at a different grade. |
| Trends in International Mathematics and Science Study (TIMSS)* | The TIMSS math assessment, which is carried out by the International Association for the Evaluation of Educational Achievement (IEA), assesses pupils knowledge and understanding of mathematical concepts. TIMSS has been administered to children in the 4th and 8th grades of formal schools every four years since 1995. In a small number of countries, it may be administered at different grade levels. |
| Second Regional Comparative and Explanatory Study (SERCE)* | The SERCE assessment was administered in 16 countries in Latin America and the Caribbean by the Latin American Laboratory for Assessment of the Quality of Education (LLECE) in 2006. SERCE was administered to children in the 3rd and 6th grades of formal school. It measures student ability in the areas of reading, mathematics, and science. |
| Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)* | The SACMEQ assessment is designed to assess student abilities in mathematics and reading English. SACMEQ reading and math assessments have been carried out in countries in Anglophone East Africa in 1995, 2000, and 2007. SACMEQ is administered in school to children in the 6th grade of formal school. |
| Highest Performance Benchmark* | The highest test-specific performance or learning levels of an assessment. These benchmarks are different for each assessment because each assessment uses different constructs, tools, and procedures. Additionally, assessments vary in the standards for each learning achievement benchmark, the number of benchmarks according to which test-takers can be evaluated, and the youth populations they test. |
| Lowest Performance Benchmark* | The lowest test-specific performance or learning levels of an assessment. These benchmarks are different for each assessment because each assessment uses different constructs, tools, and procedures. Additionally, assessments vary in the standards for each learning achievement benchmark, the number of benchmarks according to which test-takers can be evaluated, and the youth populations they test. |

* Learn more about assessment data and what competencies correspond with performance benchmarks at www.epdc.org/data-about-epdc-data/about-epdc-learning-outcomes-data.