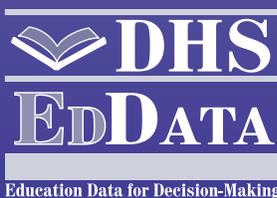


**DHS EdDATA
EDUCATION PROFILE**

**Uzbekistan
1996 and 2002**



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.

Uzbekistan

DHS EdData Education Profile: 1996 and 2002

The Uzbekistan Demographic and Health Surveys (DHS) were conducted in 1996 and 2002.¹ Having data from two surveys allows for an analysis of changes in the educational setting over time.

Key Findings

Over the years between 1996 and 2002, rates of primary school attendance increased in Uzbekistan.

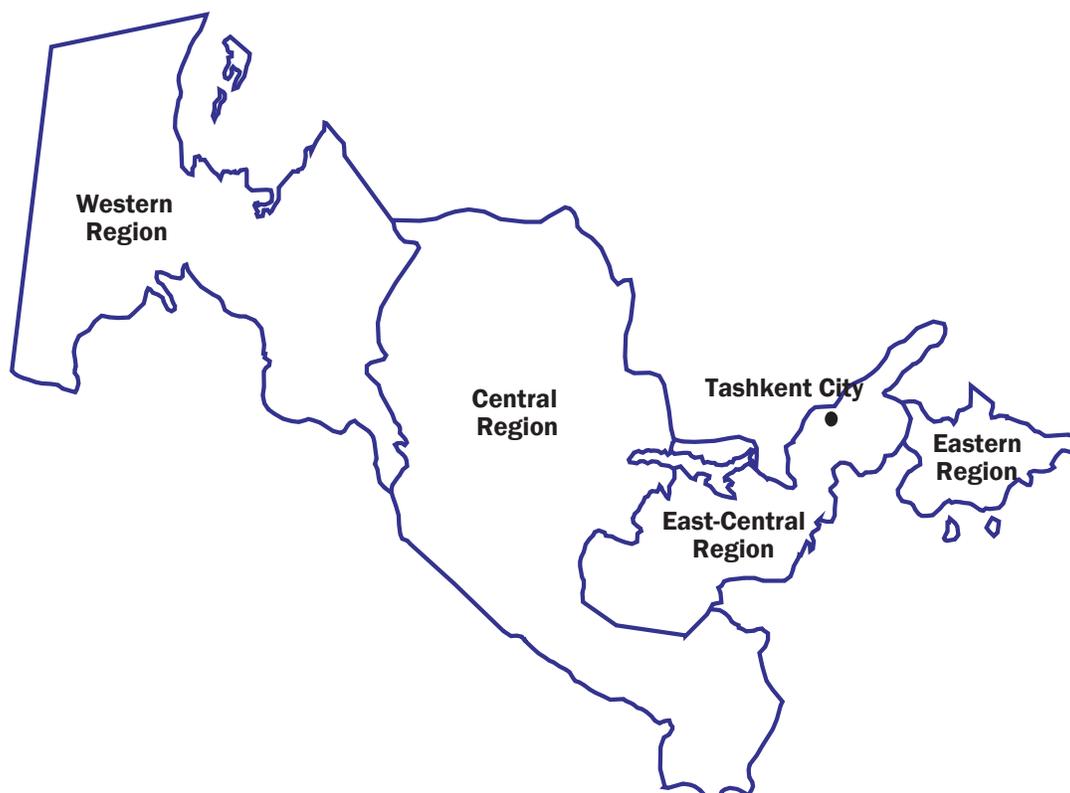
- In 2002, 89% of children age 6-9 attended primary school, compared to 75% in 1996.
- School-age males and females were nearly equally likely to attend primary school in both survey years.

At the secondary level, rates of attendance among school-age youth were high, and increased between 1996 and 2002.

- In 2002, 91% of youth age 10-16 attended secondary school, compared to 78% in 1996.
- Rates of attendance among youth age 10-16 were roughly equal for males and females.

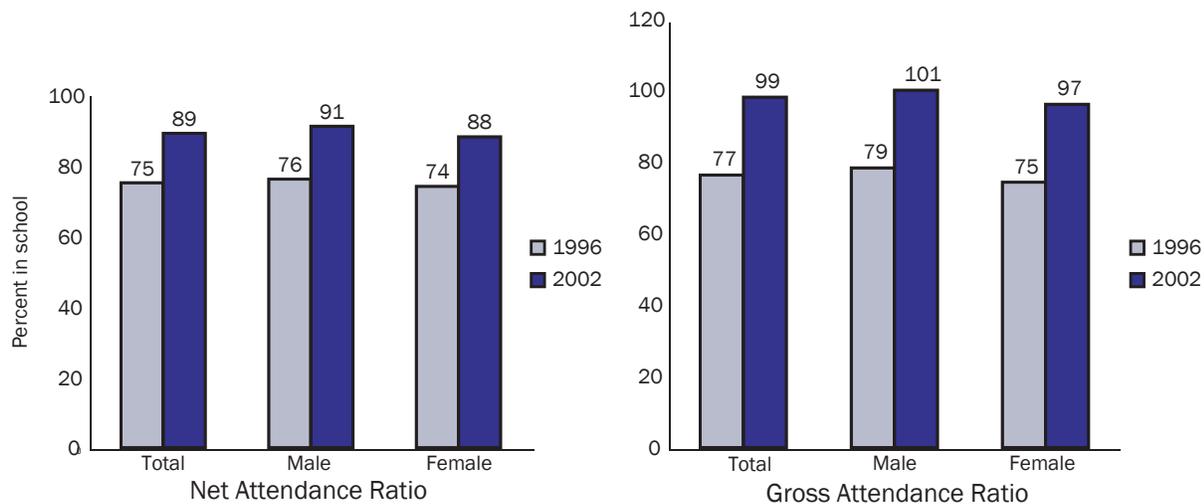
Adult educational attainment was high and changed little between 1996 and 2002. In 1996, literacy was nearly universal among women of all ages.

- In 2002, 97% of the population age 15 and older had completed primary school, with near gender parity.
- In 2002, 41% of men and 33% of women age 20 and older had completed secondary school.
- Virtually all women age 15-49 were literate in 1996.



¹ The 1996 survey was administered to 3,703 households, and to 4,415 women age 15-49 from those households. The 2002 survey was administered to 4,168 households, 5,463 women age 15-49, and 2,333 men age 15-59.

Primary School Attendance Ratios: 1996 and 2002



Source: UDHS 1996 and 2002

The net attendance ratio (NAR) is the percentage of the official primary school-age population (age 6-9 in Uzbekistan) 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)

The percentage of children age 6-9 attending primary school increased by 14 percentage points between 1996 and 2002.

- In 2002, 89% of primary school-age children in Uzbekistan attended primary school, compared with 75% in 1996.

School-age males and females were almost equally likely to attend primary school in 1996 and 2002.

Primary Gross Attendance Ratio (GAR)

From 1996 to 2002, the percentage of students outside the official primary school age range (either younger than 6 or older than 9) increased by 7 percentage points.

- Students over or under the official primary school age range made up 10% ($[\text{GAR } 99 - \text{NAR } 89] / \text{GAR } 99$) of the primary school population in 2002 and 3% ($[\text{GAR } 77 - \text{NAR } 75] / \text{GAR } 77$) in 1996.

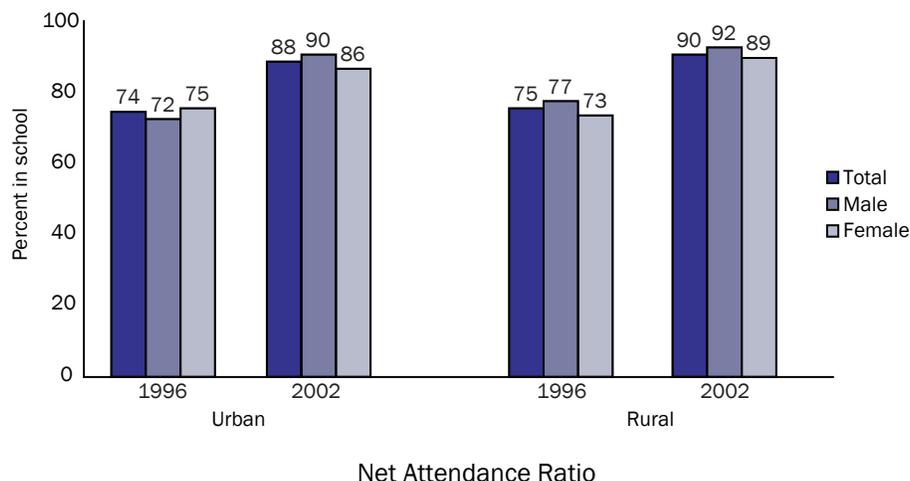
Among youth of all ages, males were slightly more likely than females to attend primary school in both survey years.

- In 2002, the gross attendance ratio (GAR) among males was 101, compared with 97 among females.

Primary School Net Attendance Ratio (NAR) by Urban/Rural: 1996 and 2002

In 1996 and 2002, children age 6-9 in urban and rural areas were almost equally likely to attend primary school.

- In 2002, 88% of children age 6-9 in urban areas attended primary school, compared to 90% in rural areas.
- In 1996, 74% of school-age children in urban areas and 75% in rural areas attended primary school.



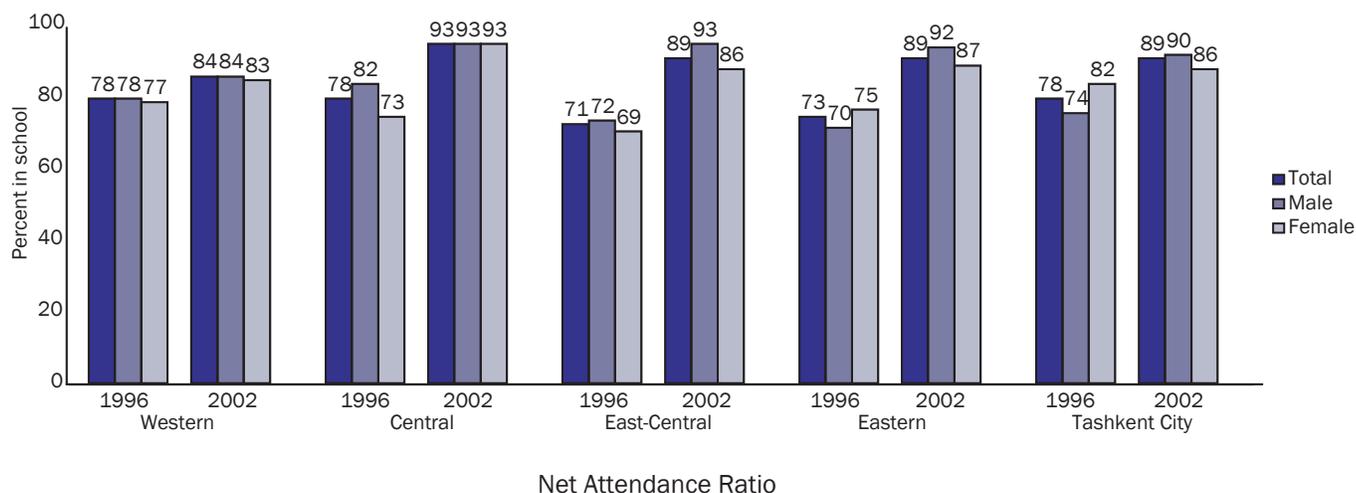
Source: UDHS 1996 and 2002

Primary School Net Attendance Ratio (NAR) by Region: 1996 and 2002

In both survey years, there was little regional variation in the rate of primary school attendance in Uzbekistan.

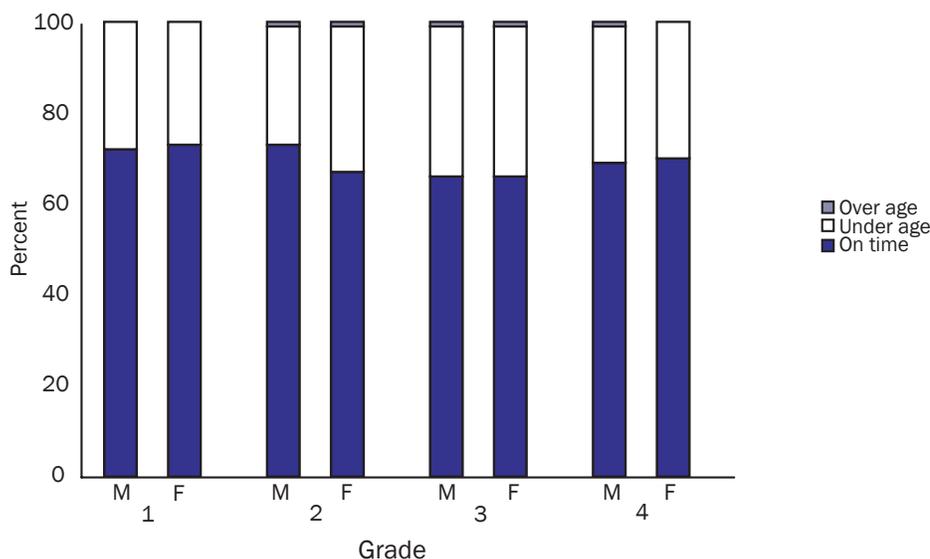
- In 2002, the NAR was highest in the Central region (93%) and lowest in the Western region (84%).

In 2002, the percentage of school-age children attending primary school was similar for male and female students in all regions.



Source: UDHS 1996 and 2002

Over-Age, Under-Age, and On-time Students in Primary School: 2002



Source: UDHS 2002

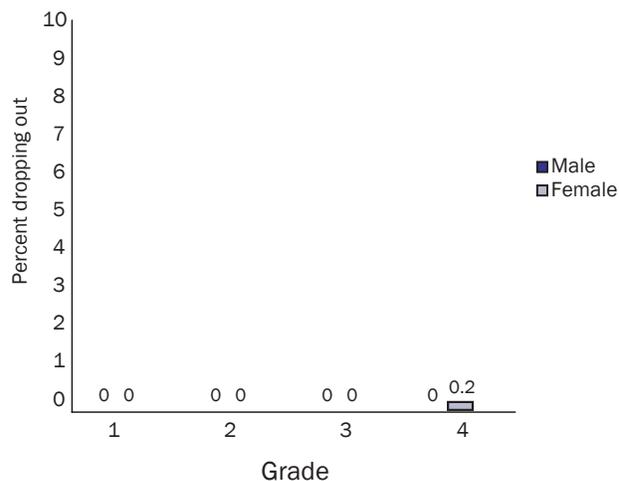
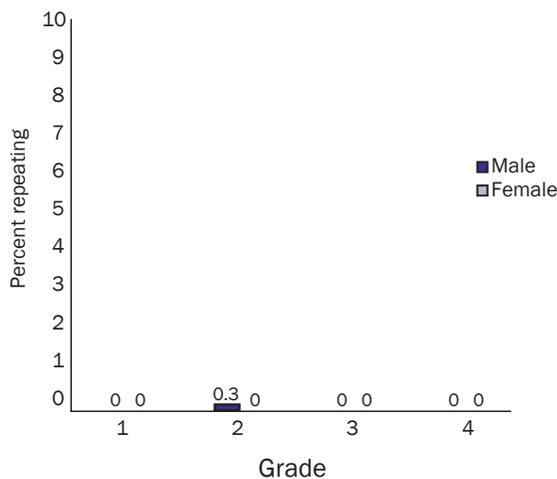
In 2002 and 1996, the vast majority of primary school students was either on time or under age for the grade attended (data from 1996 not shown).

- In general, male and female students were equally likely to be on time or under age for the grade attended.

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 6 in Uzbekistan, a grade 1 student who is age 6 or 7 is considered to be on time, a student age 8 or older is over age, and a student age 5 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 and Dropout: 2002²

In 2002, there was virtually no grade repetition or dropout in Uzbekistan.

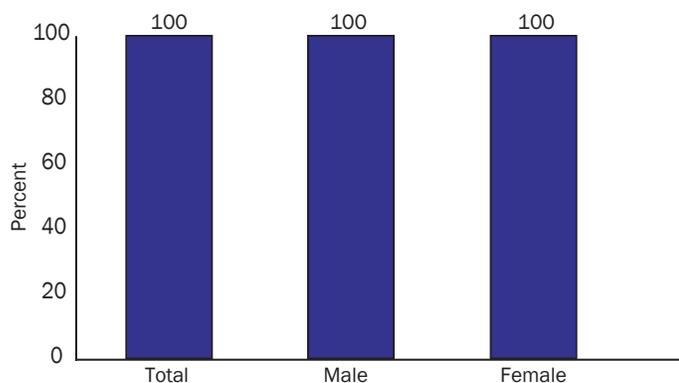


Source: UDHS 2002

² Repetition and dropout data are not available from the 1996 survey.

Survival to Grade 4: 2002³

In 2002, nearly all primary school students attending grade 1 could be expected to reach the final grade of the primary cycle, with or without grade repetition.

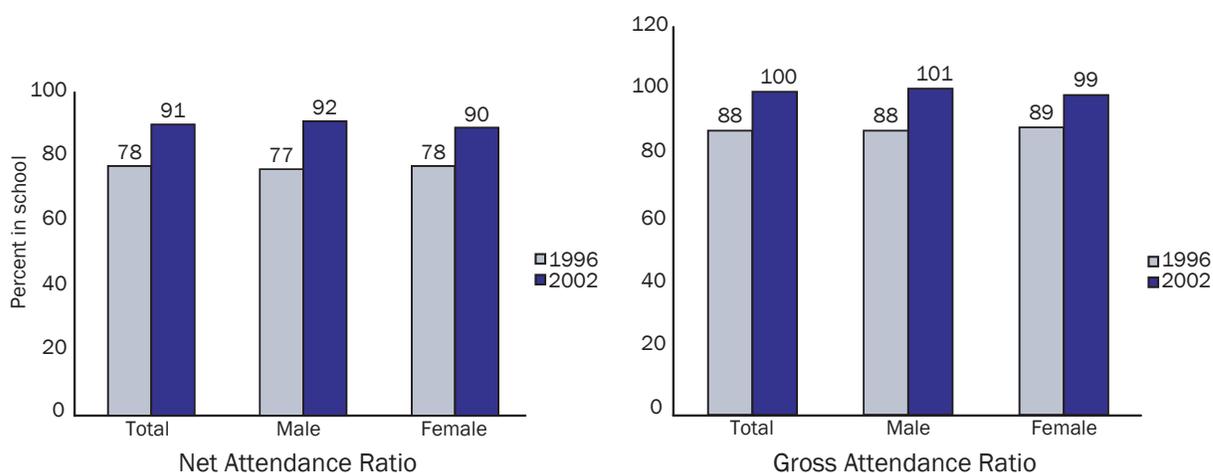


Source: UDHS 2002

Survival rates use drop out and repetition rates to estimate the percentage of students starting grade 1 who will 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).

³ Data on survival rates are not available from the 1996 survey.

Secondary School Attendance Ratios: 1996 and 2002



Source: UDHS 1996 and 2002

The net attendance ratio (NAR) is the percentage of the official secondary school-age population (age 10-16 in Uzbekistan) 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)

The percentage of youth age 10-16 attending secondary school increased notably between 1996 and 2002.

- In 2002, 91% of secondary school-age youth attended secondary school, up from 78% in 1996.
- In both 1996 and 2002, there was almost no gender gap in the rate of secondary school attendance.

Secondary Gross Attendance Ratio (GAR)

Among students of all ages (gross attendance), overall rates of secondary school attendance increased from 1996 to 2002.

- In 2002, the gross attendance ratio (GAR) was 100, compared to 88 in 1996.
- In both survey years, there was near gender parity in the rate of secondary school attendance.

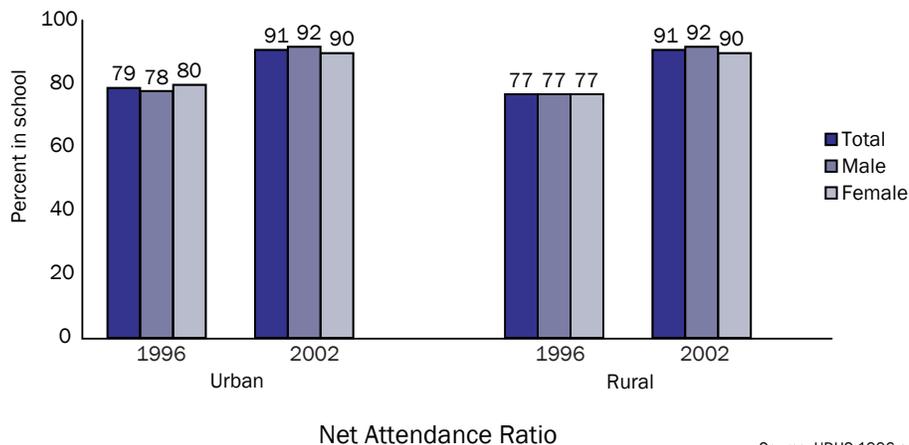
Secondary School Net Attendance Ratio (NAR) by Urban/Rural: 1996 and 2002

In 1996 and 2002, youth age 10-16 in urban and rural areas were equally likely to attend secondary school.

- In 2002, 91% of school-age youth in urban and rural areas attended secondary school.

From 1996 to 2002, rates of secondary school attendance among school-age youth increased notably in urban as well as rural areas.

- The NAR increased from 79% to 91% in urban areas, and from 77% to 91% in rural areas.

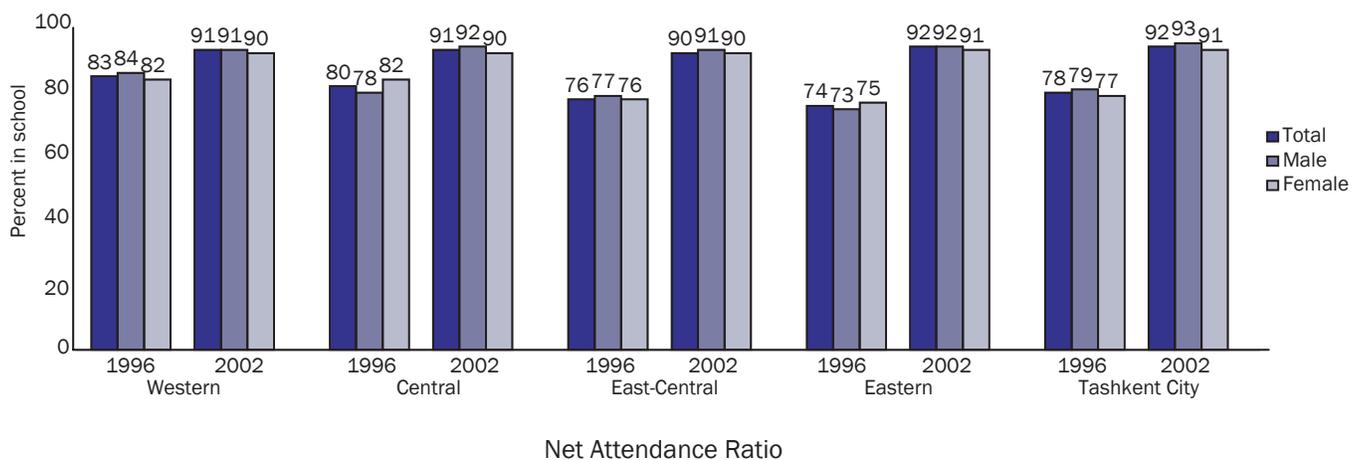


Secondary School Net Attendance Ratio (NAR) by Region: 1996 and 2002

Between 1996 and 2002, regional differences in the secondary NAR were virtually eliminated.

- In 1996, the secondary NAR ranged from 74% in the Eastern region to 83% in the Western region.
- In 2002, there was almost no regional variation in rates of secondary school attendance.

In 1996 and 2002, in all regions, there was near gender parity in the secondary NAR.

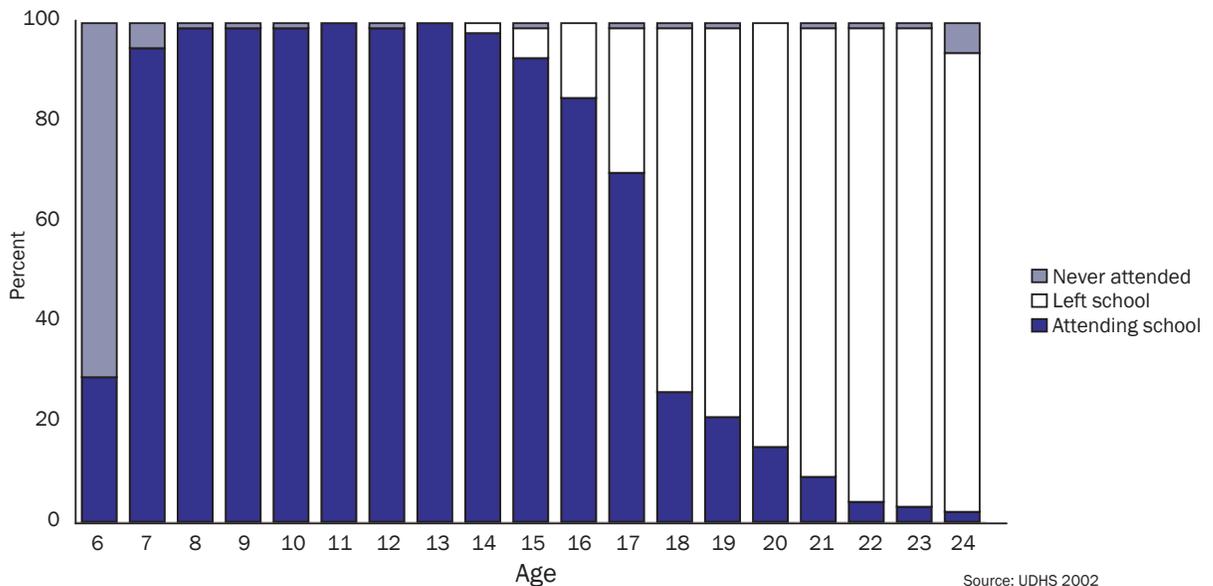


Schooling Status of Youth Age 6-24: 1996 and 2002

Between 1996 and 2002, the percentage of youth attending school at the pre-primary, primary, secondary, or post-secondary levels increased at each age from 6 to 20 (data from 1996 not shown).

- In 2002, the peak ages of attendance were 11 and 13, with nearly all children age 11 and 13 attending school; the peak age range was 8-14.

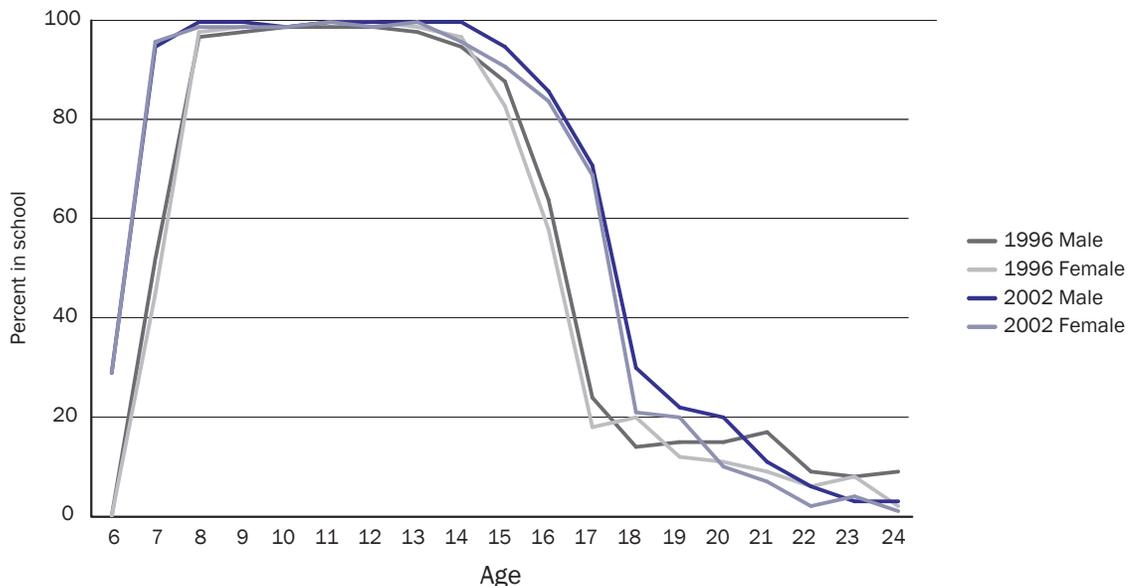
In both 2002 and 1996, the percentage of youth age 8-24 who had never attended school was negligible.



Age-Specific Attendance Rate by Sex: 1996 and 2002

In both survey years, at most ages from 6 to 24, the percentage of male and female youth attending school (pre-primary, primary, secondary or post-secondary) was nearly equal.

- The peak ages of attendance were 11 and 13 for females and 9 for males (100% attending at each age).
- In 2002, the largest gender gap in attendance was at age 20, with male attendance at 20% and female attendance at 10%.



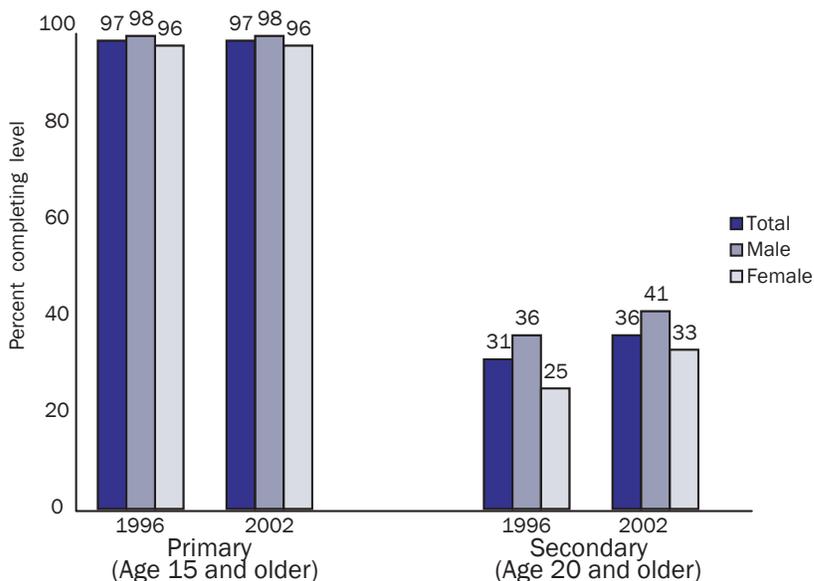
Adult Primary and Secondary School Completion Rates: 1996 and 2002

In 1996 and 2002, nearly the entire population age 15 and older in Uzbekistan had completed primary school.

- In both survey years, the primary school completion rate was 98% for men and 96% for women.

Secondary school completion rates among adults age 20 and older were considerably lower than primary school completion rates in both 1996 and 2002.

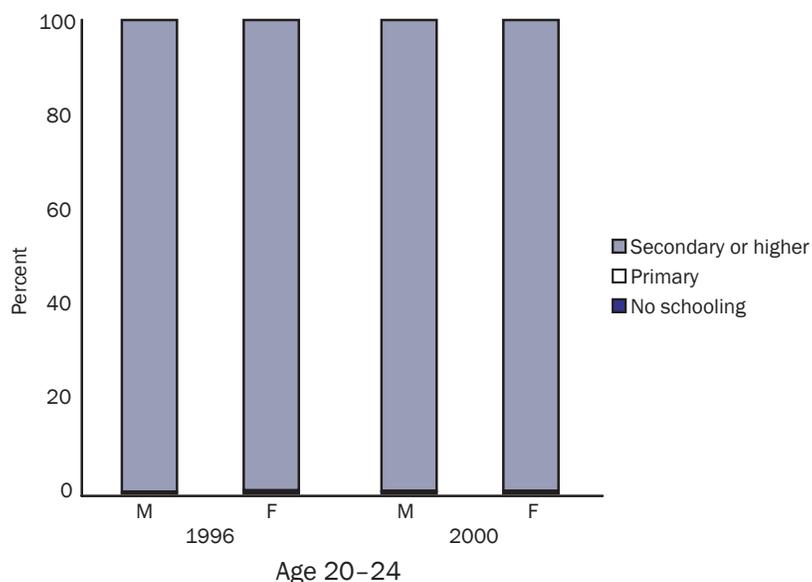
- In 2002, 41% of men and 33% of women had completed the secondary level.



Source: UDHS 1996 and 2002

Adult Educational Attainment: 1996 and 2002

Between 1996 and 2002, educational attainment among adults age 20-24 changed little, remaining nearly universal.



Source: UDHS 1996 and 2002

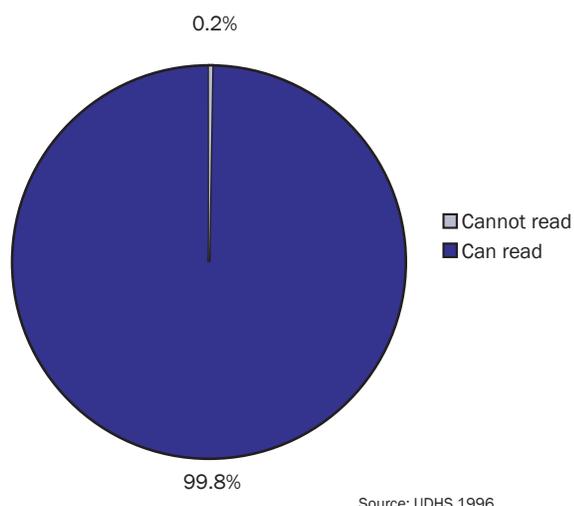
- In both surveys less than 1% of men and women age 20-24 had never attended school.

Younger adults have attained a higher level of schooling than older adults.

- In 2002, among women age 20-24, 99% had attended secondary or higher, compared with 59% of women age 65 and older (data not shown for all age groups).
- Among men age 20-24, in 2002, 99% had attended secondary school or higher, compared with 70% of men age 65 and older.

Literacy Among Women Age 15-49: 1996⁴

In 1996, literacy among women age 15-49 in Uzbekistan was nearly universal.⁵



⁴ Literacy was not measured in the 2002 survey. In 1996, literacy was measured for women only.

⁵ Among women who never attended school and those who attended primary school, literacy was self-reported in 1996. 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.

Main Reason for Leaving Secondary School Among Women Age 15-24 : 1996

In 1996, women age 15-24 who no longer attended school, were asked the main reason they had left school. The most common reason women gave for leaving secondary school was graduation or that the woman had attained the desired level of schooling (69%).

- In addition, 10% of women left secondary school because of pregnancy.
- Other reasons given for leaving secondary school included the need to earn money (5%) and not liking school (5%).

	Left during secondary or higher %
Got pregnant	0.1
Got married	10
Needed to take care of children	1
Family needed help	4
Could not pay for schooling	0
Needed to earn money	5
Graduated/Had enough schooling	69
Failed exams	3
Did not like school	5
School not accessible	0.3
Other/Don't know	2

Source: UDHS 1996

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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Elizabeth Appiah, USAID/EGAT/ED, 1300 Pennsylvania Ave, NW, Washington, DC 20523-4600 (Telephone: 202-712-5937; Email: eappiah@usaid.gov).

Tracy Brunette, USAID/AFR/SD, 1300 Pennsylvania Ave, NW, Washington, DC 20523-4600 (Telephone: 202-712-1847; Email: 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; Website: <http://www.dhseddata.com>).

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