

# DHS EdData Education Profile

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# Guinea 1999



# DHS EdData Education Profiles

## DHS EdData Education Profiles

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.

# Guinea

## DHS EdData Education Profile: 1999

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A Guinea Demographic and Health Survey (DHS) was conducted in 1999.<sup>1</sup>

### Key Findings

**In 1999, rates of primary school attendance were relatively low.**

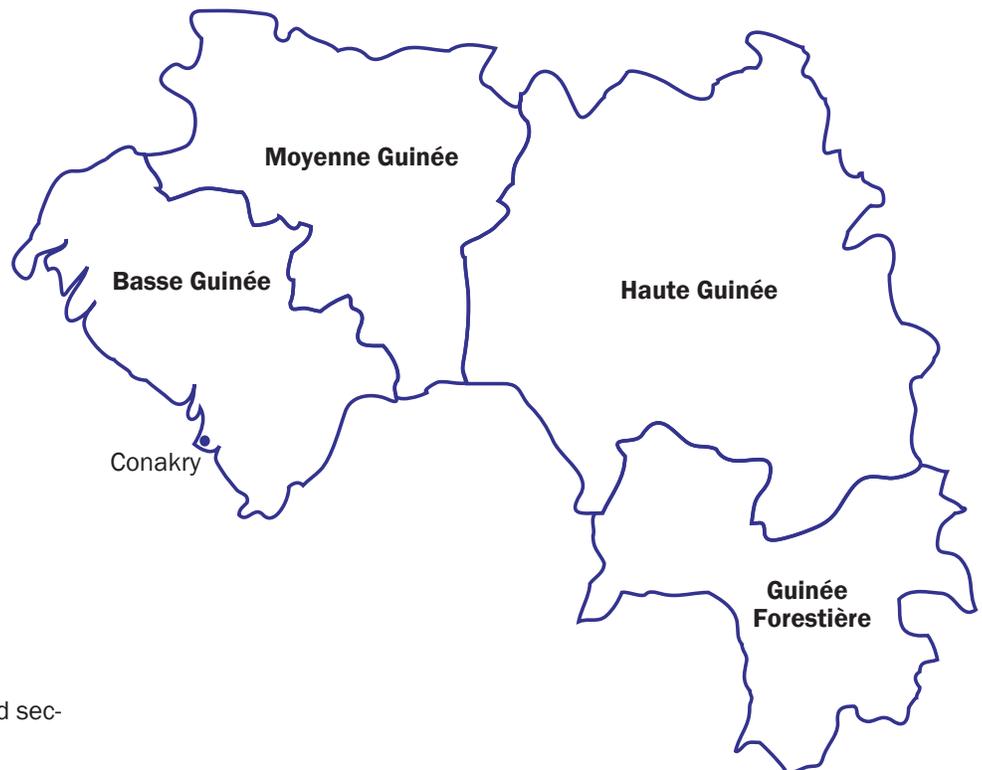
- 39% of children age 7-12 attended primary school.
- School-age males were more likely than school-age females to attend primary school.

**At the secondary level, rates of attendance among youth age 13-19 were low.**

- In 1999, 13% of secondary school-age youth attended secondary school.
- Male youth age 13-19 were more than twice as likely as female youth to attend secondary school.

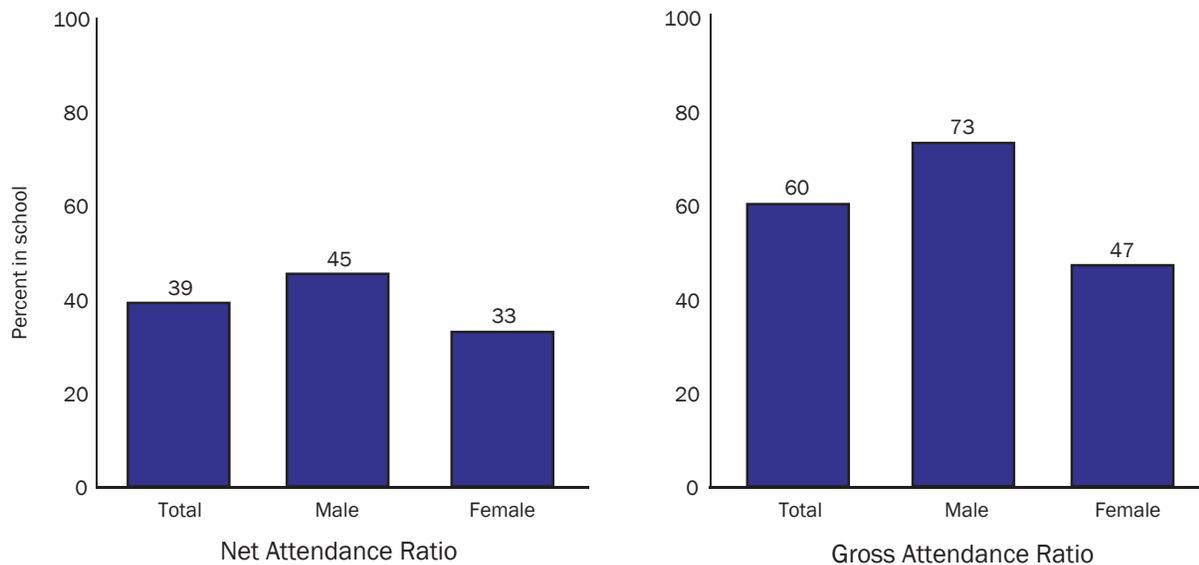
**In 1999, adult educational attainment and literacy were low, with considerable gender disparities.**

- 16% of the population age 15 and older had completed primary school, with men more than twice as likely as women to have completed that level.
- 5% of the population age 20 and older had completed the secondary level, with men three times as likely as women to have completed that level.
- In 1999, men were more than twice as likely as women to be literate: 36% of men age 15-59 were literate, compared to 14% of women age 15-49.



<sup>1</sup>The 1994 survey was administered to 5,090 households and 6,753 women age 15-49 and 1,980 men age 15-59 from those households.

# Primary School Attendance Ratios: 1999



Source: GDHS 1999

The net attendance ratio (NAR) is the percentage of the official primary school-age population (age 7-12 in Guinea) 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 population.

## Primary Net Attendance Ratio (NAR)

**In 1999, 4 out of 10 children age 7-12 attended primary school.**

- 39% of school-age children in Guinea attended primary school.

**School-age males were more likely than females to attend primary school in 1999.**

- 45% of male and 33% 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 1999, 1 in 3 primary school students was outside (either younger than or older than) the official school age range of 7-12.**

- Students over or under the official primary school age range made up 35% ( $(\text{GAR } 60 - \text{NAR } 39) / \text{GAR } 60$ ) of the primary school population.

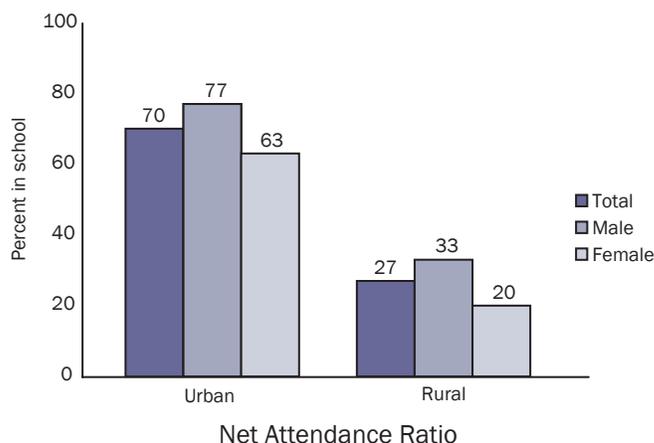
**Among youth of all ages, males were more likely than females to attend primary school.**

- In 1999, the gross attendance ratio (GAR) among males was 73, compared with 47 among females.

# Primary School Net Attendance Ratio (NAR) by Urban/Rural: 1999

In 1999, children age 7-12 in urban areas were far more likely to attend primary school than children in rural areas.

- 70% of primary school-age children in urban areas attended primary school, compared to 27% in rural areas.



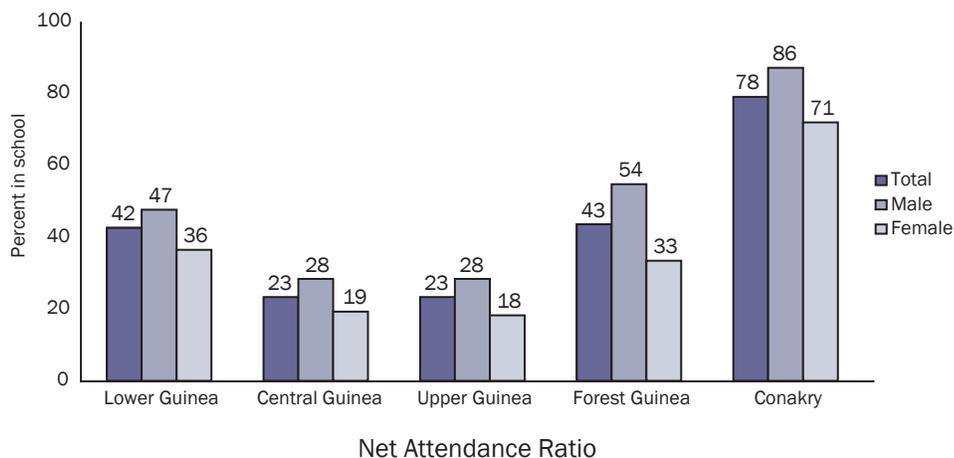
Source: GDHS 1999

# Primary School Net Attendance Ratio (NAR) by Region: 1999

In 1999, there were large regional disparities in primary school attendance in Guinea.

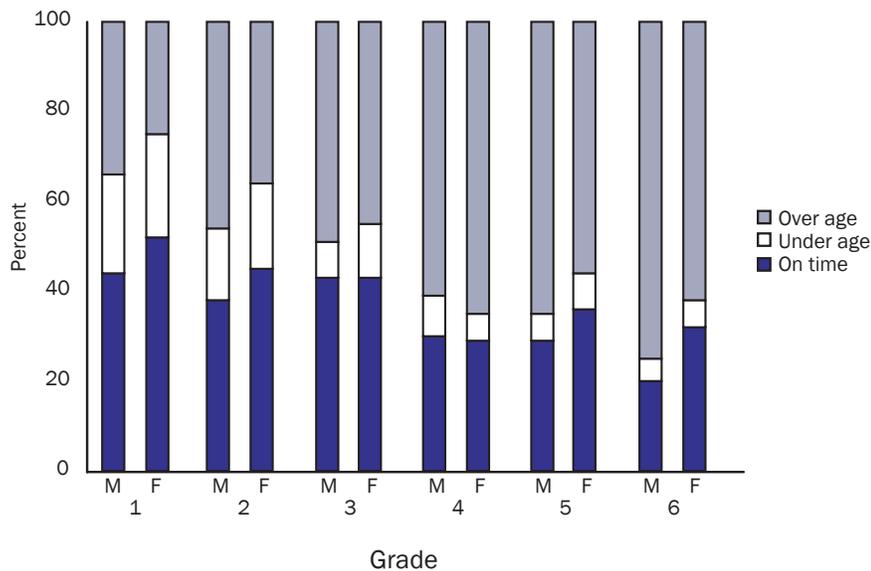
- The rate of primary school attendance among school-age children was highest in the Conakry urban area (78%) and lowest in the Central Guinea and Upper Guinea regions (23% for both).
- In four of the five regions, less than half of school-age children attended primary school.

The percentage of children age 7-12 attending primary school was higher for males than females in all regions.



Source: GDHS 1999

# Over-Age, Under-Age, and On-time Students in Primary School: 1999



**In 1999, 30% of grade 1 and 71% of 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.

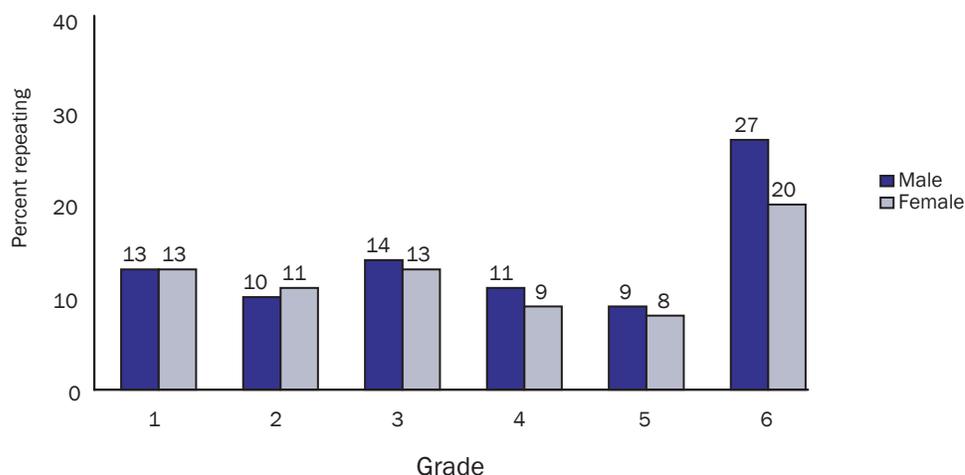
Source: GDHS 1999

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 Guinea, 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: 1999

**Grade repetition was substantial in all grades, but was highest in grade 6.**

- In 1999, 1 in 4 students attending grade 6 was repeating that grade.
- In the remaining grades, repetition rates ranged from 8% to 14%, with no systematic gender differences.

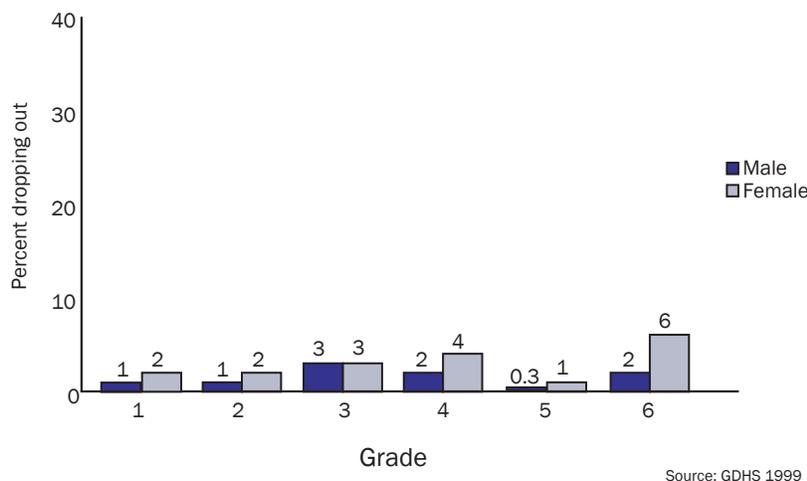


Source: GDHS 1999

# Primary School Dropout: 1999

In 1999, the percentage of students dropping out of school was relatively low in each grade of the primary cycle, suggesting that once children start attending school they are likely to persist to the end of the cycle.

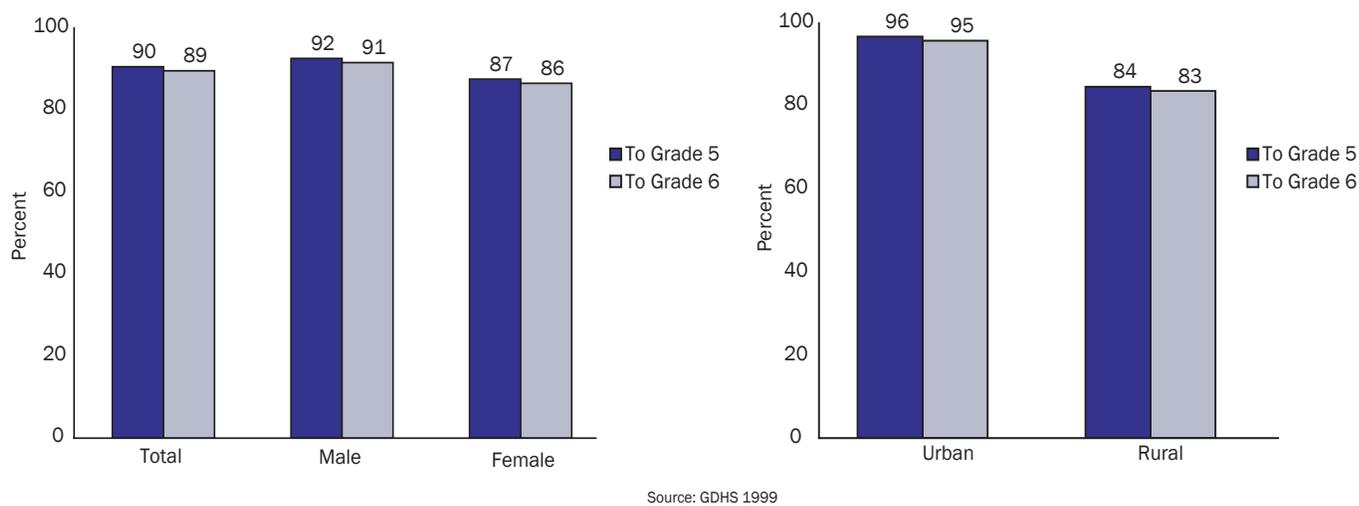
- Primary school dropout rates ranged from 0.3% to 6%.
- At grade 6, females were more likely than males to drop out, while males were more likely to repeat that grade.



## Survival to Grades 5 and 6: 1999

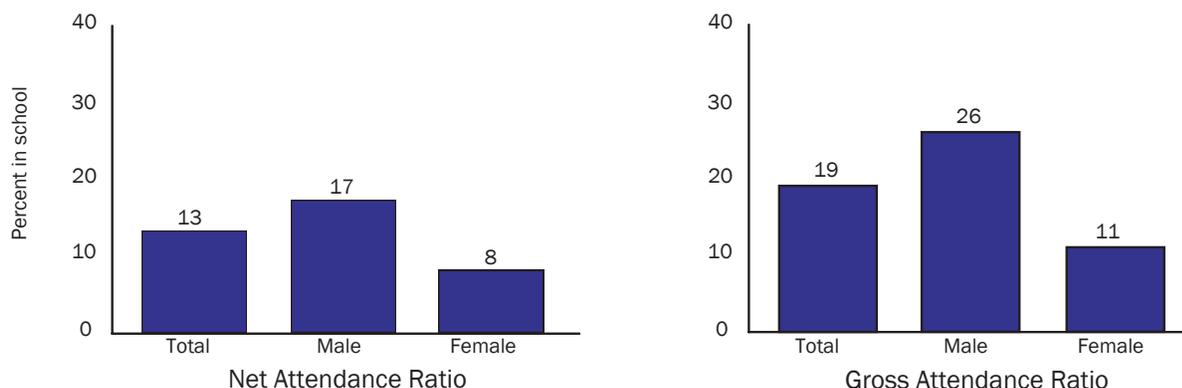
In 1999, the vast majority of students attending grade 1 could be expected to reach the final grades of the primary cycle, with or without grade repetition.

- 92% of male and 87% of female students attending grade 1 could be expected to reach grade 5, while 91% of male and 86% of female students could be expected to reach grade 6.
- In urban areas, 96% of students attending grade 1 could be expected to reach grade 5 and 95% could be expected to reach grade 6, compared with 84% and 83% of students in rural areas.



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: 1999



Source: GDHS 1999

The net attendance ratio (NAR) is the percentage of the official secondary school-age population (age 13-19 in Guinea) 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 population.

## Secondary Net Attendance Ratio (NAR)

**In 1999, 13% of youth age 13-19 attended secondary school.**

- Male youth of secondary school age were twice as likely as female youth to attend secondary school (NAR of 17% for males versus 8% for females).

## Secondary Gross Attendance Ratio (GAR)

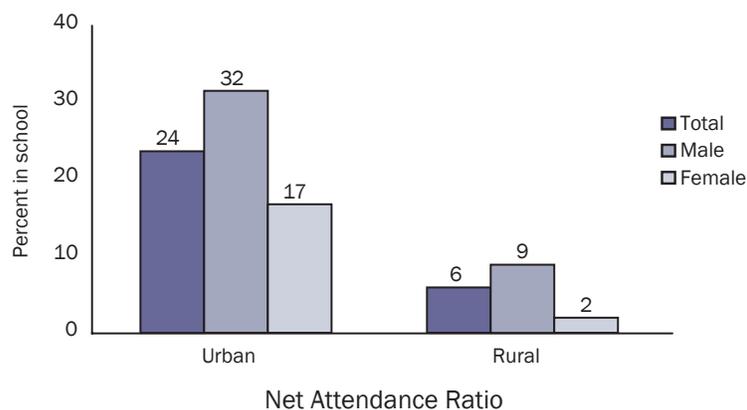
**In 1999, among students of all ages (gross attendance), the rate of secondary attendance was 19.**

- There was a large gender gap in favor of male youth, with a GAR among males of 26, compared with 11 among females.

# Secondary School Net Attendance Ratio (NAR) by Urban/Rural: 1999

**In 1999, youth age 13-19 in urban areas were much more likely to attend secondary school than youth in rural areas.**

- 24% of youth age 13-19 in urban areas attended secondary school, compared to 6% in rural areas.



Source: GDHS 1999

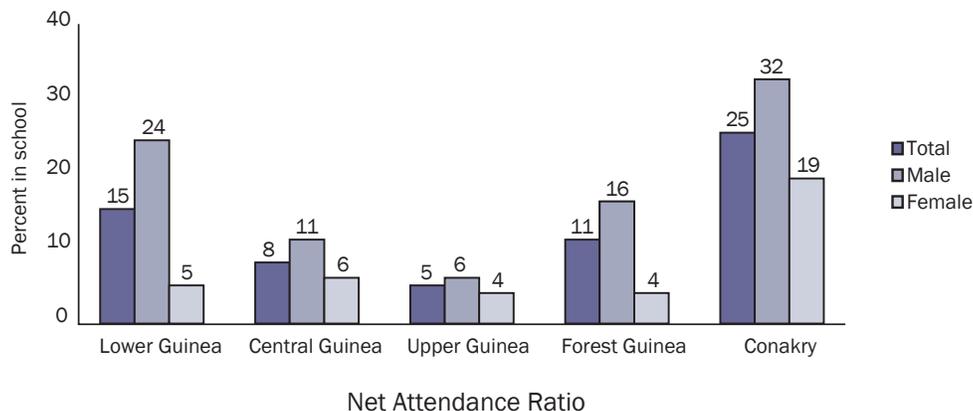
# Secondary School Net Attendance Ratio (NAR) by Region: 1999

In 1999, there were notable differences in the secondary school net attendance ratio by region.

- The secondary school NAR was lowest in the Upper Guinea region (5%), and highest in Conakry (25%).

The secondary school NAR was higher for males than for females in all regions.

- The gender gap was especially wide in Lower Guinea, with an NAR of 24% for males and 5% for females.

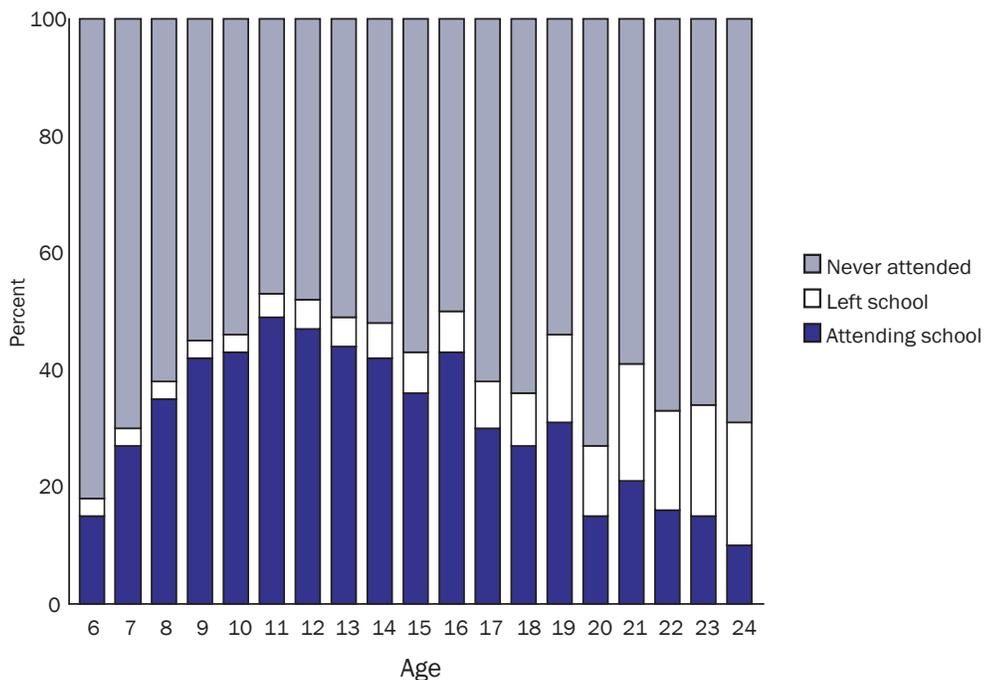


Source: GDHS 1999

# Schooling Status of Youth Age 6-24: 1999

In 1999, at no age did more than half of the youth attended school at the pre-primary, primary, secondary, or post-secondary levels.

- The peak age of attendance was at age 11, with 49% of children age 11 attending school; the peak age range was 9-14.

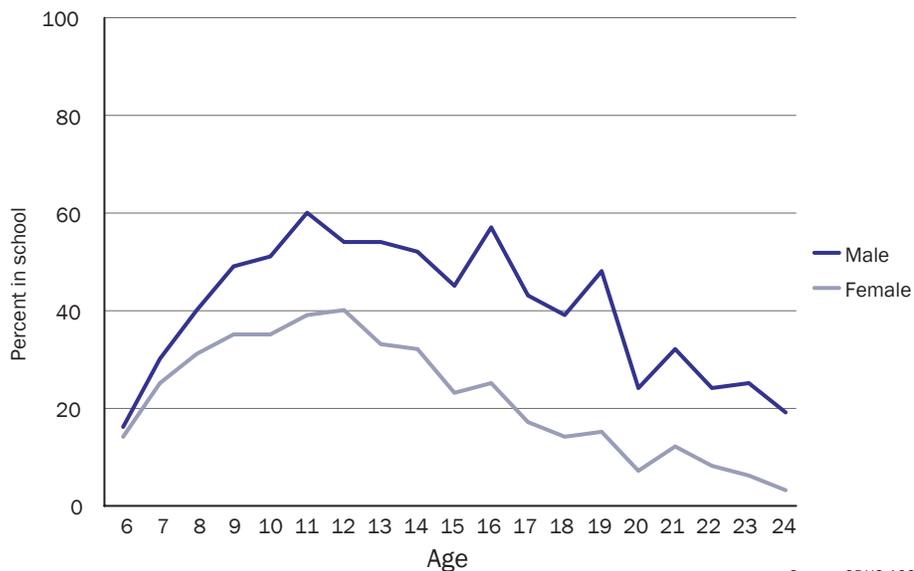


Source: GDHS 1999

# Age-Specific Attendance Rate by Sex: 1999

In 1999, at each age from 6 to 24, the percentage of males attending school at any level was higher than the percentage of females attending.

- Attendance peaked at age 11 for males (60%), and at age 12 for females (40%).
- The largest gender gap in attendance was at age 19, with male attendance at 48% and female attendance at 15%.
- In 1999, attendance rates remained low among older youth, with notable declines around age 15 for females and age 20 for males.



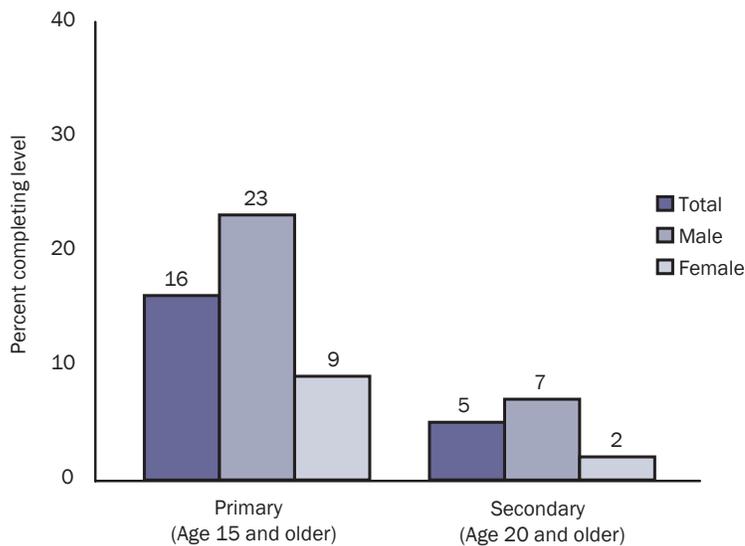
# Adult Primary and Secondary School Completion Rates: 1999

In 1999, 16% of the population age 15 and older had completed primary school.

- Men were more than twice as likely as women to have completed primary school (23% versus 9%).

In 1999, just 5% of the population age 20 and older had completed secondary school.

- Men were more likely than women to have completed secondary school: 7% of men and 2% of women had completed the secondary level.



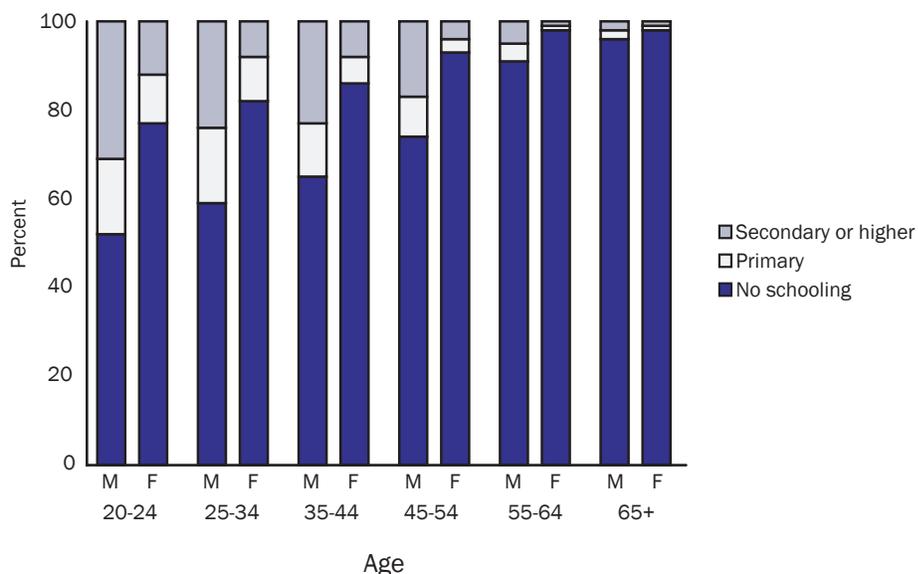
# Adult Educational Attainment: 1999

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

- In 1999, 48% 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, 23% of women age 20-24 and 1% of women age 65 and older had attended school.

**In 1999, men were more likely than women to have attended primary school or higher.**

- Among men age 20 and older, 30% had attended primary school or higher. Among women age 20 and older, 13% had attended primary school or higher.
- 19% of men age 20 and older had attended secondary school or higher, compared with 7% of women.

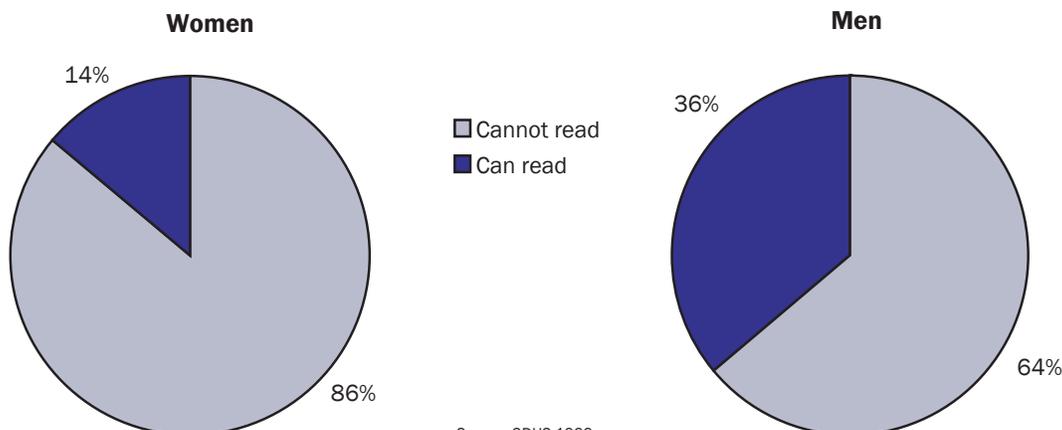


Source: GDHS 1999

# Literacy Among Women Age 15-49 and Men Age 15-59: 1999

Overall, literacy was very low in 1999, with men more than twice as likely as women to be literate.

- In 1999, 36% of men were literate, compared to 14% of women.<sup>2</sup>



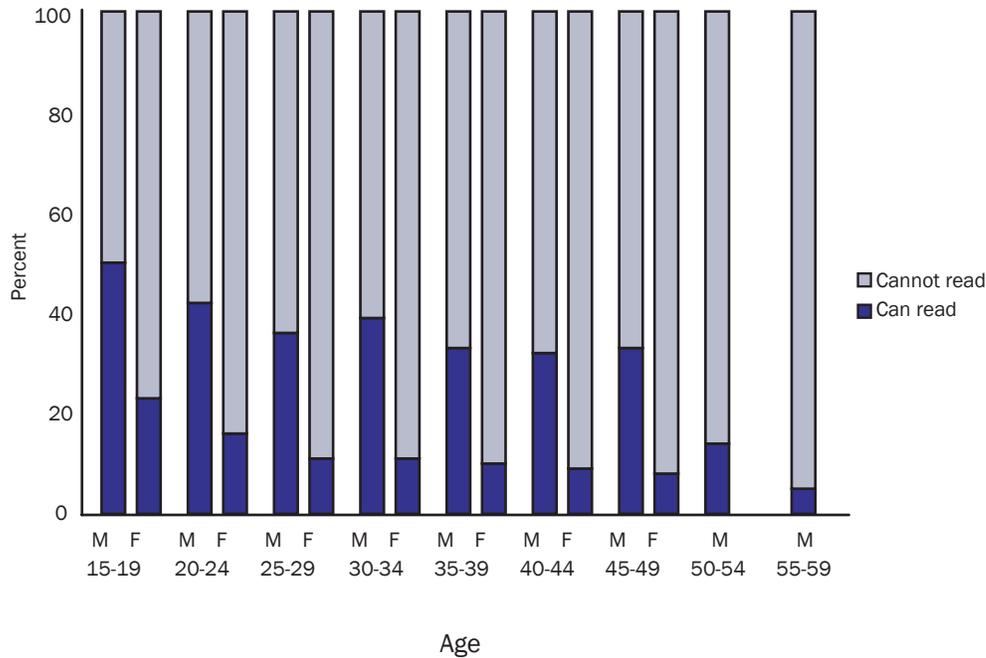
Source: GDHS 1999

<sup>2</sup> Among adults who never attended school and those who attended primary school, literacy was self-reported. 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 reported themselves to be literate.

# Literacy by Age: 1999

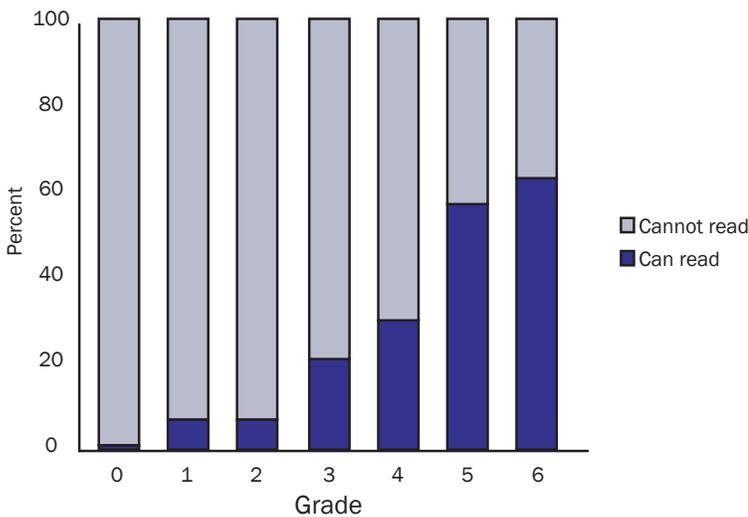
Literacy, while still low, has been increasing over the past 30 years.

- In 1999, 23% of women age 15-19 could read, compared with 8% of women age 45-49.
- In 1999, 50% of men age 15-19 could read, compared with 33% of men age 45-49 and 5% of men age 55-59.



Source: GDHS 1999

# Women's Literacy by Years of Primary School Completed: 1999



In 1999, 30% of women who had completed grade 4 and 63% of those who had completed grade 6 could read.

Source: GDHS 1999

# Main Reason for Leaving School Among Women Age 15-24, by Highest Level of Schooling Attended: 1999

Women age 15-24, who no longer attended school, were asked the main reason they left school.

The most common reasons women gave for leaving primary school were failing examinations (24%) and not liking school (21%).

- 1 in 10 women cited the inability to pay school fees as the main reason for leaving primary school.

The most common reasons for leaving secondary school or higher were failing examinations (20%) and marriage (19%).

- 12% of women who left secondary school or higher gave pregnancy as the main reason for leaving.

	Left during primary %	Left during secondary or higher %	Total %
Got pregnant	5	12	6
Got married	7	19	9
Needed to take care of children	4	1	3
Family needed help	8	0	7
Could not pay for schooling	10	8	10
Needed to earn money	2	0	1
Graduated/Had enough schooling	0.4	4	1
Failed exams	24	20	23
Did not like school	21	6	18
School not accessible	4	3	4
Other/Don't know	16	28	18

Source: GDHS 1999

## 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](http://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 15-49<sup>1</sup> 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.

<sup>1</sup> 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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Tracy Brunette, USAID/AFR/SD, 1300 Pennsylvania Ave, NW, Washington, DC 20523-4600 (Telephone: 202-712-1847; Email: [tbrunette@usaid.gov](mailto:tbrunette@usaid.gov)).

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](mailto:reports@orcmacro.com); Website: <http://www.dhseddata.com>).

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