

Macedonia

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

, and the official primary school entrance age is 6. The system is structured so that the primary school cycle lasts 5 years, lower secondary lasts 4 years, and upper secondary lasts 4 years. Please note that this represents the official UNESCO-ISCED definition of primary and secondary education, which differs from the national definition. UNESCO definitions are used for all tables and figures, unless otherwise stated. Macedonia has a total of 278,000 pupils enrolled in primary and secondary education. Of these pupils, about 109,000 (39%) are enrolled in primary education.

FIG 1. EDUCATION SYSTEM

School Entrance Age:

Primary school - Age 6

Duration and Official Ages for School Cycle:

Primary : 5 years - Ages 6 - 10

Lower secondary : 4 years - Ages 11 - 14

Upper secondary : 4 years - Ages 15 - 18

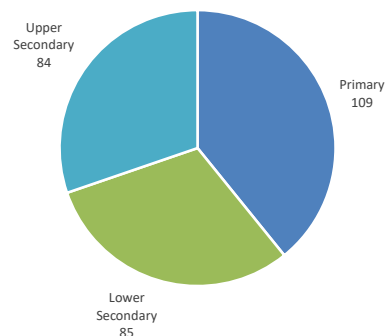
Academic Calendar:

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Data source: UNESCO Institute for Statistics

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



Data Source: UNESCO Institute for Statistics 2015

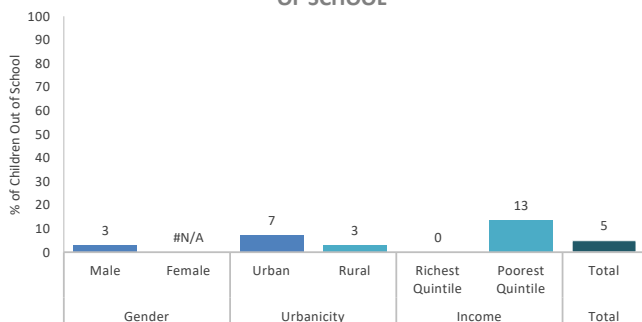
FIG 3. EDUCATIONAL ATTAINMENT, YOUTH
AGES 15-24

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SCHOOL PARTICIPATION AND EFFICIENCY

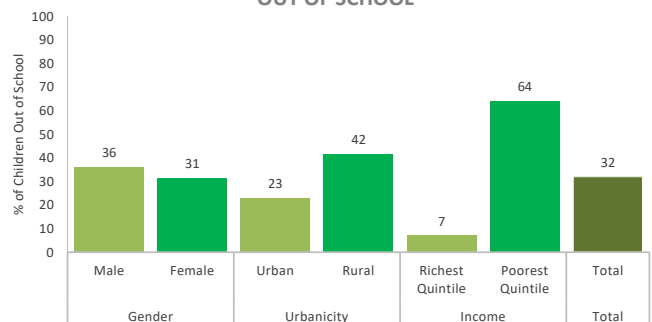
The percentage of out of school children in a country shows what proportion of children are not currently participating in the education system and who are, therefore, missing out on the benefits of school. Figure 5 looks at the percentage of youth of secondary school ages who are out of school in Macedonia. Nearly 31% of female youth of secondary school age are out of school compared to 36% 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. Please note that Figures 4 and 5 make use of the national definition of primary and secondary education, instead of the UNESCO-ISCED definition.

FIG 4. PERCENTAGE OF CHILDREN OF PRIMARY SCHOOL AGE OUT OF SCHOOL



Data source: Multiple Indicator Cluster Survey (MICS Dataset) 2005

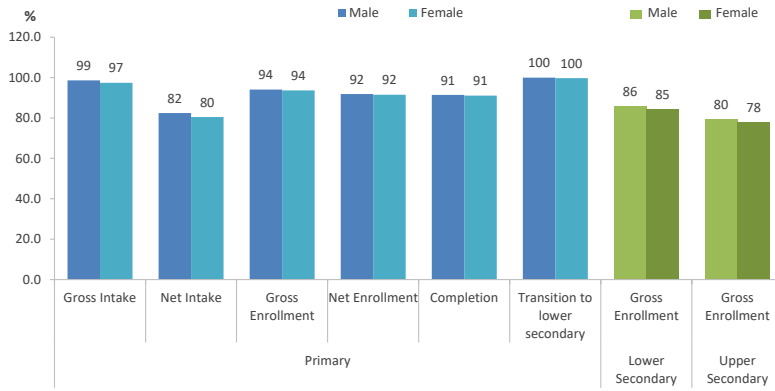
FIG 5. PERCENTAGE OF CHILDREN OF SECONDARY SCHOOL AGE OUT OF SCHOOL



Data source: Multiple Indicator Cluster Survey (MICS Dataset) 2005

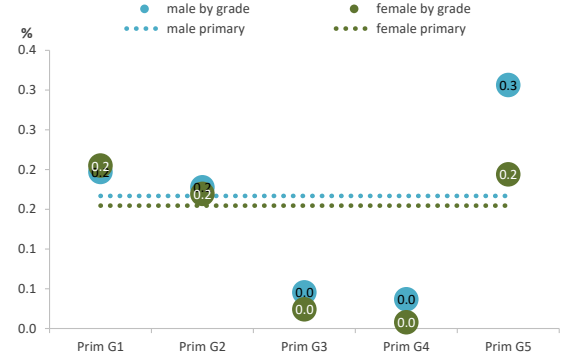
Figures 6 and 7 look at indicators of participation, completion, and progression in the education system. Figure 6 displays gross indicators (which include under- and over-age students) and net indicators (which include only on-time students of official school age) for student intake, participation, and flows. In Macedonia, the gross enrollment rate in primary education is 94% for both girls and boys combined. This decreases to 85% in lower secondary, with a student transition rate to secondary school of 100%. In Macedonia, the primary net enrollment rate is 92% and the primary completion rate is 91%. 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 Macedonia, 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 Macedonia, students are more likely to repeat grade 5. The repetition rate in grade 5 is 0.3% (for both males and females), which is 0.1 points higher than the average repetition rate across primary grades of 0.2%.

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

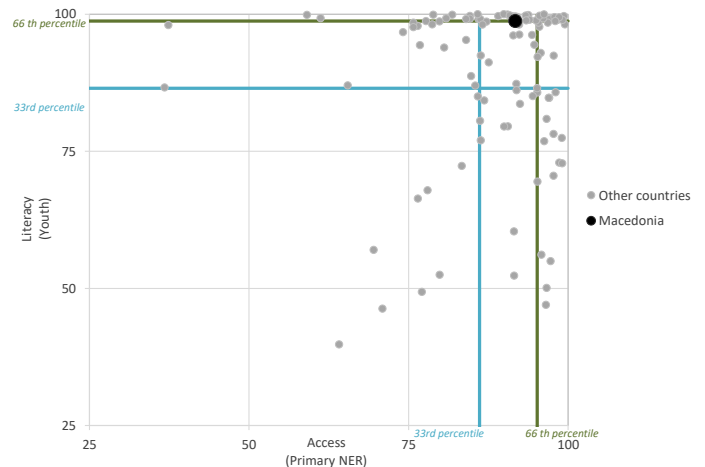


Data source: EPDC calculation based on UIS data (see Data Table for year)

LEARNING

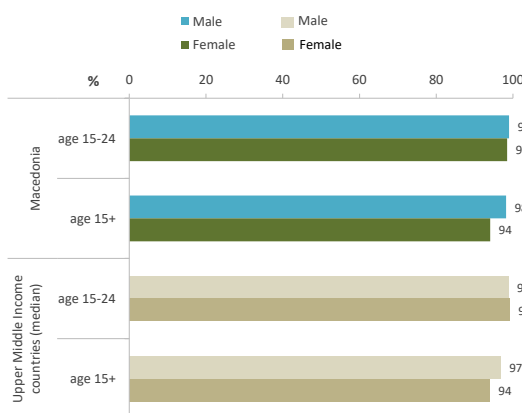
This section provides information on indicators of learning, which lend insight into the quality of educational provision. In this profile, learning is measured through literacy rates, which are important because literacy is a foundational skill needed to attain higher levels of learning, and national performance on learning assessments. Figure 8 demonstrates where Macedonia 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, Macedonia ranks at the 51 percentile in access and at the 66 percentile in learning. Figure 9 compares youth and adult literacy rates and shows that, in Macedonia, the literacy rate is 99% among the youth population; this is lower than the average youth literacy rate in other upper middle income countries.

FIG 8. COMPARISON OF ACCESS AND LITERACY



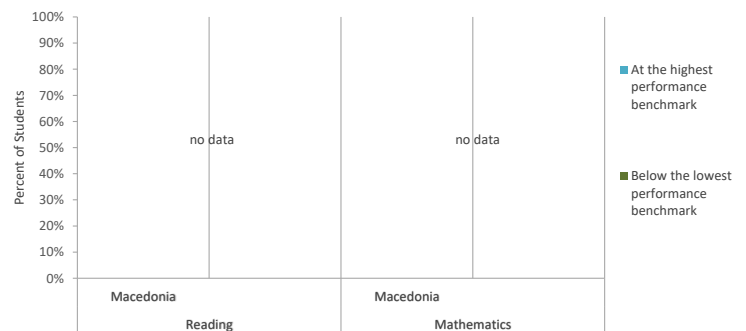
Data source: UNESCO Institute for Statistics (UIS) (see Data Table for year)

FIG 9. LITERACY RATE AMONG YOUTH AND ADULT POPULATION



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

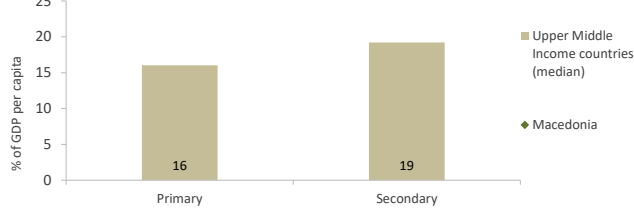
FIG 10. PERFORMANCE ON LEARNING ASSESSMENTS



EDUCATION EXPENDITURE

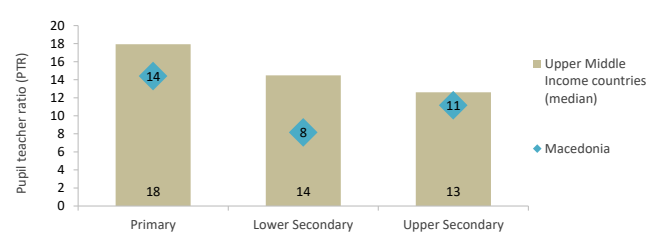
Figures 11 and 12 compare Macedonia's per pupil expenditure (PPE) and pupil teacher ratio (PTR), where data is available, to those of other upper middle income countries. PPE indicates a country's commitment to education at each school level. PTR is a proxy learning quality and resource availability indicator. In Macedonia, the PTR in primary education is 14.4, meaning that on average there is one teacher for every 14.4 primary school students. This is lower than the median PTR in primary for upper middle income countries, which is 18. In Macedonia, 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 Macedonia are compared to all countries, to Europe & Central Asia, and to low and middle income countries. The percentile rank that is given indicates Macedonia'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 Macedonia is 94%. For this indicator, Macedonia ranks in the 18 percentile relative to all countries, meaning that 18% of countries have lower gross enrollment rates than Macedonia. As another example, the survival rate to grade 5 of primary school for males in Macedonia is 97%, and Macedonia ranks in the 73 percentile relative to all countries, in the 50 percentile relative to Europe & Central Asia, and in the 88 percentile relative to low and middle income countries for this indicator.

INDICATOR	VALUE	YEAR	PERCENTILE RANK RELATIVE TO...			DATA SOURCE
			All Countries	Europe & Central Asia	Low and Middle Income†	
Literacy rate, 15+, Female	94	2002	63%	5%	72%	UNESCO Institute for Statistics (UIS)
Literacy rate, 15+, Male	98	2002	71%	0%	77%	UNESCO Institute for Statistics (UIS)
Literacy rate, 15-24, Female	98	2002	48%	5%	58%	UNESCO Institute for Statistics (UIS)
Literacy rate, 15-24, Male	99	2002	65%	11%	73%	UNESCO Institute for Statistics (UIS)
Gross intake rate, Primary, Female	97	2015	28%	43%	29%	UNESCO Institute for Statistics (UIS)
Gross intake rate, Primary, Male	99	2015	33%	43%	29%	UNESCO Institute for Statistics (UIS)
Net intake rate, Primary, Female	80	2014	62%	53%	70%	UNESCO Institute for Statistics (UIS)
Net intake rate, Primary, Male	82	2014	68%	60%	75%	UNESCO Institute for Statistics (UIS)
Gross enrollment rate, Primary, Female	94	2015	18%	17%	21%	UNESCO Institute for Statistics (UIS)
Gross enrollment rate, Primary, Male	94	2015	13%	23%	15%	UNESCO Institute for Statistics (UIS)
Gross enrollment rate, Lower Secondary, Female	85	2015	29%	5%	40%	UNESCO Institute for Statistics (UIS)
Gross enrollment rate, Lower Secondary, Male	86	2015	31%	5%	44%	UNESCO Institute for Statistics (UIS)
Gross enrollment rate, Upper Secondary, Female	78	2015	43%	5%	60%	UNESCO Institute for Statistics (UIS)
Gross enrollment rate, Upper Secondary, Male	80	2015	51%	5%	69%	UNESCO Institute for Statistics (UIS)
Net enrollment rate, Primary, Female	92	2015	41%	37%	52%	UNESCO Institute for Statistics (UIS)
Net enrollment rate, Primary, Male	92	2015	42%	37%	53%	UNESCO Institute for Statistics (UIS)
Net enrollment rate, Secondary, Female	78	2005	46%	0%	64%	UNESCO Institute for Statistics (UIS)
Net enrollment rate, Secondary, Male	80	2005	55%	6%	74%	UNESCO Institute for Statistics (UIS)
Repetition rate, Primary, Female [‡]	0	2009	89%	42%	88%	Education Policy and Data Center (EPDC)*
Repetition rate, Primary, Male [‡]	0	2009	91%	42%	88%	Education Policy and Data Center (EPDC)*
Dropout rate, Primary, Female [‡]	4	2013	66%	36%	79%	Education Policy and Data Center (EPDC)*
Dropout rate, Primary, Male [‡]	3	2013	73%	42%	86%	Education Policy and Data Center (EPDC)*
Survival rate, to Prim G5, Female	96	2013	61%	50%	74%	Education Policy and Data Center (EPDC)*
Survival rate, to Prim G5, Male	97	2013	73%	50%	88%	Education Policy and Data Center (EPDC)*
Completion rate, Primary, Female	91	2015	36%	6%	46%	UNESCO Institute for Statistics (UIS)
Completion rate, Primary, Male	91	2015	37%	12%	48%	UNESCO Institute for Statistics (UIS)
Transition rate, to Secondary, Female	100	2014	80%	82%	88%	Education Policy and Data Center (EPDC)*
Transition rate, to Secondary, Male	100	2014	85%	94%	93%	Education Policy and Data Center (EPDC)*
Pupil teacher ratio, Primary [‡]	14	2015	72%	77%	91%	UNESCO Institute for Statistics (UIS)
Pupil teacher ratio, Lower Secondary [‡]	8	2015	89%	77%	95%	UNESCO Institute for Statistics (UIS)
Pupil teacher ratio, Upper Secondary [‡]	11	2015	69%	39%	79%	UNESCO Institute for Statistics (UIS)
Public education expenditure per pupil (% of GDP per capita), Primary						
Public education expenditure per pupil (% of GDP per capita), Secondary						
Percentage of children out of school, Primary, Poorest Quintile [‡]	13	2005	52%	22%	53%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Secondary, Poorest Quintile [‡]	64	2005	19%	8%	19%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Primary, Richest Quintile [‡]	0	2005	100%	100%	100%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Secondary, Richest Quintile [‡]	7	2005	66%	22%	67%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Primary, Urban [‡]	7	2005	44%	15%	44%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Secondary, Urban [‡]	23	2005	36%	8%	37%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Primary, Rural [‡]	3	2005	85%	65%	85%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Secondary, Rural [‡]	42	2005	29%	8%	29%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Primary, Male [‡]	3	2005	74%	54%	81%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Secondary, Male [‡]	36	2005	21%	0%	21%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Primary, Female [‡]						
Percentage of children out of school, Secondary, Female [‡]	31	2005	38%	8%	39%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Primary, Total [‡]	5	2005	58%	36%	65%	Multiple Indicator Cluster Survey (MICS Dataset)
Percentage of children out of school, Secondary, Total [‡]	32	2005	33%	8%	34%	Multiple Indicator Cluster Survey (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.