

**DHS ED DATA
EDUCATION PROFILE**

**Ethiopia
2000**



DHS EdData Education Profiles

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This series of country education profiles uses internationally comparable data from USAID's Demographic and Health Surveys (DHS) to characterize children's participation in primary and secondary schooling and adults' schooling attainment and literacy. These profiles provide information that, combined with other country-specific data, can inform education decision-making. Although the DHS began collecting education data in 1984, there was no systematic effort to analyze and present these data in a format accessible to education planners and policy-makers until the DHS EdData Activity began in 1999.

In 2000, the DHS EdData Education Profiles for Africa were produced for nine sub-Saharan African countries. The current set of profiles updates those original profiles with data from recent DHS surveys, and adds to the number of countries profiled. In addition to the thirteen country profiles for sub-Saharan Africa (Benin, Ethiopia, Ghana, Guinea, Kenya, Malawi, Mali, Namibia, Nigeria, Rwanda, South Africa, Uganda, and Zambia), the current series includes profiles for countries in the ANE (Bangladesh, Cambodia, Egypt, India, and Nepal), LAC (Guatemala, Haiti, Nicaragua, and Peru), and E&E (Kazakhstan and Uzbekistan) regions.

Data Presented in the Profiles

These profiles present data from nationally representative household surveys, which provide data at the household and individual levels. The data include educational attainment and schooling status of household members, which allow for the calculation of net and gross attendance ratios (disaggregated by sex, urban/rural residence, and region); the percentage of students under age, on time, and over age, by grade; age-specific schooling status of youth (attending, dropped out, never attended); and adult primary and secondary school completion rates and educational attainment. Recent surveys provide data on repetition, dropout, and survival rates by primary school grade. The DHS also provides information on men's and women's literacy rates for a selected age range.

A Supplement to Other Sources of Education Data

The DHS measures of children's school attendance rates differ from, and supplement, traditional sources of international statistics, such as those produced by ministries of education or UNESCO. Statistics on children's participation in schooling usually are derived from country data on children's school enrollment, which are collected from school records and used to produce net and gross enrollment ratios (NER and GER).

DHS, on the other hand, measures children's participation in schooling using data on school attendance, collected from a representative sample of households. Net and gross attendance ratios (NAR and GAR) are calculated based on questions about whether children attend (or go to) school. While the NAR and GAR may be seen as proxies for the more commonly used NER and GER, discrepancies between attendance and enrollment ratios can be expected.

DHS EdData

The DHS EdData Activity is supported primarily by USAID's Office of Education in the Bureau for Economic Growth, Agriculture and Trade, with additional support from USAID's Africa Bureau. DHS EdData is closely linked to the population and health sector DHS. In addition to analyzing the education data collected by the DHS, DHS EdData conducts various data collection activities, including in-depth household education surveys in a subset of DHS households.

The DHS EdData household survey focuses on issues surrounding the household demand for schooling in order to provide information about the decisions households make about how much of what kind of education to invest in for household members. Specific topics in the core survey include: the reasons for school-age children never having attended school or having dropped out of school, household expenditures on schooling, parent/guardians' perceptions of the benefits of schooling and of school quality, distances and travel times to schools, and the frequency of and reasons for student absenteeism.

Data on these topics, together with the information from the DHS, provide information useful for education policy and program planning and for monitoring USAID basic education activities. The linkage between the DHS EdData and the DHS surveys allows for an analysis of the relationships between education and health, nutrition, family planning, and other individual and household characteristics.

Ethiopia

DHS EdData Education Profile: 2000

An Ethiopia Demographic and Health Survey (DHS) was conducted in 2000.¹

Key Findings

In 2000, rates of primary school attendance were low in Ethiopia.

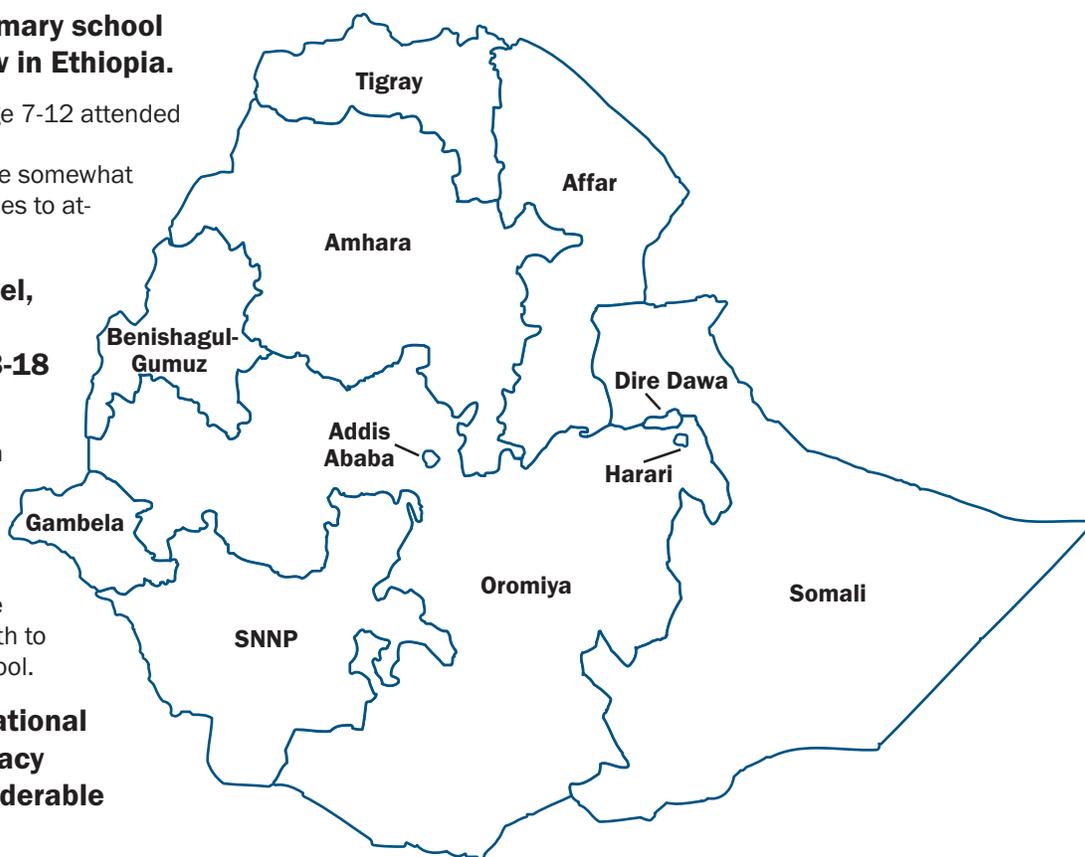
- Just 1 in 3 children age 7-12 attended primary school.
- School-age males were somewhat more likely than females to attend primary school.

At the secondary level, rates of attendance among youth age 13-18 were low.

- In 2000, 12% of youth age 13-18 attended secondary school.
- Male youth of secondary school age were slightly more likely than female youth to attend secondary school.

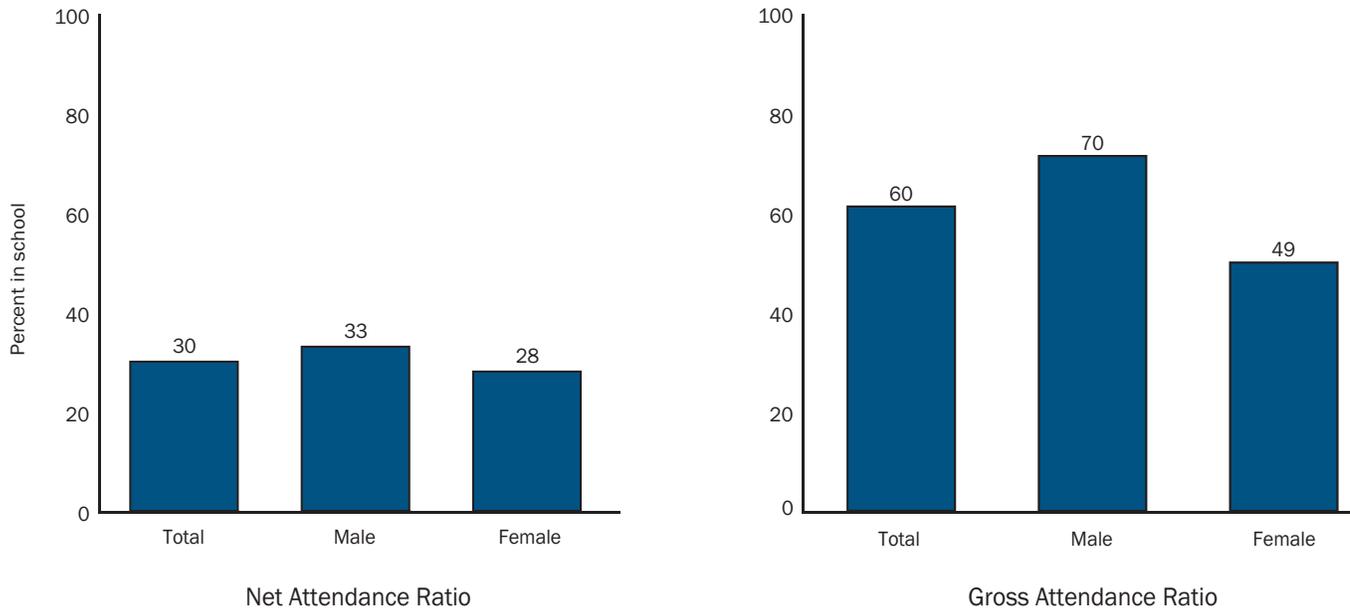
In 2000, adult educational attainment and literacy were low, with considerable gender disparities.

- 13% of the population age 15 and older had completed primary school, with men twice as likely as women to have completed that level.
- Only 5% of men and 2% of women age 20 and older had completed secondary school.
- In 2000, men were more than twice as likely as women to be able to read: 24% of women age 15-49, and 53% of men age 15-59 were literate.



¹ The 2000 survey was administered to 14,072 households and 15,367 women age 15-49 and 2,607 men age 15-59 from those households.

Primary School Attendance Ratios: 2000



Source: EDHS 2000

The net attendance ratio (NAR) is the percentage of the official primary school-age population (age 7-12 in Ethiopia) that attends primary school. The gross attendance ratio (GAR) is the total number of students attending primary school—regardless of age—expressed as a percentage of the official primary school-age population

Primary Net Attendance Ratio (NAR)

In 2000, only 1 in 3 children age 7-12 attended primary school.

- 30% of school-age children in Ethiopia attended primary school.
- School-age males were somewhat more likely than females to attend primary school.
- 33% of male and 28% of female children age 7-12 attended primary school.

Primary Gross Attendance Ratio (GAR)

Many of the children attending primary school are outside of the official age range (as reflected in the difference between net and gross attendance ratios). This can have tremendous impact on the educational infrastructure, the experience in the classroom, and education planning.

In 2000, half of the primary school students were outside (either younger than or older than) the official school age range of age 7-12.

- Students over or under the official primary school age range made up 50% ($(\text{GAR } 60 - \text{NAR } 30) / \text{GAR } 60$) of the primary school population.

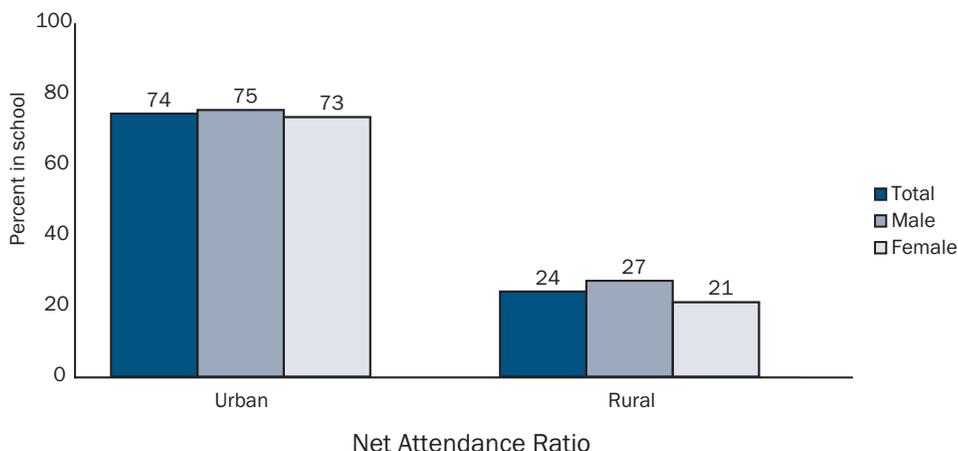
Among youth of all ages, males were far more likely than females to attend primary school.

- In 2000, the gross attendance ratio (GAR) among males was 70, compared with 49 among females.

Primary School Net Attendance Ratio (NAR): by Urban/Rural: 2000

In 2000, children age 7-12 in urban areas were three times as likely as children in rural areas to attend primary school.

- 74% of primary school-age children in urban areas attended primary school, compared to 24% in rural areas.



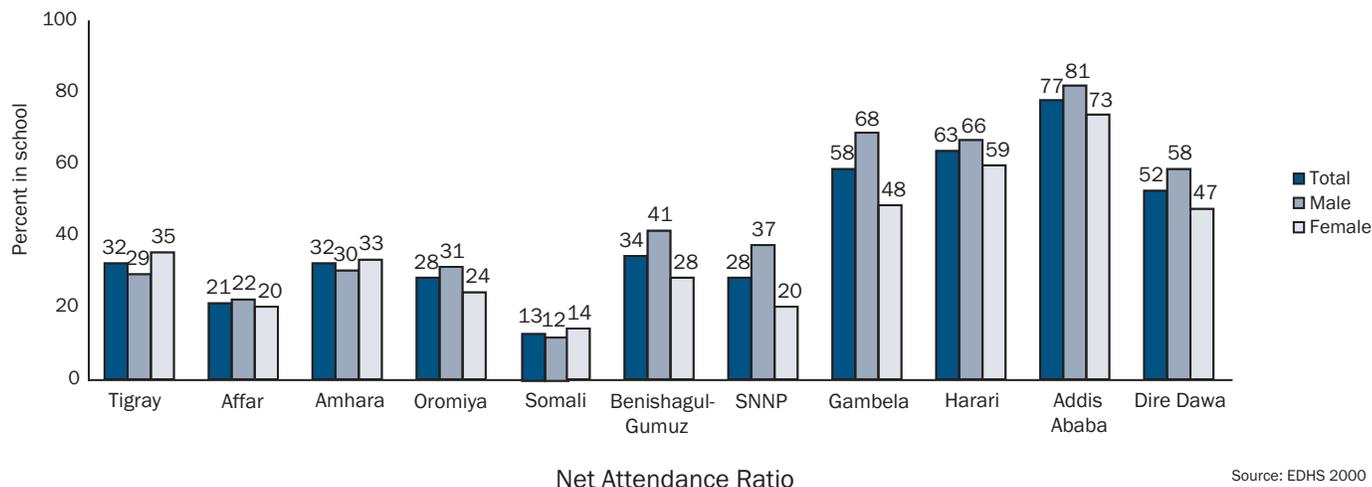
Source: EDHS 2000

Primary School Net Attendance Ratio (NAR) by Region: 2000

In 2000, there were large regional disparities in primary school attendance in Ethiopia.

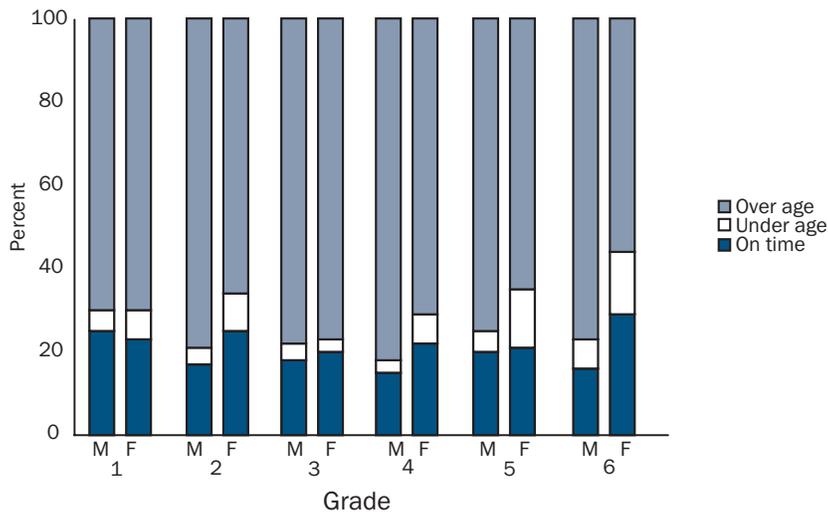
- The rate of primary school attendance was highest in Addis Ababa (77%) and lowest in the Somali (13%) and Affar (21%) regions.
- In six of the eleven regions, less than one-third of school-age children attended primary school.

The percentage of school-age children attending primary school was considerably higher for males than for females in seven regions. In the Tigray region, the NAR was higher for females than for males.



Source: EDHS 2000

Over-Age, Under-Age, and On-time Students in Primary School: 2000



In 2000, 70% of grade 1 and grade 6 students were over age for the grade attended.

- In general, male students were more likely than female students to be over age for the grade attended.

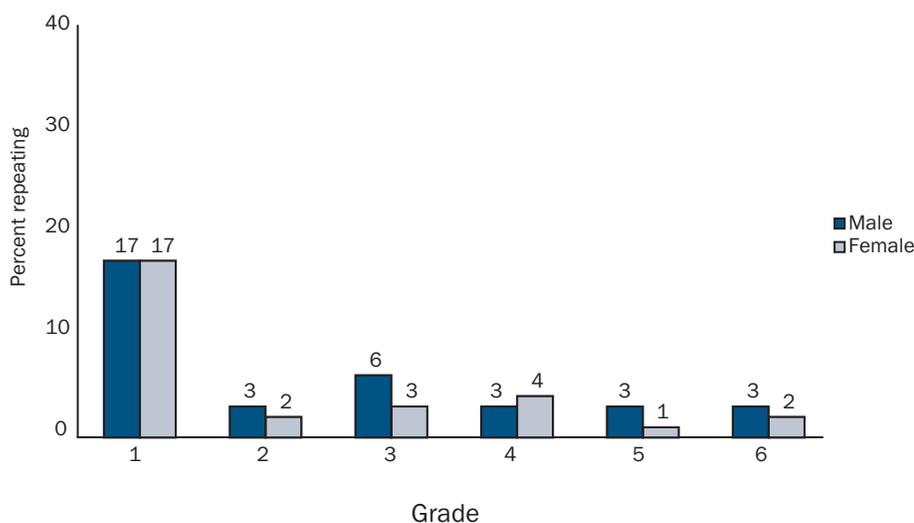
Source: EDHS 2000

Students are considered to be over age if they are two or more years older, and under age if they are one or more years younger, than the official age for their grade. Students are considered to be on time if they are of the official age, or are one year older than the official age for their grade. Since the official age of entry to grade 1 is age 7 in Ethiopia, a grade 1 student who is age 7 or 8 is considered to be on time, a student age 9 or older is over age, and a student age 6 or younger is under age. This indicator—under age, on time, or over age for grade—differs from the percentage of primary school students outside the primary school age range in that the proportion of students over age, on time, and under age is calculated for each primary school grade, rather than for primary school overall.

Primary School Repetition: 2000

In 2000, grade repetition was relatively low in all grades except grade 1.

- 17% of male and female students attending grade 1 were repeating that grade.
- In the remaining grades, repetition rates ranged from 1% to 6%.

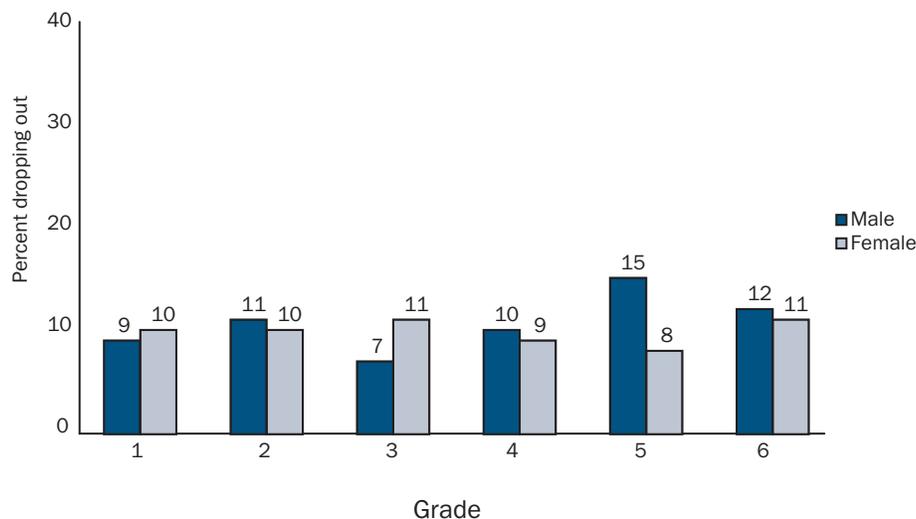


Source: EDHS 2000

Primary School Dropout: 2000

In 2000, dropout rates were substantial throughout the primary school grades.

- The grade 1 dropout rate was 9% for males and 10% for females.
- In the remaining grades, repetition rates ranged from 7% to 15%, with no systematic gender differences.

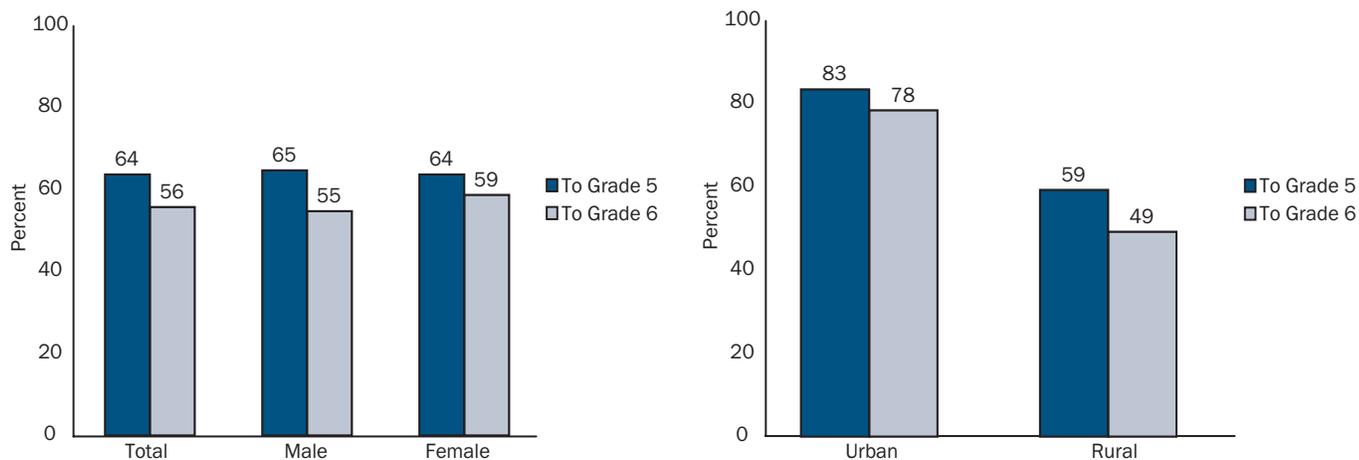


Source: EDHS 2000

Survival to Grades 5 and 6: 2000

In 2000, more than half of primary school students who entered grade 1 could be expected to reach the final grades of the primary cycle, with or without grade repetition.

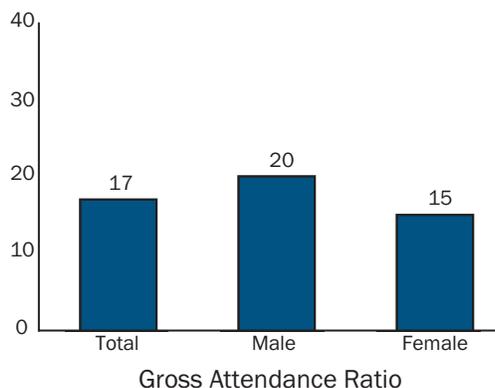
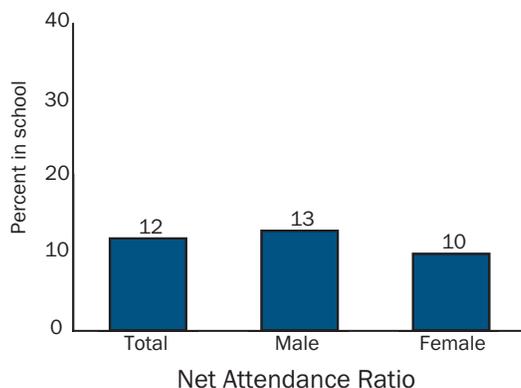
- 65% of male and 64% of female students attending grade 1 could be expected to reach grade 5, while 55% of male and 59% of female students could be expected to reach grade 6.
- In urban areas, 83% of students attending grade 1 could be expected to reach grade 5 and 78% could be expected to reach grade 6, compared with 59% and 49% in rural areas.



Source: EDHS 2000

Survival rates use dropout and repetition rates to estimate the percentage of students starting grade 1 who can be expected to reach a subsequent grade. The calculation allows for a student to repeat a grade up to three times before assuming that the student then drops out (see Appendix for further detail).

Secondary School Attendance Ratios: 2000



Source: EDHS 2000

The net attendance ratio (NAR) is the percentage of the official secondary school-age population (age 13-18 in Ethiopia) that attends secondary school. The gross attendance ratio (GAR) is the total number of students attending secondary school—regardless of age—expressed as a percentage of the official secondary school-age population.

Secondary Net Attendance Ratio (NAR)

In 2000, 12% of youth age 13-18 attended secondary school.

- Male youth of secondary school age were slightly more likely than female youth to attend secondary school (NAR of 13% for males versus 10% for females).

Secondary Gross Attendance Ratio (GAR)

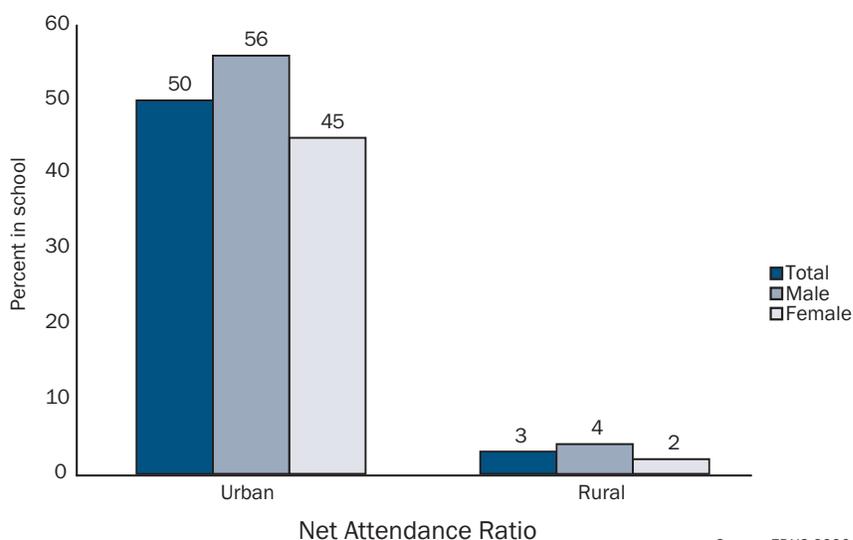
In 2000, among students of all ages (gross attendance), the rate of secondary attendance was 17.

- The gross attendance ratio (GAR) among males was 20, compared with 15 among females.

Secondary School Net Attendance Ratio (NAR) by Urban/Rural: 2000

In 2000, in urban areas, half of the youth age 13-18 attended secondary school, compared with virtually none of the youth in rural areas.

- 50% of urban youth age 13-18 attended secondary school, compared to just 3% in rural areas.



Source: EDHS 2000

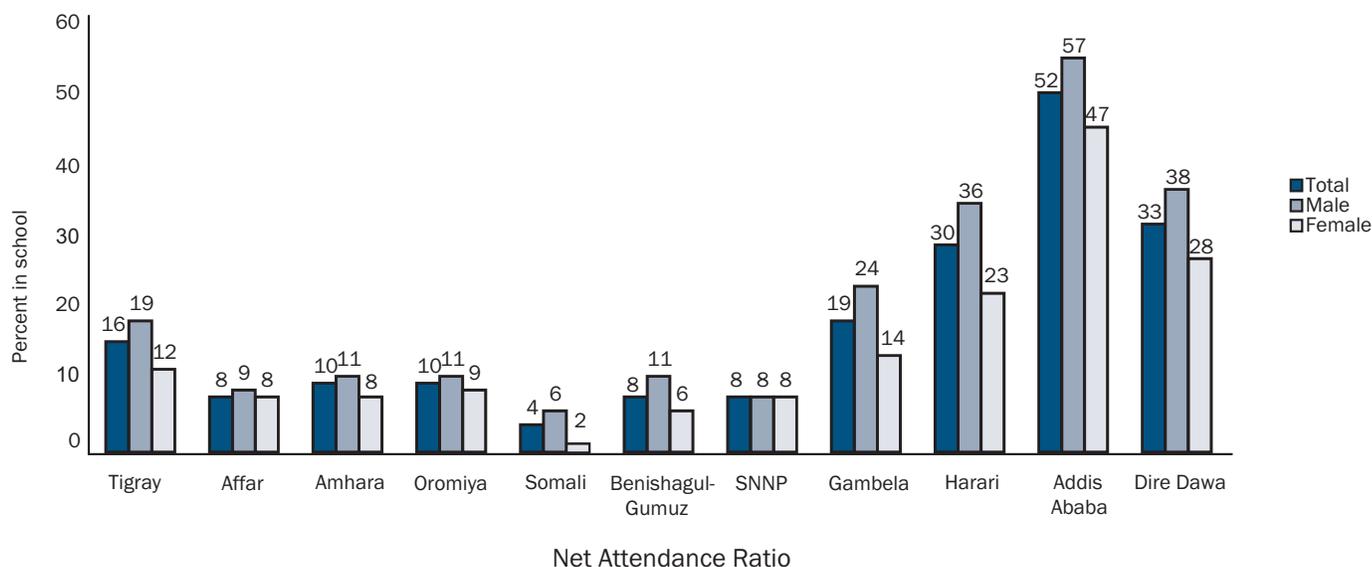
Secondary School Net Attendance Ratio (NAR) by Region: 2000

In 2000, there were notable differences in the secondary school net attendance ratio (NAR) by region.

- The secondary school NAR was lowest in the Somali region (4%), and highest in Addis Ababa (52%).

In 2000, rates of attendance among youth age 13-18 were notably higher for males than for females in seven of the eleven regions.

- The gender gap was especially wide in Harari, with an NAR of 36% for males and 23% for females.

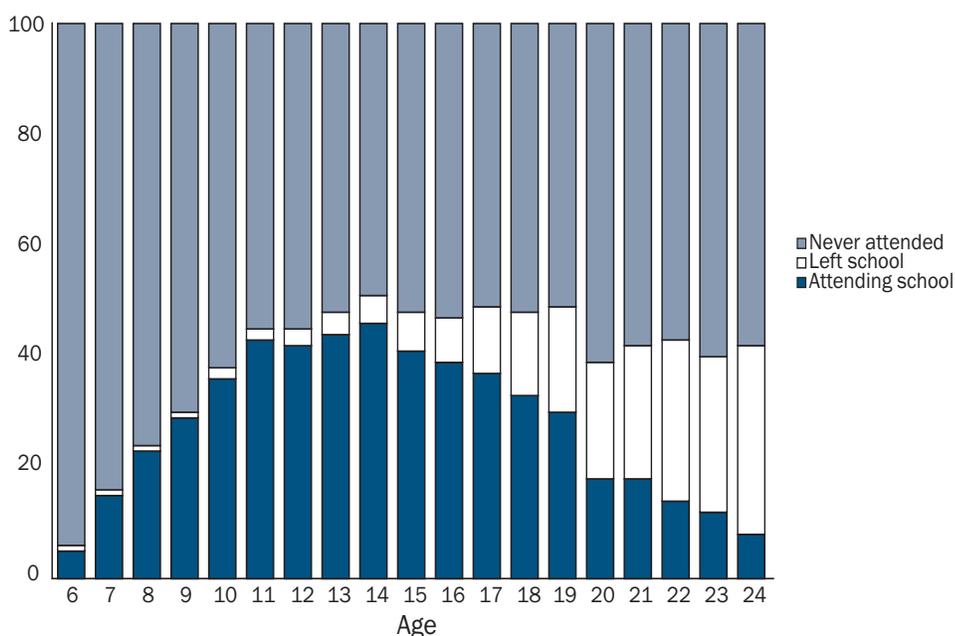


Source: EDHS 2000

Schooling Status of Youth Age 6-24: 2000

In 2000, at no age did even half of the youth attend school at the pre-primary, primary, secondary, or post-secondary levels in Ethiopia.

- The peak age of attendance was at age 14, with 46% of youth age 14 attending school; the peak age range was 11-14.

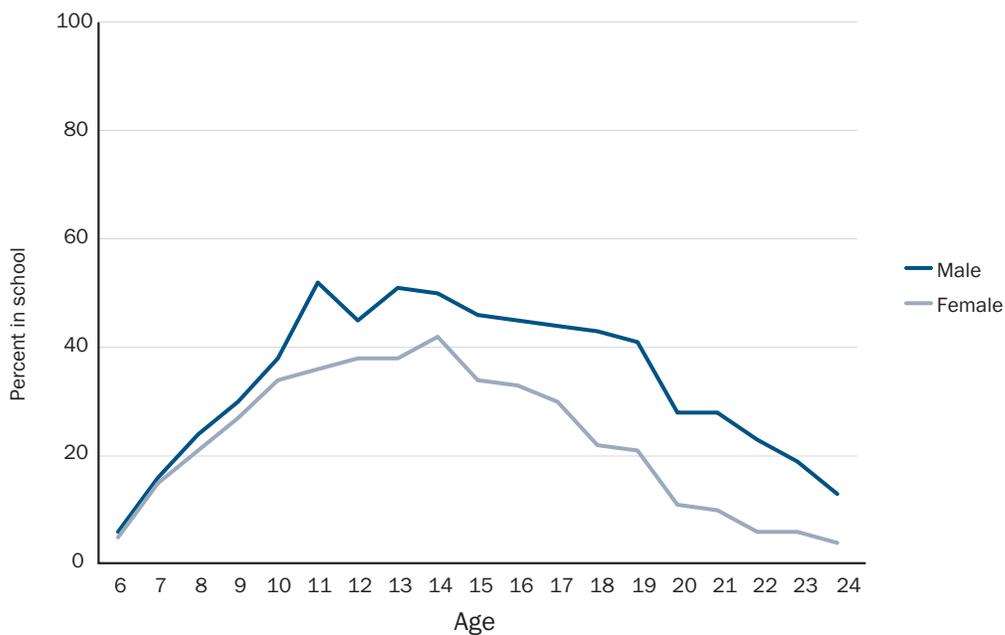


Source: EDHS 2000

Age-Specific Attendance Rate by Sex: 2000

In 2000, at each age from 6 to 24, males were more likely than females to attend school at any level.

- Attendance peaked at age 11 for males (52%), and at age 14 for females (42%).
- In terms of percentage points, the largest gender gap was at age 18, with male attendance at 43% and female attendance at 22%.



Source: EDHS 2000

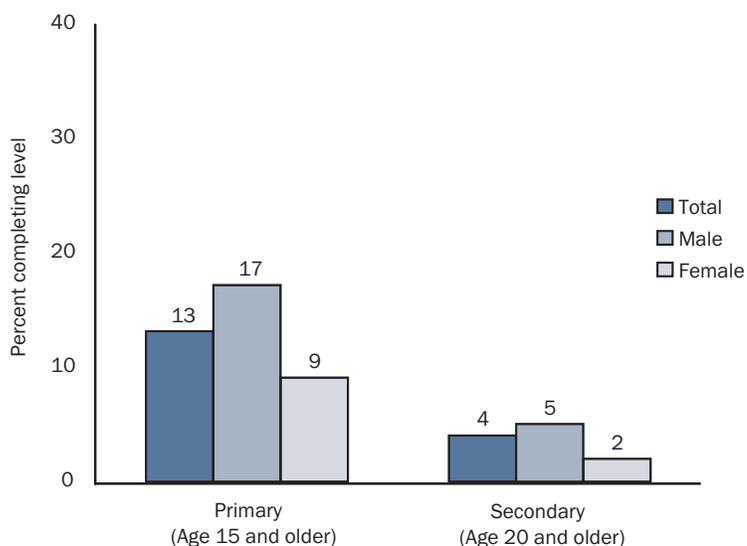
Adult Primary and Secondary School Completion Rates: 2000

In 2000, just 13% of the population age 15 and older had completed primary school.

- Men were twice as likely as women to have completed primary school (17% versus 9%).

In 2000, just 4% of the population age 20 and older had completed secondary school.

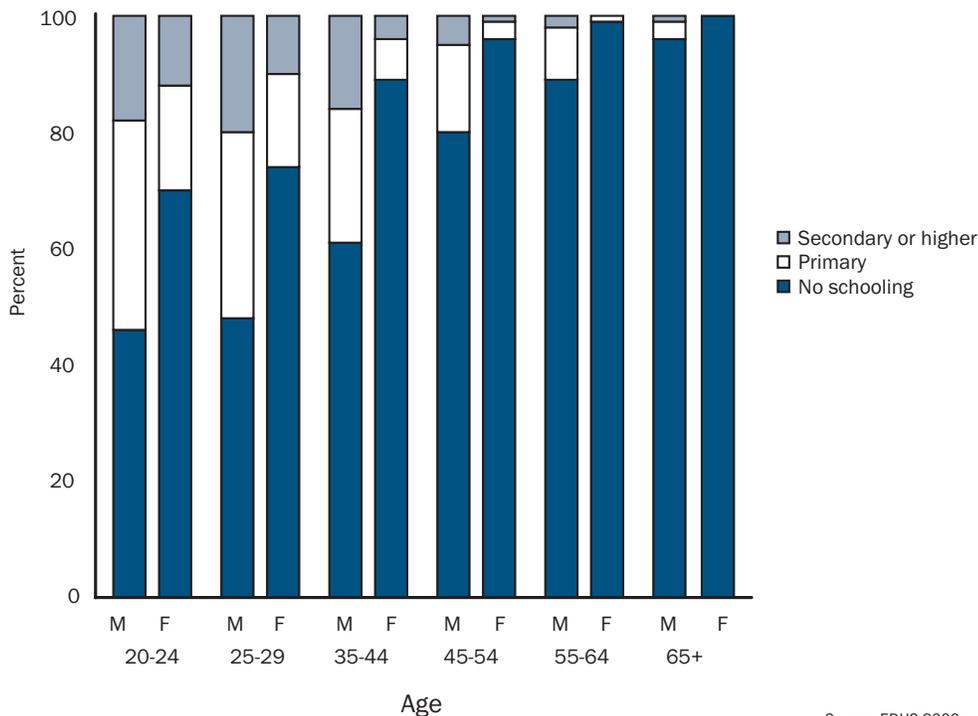
- Men were more likely than women to have completed secondary school: 5% of men and 2% of women age 20 and older had completed secondary school.



Source: EDHS 2000

Adult Educational Attainment: 2000

Educational attainment has been increasing steadily for men and women age 20 and older in Ethiopia.



- In 2000, 54% of men age 20-24 had attended primary school or higher, compared to 4% of men age 65 and older.
- At the same point in time, 30% of women age 20-24 and 0.2% of women age 65 and older had attended school.

In 2000, men were more likely than women to have attended primary school or higher.

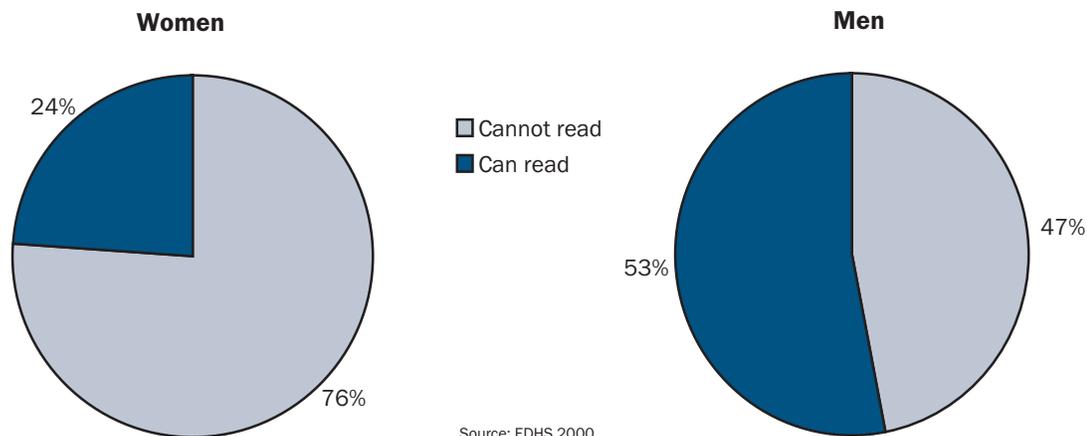
- Among men age 20 and older, 36% had attended primary school or higher. Among women age 20 and older, 16% had attended primary school or higher.
- 13% of men age 20 and older had attended secondary school or higher, compared with 6% of women.

Source: EDHS 2000

Literacy Among Women Age 15-49 and Men Age 15-59: 2000

In 2000, men were more than twice as likely as women to be literate.

- 24% of women age 15-49 could read, compared with 53% of men age 15-59².



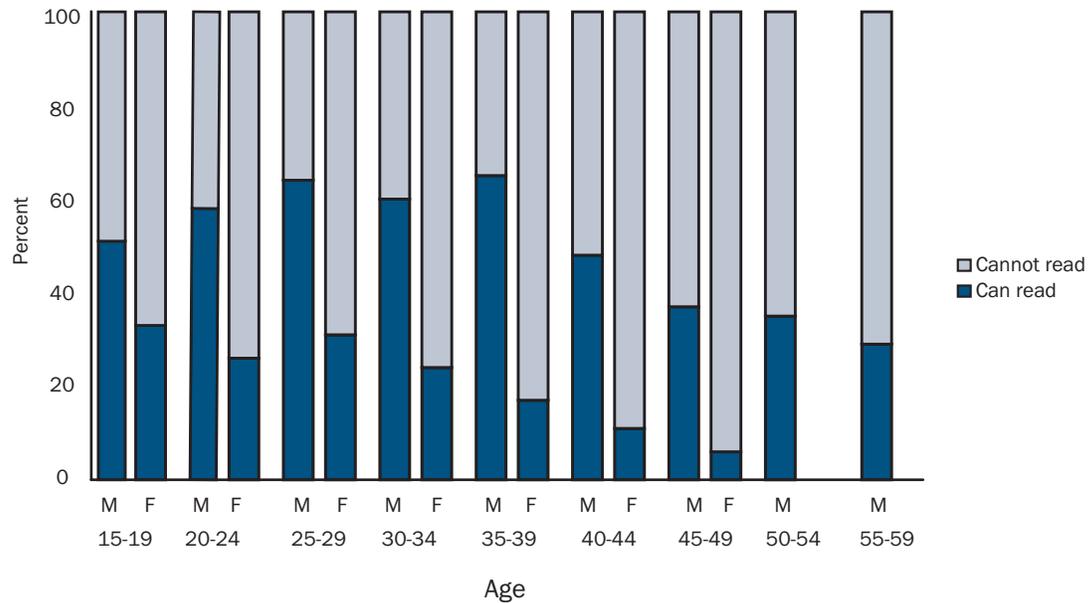
Source: EDHS 2000

² Among men and women who never attended school and those who attended primary school, literacy was tested in 2000. Literacy was tested by asking the respondent to read a sentence in a language in which he/she was likely to be literate. Men and women who attended secondary school or higher were assumed to be literate. As a consequence, the percentage literate includes both those who attended secondary school or higher, and those who were able to read.

Literacy by Age: 2000

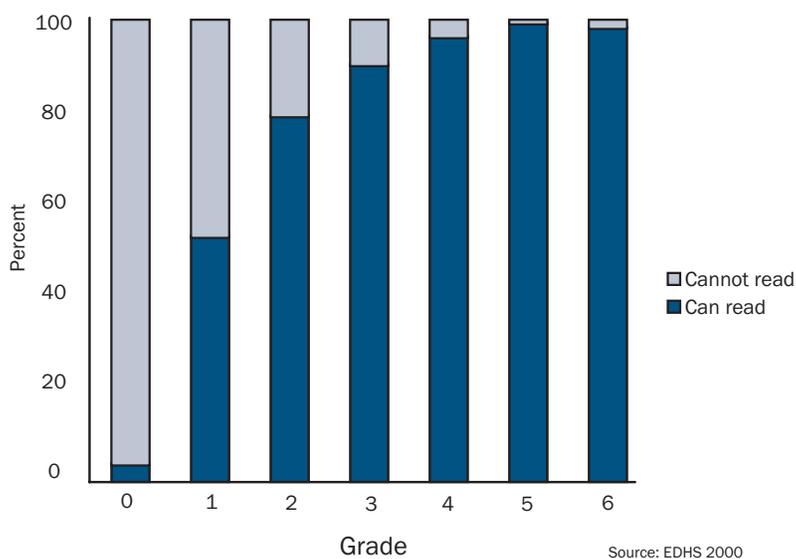
Literacy, while low, has been increasing over the past 30 years.

- In 2000, 33% of women age 15-19 could read, compared with only 6% of women age 45-49.
- In general, younger men were more likely to be literate than older men. For instance, while 51% of men age 15-19 could read, 29% of men age 55-59 could read.



Source: EDHS 2000

Women's Literacy by Years of Primary School Completed: 2000



In 2000, 96% of women who had completed grade 4 could read and 98% of those who had completed grade 6 could read.

Source: EDHS 2000

Appendix: Indicator Specifications

The methods used to calculate the indicators presented in the education profiles are described below.

Net Attendance Ratio (NAR)

Primary level:

$$\frac{\text{number of students of primary school age attending primary school}}{\text{number of people of primary school age in the population}}$$

Secondary level:

$$\frac{\text{number of students of secondary school age attending secondary school}}{\text{number of people of secondary school age in the population}}$$

The Net Attendance Ratio (NAR) is the percentage of children in the target age range for the specified level of schooling attending that level of schooling, and is calculated separately for primary and secondary school. A primary NAR of 95% would indicate that nearly all of the children of primary school age attend primary school. A primary NAR of only 38%, on the other hand, would indicate that a majority, or 62%, of the children of primary school age do not attend primary school. By definition, the NAR cannot exceed 100%.

Gross Attendance Ratio (GAR)

Primary level:

$$\frac{\text{number of students attending primary school, regardless of age}}{\text{number of people of primary school age in the population}}$$

Secondary level:

$$\frac{\text{number of students attending secondary school, regardless of age}}{\text{number of people of secondary school age in the population}}$$

The Gross Attendance Ratio (GAR) for a given school level is the total number of students attending at that level, divided by the population of the official age range for that school level. The GAR is calculated separately for primary and secondary school. Unlike the NAR, the GAR can exceed 100.

Both a GAR greater than 100 and a GAR greater than the NAR indicate the presence in the classroom of children who are either older or younger than the official age range for the school level. The magnitude of difference between the NAR and GAR indicates the extent of over-age/under-age attendance. For instance, if the primary NAR is 35% and the GAR is 65, then 54% (35/65) of the primary school students are of primary school age, while 46% are either older or younger than the official age range. In some countries, where there is a substantial difference between the GAR and the NAR, the number and proportion of over-age and/or under-age students burdens the school system, absorbing resources that might otherwise be spent on children in the official age range for the level.

Primary School Under Age, On Time, and Over Age

Students in each grade of primary school are either under age, on time, or over age for the grade attended. Students are under age for the grade if they are younger than the official target age for the grade. Students are on time if they are at the official age for the grade, or are one year older than the official age. Students are over age if they are two or more years older than the official age for the grade. For example, if the official entry age for grade 1 is 6, a student age 5 or younger is under age, a student age 6-7 is on time, and a student age 8 or older is over age.

The percentage of students on time for the grade attended is calculated as follows:

$$\frac{\text{number of grade X students who are at the target entry age for the grade or one year older}}{\text{total number of students attending grade X}}$$

Primary School Repetition Rates

$$\frac{\text{number of students repeating grade X in year 2}}{\text{number of students attending grade X in year 1}}$$

Repetition rates measure the percentage of students in a given grade who also attend that same grade in the following school year. These rates are calculated from data on children's school attendance for two school years in a row. For instance, if a student is in grade 3 at the time of the survey, and was also in grade 3 during the previous school year, the student is repeating that grade.

Primary School Dropout Rates

$$\frac{\text{number of students in grade X in year 1 who no longer attend school in year 2}}{\text{number of students attending grade X in year 1}}$$

Dropout rates measure the percentage of students who left school after attending a particular grade. These rates are calculated from data on children's school attendance for two school years in a row. For instance, if a student did not attend school during the school year during which the survey was conducted, but attended grade 1 in the previous school year, then that student dropped out of school.

Survival Rates to Grade 5 and to the Last Year of Primary School (using the Reconstructed Cohort Method of UNESCO)

The survival rate estimates the percentage of students attending grade 1 in a given year that is expected to reach a subsequent grade, with or without repetition. The survival rate is calculated using rates of promotion, dropout, and repetition for a given school year. This projection is based on several assumptions, including: a) that there are no new entrants to the school system (including dropouts returning to school); b) that at any grade, the same promotion, repetition, and dropout rates apply to all students, regardless of whether a student is in the grade for the first time or is repeating; c) that the same promotion, repetition and dropout rates observed during one school year apply for all students when they attend that same grade; and d) that the number of times students may repeat a grade is defined. The survival rate estimates presented in these profiles allow for students to attend a grade four times, after which it is assumed that the students drop out of school.

For a detailed flowchart of the calculation of this indicator, refer to the "Education for All: The Year 2000 Assessment Technical Guidelines" published by UNESCO (also see the web site at www.education.unesco.org/efa).

Schooling Status of Youth Age 6-24

For each age, from age 6-24, the percentage attending school:

$$\frac{\text{number of people age 6 attending school, at any level}}{\text{number of people age 6 in the population}}$$

For each age, from age 6-24, the percentage who have left school:

$$\frac{\text{number of people age 6 who used to attend school, but have dropped out}}{\text{number of people age 6 in the population}}$$

For each age, from age 6-24, the percentage who have never attended school:

$$\frac{\text{number of people age 6 who have never attended school}}{\text{number of people age 6 in the population}}$$

Schooling status indicates the percentage of children and youth, by age, who attend school (at any level), have dropped out of school, or who have never attended school. Added together, these percentages total 100% for each age.

Age-Specific Attendance Rate (ASAR)

For each age, from age 6-24:

$$\frac{\text{number of people age 6 attending school, at any level}}{\text{number of people age 6 in the population}}$$

The ASAR indicates the percentage of a given age cohort attending school—regardless of the level attended (primary, secondary, or higher). The ASAR cannot exceed 100%, and the closer it is to 100%, the higher the participation of that age group in the population.

Adult Primary and Secondary School Completion Rates

Primary

$$\frac{\text{number of people age 15 or older who have completed the last grade of primary (or higher)}}{\text{number of people age 15 or older in the population}}$$

Secondary

$$\frac{\text{number of people age 20 or older who have completed the last grade of secondary (or higher)}}{\text{number of people age 20 or older in the population}}$$

The completion rates presented here are indicators of the level of primary or secondary school completion among those who are beyond primary or secondary school age. Those in the numerator have either completed the specified level of schooling or attended school at a higher level. In other words, the percentage of adults who have completed primary school includes those who have attended secondary school or a higher level of schooling. Note that the calculation of this indicator differs from the calculation of the Primary and Secondary Completion Rates.

Adult Educational Attainment by Level of Schooling Attended

For each level of attainment:

$$\frac{\text{number of people age 20 or older who never attended school}}{\text{number of people in the population age 20 or older}}$$

These indicators present the percentage of the adult population age 20 or older that has never attended school, attended primary school, or attended secondary school or higher. Results are presented in five-year age ranges, and for age 65 or older. Within each age range, the percentages, added together, total 100%. This indicator is useful in tracking changes in attainment by age group, gender, and other sub-groups.

Adult Literacy

Women (and in many countries, also men) age 15-49¹ who never attended school and those who left school before reaching secondary school were asked to assess their literacy or to demonstrate literacy. If respondents were asked to report on their literacy, the question was: “Can you read and understand a letter or newspaper easily, with difficulty, or not at all?” People who said they can read easily or with difficulty were grouped together as literate. If literacy was tested, which is the case with most recent surveys, respondents were asked to read (in a language in which they were likely to be literate) a short simple statement about everyday life. If the respondent could read part or all of the sentence, or had attended secondary school or higher, the respondent was classified as literate.

¹ The age range for men is often different from that of women, and is most commonly age 15-54 or 15-59.

Contact Information

Information about DHS EdData may be obtained from several sources, including:

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Additional information about DHS EdData and these country education profiles may be obtained by writing to: DHS EdData, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone: 301-572-0200; Fax: 301-572-0983; Email: reports@orcmacro.com; Website: <http://www.dhseddata.com>).

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