Zambia

DHS EdData Survey 2002

Education Data for Decision-making

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Central Statistical Office
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ORC Macro
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This report summarises the education data from the 2002 Zambia DHS EdData Survey (ZDES) and the 2001-2002 Zambia Demographic and Health Survey (Zambia DHS), both of which were carried out by the Central Statistical Office (CSO), with technical assistance provided by ORC Macro. The 2002 ZDES was carried out by the CSO in partnership with the Zambia Ministry of Education (MOE). Funding for the 2002 ZDES was provided by the United States Agency for International Development (USAID)/Zambia through the USAID DHS EdData Activity. Funding for the overall DHS EdData Activity, including the development of the model survey instruments, was provided by USAID's Office of Education in the Bureau for Economic Growth, Agriculture and Trade. Financial assistance for the 2001-2002 Zambia DHS survey was provided by USAID/Zambia. Additional funding for the 2001-2002 Zambia DHS survey was received from the Government of Japan through a trust fund managed by United Nations Development Programme (UNDP) and through bilateral agreements between the Government of the Republic of Zambia and the United Nations Population Fund (UNFPA) and the Danish International Development Agency (DANIDA). The opinions expressed in this report are those of the authors and do not necessarily reflect the views of USAID.

Additional information about this report may be obtained from the Central Statistical Office (CSO), P.O. Box 31908, Lusaka, Tel: 260-1-251377/85; fax: 260-1253468.

Additional information about the 2002 ZDES, the DHS EdData Activity, the 2000-2001 Zambia DHS survey, or the MEASURE *DHS+* program may be obtained by writing to: DHS EdData or MEASURE *DHS+*, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone: 301-572-0200; Fax: 301-572-0983; E-mail: reports@orcmacro.com; Internet: http://www.dhseddata.com or http://www.measuredhs.com).

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FOREWORD

This report presents the major findings of the 2002 Zambia DHS EdData Survey (ZDES). The 2002 ZDES is the first education survey of its kind to be conducted in Zambia. The primary objective of the 2002 ZDES is to provide up-to-date household-based information on education among children of primary school age in order to inform the development, monitoring, and evaluation of education programmes in Zambia. The survey focuses on the factors influencing household decisions about children's school attendance. These data supplement the school data collected by the Ministry of Education by focusing on attendance and exploring the costs of schooling (monetary and non-monetary) and parent/guardian attitudes about schooling.

The survey provides data on topics such as the age of children's first school attendance, and dropout; reasons for overage first-time enrolment in school, never enrolling in school, and dropout; and frequency of and reasons for pupil absenteeism. It also collects information on household expenditures on schooling and other contributions to schooling; distances and travel times to school; and parent/ guardian perceptions of school quality and the benefits and disadvantages of schooling. In addition, the 2002 ZDES provides critical information on the nutritional status and basic literacy and numeracy among young school-age children.

I would like to acknowledge the efforts of a number of organisations and individuals that contributed to the success of the survey. First I would like to acknowledge the financial assistance from the U.S. Agency for International Development (USAID)/Zambia for survey activities. Funding for the overall DHS EdData Activity was provided by USAID's Office of Education in the Bureau for Economic Growth, Agriculture and Trade. Thanks also to ORC Macro for technical backstopping. I would also like to acknowledge the close collaboration efforts between the staff of the Central Statistical Office and the Ministry of Education in implementing the survey. Finally, I am grateful to the survey respondents who generously gave their time to provide the information on which this report is based.

Dr. Buleti G. Nsemukila
Director
Central Statistical Office, Zambia

SUMMARY OF FINDINGS

The 2002 Zambia DHS EdData Survey (ZDES) was a nationally representative sample survey covering 4,245 households, 3,975 parent/guardians, and 8,027 children of primary school age. The 2002 ZDES was the first education survey of its kind in Zambia, and was linked to the 2001-2002 Zambia Demographic and Health Survey (DHS). This report presents information primarily from the 2002 ZDES, but also presents selected information from the 2001-2002 Zambia DHS survey.

The 2002 ZDES was designed to provide information on education among children age 6-14, with a focus on factors influencing household decisions about children's schooling. This report presents information on adult educational attainment, children's characteristics and rates of school attendance, absenteeism among primary school pupils, household expenditures on schooling and other contributions to schooling, and parent/guardian perceptions of schooling, among other topics.

The sample size for both the 2001-2002 Zambia DHS survey and the 2002 ZDES was sufficiently large to provide estimates for indicators at the national and urban-rural levels, and at the provincial level for most indicators. Ten survey teams trained by the Central Statistical Office (CSO), in collaboration with the Ministry of Education, conducted the survey from August to October 2002.

CHARACTERISTICS OF HOUSEHOLDS AND HOUSEHOLD MEMBERS

Educational Attainment. Eighty-five percent of adults age 15 or older have attended school, although there are substantial differences in educational attainment by gender, residence, and age group. On average, men have completed two more years of schooling than women (7 compared with 5 years). While 5 percent of adults in urban areas have never attended school, 20 percent of adults in rural areas have never attended school. About one in four adults in Eastern and Western Provinces has never attended school, compared with less than one in ten adults in Copperbelt and Lusaka Provinces. Older adults are considerably less likely than younger adults to have attended school.

Children's Living Arrangements. Over half of the children age 6-14 live with both of their biological parents, while 17 percent live with their mother (but not with their father), 5 percent live with their father (but not with their mother), and 21 percent live with neither of their biological parents. Many of these children have been orphaned, losing one or both parents: 18 percent have lost their father, 9 percent have lost their mother, and 5 percent have lost both parents.

Children's Eating Patterns. The survey collected information about the meals eaten by children on the day before the household was interviewed. Seventy percent of children ate breakfast and 85 percent ate lunch, with pupils being more likely than non-pupils to have eaten at both times of day. Overall, children ate 3 times during the day.

Children's Nutritional Status. The survey also collected and analysed height and weight measurements for children age 7-9. Thirty-one percent of children age 7-9 are chronically malnourished or stunted, with Luapula and Northern Provinces having especially high rates of stunting. Wasting is uncommon in Zambia (2 percent), but 17 percent of children are underweight for their age. Children who attend or have attended school are less likely to be stunted or underweight than are children who have never attended school or who have attended only pre-primary school.

Literacy and Numeracy among Children. The survey provides a rough measure of literacy and numeracy among children age 7-10. Children were asked to read from a sentence in a language in which they were likely to be literate, and were asked to add up two one-digit numbers totaling less than 10. Levels of basic literacy among children age 7-10 are low, with 19 percent of children able to read part or all of a sentence. Basic numeracy rates are considerably higher, with 52 percent of children able to add the numbers correctly.

CHILDREN'S SCHOOL ATTENDANCE

Primary School Attendance and Pupil Flow Rates. Two-thirds (67 percent) of children age 7-13 attend primary school, with equal percentages of male and female children attending school. There are, however, differences in attendance ratios by urban-rural location, province, parents' educational attainment, and wealth. For instance, in Eastern Province, 54 percent of the children of primary school age attend school, compared with 76 percent in North-Western and Copperbelt Provinces. In the poorest households, 51 percent of children age 7-13 attend primary school, compared with 87 percent of the children from the wealthiest households.

At the primary level, pupil repetition and dropout rates are low. For the level as a whole, just 5 percent of the pupils attending school in 2000 repeated the same grade in 2001, and 4 percent dropped out from one year to the next.

Secondary School Attendance Ratios. Twenty-two percent of children age 14-17 attend secondary school, with similar percentages of male and female youth attending school. There are substantial differences, though, by urban-rural residence, province, and wealth. For instance, 9 percent of youth age 14-17 in Luapula Province attend secondary school, compared with 37 percent in Copperbelt Province. Differences by wealth are even more dramatic than those at the primary level, with just 6 percent of youth in the poorest households attending secondary school, and 51 percent of youth in the wealthiest households attending secondary school.

Factors Affecting Children's School Attendance. Parent/guardians whose 7-14 year-old children had never attended school were asked why their children did not go to school. The most commonly cited reason was the monetary cost of schooling, followed by the distance to the nearest school, and the child being perceived as too young to attend school. Similarly, among children age 6-14 who had once attended school but later dropped out during primary school, the most commonly cited reason was the monetary cost of schooling, followed by the child's lack of interest in attending school, and the distance to the nearest school with the needed grade.

Household Proximity to Schools. As expected, children in rural areas face considerably longer distances and walking times to the nearest primary and secondary schools than children in urban areas. Children living far from school may be likely to start attending school over age or not to attend school at all. Among over-age children, those in rural areas are considerably more likely than those in urban areas to have started school over age because of the distance to the nearest school. In addition, the distance to school in part explains why young school-age children do not attend school, since it may be difficult or unsafe for children to walk long distances to school at the age of 7.

PRIMARY SCHOOL PUPIL ABSENTEEISM

Incidence of Absenteeism. Eighty-six percent of primary school pupils missed one or more days of school during the 2001 school year. On average, pupils absent from school missed 13 days during the year. In the week preceding the household interview, 25 percent of pupils missed one or more days of school.

Reasons for Absenteeism. During the 2001 school year, 69 percent of pupils missed school because they were ill, 30 percent because fees were due and there was no money to pay the fees, 30 percent because they did not want to go, and 24 percent because they were engaged in funeral-related activities.

HOUSEHOLD EXPENDITURES ON SCHOOLING AND OTHER CONTRIBUTIONS TO SCHOOLING

Household Expenditures on Primary Schooling. The ZDES collected detailed information about household expenditures on schooling for each child attending primary school during the 2001 school year, before the implementation of Free Basic Education. Questions were asked specifically about each possible cost, including tuition, PTA fees, the sports fund, examination fees, boarding fees, uniforms and school-related clothing, school books and supplies, transportation, food, private tuition (tutoring), and other types of expenditures. Nearly all primary school pupils' households spent money on schooling during the school year. On average, pupils' households spent ZK 202,899 per pupil during the 2001 school year. Households spent twice as much on female pupils as on male pupils (ZK 278,000 versus ZK 127,704). Pupils' households in urban areas spent nearly ten times as much as those in rural areas on schooling (ZK 418,210 versus ZK 48,097). In addition, pupils' households spent far more if their children attended private schools than if they attended government or government-assisted schools.

Other Household Contributions to Schooling. In addition to monetary contributions for children's schooling, children and other household members may contribute time, labour, and materials to schools. Including travel time, pupils in day primary schools in the lower grades spend 5 hours per day on school activities, while those in the higher grades spend 6 hours on school activities. Over half of the pupils do homework outside school and spend about 1 hour per week on the task.

Another kind of contribution households make to schooling is the time parent/guardians and other household members spend on school-related activities. The majority of pupils doing homework receive help from household members. Furthermore, in the 12 months preceding the survey interview, 93 percent of parent/guardians with one or more children in primary school said that they or another adult in the household had visited the school to attend a parent-teacher association (PTA) meeting, to attend a celebration or sports event, to meet with a head teacher or teacher, or to collect school forms. Two-thirds of parent/guardian households made additional contributions of money, materials, or labour to the school.

PARENT/GUARDIAN PERCEPTIONS OF SCHOOLING

Perceived Quality of Primary Schooling. Forty-three percent of the primary school pupils attend schools that their parent/guardians consider to have problems with buildings and facilities, 30 percent attend schools with perceived problems with classroom overcrowding, and 6 percent attend schools with perceived problems with pupil safety. Parent/guardians overwhelmingly agreed that for a primary school to be a good school, it must have permanent buildings and that school quality is improved by requiring pupils to wear uniforms.

Value of Schooling. Ninety-nine percent of parent/guardians disagreed with a statement that boys need only a primary school education (rather than continuing to secondary school), and a similar proportion disagreed that girls need only a primary school education. Parent/guardians were also asked about the advantages of primary schooling for a 15-year-old boy or girl compared with a boy or girl of the same age who had never attended school. Nearly all respondents said there were benefits to primary schooling. There were minimal gender differences in advantages mentioned, with commonly cited benefits for both boys and girls being literacy, finding a job, and developing a moral framework. Two

benefits listed more often for girls than for boys were the likelihood of making a better marriage and becoming a better parent.

Parent/guardians were also asked about the disadvantages of sending a boy, and then a girl, to primary school. Virtually all parent/guardians said there were no disadvantages to sending children to school.

SEXUAL MATTERS, AIDS, AND EDUCATION

Sources of Information about Sexual Matters. Parent/guardians were asked where children in the community get information about sexual or reproductive matters, such as conception and contraception. The most commonly cited sources of information include parent/guardians themselves, teachers, clinics, and children's friends.

Sex Education and Primary Schooling. Parent/guardians were asked whether schools should teach about sex education, and 62 percent said that they should. Among these parent/guardians who approved of including sex education in schools, the majority thought that the subject should be introduced in the upper primary grades. Among the 38 percent of parent/guardians who said primary schools should not teach sex education, the most common reasons given were that primary school pupils are too young, that sex education encourages children to have sex, and that it is not appropriate to teach sex education in schools.

AIDS Education and Primary Schooling. Parent/guardians were asked whether schools should teach about AIDS, and 91 percent said that they should. Among these parent/guardians who approved of including AIDS education in schools, the majority thought that the subject should be introduced in the upper primary grades. Among the 9 percent of parent/guardians who said primary schools should not teach AIDS education, the most common reasons given were the same ones given for not teaching sex education in primary schools. Parent/guardians were also asked whether any children in the community and in their family did not attend school because their parent/guardians were sick from or had died of AIDS. Half of the parent/guardians said that this was the case in their community, and 12 percent said that there were children in their own family who did not attend school because a parent/guardian was sick or had died of AIDS.

INTRODUCTION 1

History, Geography, and Economy

History

Historical and archaeological evidence indicates that by the year 1500 much of modern Zambia was occupied by farming people who were ancestors of the present inhabitants. In the late nineteenth century, various parts of what was to become Northern Rhodesia were administered by the British South Africa Company. In 1924, the British Colonial Office assumed responsibility for administering the territory, and in 1953, Northern Rhodesia (Zambia) and Southern Rhodesia (Zimbabwe) joined Nyasaland (Malawi) to form the Central African Federation of Rhodesia and Nyasaland, despite the opposition of Northern Rhodesia's Africans. The Federation was, however, dissolved in 1963. In October 1964, Zambia gained political independence and adopted a multiparty system of government. In December 1972, Zambia became a one-party state. The current multiparty system was re-introduced in 1991.

In 2000, Zambia's population was estimated at close to 10 million people, divided among 73 different tribes or ethnic groups officially recognized by the government. There are about 20 distinct languages, many with two or three different dialects. In addition to English, Zambia has seven major languages: Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja, and Tonga. Most people in Zambia follow either a form of Christianity or a traditional African religion; there are small groups of Muslims, primarily in the large cities.

Geography

Zambia is a land-locked country covering an area of 752,612 square kilometres and consisting of about 2.5 percent of the area of Africa. It shares borders with the Democratic Republic of Congo (DRC) and Tanzania in the north; Malawi and Mozambique in the east; Zimbabwe and Botswana in the south; Namibia in the southwest and Angola in the west. Administratively, the country is divided into nine provinces and 72 districts. Out of the nine provinces, two are predominantly urban, namely Lusaka and Copperbelt Provinces. The remaining provinces—Central, Eastern, Northern, Luapula, North-Western, Western and Southern—are predominantly rural provinces. Nearly four in ten Zambians live in urban areas.

Zambia lies between 8 and 18 degrees south latitude and between 20 and 35 degrees east longitude. It has a tropical climate and vegetation with three distinct seasons: the cool dry winter from May to August, a hot dry season during September and October, and a warm wet season from November to April.

Among the main river water sources in Zambia are the Zambezi, Kafue, Luangwa and Luapula. The country also has several major lakes, including Tanganyika, Mweru, Bangweulu and the man-made Kariba. The northern part of the country receives the highest rainfall with an annual average ranging from 1,100 mm to over 1,400 mm. The southern and eastern parts of the country have less rainfall, ranging from 600 mm to 1,100 mm annually, which often results in droughts.

Economy

Zambia's economy consists of a modern urban-oriented sector and a rural agricultural sector. For many years, the modern sector has been dominated by parastatal organisations, while private businesses have predominated in the construction and agricultural sectors. Since 1991, with the introduction of a liberalised market-oriented economy, the parastatals have been privatised and, in some cases, liquidated.

Copper mining is the country's main economic activity, accounting for 95 percent of export earnings and contributing 45 percent of government revenue during the decade following the attainment of political independence (1965-1975). In the mid-1970s, following a sharp decline in copper prices and a sharp increase in oil prices, the country's economy deteriorated. Attempts were made to minimise dependency on copper exports by diversifying the economy through the creation of import substitution parastatals. This effort did not achieve the desired results.

The 1980s marked the start of the first phase of implementing Structural Adjustment Programmes (SAP) in a stagnating economy. However, the SAP failed to alter the economy structurally and exacerbated poverty among the majority of Zambians. Currently around 73 percent of Zambians are classified as poor. Poverty is more prevalent in rural areas compared to urban areas (83 percent and 56 percent, respectively). Poverty in the Zambian context can be defined as the lack of access to income, to employment opportunities, and to entitlements such as the freely determined consumption of goods and services, shelter and the other basic needs of life (MOFNP, 2002).

In an effort to halt the economic recession, in 1991 the Movement for Multiparty Democracy (MMD) Government launched an Economic Recovery Programme (ERP) to reverse the protracted decline of the economy, and to achieve sustained positive real growth and the consequent improvement in living standards and the quality of life. In 2001, the Government initiated the Poverty Reduction Strategy to improve living conditions and to address problems associated with AIDS and with food shortages (Republic of Zambia, 1992).

Education System and Programmes

Structure of the Education System

Zambia's education system consists of academic training at the primary, secondary, and tertiary levels. Formal primary schooling in Zambia includes seven years of primary school, typically referred to as grades 1-7. The official age range for primary schooling is age 7-13. At the end of primary school, a national examination, the Primary School Leaving Certificate Examination (PSLCE) is administered.

Secondary schooling consists of two levels, junior secondary (grades 8-9) and senior secondary (grades 10-12), with the official secondary school age range being age 14-18. Successful completion of junior secondary leads to the award of the Junior Certificate of Examination (JCE), and completion of senior secondary leads to the award of the School Certificate of Education (SCE). The Ministry of Education (MOE) is currently reorganizing the pre-university education system into two levels: basic education will include grades 1-9, and high school will include grades 10-12.

Tertiary education includes schooling at universities, colleges of commerce, technical colleges, and teacher training colleges. Both universities and colleges require the SCE for admission. Technical and vocational colleges train craftsmen, technicians, and other skilled workers for industry. These colleges include an intermediate level for students who have completed primary school and an advanced level for students who have completed secondary school. Students studying to become primary school or secondary school teachers enrol in teacher training colleges after completing the SCE.

In addition to the formal system, a non-formal education system operates to serve the disabled, displaced persons, school-age children who have never attended formal school or who have dropped out of school, geographically isolated children, orphans, and street and working children, among others. The MOE officially recognizes two alternative approaches to primary school—community schools and interactive radio centres—that particularly address the needs of educationally underserved populations and out-of-school children. The MOE is establishing regulations and quality control procedures to ensure that the growing numbers of community schools are formally registered and eligible for government support. Although considered a transitional means of providing primary schooling until formal schools can be established, interactive radio centres eventually will be used to supplement teaching and learning in regular schools.

Basic Education Sub Sector Investment Programme (BESSIP)

In 1999, the MOE launched the Basic Education Sub Sector Investment Programme (BESSIP) in order to address the decline in basic education participation and standards, which began in the 1990s. The main objective of BESSIP is to broaden access to primary schooling, largely by improving equitable access to basic education. The targets are 100 percent enrolment of the primary school age group (7-13) by 2005 and 100 percent enrolment of the junior secondary age group (14-15) by 2015. Thus far, the effects of BESSIP have been notable. Primary school enrolments have grown steadily from 1,555,707 in 1999 to 1,731,579 in 2002, an increase of 11 percent. In 2002, the gross enrolment ratio (GER) at the primary level was 81 (85 for males and 78 for females). The 3 percent dropout rate has remained stable between 1999 and 2002. The repetition rate has changed little over the same period, rising from 6 percent in 1999 to 8 percent in 2002.[1]

Access and quality are seen as the major education challenges facing Zambia. Accommodating additional pupils in classrooms, providing trained teachers, and supplying sufficient instructional materials are issues that must be addressed. The Government of Zambia promotes the establishment of private schools and has increased the total number of school places through infrastructure development, by constructing new schools and expanding and rehabilitating existing schools. In 1999, there were about 4,300 primary schools in Zambia. By 2002, there were 4,558 schools, of which 94 percent were government schools, 4 percent private schools, 1 percent government-assisted schools, and less than one percent were other types of schools.

The Government has also implemented a number of policy reforms. In 2001, the MOE abolished the examination fee for the Primary School Leaving Certificate Examination (PSLCE) in order to ensure that no pupil was prevented from sitting for the exam because of cost. This policy has resulted in an increase in the percentage of pupils sitting for grade 7 examinations.

In 2002, Zambia declared Free Primary Education (FPE) for grades 1-7 and increased budgetary allocation to the sector. A circular to all government schools and education offices explained that tuition and other government school fees had been eliminated for pupils in grades 1-7, and that school uniforms were no longer compulsory. Although government school education boards and PTAs are permitted to raise funds through various activities, it is the Government's intent that no pupil should be denied access to government schools because of school fees.

These new policies are supported by the following measures: sensitisation of communities about the importance of educating girls, women, orphans and the vulnerable; distribution of grants to all government and recognized community schools based on unit cost, learner population and equity-based criteria; provision of infrastructure and learning materials; bursaries to cover basic essentials like clothing

[1] See the 2002 Education Statistical Bulletin (unpublished), Directorate of Planning and Information, Ministry of Education, Lusaka, Zambia.

for orphans and children with special needs; and weekly boarding facilities for those without adequate home-based care.

For many years prior to the implementation of FPE, households sending children to primary school paid a sizeable percentage of the direct costs of primary schooling. Reducing the direct costs of schooling to households is expected to increase the willingness to send children to school, which will result in increased enrolment in primary schools and a reduction in the numbers of out-of-school children.

Secondary Schooling

To respond to the increasing demand for post-primary schooling, the MOE is working toward establishing at least one secondary or high school in all districts that do not have a secondary school, and is supporting the establishment of private secondary schools. Nonetheless, there are a limited number of secondary schools in Zambia (335 secondary schools in 2002), making access to secondary schooling much narrower than access to primary schooling. In 2002, 205,393 students attended secondary school and the gross enrolment ratio was 13 (15 for boys and 11 for girls). These figures indicate that participation at the secondary level is low among youth of secondary school age (14-18) and among those outside the official age range.[2]

Strategic Plan 2003-2005

The Ministry of Education has formulated a five-year sector strategic plan to address the education needs of the Zambian people. The Strategic Plan 2003-2007 is based mainly on three key documents, *Educating Our Future* (1996), the *Poverty Reduction Strategy Paper* (2001/2002) and the *Report on the Restructuring and Decentralisation of the Ministry of Education* (2000).[3] The Strategic Plan addresses all sub-sectors of the education system. The main priorities are:

- Improved access, gender equity and quality in basic education (grades 1-9)
- Improved quality and efficiency in secondary and tertiary education
- Development of relevant skills and enhanced learning achievement by all learners
- Effective decentralisation of decision-making, procurement and financial management to districts and schools
- Management/mitigation of the impact of HIV/AIDS.

From 2003–2005, the focus will largely be on grades 1-9, with an emphasis on the expansion of enrolment in grades 8 and 9. Major investment and reform in post-basic education will begin in 2005.

Sources of Education Data

Annually, the Ministry of Education (MOE) collects data on school, teacher, and student characteristics from both government and non-government schools from the primary through tertiary levels. These data are reported in the Education Statistical Bulletin.[4]

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[2] See the 2002 Education Statistical Bulletin (unpublished), Directorate of Planning and Information, Ministry of Education, Lusaka, Zambia.

[3] See Strategic Plan 2003-2007, Ministry of Education, Zambia (31 January 2003).

[4] See 2002 Education Statistical Bulletin (unpublished), Directorate of Planning and Information, Ministry of Education, Lusaka, Zambia.

At the household level, the Government of Zambia conducts a census every ten years, with the last census conducted in 2000. It also conducts the Living Conditions Monitoring Survey (LCMS), formerly known as the Priority Survey (PS). The LCMS is an ongoing survey that collects household and community data on socio-economic status and agricultural activities. The LCMS collects some education data, including household members' educational attainment, literacy, and current schooling status. The PS/LCMS has been conducted four times since 1991, and another round of the survey is currently underway.

Objectives of the 2002 Zambia DHS EdData Survey

The principal aim of the 2002 Zambia DHS EdData Survey (ZDES) is to provide up-to-date information on education among children of primary school age. The survey focuses on factors influencing household decisions about children's school attendance. These data supplement the data collected by the Ministry of Education (MOE) by focusing on attendance rather than enrolment and exploring the costs of schooling (monetary and non-monetary) and parent/guardians' attitudes about schooling.[5] The survey provides data on topics such as the age of children's first school attendance and dropout; the reasons for over-age first-time enrolment in school, never enrolling in school, and dropout; the frequency of and reasons for pupil absenteeism; household expenditures on schooling and other contributions to schooling; distances and travel times to schools; and parent/guardians' perceptions of school quality and the benefits and disadvantages of schooling. In addition, ZDES presents anthropometric (height and weight) data for children age 7-9 and literacy/numeracy data for children age 7-10.

The 2001 ZDES was designed to supplement existing education data sources and to provide policy-relevant data to assist policymakers in evaluating education programmes in the country. In broad terms, the 2002 ZDES aims to—

- Provide baseline data on key education indicators to support education policy and planning
- Assist in the evaluation of Zambia's education programmes
- Advance survey methodology in Zambia and contribute to national and international databases
- In more specific terms, the 2002 ZDES was designed to—
- Provide data on the schooling status of Zambian children of primary school age and on factors influencing whether children ever enrol in school and why pupils drop out of school
- Quantify household expenditures on children's schooling and examine differential patterns of expenditure by various background characteristics
- Measure parent/guardians' attitudes about schooling, including the quality of schooling, to provide an understanding of attitudes that shape parent/guardians' willingness to send their children to school
- Measure the frequency of pupil absenteeism and the reasons for missing school in order to suggest possible approaches to maximizing pupil attendance
- Measure parent/guardians' attitudes toward sex education and AIDS education, in order to understand how the introduction of these topics into primary school would likely be received.

[5] See chapter 5 for further discussion.

Organization of the Survey

The 2002 Zambia DHS EdData Survey was a comprehensive survey that involved several agencies. The Central Statistical Office (CSO) of Zambia had the primary responsibility for conducting the survey, in partnership with the Ministry of Education (MOE). Model survey instruments were modified by CSO in consultation with a number of technical institutions and agencies, including the Ministry of Education, the University of Zambia (UNZA), the U.S. Agency for International Development (USAID)/Zambia, and ORC Macro. ORC Macro provided technical assistance for the 2002 ZDES, and funding was provided by USAID/Zambia through the USAID DHS EdData Activity. Funding for the overall DHS EdData Activity, including the development of the core survey instruments, was provided by USAID's Office of Education in the Bureau for Economic Growth, Agriculture, and Trade.

Linkage of the 2002 ZDES with the 2001-2002 ZDHS

The 2002 ZDHS EdData Survey was linked to the 2001-2002 Zambia Demographic and Health Survey (DHS). The 2001-2002 Zambia DHS survey, for which data collection was carried out from November 2001 through May 2002, was the third DHS conducted in Zambia (previous surveys were implemented in 1992 and 1996). The 2001-2002 Zambia DHS survey was designed to provide current and reliable information on key indicators of social development, including fertility levels and trends, family planning knowledge and use, maternal and child health, awareness and behaviour regarding AIDS and other sexually transmitted infections, and domestic violence. The 2001-2002 Zambia DHS survey also included questions on educational attainment among household members and literacy among men age 15-59 and women age 15-49.

The 2002 ZDES was linked to the 2001-2002 Zambia DHS survey in order to collect additional education data on a sub-set of the households surveyed by the 2001-2002 Zambia DHS survey. Of the 7,126 households for which 2001-2002 Zambia DHS interviews were completed, 4,701 households were sampled for the 2002 ZDES. Data from the two surveys for a given household were then statistically linked to create a data set that was used to produce the results presented in this report.

Sample Design

The sample for the 2002 ZDES is based on the sampling frame for the 2001-2002 Zambia DHS survey, which was designed to provide estimates of health and demographic indicators at the national and provincial levels and for urban and rural areas. It was also designed to provide estimates of some indicators in 12 combined districts.[6] This discussion will first address the sample design for the 2001-2002 Zambia DHS survey, then the subsequent design for the ZDES.

The 2001-2002 Zambia DHS sample points (clusters) were systematically selected from a list of Standard Enumeration Areas (SEAs) defined in the 2000 Population Census. A total of 320 clusters was drawn from the census sample frame: 220 in rural areas and 100 in urban areas. In general, the 2001-2002 Zambia DHS clusters included only one SEA; however, in order to achieve the minimum cluster size of 85 households, 34 clusters comprised two SEAs.

After selecting the 320 clusters, the CSO trained teams to conduct the comprehensive listing of households and to update maps in the selected clusters. The listing operation was initiated in March 2001 and completed prior to household selection.

[6] The 2001-2002 Zambia DHS survey was designed to produce district-level estimates for selected parts of the country for the Zambia Integrated Health Programme. The 2002 ZDES, by contrast, was not intended to provide district-level estimates.

Following the listing operation, households to be included in the 2001-2002 Zambia DHS survey were selected, with the number of households selected per cluster being inversely proportional to the size of the cluster. In the 2001-2002 Zambia DHS sampling frame, the number of households by province was disproportional to population size, in order to have adequate numbers of cases for provincial reporting. The sample was constructed to allow for separate estimates for key indicators in each of the nine provinces in Zambia, with the result that the sample is not self-weighting at the national level.

The 2002 ZDES sample was designed to provide reliable estimates of important household and individual characteristics for Zambia as a whole, urban and rural areas, and each of the nine provinces (Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Southern, and Western). For the 2002 ZDES, the sample included all of the 2001-2002 Zambia DHS households with children in the eligible child age range (6-14) in all 320 clusters.

Questionnaires

Three questionnaires were used for the 2002 ZDES: the Household Questionnaire, the Parent/Guardian Questionnaire, and the Eligible Child Questionnaire. The Household Questionnaire listed all people who were either members of the household or visitors at the time the household was surveyed for the 2001-2002 Zambia DHS survey. The three purposes of the ZDES Household Questionnaire were to 1) confirm that the household was the same household surveyed by the 2001-2002 ZDHS, 2) identify which children were eligible (qualified) to be covered by the Eligible Child Questionnaire and those eligible to have anthropometric and literacy/numeracy data collected about them, and 3) identify a parent or guardian as the respondent for each eligible child. The ZDES Household Questionnaire determined whether each potentially eligible child was a usual household member. Children who were age 6-14 at the time of the 2001-2002 Zambia DHS survey were eligible to be covered by the Eligible Child Questionnaire. Children age 6-11 at the time of the 2001-2002 Zambia DHS survey had their heights and weights measured, and were given a literacy/numeracy test.[7]

The Parent/Guardian Questionnaire collected background information on each parent/guardian respondent and on general education issues. Information was collected on the parent/guardian's age, education, literacy, and religion. Questions were also asked about the walking time and distance to the nearest primary and secondary schools, as well as household support of and participation in school activities. Parent/guardians were also asked about their views on school quality, the benefits and disadvantages of schooling, and sex and AIDS education. Additionally, information was collected on each primary school attended by the children for whom the parent/guardian responded, including the school type and location, the reason for selection of that school, and perceived school quality.

The Eligible Child Questionnaire collected different kinds of information about each eligible child, depending on the child's schooling status. While the subject of the Eligible Child Questionnaire was the eligible child and his/her schooling, the respondent for the questionnaire was the child's parent/guardian, since the purpose of the questionnaire was to collect information on issues from the parent/guardian's perspective. Data were collected on the following topics, according to the child's schooling status:

[7] The 2002 ZDES was designed to collect anthropometric and literacy/numeracy data for children who were age 7-10 at the time of the ZDES. Because children who were age 6 at the time of the 2001-2002 Zambia DHS might have become 7 years old by the time of the 2002 ZDES, anthropometric and literacy/numeracy data were also collected for children who were 6 years old at the time of the 2001-2002 Zambia DHS. Because the more specific birth date data collected by ZDES might show that children said to be age 11 at the time of the 2001-2002 Zambia DHS were actually within the eligible 7-10 age group, anthropometric and literacy/numeracy data were also collected for these children. Ultimately, analysis of the anthropometric data was conducted for children age 7-9, in keeping with WHO/CDC analytic parameters.

- Schooling background and participation during the current school year (attended school during the 2002 school year, dropped out of school, or never attended school)
- Frequency of and reasons for pupil absenteeism, household expenditures on schooling, other costs of schooling (for children who attended school during the 2001 school year)
- Reasons for dropping out of school (for children who have dropped out of school)
- Reasons for not attending school during the 2002 school year (for children who have never attended school)
- Children's eating patterns

The questionnaires were translated from English into seven local languages—Bemba, Kaonde, Lozi, Lunda, Luvale, Nyanja, and Tonga. Pretest training and fieldwork took place in April and May 2002. For this exercise, fourteen interviewers were trained (two per local language). The questionnaires were tested in and around Lusaka in all languages, including English. A total of 101 households were interviewed, and 111 Parent/Guardian Questionnaires and 180 Eligible Child Questionnaires were completed. Based on the results of the pretest, adjustments in the language and content of the survey questionnaires and interviewers' manual were made before the main survey training was initiated and local language translations finalised.

Training

Training of field staff for the main survey was conducted over a three-week period in July 2002. Fifty interviewer candidates participated in the training, selected by CSO from its staff and consultants according to anticipated local language requirements. From this pool, 40 people—30 interviewers and 10 supervisors—were selected to work on the 2002 ZDES based on performance and test results.

The training was conducted using the DHS EdData Survey training procedures, including instruction in general interviewing techniques and field procedures, class presentations on the questionnaires, mock interviews between participants, and tests. The training included practice interviews in neighbourhoods in and around Lusaka, using the questionnaire in English and the seven local languages. Training and field practice also included using the height boards and scales for the anthropometry module. The trainees were organized into local language teams, headed by one trainer, to review the draft local language instruments so that final adjustments could be made.

Supervisors were trained during a one-day classroom session, followed by two days of actual field supervision, questionnaire review, and discussion. Several supervisors had been involved in the 2001-2002 Zambia DHS survey, which allowed for a briefer training of supervisors than otherwise would have been possible because supervisors were already familiar with survey field procedures.

Data Collection and Data Processing

Ten interviewing teams—approximately one per province—carried out data collection for the 2002 ZDES. Each team was composed of one supervisor, one driver, and two to four interviewers depending on the number of assigned households. Staff from CSO coordinated and supervised fieldwork activities, with the assistance of MOE staff. ORC Macro staff also participated in field supervision, making initial visits to five of the nine provinces. Field teams included persons who had worked previously on the 2001-2002 Zambia DHS survey and were familiar with the location of the selected households. Data were collected over a three-month period, from 2 August through 30 October 2002.

All ZDES questionnaires were taken to the CSO headquarters in Lusaka for data processing. Data processing consisted of office editing, the coding of open-ended questions, data entry, verification, and editing of the computer-identified errors. A team of six data entry clerks, data editors, and a data entry supervisor processed the data. Data entry and editing started in late August 2002, using the computer package CSPro (Census and Survey Processing System), which was specifically designed to process data from large-scale household surveys of this type. Data tables were produced using ISSA (Integrated System for Survey Analysis).

Table 1.1 shows response rates for the 2002 ZDES. A total of 4,701 households with children age 6-14 were selected, of which 4,306 were occupied. Of the 4,306 occupied households, 4,245 were interviewed successfully, yielding a household response rate of 99 percent.[8]

In the interviewed households, 3,975 parent/guardians were identified to be interviewed.[9] Interviews were completed with 3,975 parent/guardians, yielding a response rate of 100 percent.[10]

Since the parent/guardians responded to the questions about their children and the children age 6-14 for whom they are responsible, the eligible child questionnaire response rate reflects the percentage of eligible children for whom data were collected. Data were collected on all 8,027 eligible children identified, yielding a response rate of 100 percent. The overall children response rate, which is 99 percent, is the product of the household response rate, the parent/guardian response rate, and the eligible child response rate.

Anthropometric data were collected for young school-age children, and analysed for children age 7 to 9. A total of 2,971 children were identified and complete measures were obtained for 2,690 of these children, yielding a response rate of 91 percent. The response rate was higher in urban areas than in rural areas (94 percent versus 89 percent).

Literacy and numeracy data were collected for young school- age children, and analysed for children age 7 to 10. Of the 3,944 children identified, a measure of literacy was obtained for 3,538 children, and a measure of numeracy collected for 3,539 children, yielding a response rate of 90 percent.

[8] Occupied households exclude the following categories: entire household absent, dwelling vacant, dwelling destroyed, and household moved. The household response rate is calculated from those households expected to have been interviewed. The categories constituting 'occupied' and hence the denominator for the calculation of the response rate include: completed, no household member at home, refused, and dwelling not found. The numerator for the calculation of the household response rate is 'completed.'

[9] The focus of the 2002 ZDES, as discussed earlier, was the education of primary school-age children as seen from the perspective of children's parent/guardians. The survey was designed to collect information about each eligible child from a respondent knowledgeable about the child's education history. The respondent might be the child's mother, father, grandparent, another relative, or a non-relative, and it was expected that in many households, more than one parent/guardian might be qualified to respond to questions about each child. The survey allowed for one qualified respondent to answer questions, but also allowed for the substitution of another knowledgeable parent/guardian should the "best" respondent be unavailable. As a consequence of this approach, the respondent's characteristics—such as relationship to the child, age, sex, educational attainment, and so on—were not known in advance. In addition, in households with more than one eligible child, the survey allowed for more than one parent/guardian respondent per household. The end result of this approach to identifying parent/guardians is that it cannot be said that the 2002 ZDES includes a probabilistic sample of parent/guardians.

[10] Of the 4,245 households that were successfully interviewed, there were 3,954 households with at least one eligible child and parent/guardian. Interviews were conducted with 3,975 parent/guardians in these 3,954 households, for an average of 1.01 parent/guardian respondents per household.

Table 1.1 Results of the 2002 ZDES household and individual interviews

Number of households, number of interviews, and response rates, by residence, ZDES 2002

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households sampled	1,336	3,365	4,701
Households occupied	1,196	3,110	4,306
Households completed	1,172	3,073	4,245
No household member at home	10	25	35
Entire household absent	10	65	75
Refused	10	11	21
Dwelling vacant	1	8	9
Dwelling destroyed	2	1	3
Dwelling not found	4	1	5
Household moved	127	181	308
Household response rate	98.0	98.8	98.6
Parent/guardian interviews			
Eligible parent/guardians	1,097	2,878	3,975
Interviews completed	1,097	2,878	3,975
Parent/guardian response rate	100.0	100.0	100.0
Children's questionnaires			
Eligible children found	2,275	5,752	8,027
Children's questionnaires completed	2,275	5,752	8,027
Children's response rate	100.0	100.0	100.0
Overall children's response rate	98.0	98.8	98.6
Children 7-9 anthropometry			
Eligible children 7-9	876	2,095	2,971
Eligible children 7-9, with measures completed	822	1,868	2,690
Eligible children 7-9 response rate	93.8	89.2	90.5
Children 7-10 literacy			
Eligible children 7-10	1,168	2,776	3,944
Eligible children 7-10, with valid response	1,087	2,451	3,538
Eligible children 7-10 response rate	93.1	88.3	89.7
Children 7-10 numeracy			
Eligible children 7-10	1,168	2,776	3,944
Eligible children 7-10, with valid response	1,087	2,452	3,539
Eligible children 7-10 response rate	93.1	88.3	89.7

Note: All values in this table are unweighted. Unless otherwise specified, eligible children are age 6-14.

ADULT EDUCATIONAL ATTAINMENT AND LITERACY 2

This chapter presents data on the educational attainment of adults in the households surveyed for the 2001-2002 Zambia Demographic and Health Survey. Also presented is information on literacy among selected household members: women age 15-49 and men age 15-59.

Educational Attainment

Educational attainment among adults (defined here as household members age 15 or older) is an indicator of the adult population's exposure to schooling, as well as a rough indicator of a country's human resource base. The 2001-2002 Zambia DHS survey collected data on the highest level of education attended and the highest class completed at that level among Zambians age 5 or older. This information allows for the calculation of educational attainment among the Zambian adult de jure household population (see Tables 2.1.1 through 2.1.3).[11]

[11] The de jure household population includes usual household members and excludes visitors to the household.

Table 2.1.1 Educational attainment of male adult household population

Percent distribution of the de jure male household population age 15 and over by highest level of education attended, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Educational attainment							Total	Number	Mean number of years of schooling
	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing			
Age										
15-19	6.2	46.1	18.7	26.6	2.1	0.1	0.2	100.0	2,047	5.9
20-24	5.9	25.8	21.4	28.8	14.2	3.6	0.3	100.0	1,516	7.4
25-29	6.8	24.8	21.4	26.3	13.9	6.6	0.2	100.0	1,427	7.7
30-34	5.5	19.7	23.0	27.2	13.5	10.9	0.2	100.0	1,125	8.1
35-39	6.7	19.5	26.6	27.2	10.3	9.6	0.0	100.0	871	7.8
40-44	5.0	16.9	34.4	24.7	9.3	9.2	0.5	100.0	625	7.9
45-49	6.7	21.1	26.5	29.5	5.1	10.3	0.8	100.0	486	7.9
50-54	11.0	25.3	21.8	24.6	5.9	11.2	0.2	100.0	374	7.2
55-59	16.8	37.5	16.8	16.7	4.5	7.7	0.0	100.0	318	5.8
60-64	22.3	43.5	15.1	10.3	2.9	4.6	1.4	100.0	314	5.6
65+	35.2	46.2	7.6	6.5	1.0	2.3	1.2	100.0	559	3.4
Residence										
Urban	2.4	13.8	19.2	36.1	16.7	11.3	0.5	100.0	3,640	9.0
Rural	12.8	39.8	22.8	18.2	3.7	2.5	0.3	100.0	6,023	5.7
Province										
Central	6.5	32.0	22.7	26.5	5.6	6.4	0.3	100.0	731	7.3
Copperbelt	3.1	15.3	21.8	35.0	13.7	11.0	0.1	100.0	1,938	8.7
Eastern	21.2	36.1	17.5	15.9	5.6	3.0	0.7	100.0	1,225	5.2
Luapula	8.4	45.6	23.5	17.4	2.1	2.9	0.0	100.0	725	5.8
Lusaka	3.6	15.2	21.5	31.0	17.4	10.6	0.7	100.0	1,386	8.9
Northern	6.9	38.0	23.2	22.6	5.8	3.1	0.4	100.0	1,348	6.4
North-Western	13.8	38.5	15.2	24.7	3.3	4.4	0.1	100.0	467	5.8
Southern	8.7	33.2	27.7	21.9	5.9	2.2	0.5	100.0	1,045	6.3
Western	16.6	43.2	15.9	17.2	5.8	1.0	0.3	100.0	797	5.2
Total	8.9	30.0	21.4	24.9	8.6	5.8	0.4	100.0	9,663	7.0

Table 2.1.2 Educational attainment of female adult household population

Percent distribution of the de jure female household population age 15 and over by highest level of education attended, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Educational attainment							Total	Number	Mean number of years of schooling
	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing			
Age										
15-19	8.9	41.3	18.0	29.2	2.3	0.1	0.2	100.0	1,979	5.8
20-24	11.9	34.9	19.1	23.7	7.7	2.7	0.1	100.0	1,752	6.2
25-29	10.7	35.0	21.1	23.1	4.6	5.4	0.1	100.0	1,464	6.3
30-34	11.6	35.3	23.2	22.4	2.9	4.5	0.2	100.0	1,046	6.2
35-39	16.2	35.9	24.5	17.8	2.0	3.1	0.5	100.0	826	5.6
40-44	19.0	34.9	25.8	14.3	1.8	4.1	0.0	100.0	662	5.4
45-49	20.9	45.1	18.1	9.5	1.0	5.0	0.3	100.0	511	4.7
50-54	41.2	40.6	7.6	5.1	0.6	3.8	1.0	100.0	460	3.2
55-59	55.2	36.8	3.4	1.8	0.0	1.6	1.2	100.0	333	2.0
60-64	63.5	31.5	2.1	0.8	0.0	1.2	0.7	100.0	304	1.6
65+	69.7	27.4	1.3	0.2	0.1	0.2	1.1	100.0	530	0.9
Residence										
Urban	7.6	23.0	23.2	32.7	6.8	6.5	0.3	100.0	3,602	7.4
Rural	27.0	44.5	14.9	11.3	1.1	0.8	0.3	100.0	6,265	4.0
Province										
Central	14.9	40.8	18.0	19.2	3.4	3.5	0.3	100.0	745	6.1
Copperbelt	9.1	23.4	25.6	31.0	5.2	5.4	0.4	100.0	1,844	7.0
Eastern	33.3	40.6	9.6	11.9	2.2	2.0	0.5	100.0	1,316	3.8
Luapula	19.8	58.0	12.2	8.5	1.0	0.5	0.0	100.0	808	3.9
Lusaka	10.6	25.4	24.0	26.2	6.5	6.7	0.5	100.0	1,309	7.0
Northern	22.3	43.9	14.6	16.1	1.9	0.9	0.3	100.0	1,368	4.5
North-Western	29.1	40.4	11.4	15.8	1.7	1.4	0.2	100.0	497	4.1
Southern	19.6	34.8	23.2	18.1	2.5	1.6	0.2	100.0	1,064	5.2
Western	31.5	41.0	13.1	12.5	1.1	0.6	0.2	100.0	918	3.7
Total	19.9	36.7	17.9	19.1	3.2	2.9	0.3	100.0	9,868	5.3

Table 2.1.3 Educational attainment of adult household population

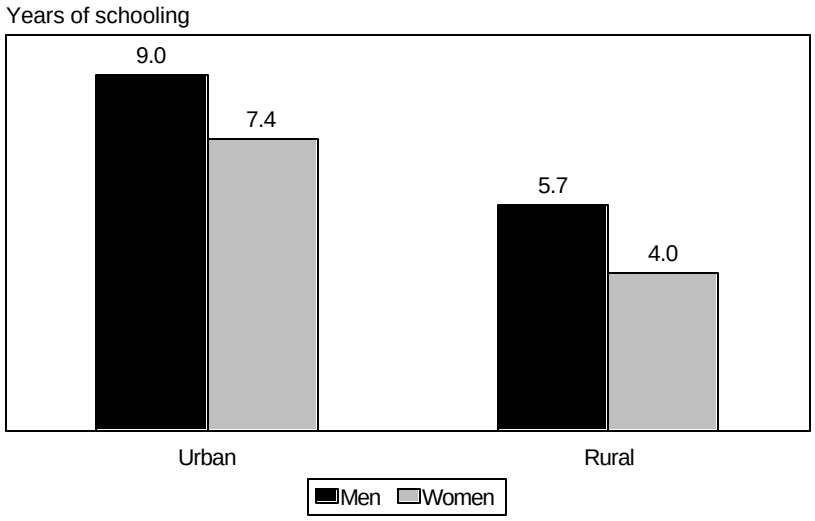
Percent distribution of the de jure female and male household populations age 15 and over by highest level of education attended, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Educational attainment							Total	Number	Mean number of years of schooling
	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing			
Age										
15-19	7.5	43.7	18.3	27.9	2.2	0.1	0.2	100.0	4,026	5.9
20-24	9.1	30.7	20.2	26.1	10.7	3.1	0.2	100.0	3,268	6.8
25-29	8.7	30.0	21.3	24.7	9.2	6.0	0.2	100.0	2,891	7.0
30-34	8.4	27.2	23.1	24.9	8.4	7.8	0.2	100.0	2,171	7.2
35-39	11.3	27.5	25.6	22.6	6.3	6.5	0.2	100.0	1,697	6.8
40-44	12.2	26.2	30.0	19.4	5.4	6.6	0.3	100.0	1,287	6.6
45-49	14.0	33.4	22.2	19.2	3.0	7.6	0.6	100.0	997	6.3
50-54	27.7	33.8	14.0	13.8	2.9	7.1	0.7	100.0	835	5.0
55-59	36.4	37.2	9.9	9.1	2.2	4.6	0.6	100.0	651	3.9
60-64	42.5	37.6	8.7	5.7	1.5	2.9	1.1	100.0	618	3.6
65+	52.0	37.1	4.5	3.5	0.6	1.3	1.1	100.0	1,089	2.2
Residence										
Urban	5.0	18.4	21.2	34.4	11.8	8.9	0.4	100.0	7,242	8.2
Rural	20.0	42.2	18.7	14.7	2.4	1.6	0.3	100.0	12,289	4.9
Province										
Central	10.7	36.4	20.4	22.8	4.5	4.9	0.3	100.0	1,476	6.7
Copperbelt	6.0	19.2	23.7	33.1	9.5	8.3	0.2	100.0	3,782	7.9
Eastern	27.5	38.4	13.4	13.8	3.8	2.5	0.6	100.0	2,541	4.5
Luapula	14.4	52.2	17.5	12.7	1.6	1.6	0.0	100.0	1,534	4.8
Lusaka	7.0	20.2	22.7	28.7	12.1	8.7	0.6	100.0	2,695	8.0
Northern	14.7	41.0	18.9	19.3	3.8	2.0	0.3	100.0	2,716	5.5
North-Western	21.7	39.5	13.3	20.1	2.4	2.9	0.2	100.0	964	4.9
Southern	14.2	34.0	25.4	20.0	4.2	1.9	0.3	100.0	2,109	5.8
Western	24.6	42.0	14.4	14.6	3.3	0.8	0.2	100.0	1,715	4.4
Total	14.4	33.4	19.7	22.0	5.9	4.3	0.3	100.0	19,531	6.1

As shown in Table 2.1.3, the majority of Zambian adults (85 percent) have attended school, although many of these adults did not complete primary school. One in two (52 percent) Zambian adults has completed primary school or has attended school at the post-primary level.

Although most Zambian adults have attended school, there are sizeable differences by sex, urban-rural residence, and province. While 9 percent of men have never attended school, 20 percent of women have never been to school (see Tables 2.1.1 and 2.1.2). The mean years of schooling also reflects the overall gender gap in educational attainment: men have completed an average of 7.0 years of schooling, compared with 5.3 years among women. In urban areas, 5 percent of the adult population has never attended school, compared with 20 percent in rural areas. In urban areas, men have completed an average of 9.0 years of schooling, compared with 5.7 years among men in rural areas. Among women, the gap is comparable, with urban women having completed an average of 7.4 years and rural women having completed 4.0 years of schooling (see Figure 2.1). Twenty-eight percent of the adults in Eastern Province have never attended school, compared with only 6 percent in Copperbelt Province.

Figure 2.1
Mean Years of Schooling Completed by Men and Women Age 15 or Older, by Residence



Zambia DHS 2001-2002

The results by age group indicate that the percentages of adults who have never attended school tends to decrease over time: 8 percent of young adults age 15-19, 9 percent of those age 20-24, and 9 percent of those age 25-29 have never attended school, compared with 36 percent of those age 55-59, 43 percent of those age 60-64, and 52 percent of those age 65 or older. The absolute gender gap (the difference between the percentage of men and women who have never attended school) decreases among younger cohorts, with a gap of 3 percentage points between men and women age 15-19 (6 percent of men and 9 percent of women age 15-19 have never attended school), compared with a gap of 35 percentage points between men and women age 65 or older (35 percent of men and 70 percent of women age 65 or older have never attended school).

Literacy

Literacy is a complex construct, not easily captured by one indicator. The 2001-2002 Zambia DHS survey provides one measure of literacy, namely, whether a man or woman can read a simple sentence about everyday life. This definition does not provide information about functional literacy such as whether the respondent can read and understand the instructions on a medicine bottle or read and make use of a bus timetable, for example. Nevertheless, this indicator of the ability to read some or all of a sentence suggests whether respondents have the basic ability to read common words.

The 2001-2002 Zambia DHS survey assessed literacy among men age 15-59 and women age 15-49. Respondents who have attended school beyond the primary level are assumed to be literate; therefore, the survey measures literacy only among respondents who have never attended school or who attended school up to the primary level. Among respondents with primary or no schooling, the level of literacy is based on the respondent's ability to read none, part, or all of a sentence in a language in which he/she is likely to be literate. Respondents were asked to demonstrate literacy by reading from a card with a simple sentence in one of eight languages.[12] The percent literate (as presented in Tables 2.2.1 and 2.2.2) includes respondents who could read part or all of a sentence and those who attended post-primary school or higher.

[12] The statements included the following: 1) Breast milk is good for babies. 2) Most Zambians live in villages. 3) Immunisation can prevent children from getting diseases. 4) Family planning teaches people to be responsible to their family.

Table 2.2.1 Literacy among males age 15-59

Percent distribution of the de jure male household population age 15-59 by level of schooling attended and by level of literacy, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	No schooling or primary school: Can read part of a sentence	No schooling or primary school: Cannot read at all	No schooling or primary school: No card with required language	Total	Number	Percent literate
Age								
15-19	31.2	22.7	16.2	29.4	0.4	100.0	441	70.2
20-24	52.6	18.5	11.7	17.2	0.0	100.0	332	82.8
25-29	46.5	19.7	13.4	20.4	0.0	100.0	353	79.6
30-34	47.0	27.2	11.2	14.6	0.0	100.0	273	85.4
35-39	48.0	29.4	6.2	16.4	0.0	100.0	236	83.6
40-44	37.3	40.4	12.1	9.5	0.7	100.0	171	89.8
45-49	51.9	32.6	6.8	8.7	0.0	100.0	112	91.3
50-54	38.1	29.7	18.7	13.5	0.0	100.0	100	86.5
55-59	34.3	42.0	10.2	13.5	0.0	100.0	68	86.5
Residence								
Urban	66.0	15.8	8.5	9.6	0.0	100.0	826	90.4
Rural	28.2	32.4	14.8	24.3	0.2	100.0	1,260	75.4
Province								
Central	39.6	26.4	18.5	15.5	0.0	100.0	159	84.5
Copperbelt	67.3	14.0	9.7	8.6	0.4	100.0	431	91.1
Eastern	32.0	22.9	17.4	27.7	0.0	100.0	265	72.3
Luapula	22.6	44.1	8.5	24.9	0.0	100.0	162	75.1
Lusaka	59.3	16.9	10.4	13.4	0.0	100.0	303	86.6
Northern	32.9	32.9	15.8	18.3	0.0	100.0	287	81.7
North-Western	36.1	32.6	11.0	20.3	0.0	100.0	89	79.7
Southern	34.8	33.8	10.9	19.9	0.5	100.0	228	79.6
Western	25.2	32.5	8.6	33.8	0.0	100.0	162	66.2
Total	43.2	25.8	12.3	18.5	0.1	100.0	2,086	81.3

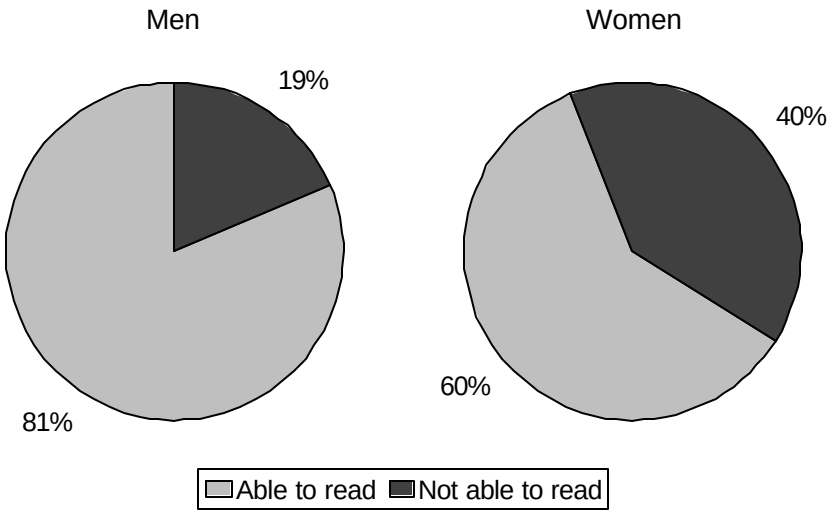
Table 2.2.2 Literacy among females age 15-49

Percent distribution of the de jure female household population age 15-49 by level of schooling attended and by level of literacy, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	No schooling or primary school: Can read part of a sentence	No schooling or primary school: Cannot read at all	No schooling or primary school: No card with required language	Total	Number	Percent literate
Age								
15-19	33.6	14.3	10.3	41.0	0.8	100.0	1,737	58.2
20-24	34.4	16.3	8.2	40.0	1.2	100.0	1,593	58.8
25-29	32.6	21.0	9.7	35.7	1.0	100.0	1,333	63.3
30-34	29.7	23.4	10.5	35.5	0.8	100.0	948	63.7
35-39	22.0	27.4	9.6	39.6	1.4	100.0	743	59.1
40-44	19.5	33.6	9.8	36.6	0.6	100.0	593	62.9
45-49	14.7	32.9	10.0	41.5	0.9	100.0	454	57.6
Residence								
Urban	50.2	19.4	9.4	19.9	1.2	100.0	2,954	78.9
Rural	16.0	22.2	9.8	51.1	0.8	100.0	4,448	48.1
Province								
Central	28.8	27.1	7.8	35.8	0.5	100.0	531	63.7
Copperbelt	47.3	22.4	9.0	19.5	1.8	100.0	1,495	78.8
Eastern	20.3	15.9	11.6	52.0	0.2	100.0	914	47.7
Luapula	12.3	22.9	5.3	59.5	0.0	100.0	613	40.5
Lusaka	41.0	18.2	11.0	27.4	2.3	100.0	1,077	70.2
Northern	23.0	18.2	12.4	46.3	0.1	100.0	1,004	53.6
North-Western	22.9	18.4	12.1	46.4	0.1	100.0	342	53.5
Southern	25.8	24.8	10.6	37.2	1.6	100.0	789	61.2
Western	18.5	24.9	4.8	51.6	0.2	100.0	636	48.2
Total	29.6	21.1	9.6	38.7	1.0	100.0	7,401	60.4

Differences in literacy by sex, residence and province parallel those in educational attainment. Women are less likely than men to be able to read: 60 percent of women and 81 percent of men are literate (see Figure 2.2). The gender gap in literacy, however, decreases from older to younger cohorts, with literacy rates among young adults age 15-19 at 58 percent for women and 70 percent for men (a 12 percentage point gap), compared with literacy rates among older adults age 45-49 at 58 percent for women and 91 percent for men (a 33 percentage point gap).

Figure 2.2
Literacy among Men Age 15-59 and Women Age 15-49



Zambia DHS 2001-2002

Adults in urban areas are more likely than those in rural areas to be able to read. In rural areas, 48 percent of women age 15-49 and 75 percent of men age 15-59 can read, compared with 79 percent of women and 90 percent of men in urban areas. Among provinces, differences in women's literacy rates are substantial, ranging from 41 percent in Luapula Province to 79 percent in Copperbelt Province. The range of difference in men's literacy rates by province is narrower, from 66 percent in Western Province to 91 percent in Copperbelt Province.

Table 2.3 presents information about literacy among women age 15-49 according to the number of years of primary schooling completed. In general, the more years of schooling a woman has completed, the more likely she is to be literate: whereas only 2 percent of women with no schooling can read, 18 percent of women who completed grade 1 and 82 percent of women who completed grade 7 can read. In international comparisons, where data on literacy are unavailable, completion of four years of primary school is often used as a proxy for literacy. Data from the 2002 ZDES suggest that literacy cannot be assumed among women completing grade 4, since only 34 percent of those who completed grade 4 can read. Further, not all of the Zambian women age 15-49 who have completed primary school (7 years) are literate.

Table 2.3 Literacy among females age 15-49 by years of schooling

Percent distribution of females age 15-49 who have not attended secondary school by level of literacy, according to highest primary grade completed, Zambia DHS 2001-2002

	No schooling or primary school						
Education in single years	Can read a whole sentence	Can read part of a sentence	Cannot read at all	No card with required language	Total	Number	Percent literate
0	1.4	0.7	97.6	0.3	100.0	936	2.1
1	6.0	12.0	79.7	2.4	100.0	237	18.0
2	5.6	5.3	88.8	0.3	100.0	311	10.9
3	11.0	6.5	82.0	0.6	100.0	400	17.5
4	20.5	13.4	65.3	0.8	100.0	624	33.9
5	27.5	20.2	50.5	1.8	100.0	549	47.8
6	43.5	20.7	33.9	1.8	100.0	682	64.2
7	61.4	20.3	16.1	2.1	100.0	1,456	81.8

Note: Respondents who had attained secondary school or higher were assumed to be literate. Only those respondents who had completed primary school or less were asked the literacy question. Percent literate includes those who can read a whole sentence and those who can read part of a sentence, and excludes from the calculation those for whom there was no card available with the language required to test literacy.

ZDES PARENT/GUARDIAN RESPONDENTS' BACKGROUND CHARACTERISTICS 3

This chapter presents information on the background characteristics, educational attainment, and literacy of the parent/guardians who responded to the Parent/Guardian Questionnaire and the Eligible Child Questionnaire.

Background Characteristics

Table 3.1 presents the percent distribution of parent/guardians by sex, age group, place of residence, and province. Sixty-two percent of the respondents are female. Fifty-eight percent of the parent/guardians are age 25-44, with only 12 percent younger than age 25 and 6percent over age 65. Two-thirds of the respondents (66 percent) live in rural areas. Among the provinces, the highest proportion (18 percent) of the ZDES parent/guardian respondents live in Copperbelt Province and the lowest proportion (5 percent) live in North-Western Province.

Table 3.1 Background characteristics of eligible parent/guardian respondents

Percent distribution of parent/guardians by background characteristics, ZDES 2002

Background characteristic	Weighted percent	Weighted number	Unweighted number
Age			
15-19	4.5	179	174
20-24	7.8	307	294
25-29	14.2	560	541
30-34	17.5	693	680
35-39	14.6	579	584
40-44	11.3	447	448
45-49	9.7	383	399
50-54	6.1	242	246
55-59	4.2	164	178
60-64	4.1	160	173
65+	6.0	237	258
Sex			
Male	38.3	1,513	1,577
Female	61.7	2,440	2,398
Residence			
Urban	33.9	1,338	1,097
Rural	66.1	2,615	2,878
Province			
Central	7.1	281	437
Copperbelt	17.9	708	430
Eastern	14.0	552	537
Luapula	8.5	335	324
Lusaka	13.1	517	403
Northern	14.5	574	626
North-Western	5.3	208	508
Southern	11.3	448	381
Western	8.3	330	329
Total	100.0	3,953	3,975

Educational Attainment

For each parent/guardian respondent, data were collected on the highest level of education attended and the highest grade or year completed at that level. Tables 3.2.1, 3.2.2, and 3.2.3 present the distribution of parent/guardians according to educational attainment by sex and by other background characteristics.

Eighty-six percent of the parent/guardians have attended primary school or a higher level of schooling, although there are notable differences by gender, with male respondents having higher educational attainment than female respondents. Nine percent of the male and 18 percent of the female parent/guardians have never attended school (see Tables 3.2.1 and 3.2.2). Fifty-eight percent of the male and 46 percent of the female parent/guardians have completed primary schooling or higher. Attendance at the secondary level or higher shows a similar pattern, with 36 percent of male and 27 percent of female respondents having attended school at the secondary or post-secondary levels.[13]

The mean years of schooling attained also reflects gender gaps in educational attainment: the mean number of years of schooling among male parent/guardians is 6.7, compared with 5.5 among female parent/guardians. There are notable differences in mean years of schooling attained by gender according to urban-rural residence. Female parent/guardians in urban areas have completed an average of 7.5 years of schooling, compared with 4.2 years among female parent/guardians in rural

[13] Post-secondary includes vocational-technical training and schooling at the university and college levels.

areas. Among male parent/guardians, the gap is also wide, with male respondents in urban areas having completed 9.2 years of schooling, compared with 5.9 years among men in rural areas. In addition, younger parent/guardians have completed more years of schooling than older parent/guardians. For example, among those age 20-24, the average years of schooling is 7.0 compared with an average of 2.7 years among those age 65 or older.

There are also sizeable urban-rural and provincial differences in educational attainment among parent/guardians (see Table 3.2.3). While 5 percent of parent/guardians in urban areas have never attended school, 19 percent of parent/guardians in rural areas have never attended school. Parent/guardians in Copperbelt Province are most likely to have had some schooling, with only 5 percent of parent/guardians never having attended school. In contrast, 29 percent of parent/guardians in Western Province have never attended school.

Table 3.2.1 Educational attainment of male parent/guardian respondents

Percent distribution of male parent/guardians by highest level of schooling attended, and mean number of years of schooling, according to background characteristics, ZDES 2002

Background characteristic	Highest level of schooling attended							Total	Number	Mean number of years of schooling
	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing			
Age										
15-19	4.4	34.7	21.3	33.5	6.1	0.0	0.0	100.0	67	7.1
20-24	0.0	25.4	25.7	33.4	8.7	6.8	0.0	100.0	75	7.9
25-29	8.2	35.1	22.8	23.9	5.8	4.3	0.0	100.0	136	6.6
30-34	7.0	31.9	19.7	28.5	9.3	3.2	0.4	100.0	212	6.9
35-39	4.4	24.2	25.5	28.1	8.8	9.0	0.0	100.0	217	7.9
40-44	3.5	24.7	30.5	26.6	9.3	5.4	0.0	100.0	207	7.7
45-49	6.5	26.6	28.7	22.9	6.5	8.8	0.0	100.0	159	7.3
50-54	10.3	24.6	20.5	28.5	0.9	15.1	0.0	100.0	116	7.3
55-59	13.4	43.9	20.2	16.5	2.2	3.9	0.0	100.0	88	5.4
60-64	16.4	55.9	10.7	11.8	1.0	4.1	0.0	100.0	91	4.6
65+	24.4	58.0	7.4	5.8	1.8	2.7	0.0	100.0	145	3.6
Residence										
Urban	2.7	14.1	16.7	38.8	14.4	13.3	0.0	100.0	390	9.2
Rural	10.7	40.1	23.8	18.6	3.3	3.5	0.1	100.0	1,123	5.9
Province										
Central	5.3	38.9	13.7	26.8	5.8	9.5	0.0	100.0	122	7.1
Copperbelt	5.2	17.0	20.0	40.7	13.3	3.7	0.0	100.0	222	8.1
Eastern	17.7	38.1	20.5	14.4	2.8	6.5	0.0	100.0	221	5.4
Luapula	7.2	44.8	28.0	16.0	2.4	1.6	0.0	100.0	129	5.9
Lusaka	4.5	18.0	18.0	28.8	11.7	18.9	0.0	100.0	142	8.8
Northern	4.7	38.0	22.6	24.1	3.6	6.6	0.4	100.0	251	6.7
North-Western	12.2	33.5	22.6	22.6	4.5	4.5	0.0	100.0	90	6.1
Southern	5.0	34.0	32.1	20.1	5.0	3.8	0.0	100.0	187	6.7
Western	17.0	42.9	18.4	16.3	5.4	0.0	0.0	100.0	147	5.2
Total	8.6	33.4	22.0	23.8	6.2	6.0	0.1	100.0	1,513	6.7

Table 3.2.2 Educational attainment of female parent/guardian respondents

Percent distribution of female parent/guardians by highest level of schooling attended, and mean number of years of schooling, according to background characteristics, ZDES 2002

Background characteristic	Highest level of schooling attended							Total	Number	Mean number of years of schooling
	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing			
Age										
15-19	5.4	27.5	17.2	44.6	4.2	1.1	0.0	100.0	112	7.3
20-24	10.0	31.8	18.1	25.4	11.5	3.2	0.0	100.0	232	6.8
25-29	10.2	36.0	19.9	24.5	6.8	2.7	0.0	100.0	424	6.2
30-34	12.4	31.6	25.3	23.4	4.2	3.1	0.0	100.0	481	6.1
35-39	14.0	34.5	23.3	20.2	3.5	4.4	0.0	100.0	362	6.0
40-44	17.3	39.4	22.8	13.7	2.2	4.5	0.0	100.0	240	5.4
45-49	21.2	41.4	21.0	12.8	2.0	1.6	0.0	100.0	224	4.7
50-54	27.2	50.4	10.7	7.7	0.0	3.6	0.5	100.0	126	3.9
55-59	44.5	48.5	4.9	1.3	0.0	0.8	0.0	100.0	77	2.1
60-64	56.3	38.4	3.5	1.8	0.0	0.0	0.0	100.0	70	1.7
65+	56.2	42.4	0.0	1.4	0.0	0.0	0.0	100.0	92	1.3
Residence										
Urban	6.3	22.8	24.2	32.8	8.6	5.3	0.0	100.0	948	7.5
Rural	24.9	45.0	16.3	10.9	1.4	1.4	0.0	100.0	1,492	4.2
Province										
Central	17.0	38.9	19.8	15.0	2.8	6.1	0.4	100.0	159	5.5
Copperbelt	5.4	22.4	25.4	35.6	9.2	2.0	0.0	100.0	486	7.5
Eastern	31.4	41.0	12.4	12.7	0.9	1.6	0.0	100.0	331	3.9
Luapula	17.1	56.3	15.6	9.0	1.5	0.5	0.0	100.0	206	4.0
Lusaka	7.5	31.5	21.6	27.7	5.1	6.5	0.0	100.0	375	6.9
Northern	18.2	47.2	15.6	13.1	4.0	2.0	0.0	100.0	323	5.0
North-Western	33.1	35.2	13.9	13.9	1.7	2.1	0.0	100.0	117	4.2
Southern	16.2	38.7	25.7	13.5	1.4	4.5	0.0	100.0	261	5.4
Western	39.0	29.1	16.5	9.9	5.5	0.0	0.0	100.0	182	3.8
Total	17.7	36.4	19.4	19.4	4.2	2.9	0.0	100.0	2,440	5.5

Table 3.2.3 Educational attainment of parent/guardian respondents

Percent distribution of parent/guardians by highest level of schooling attended, and mean number of years of schooling, according to background characteristics, ZDES 2002

Background characteristic	Highest level of schooling attended							Total	Number	Mean number of years of schooling
	No schooling	Some primary	Completed primary	Some secondary	Completed secondary	More than secondary	Don't know/ missing			
Age										
15-19	5.0	30.2	18.7	40.4	4.9	0.7	0.0	100.0	179	7.2
20-24	7.6	30.2	20.0	27.3	10.8	4.1	0.0	100.0	307	7.0
25-29	9.7	35.7	20.6	24.4	6.6	3.1	0.0	100.0	560	6.3
30-34	10.7	31.7	23.6	25.0	5.7	3.1	0.1	100.0	693	6.4
35-39	10.4	30.6	24.1	23.2	5.5	6.1	0.0	100.0	579	6.7
40-44	11.0	32.6	26.4	19.6	5.5	5.0	0.0	100.0	447	6.5
45-49	15.1	35.2	24.2	17.0	3.9	4.6	0.0	100.0	383	5.8
50-54	19.1	38.1	15.4	17.7	0.4	9.1	0.3	100.0	242	5.5
55-59	27.8	46.0	13.1	9.4	1.2	2.5	0.0	100.0	164	3.9
60-64	33.7	48.3	7.6	7.5	0.6	2.3	0.0	100.0	160	3.3
65+	36.8	51.9	4.5	4.1	1.1	1.6	0.0	100.0	237	2.7
Residence										
Urban	5.3	20.3	22.0	34.5	10.3	7.6	0.0	100.0	1,338	8.0
Rural	18.8	42.9	19.6	14.2	2.2	2.3	0.1	100.0	2,615	4.9
Province										
Central	11.9	38.9	17.2	20.1	4.1	7.6	0.2	100.0	281	6.2
Copperbelt	5.3	20.7	23.7	37.2	10.5	2.6	0.0	100.0	708	7.7
Eastern	25.9	39.9	15.6	13.4	1.7	3.5	0.0	100.0	552	4.5
Luapula	13.3	51.9	20.4	11.7	1.9	0.9	0.0	100.0	335	4.8
Lusaka	6.7	27.8	20.6	28.0	6.9	9.9	0.0	100.0	517	7.4
Northern	12.3	43.1	18.7	17.9	3.8	4.0	0.2	100.0	574	5.7
North-Western	24.0	34.4	17.7	17.7	3.0	3.1	0.0	100.0	208	5.1
Southern	11.5	36.7	28.3	16.3	2.9	4.2	0.0	100.0	448	6.0
Western	29.2	35.3	17.3	12.8	5.5	0.0	0.0	100.0	330	4.4
Total	14.2	35.2	20.4	21.1	5.0	4.1	0.0	100.0	3,953	6.0

Literacy

Respondents who have attended school beyond the primary level are assumed to be literate; therefore, the survey measures literacy only among respondents who have never attended school or who

attended school up to the primary level. Among respondents with primary or no schooling, the level of literacy is based on the parent/guardian respondent's ability to read none, part, or all of a sentence in a language in which he/she is likely to be literate. Parent/guardians were asked to demonstrate literacy by reading from a card with a simple sentence in one of eight major Zambian languages, including English.[14] The percent literate (as presented in Tables 3.3.1 through 3.3.3) includes respondents who could read part or all of a sentence and those who attended post-primary school or higher.

The literacy rate among parent/guardian respondents is 81 percent for males and 62 percent for females (see Tables 3.3.1 and 3.3.2). By gender, there are notable differences in literacy by residence. While 92 percent of male parent/guardians in urban areas are literate, 77 percent of male parent/guardians in rural areas are literate. Among female respondents, 81 percent of parent/guardians in urban areas and 51 percent of those in rural areas are literate.

As shown in Table 3.3.3, parent/guardians in Copperbelt Province have the highest literacy rate (85 percent). Differences in literacy by province are more pronounced among female parent/guardians: 82 percent of female parent/guardians are literate in Copperbelt Province, but only 45 percent of them are literate in Western Province. Among male parent/guardians, literacy rates range from 72 percent in Eastern Province to 90 percent in both Copperbelt Province and Lusaka Province.

[14] The statements included the following: 1) The woman is fetching water. 2) The men are drinking tea. 3) Today the sun is shining. 4) The boys are fishing on the lake.

Table 3.3.1 Literacy among male parent/guardian respondents

Percent distribution of male parent/guardians by highest level of schooling attended and level of literacy, according to background characteristics, ZDES 2002

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	No schooling or primary school: Can read part of a sentence	No schooling or primary school: Cannot read at all	No schooling or primary school: No card with required language or missing	Total	Number	Percent literate
Age								
15-19	39.6	38.0	10.3	12.2	0.0	100.0	67	87.8
20-24	48.9	25.5	8.1	17.5	0.0	100.0	75	82.5
25-29	34.0	35.4	5.3	25.3	0.0	100.0	136	74.7
30-34	41.0	31.3	7.3	20.5	0.0	100.0	212	79.5
35-39	45.9	34.6	3.9	15.6	0.0	100.0	217	84.4
40-44	41.3	42.4	2.8	11.2	2.4	100.0	207	86.5
45-49	38.2	45.7	3.9	11.9	0.3	100.0	159	87.8
50-54	44.5	36.5	3.6	12.7	2.7	100.0	116	84.6
55-59	22.5	55.5	6.4	15.6	0.0	100.0	88	84.4
60-64	16.9	50.8	7.1	24.0	1.1	100.0	91	74.9
65+	10.3	51.9	3.2	30.6	4.0	100.0	145	65.4
Residence								
Urban	66.5	23.0	2.6	6.1	1.9	100.0	390	92.0
Rural	25.3	46.1	6.0	21.9	0.7	100.0	1,123	77.4
Province								
Central	42.1	32.1	7.4	17.4	1.1	100.0	122	81.6
Copperbelt	57.8	28.1	3.7	9.6	0.7	100.0	222	89.6
Eastern	23.7	40.9	7.0	27.9	0.5	100.0	221	71.6
Luapula	20.0	50.4	5.6	22.4	1.6	100.0	129	76.0
Lusaka	59.5	27.0	3.6	6.3	3.6	100.0	142	90.1
Northern	34.3	43.4	7.7	13.5	1.1	100.0	251	85.4
North-Western	31.7	41.6	2.7	23.5	0.5	100.0	90	76.0
Southern	28.9	47.8	5.0	18.2	0.0	100.0	187	81.8
Western	21.8	51.0	0.7	25.9	0.7	100.0	147	73.5
Total	35.9	40.1	5.1	17.8	1.0	100.0	1,513	81.2

Table 3.3.2 Literacy among female parent/guardian respondents

Percent distribution of female parent/guardians by highest level of schooling attended and level of literacy, according to background characteristics, ZDES 2002

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	No schooling or primary school: Can read part of a sentence	No schooling or primary school: Cannot read at all	No schooling or primary school: No card with required language or missing	Total	Number	Percent literate
Age								
15-19	50.0	13.9	4.5	30.5	1.1	100.0	112	68.4
20-24	40.1	22.9	5.5	30.6	1.0	100.0	232	68.4
25-29	34.0	23.6	7.6	33.8	1.0	100.0	424	65.2
30-34	30.7	32.3	6.8	28.1	2.1	100.0	481	69.8
35-39	28.1	32.3	6.7	31.1	1.8	100.0	362	67.2
40-44	20.4	39.2	4.8	33.3	2.3	100.0	240	64.4
45-49	16.4	42.1	4.5	35.8	1.1	100.0	224	63.0
50-54	11.2	40.4	3.9	41.4	3.0	100.0	126	55.5
55-59	2.2	29.4	5.0	63.5	0.0	100.0	77	36.5
60-64	1.8	22.3	3.6	69.0	3.3	100.0	70	27.7
65+	1.4	15.5	0.0	81.4	1.7	100.0	92	16.9
Residence								
Urban	46.7	29.5	4.6	16.4	2.9	100.0	948	80.7
Rural	13.7	30.3	6.5	48.6	0.9	100.0	1,492	50.5
Province								
Central	23.9	34.0	6.5	33.2	2.4	100.0	159	64.4
Copperbelt	46.8	32.9	2.7	15.6	2.0	100.0	486	82.4
Eastern	15.2	25.8	6.5	52.2	0.3	100.0	331	47.5
Luapula	11.1	27.6	7.0	54.3	0.0	100.0	206	45.7
Lusaka	39.4	26.7	8.2	19.9	5.8	100.0	375	74.3
Northern	19.0	27.3	10.8	41.8	1.1	100.0	323	57.1
North-Western	17.8	27.9	3.8	50.5	0.0	100.0	117	49.5
Southern	19.4	39.6	3.2	37.8	0.0	100.0	261	62.2
Western	15.4	28.6	1.1	54.9	0.0	100.0	182	45.1
Total	26.5	30.0	5.7	36.1	1.6	100.0	2,440	62.3

Table 3.3.3 Literacy among parent/guardian respondents

Percent distribution of parent/guardians by highest level of schooling attended and level of literacy, according to background characteristics, ZDES 2002

Background characteristic	Secondary school or higher	No schooling or primary school: Can read a whole sentence	No schooling or primary school: Can read part of a sentence	No schooling or primary school: Cannot read at all	No schooling or primary school: No card with required language or missing	Total	Number	Percent literate
Age								
15-19	46.1	22.9	6.7	23.6	0.7	100.0	179	75.7
20-24	42.2	23.5	6.1	27.4	0.8	100.0	307	71.9
25-29	34.0	26.4	7.1	31.7	0.8	100.0	560	67.5
30-34	33.8	32.0	6.9	25.8	1.5	100.0	693	72.7
35-39	34.8	33.2	5.7	25.3	1.1	100.0	579	73.6
40-44	30.1	40.7	3.9	23.1	2.3	100.0	447	74.6
45-49	25.5	43.6	4.3	25.9	0.8	100.0	383	73.3
50-54	27.2	38.5	3.7	27.7	2.9	100.0	242	69.4
55-59	13.1	43.3	5.7	37.9	0.0	100.0	164	62.1
60-64	10.4	38.4	5.6	43.5	2.1	100.0	160	54.4
65+	6.8	37.8	2.0	50.4	3.1	100.0	237	46.5
Residence								
Urban	52.4	27.6	4.0	13.4	2.6	100.0	1,338	84.0
Rural	18.7	37.1	6.3	37.1	0.8	100.0	2,615	62.1
Province								
Central	31.8	33.2	6.9	26.3	1.8	100.0	281	71.9
Copperbelt	50.2	31.4	3.0	13.7	1.6	100.0	708	84.7
Eastern	18.6	31.8	6.7	42.5	0.4	100.0	552	57.2
Luapula	14.5	36.4	6.5	42.0	0.6	100.0	335	57.4
Lusaka	44.9	26.8	6.9	16.1	5.2	100.0	517	78.7
Northern	25.7	34.3	9.4	29.4	1.1	100.0	574	69.5
North-Western	23.8	33.9	3.3	38.8	0.2	100.0	208	61.0
Southern	23.4	43.0	3.9	29.7	0.0	100.0	448	70.3
Western	18.2	38.6	0.9	41.9	0.3	100.0	330	57.8
Total	30.1	33.9	5.5	29.1	1.4	100.0	3,953	69.5

Exposure to Mass Media

Parent/guardian respondents were asked whether they usually read a newspaper at least once a week and how often they watch television and listen to the radio.[15] For purposes of planning education

[15] Only literate respondents were asked about their frequency of newspaper reading.

and other social initiatives, it is important to have information about which groups of people are more or less likely to be reached by the media.

As shown in Tables 3.4.1 through 3.4.3, media usage is not widespread: nearly half (45 percent) of the parent/guardian respondents do not read a newspaper, listen to radio, or watch television at least once a week, with female respondents (49 percent) more likely than male respondents (39 percent) not to utilise one or more of these media. The radio is the most widely used form of media: 55 percent of male and 45 percent of female parent/guardians reported listening to the radio at least once a week. Less common is watching television, with 22 percent of male and 28 percent of female parent/guardians watching television, and reading a newspaper, with 22 percent of male and 15 percent of female parent/guardians reading a newspaper at least once a week.

There is a wide disparity in media usage between urban and rural areas and among the provinces (see Table 3.4.3). Twenty-one percent of parent/guardians in urban areas and 58 percent of those in rural areas do not utilise newspapers, radio or television. Respondents in Lusaka Province are more likely than those in other provinces to use mass media, with 41 percent using all three media. In contrast, residents in Luapula and North-Western Provinces are the least likely to access newspapers, television, and radio, with almost none of them using all three media.

Table 3.4.1 Exposure to mass media among male parent/guardians

Percentage of male parent/guardians who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, ZDES 2002

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number
Age						
15-19	17.9	28.8	57.1	11.2	35.1	67
20-24	41.0	38.5	56.4	24.7	37.9	75
25-29	15.4	21.5	63.5	9.1	32.1	136
30-34	23.5	24.4	56.3	14.7	37.0	212
35-39	28.8	28.6	64.4	17.5	30.8	217
40-44	21.3	24.0	54.6	12.1	39.8	207
45-49	20.8	22.9	59.2	9.8	36.3	159
50-54	27.8	22.3	57.2	15.1	36.3	116
55-59	18.2	11.6	48.6	5.2	47.5	88
60-64	21.5	7.8	40.6	7.8	55.2	91
65+	12.4	7.1	39.7	0.9	54.9	145
Residence						
Urban	51.0	62.3	76.7	38.3	14.1	390
Rural	12.5	7.8	47.9	2.6	48.0	1,123
Province						
Central	17.9	16.8	48.9	8.9	49.5	122
Copperbelt	36.3	46.7	63.0	25.2	24.4	222
Eastern	8.4	12.6	64.7	4.2	32.6	221
Luapula	20.0	4.8	47.2	0.8	48.0	129
Lusaka	67.6	73.9	84.7	55.0	9.0	142
Northern	22.3	6.6	48.2	3.3	42.7	251
North-Western	11.8	7.2	45.2	0.5	52.5	90
Southern	8.2	15.1	45.3	4.4	53.5	187
Western	9.5	10.9	44.9	4.1	53.1	147
Total	22.4	21.9	55.3	11.8	39.3	1,513

Table 3.4.2 Exposure to mass media among female parent/guardians

Percentage of female parent/guardians who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, ZDES 2002

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number
Age						
15-19	17.6	41.8	50.7	13.3	41.0	112
20-24	17.9	42.8	56.7	12.6	33.0	232
25-29	15.1	32.6	52.1	10.4	41.8	424
30-34	16.3	31.4	49.1	11.5	44.5	481
35-39	21.8	27.1	48.7	12.9	43.8	362
40-44	14.1	32.2	50.7	9.7	43.3	240
45-49	11.0	16.5	34.9	6.0	60.3	224
50-54	8.4	14.3	25.8	6.3	71.3	126
55-59	4.2	8.7	20.9	1.7	73.0	77
60-64	5.3	6.2	21.4	1.4	77.1	70
65+	1.0	7.1	20.0	0.0	80.0	92
Residence						
Urban	27.9	61.6	65.1	21.9	23.4	948
Rural	6.4	6.6	32.6	1.9	64.6	1,492
Province						
Central	9.7	21.1	33.6	4.5	57.1	159
Copperbelt	18.0	58.6	61.0	13.6	27.1	486
Eastern	5.0	7.5	48.8	1.6	49.7	331
Luapula	4.5	1.0	19.1	0.0	76.9	206
Lusaka	44.2	65.1	73.6	36.0	18.2	375
Northern	9.7	9.9	29.5	3.1	65.3	323
North-Western	6.3	7.0	33.1	0.7	64.5	117
Southern	6.8	13.1	25.2	2.7	69.8	261
Western	4.9	11.0	42.3	3.3	56.6	182
Total	14.7	28.0	45.2	9.7	48.6	2,440

Table 3.4.3 Exposure to mass media among parent/guardians

Percentage of parent/guardians who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, ZDES 2002

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No media	Number
Age						
15-19	17.7	36.9	53.1	12.5	38.8	179
20-24	23.5	41.8	56.6	15.6	34.2	307
25-29	15.2	29.9	54.8	10.0	39.5	560
30-34	18.5	29.2	51.3	12.4	42.2	693
35-39	24.4	27.7	54.6	14.6	38.9	579
40-44	17.4	28.4	52.5	10.8	41.6	447
45-49	15.1	19.2	45.0	7.6	50.3	383
50-54	17.7	18.1	40.9	10.5	54.6	242
55-59	11.7	10.2	35.7	3.6	59.4	164
60-64	14.4	7.1	32.2	5.0	64.7	160
65+	7.9	7.1	32.0	0.5	64.7	237
Residence						
Urban	34.6	61.8	68.5	26.7	20.7	1,338
Rural	9.0	7.1	39.2	2.2	57.5	2,615
Province						
Central	13.3	19.2	40.3	6.4	53.8	281
Copperbelt	23.7	54.9	61.6	17.2	26.3	708
Eastern	6.3	9.5	55.1	2.6	42.8	552
Luapula	10.5	2.5	29.9	0.3	65.7	335
Lusaka	50.6	67.5	76.7	41.2	15.6	517
Northern	15.2	8.5	37.7	3.2	55.4	574
North-Western	8.7	7.1	38.4	0.6	59.3	208
Southern	7.3	13.9	33.6	3.4	63.0	448
Western	7.0	10.9	43.5	3.6	55.0	330
Total	17.7	25.7	49.1	10.5	45.0	3,953

CHILDREN'S BACKGROUND CHARACTERISTICS 4

This chapter presents information on the characteristics of the children age 6-14 for whom data were collected by the 2002 ZDES. The chapter also presents information on the nutritional status of children age 7-9 and on rates of literacy and numeracy among children age 7-10.

Children's Background Characteristics

Table 4.1 provides information about the age, sex, and residence of the children age 6-14. The sample included equal percentages of male and female children. Forty-three percent of the children are age 11-14, 37 percent are age 8-10, and 20 percent are age 6-7. Among the nine provinces, the highest percentage of children live in Copperbelt Province (19 percent) and the lowest percentage of children live in North-Western Province (5 percent).

Table 4.1 Background characteristics of children

Percent distribution of de jure children age 6-14 by background characteristics, ZDES 2002

Background characteristic	Weighted percent	Number of children	
		Weighted	Unweighted
Age			
6-7	19.8	1,590	1,599
8-10	36.9	2,960	2,953
11-14	43.3	3,477	3,475
Sex			
Male	50.5	4,054	4,057
Female	49.5	3,973	3,970
Residence			
Urban	35.1	2,814	2,275
Rural	64.9	5,213	5,752
Province			
Central	7.5	598	929
Copperbelt	19.2	1,540	935
Eastern	13.6	1,090	1,061
Luapula	7.6	606	586
Lusaka	12.9	1,036	807
Northern	14.0	1,122	1,224
North-Western	5.2	418	1,022
Southern	12.7	1,016	863
Western	7.5	602	600
Total	100.0	8,027	8,027

Children's Living Arrangements

Table 4.2 provides information on the living arrangements of children age 6-14. This table groups children into four categories: those living with both parents, those living with their mother (but not their father), those living with their father (but not their mother), and those not living with either parent.

Table 4.2 Children's living arrangements

Percent distribution of de jure children age 6-14 by survival status of parents and children's living arrangements, according to background characteristics, ZDES 2002

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent				Missing information on father/mother	Total	Number
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Mother dead	Father dead	Both dead			
Age												
6-7	62.6	9.8	6.8	2.5	1.4	9.1	1.5	3.5	2.5	0.4	100.0	1,590
8-10	59.2	7.9	8.3	2.8	1.8	8.8	2.9	4.0	3.8	0.5	100.0	2,960
11-14	50.6	7.1	10.8	2.9	2.1	10.1	3.3	5.2	6.5	1.5	100.0	3,477
Sex												
Male	56.4	8.3	8.5	3.0	2.0	8.9	2.7	4.8	4.7	0.8	100.0	3,954
Female	55.9	7.6	9.7	2.6	1.7	9.9	2.9	4.1	4.7	1.0	100.0	4,073
Residence												
Urban	55.7	6.5	11.3	3.7	2.2	7.7	2.2	4.4	5.2	1.1	100.0	2,814
Rural	56.4	8.7	7.9	2.3	1.6	10.3	3.1	4.4	4.4	0.8	100.0	5,213
Province												
Central	52.9	6.7	8.3	2.6	2.3	9.8	3.8	7.4	6.0	0.3	100.0	598
Copperbelt	59.6	5.5	11.0	3.4	1.3	7.8	2.2	4.2	4.0	1.1	100.0	1,540
Eastern	60.1	10.1	6.1	1.3	1.5	9.8	2.2	2.9	4.7	1.2	100.0	1,090
Luapula	52.9	9.7	10.4	0.9	1.9	13.7	3.1	3.9	3.2	0.3	100.0	606
Lusaka	54.9	6.8	11.2	3.1	2.2	8.9	2.7	3.7	5.2	1.2	100.0	1,036
Northern	60.5	9.3	8.5	1.7	2.3	5.3	2.1	3.5	5.7	1.0	100.0	1,122
North-Western	53.1	8.7	10.8	2.8	1.4	13.2	2.2	3.8	3.8	0.2	100.0	418
Southern	52.0	7.4	6.3	3.5	1.5	13.0	3.6	7.0	4.5	1.3	100.0	1,016
Western	49.7	9.7	10.2	6.3	2.7	8.0	4.5	4.3	4.7	0.0	100.0	602
Total	56.1	7.9	9.1	2.8	1.8	9.4	2.8	4.4	4.7	0.9	100.0	8,027

Just over half (56 percent) of children age 6-14 live with both their biological parents. Children age 6-7 are more likely to live with both parents than children age 11-14 (63 percent versus 51 percent). There are no notable differences by sex of the child or urban-rural residence. The percentages of children living with both biological parents range from 50 percent in Western Province to 61 percent in Northern Province.

One in five (22 percent) children live with either their mother or their father (but not both). For the 21 percent of children who are not living with either parent, nearly half (9 percent) have both parents

still living, one-third (7 percent) have one parent still living, and one-fourth (5 percent) have lost both parents.

The table also provides data on the extent of orphanhood, defined here as the proportion of children who have lost one or both parents. Of children age 6-14, 18 percent have lost their father and 9 percent have lost their mother.[16] Five percent of children have lost both natural parents. Almost one in four children (23 percent) have lost one or both parents.

Children's Eating Patterns

Children's nutrition is an important education issue. Children who are malnourished may be less likely to attend school, and those who do attend school may be absent frequently, have difficulty concentrating on learning activities, and have other problems. The 2002 ZDES collected information about the meals eaten by school-age children on the day before the parent/guardian was interviewed. The results are presented in Tables 4.3.1 through 4.3.3, according to children's schooling status (day pupils or non-pupils) and their background characteristics.[17]

Overall, children are more likely to eat lunch (85 percent) than breakfast (70 percent).[18] This same pattern is observed among day pupils and non-pupils, although somewhat lower percentages of non-pupils eat either breakfast or lunch.

There are no marked gender differences in the incidence of eating breakfast and lunch, but children in urban areas are more likely to eat breakfast (76 percent) than children in rural areas (67 percent). Younger children are more likely to eat breakfast and lunch than older children: 74 percent of children age 6-7 ate breakfast compared with 67 percent of children age 11-14, and 87 percent of children age 6-7 ate lunch compared to 84 percent of children age 11-14. Comparison by province indicates the incidence of eating breakfast is highest among children in Lusaka Province (85 percent) and in Eastern Province (79 percent), compared to the national average (70 percent). On average, children eat 2.8 times per day, with children in wealthier households being more likely to eat breakfast and lunch than children from the poorest households.

[16] The percent of children who have lost their mother (or their father) was calculated by summing the percentages of children who have lost that parent in each of the relevant categories of living arrangements (living with father, living with mother, not living with either parent). For example, the percentage of children who have lost their father (18.2 percent) is equal to the percent of children living with their mother whose father is dead (9.1 percent) plus the percent of children not living with either parent whose mother only is alive (4.4 percent) plus the percent of children not living with either parent whose parents are both dead (4.7 percent).

[17] Questions about food consumption on the day before the household was surveyed were asked only for non-pupils and for pupils attending day schools. Children attending boarding schools were excluded because the parent/guardians were unlikely to be able to answer questions about these children's food consumption.

[18] For the purposes of this survey, food is defined as solid food such as porridge, nsima, fruit or any other solid food. Milk and other beverages do not constitute food, although solid milk products, such as yoghurt or cheese do. If a parent/guardian said that his/her child ate food in the morning, the interviewer probed to find out what kind of food was eaten. If the reply was, for example, tea with milk, then the interviewer recorded the child as not having eaten food in the morning.

Table 4.3.1 Children's food consumption on the day before the interview: day pupils

Percent distribution of day pupils age 6-14 by consumption of breakfast and lunch on the day before the interview, and mean number of meals and snacks eaten that day, according to background characteristics, ZDES 2002

	Breakfast				Lunch					
Background characteristic	Ate	Did not eat	Don't know/ miss-ing	Total	Ate	Did not eat	Don't know/ miss-ing	Total	Number of chil-dren	Mean number of meals and snacks
Age										
6-7	81.5	13.8	4.7	100.0	90.4	4.3	5.3	100.0	763	3.0
8-10	73.8	21.7	4.4	100.0	87.9	7.3	4.8	100.0	2,303	2.9
11-14	68.3	26.1	5.6	100.0	85.4	8.8	5.8	100.0	2,872	2.8
Sex										
Male	72.7	23.0	4.4	100.0	87.7	7.7	4.6	100.0	2,962	2.8
Female	71.6	22.6	5.7	100.0	86.4	7.5	6.1	100.0	2,975	2.8
Residence										
Urban	78.0	18.7	3.3	100.0	89.3	7.1	3.6	100.0	2,359	2.9
Rural	68.3	25.5	6.2	100.0	85.5	8.0	6.5	100.0	3,579	2.8
Province										
Central	70.7	24.1	5.2	100.0	84.7	10.3	5.1	100.0	484	2.7
Copperbelt	70.8	23.9	5.2	100.0	82.5	11.5	6.0	100.0	1,293	2.7
Eastern	83.0	14.5	2.5	100.0	95.1	2.4	2.5	100.0	652	3.2
Luapula	60.5	34.2	5.4	100.0	91.1	3.6	5.4	100.0	405	2.8
Lusaka	86.7	11.8	1.5	100.0	93.3	4.9	1.8	100.0	859	3.2
Northern	69.7	22.8	7.5	100.0	83.7	8.4	7.9	100.0	805	2.8
North-Western	66.8	26.1	7.1	100.0	85.6	7.5	7.0	100.0	323	2.6
Southern	67.3	26.5	6.3	100.0	88.2	5.3	6.5	100.0	730	2.7
Western	58.8	34.5	6.7	100.0	79.0	13.5	7.5	100.0	387	2.5
Wealth index (quintile)										
Lowest	59.7	33.5	6.7	100.0	83.3	9.7	7.0	100.0	1,008	2.6
Second	68.3	25.4	6.3	100.0	83.6	9.9	6.5	100.0	923	2.8
Middle	68.1	26.2	5.7	100.0	86.8	7.1	6.1	100.0	1,147	2.7
Fourth	72.9	22.2	4.9	100.0	87.0	8.0	5.0	100.0	1,284	2.8
Highest	84.6	12.5	2.8	100.0	91.7	5.0	3.3	100.0	1,576	3.1
Total	72.1	22.8	5.0	100.0	87.0	7.6	5.3	100.0	5,937	2.8

Note: The wealth index measures socioeconomic status in terms of assets or wealth, rather than in terms of income or consumption. The assets used to form this index include: ownership of radio, television, paraffin lamp, bicycle, motorcycle/scooter, car/truck; lighting, water and fuel sources; sanitation facilities; and floor material. Each household asset used for the index was assigned a weight generated through principal components analysis, which calculated the importance of each element of the index. These asset scores were standardized in relation to a standard normal distribution and then used to create the break points that define the wealth quintiles.

Table 4.3.2 Children's food consumption on the day before the interview: non-pupils

Percent distribution of non-pupils age 6-14 by consumption of breakfast and lunch on the day before the interview, and mean number of meals and snacks eaten that day, according to background characteristics, ZDES 2002

	Breakfast				Lunch					
Background characteristic	Ate	Did not eat	Don't know/ miss-ing	Total	Ate	Did not eat	Don't know/ miss-ing	Total	Number of chil-dren	Mean number of meals and snacks
Age										
6-7	66.8	25.1	8.1	100.0	83.3	8.3	8.4	100.0	826	2.7
8-10	64.0	26.8	9.2	100.0	78.4	12.1	9.5	100.0	652	2.6
11-14	59.9	30.6	9.6	100.0	75.9	14.3	9.9	100.0	573	2.5
Sex										
Male	62.7	29.5	7.8	100.0	80.4	11.7	7.9	100.0	1,073	2.6
Female	65.4	24.6	10.0	100.0	78.9	10.7	10.5	100.0	978	2.7
Residence										
Urban	62.7	31.7	5.6	100.0	77.0	17.0	6.0	100.0	437	2.5
Rural	64.3	25.9	9.8	100.0	80.4	9.6	10.0	100.0	1,614	2.7
Province										
Central	60.6	28.0	11.4	100.0	76.0	11.4	12.6	100.0	113	2.6
Copperbelt	57.4	35.5	7.1	100.0	67.4	24.8	7.8	100.0	232	2.2
Eastern	73.9	21.8	4.3	100.0	92.2	3.6	4.3	100.0	433	3.0
Luapula	44.8	42.8	12.4	100.0	85.6	2.6	11.9	100.0	201	2.6
Lusaka	79.1	18.7	2.2	100.0	85.8	11.9	2.2	100.0	172	2.8
Northern	66.9	21.3	11.8	100.0	73.1	14.5	12.4	100.0	310	2.7
North-Western	59.3	32.0	8.7	100.0	77.5	13.4	9.1	100.0	95	2.4
Southern	57.3	29.3	13.4	100.0	74.5	12.1	13.4	100.0	281	2.4
Western	65.0	24.3	10.7	100.0	76.6	12.1	11.2	100.0	215	2.5
Wealth index (quintile)										
Lowest	61.2	29.3	9.5	100.0	77.1	13.3	9.6	100.0	732	2.5
Second	64.6	25.5	10.0	100.0	81.8	7.9	10.3	100.0	458	2.7
Middle	64.2	26.8	9.0	100.0	82.3	8.5	9.2	100.0	443	2.6
Fourth	66.2	26.4	7.4	100.0	76.8	15.3	7.9	100.0	294	2.6
Highest	71.8	23.7	4.5	100.0	84.7	10.8	4.5	100.0	125	2.7
Total	64.0	27.2	8.9	100.0	79.7	11.2	9.1	100.0	2,051	2.6

Table 4.3.3 Children's food consumption on the day before the interview: day pupils and non-pupils

Percent distribution of day pupils and non-pupils age 6-14 by consumption of breakfast and lunch on the day before the interview, and mean number of meals and snacks eaten that day, according to background characteristics, ZDES 2002

	Breakfast				Lunch					
Background characteristic	Ate	Did not eat	Don't know/ miss-ing	Total	Ate	Did not eat	Don't know/ miss-ing	Total	Number of chil-dren	Mean number of meals and snacks
Age										
6-7	73.8	19.7	6.5	100.0	86.7	6.4	6.9	100.0	1,589	2.9
8-10	71.7	22.8	5.5	100.0	85.8	8.4	5.8	100.0	2,955	2.8
11-14	66.9	26.8	6.3	100.0	83.8	9.7	6.5	100.0	3,445	2.7
Sex										
Male	70.0	24.7	5.3	100.0	85.7	8.8	5.5	100.0	4,035	2.8
Female	70.1	23.1	6.8	100.0	84.5	8.3	7.2	100.0	3,953	2.8
Residence										
Urban	75.6	20.7	3.6	100.0	87.4	8.6	4.0	100.0	2,795	2.9
Rural	67.1	25.6	7.3	100.0	83.9	8.5	7.6	100.0	5,193	2.7
Province										
Central	68.8	24.8	6.4	100.0	83.0	10.5	6.5	100.0	596	2.6
Copperbelt	68.8	25.7	5.5	100.0	80.2	13.5	6.3	100.0	1,525	2.7
Eastern	79.4	17.4	3.2	100.0	93.9	2.8	3.2	100.0	1,086	3.1
Luapula	55.3	37.0	7.7	100.0	89.2	3.2	7.5	100.0	606	2.7
Lusaka	85.4	13.0	1.6	100.0	92.0	6.1	1.9	100.0	1,030	3.1
Northern	68.9	22.4	8.7	100.0	80.8	10.1	9.1	100.0	1,115	2.8
North-Western	65.1	27.4	7.4	100.0	83.7	8.8	7.4	100.0	418	2.6
Southern	64.5	27.2	8.3	100.0	84.4	7.2	8.4	100.0	1,011	2.6
Western	61.0	30.8	8.2	100.0	78.2	13.0	8.8	100.0	602	2.5
Wealth index (quintile)										
Lowest	60.3	31.8	7.9	100.0	80.7	11.2	8.1	100.0	1,739	2.5
Second	67.1	25.4	7.5	100.0	83.0	9.2	7.8	100.0	1,381	2.8
Middle	67.0	26.3	6.6	100.0	85.5	7.5	7.0	100.0	1,590	2.7
Fourth	71.7	23.0	5.4	100.0	85.1	9.4	5.5	100.0	1,577	2.8
Highest	83.7	13.4	2.9	100.0	91.1	5.5	3.4	100.0	1,701	3.1
Total	70.0	23.9	6.0	100.0	85.1	8.5	6.3	100.0	7,989	2.8

Nutritional Status of Children Age 7-9

The DHS, including the 2001-2002 Zambia DHS, routinely assesses the nutritional status of children age five and under, but few large-scale surveys have collected these data for school-age children. The 2002 ZDES included indirect measuring of the nutritional status of children age 7, 8 and 9 by taking body measurements to derive three indices: height-for-age, weight-for-height, and weight-for-age. It is important that an awareness and understanding of the incidence and impact of malnutrition among school-age children be developed in order to address the factors that cause malnutrition. School-age children suffer from nutritional problems that may affect their physical and cognitive development, as well as their capacity to attend school, to persist in school, and to learn while attending school. Previous research has found correlations between nutrition and school enrolment/attendance, performance in school, age-of-entry, absenteeism, repetition and dropout.

Measures of Nutritional Status in Childhood

As recommended by the World Health Organization (WHO), the nutritional status of children in the ZDES is compared with an international reference population defined by the U.S. National Center for Health Statistics (NCHS) and accepted by the U.S. Centers for Disease Control (CDC). Each of the three status indicators described below is expressed in standard deviation units (z-scores) from the median for the reference population. The use of this reference population is based on the finding that well nourished young children of all population groups (for which data exist) follow very similar growth patterns, up to the onset of puberty.[19] These reference populations serve as a point of comparison, facilitating the examination of differences in the anthropometric status of subgroups in a population and changes in nutritional status over time. In any large population, there is variation in height and weight; this variation approximates a normal distribution.

Each of these indices—height-for-age, weight-for-height, and weight-for-age—give different information about growth and body composition used to assess nutritional status. The height-for-age index is an indicator of linear growth retardation. Children whose height-for-age z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (*stunted*) and have been or are chronically malnourished. Children who are below minus three standard deviations (-3 SD) from the median of the reference population are considered severely stunted.

Stunting reflects failure to receive adequate nutrition over a long period of time and is also affected by recurrent or chronic illness.[20] Height-for-age, therefore, represents a long-term effect of malnutrition in a population. Research has found that short stature—a result of stunting—is an important factor in parental decisions to enrol a child in school. Delays in enrolment can have negative, long-term consequences for educational attainment and performance. Height-for-age is positively associated with verbal development and performance on reading, spelling and arithmetic tests (Partnership for Child Development, 2000; Fentiman et al., 2001; Levinger, 1992).

The weight-for-height index measures body mass in relation to body length and describes current nutritional status. Children whose z-scores are below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (*wasted*) and are acutely malnourished. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and

[19] Consequently, the ZDES has not used data on children older than 9 years/11 months.

[20] Stunting is widely believed to occur mainly in early childhood (mostly by age 3) through a cumulative process of antenatal, infant and early childhood malnutrition, and has been considered irreversible. However, evidence that both the prevalence and severity of stunting increases through primary school years has spurred debate about whether stunting can occur in later childhood years and the extent to which stunted children can "catch-up" growth if their health and diet improve (Partnership for Child Development, 2000; Drake et al., 2002).

may be the result of inadequate food intake or recent episodes of illness, causing loss of weight and the onset of malnutrition. Children whose weight-for-height is below minus three standard deviations (-3 SD) from the median of the reference population are considered to be severely wasted. Wasted children are more susceptible to disease and are burdened by more health problems. Wasting is associated with non-enrolment in school, frequent absenteeism, repetition and dropout (Partnership for Child Development, 2000; Fentiman et al., 2001; Levinger, 1992).

Weight-for-age (*underweight*) is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic malnutrition, but does not distinguish between chronic malnutrition (stunting) and acute malnutrition (wasting). A child can be underweight for age because he is stunted, because he is wasted, or because he is stunted and wasted. It is a good overall indicator of a population's nutritional health and a useful tool in clinical settings for continuous assessment of nutritional progress and growth. Children whose weight-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Greater weight-for-age has been found to correlate with better performance on concentration tests (Levinger, 1992).

In the reference population, only 2.3 percent of children fall below minus two standard deviations (-2 SD) for each of the three indices.

Levels of Child Nutrition in Zambia

Table 4.4 presents the percentage of children age 7, 8 and 9 classified as malnourished according to height-for-age, weight-for-height, and weight-for-age indices by background characteristics. ZDES limited its data collection and analysis to this age group for two reasons: first, age 7 corresponds to the official age-of-entry into primary school; and second, variations in the maturation and growth rates of adolescent children age 10 and older make growth comparisons problematic.[21]

[21] In this report, data are presented for male and female children in the same age range, and according to the growth reference curves established by CDC/NCHS for school-age children. All three indices—height-for-weight, weight-for height, and weight-for-age—were available for female children up to 120 months (10 years) and less than 137 cm. in height, and for male children up to 138 months (11.5 years) and less than 145 cm. in height. In order to present information on all three measures for children in the same age group, this report presents anthropometric data for girls and boys age 7 years/ 0 months through age 9 years/11 months.

Table 4.4 Nutritional status of children by background characteristics

Percentage of children age 7-9 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height and weight-for-age, by background characteristics, ZDES 2002

	Height-for-age			Weight-for-height			Weight-for-age			
Background characteristic	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD	Mean Z-score (SD)	Number
Age										
7	10.8	31.7	-1.5	0.2	1.7	-0.2	2.2	17.6	-1.2	902
8	7.2	27.3	-1.4	0.4	3.1	-0.3	1.3	15.9	-1.2	878
9	9.5	33.6	-1.6	0.0	1.7	-0.3	1.4	16.9	-1.3	844
Sex										
Male	12.4	35.2	-1.6	0.3	2.8	-0.3	2.4	20.0	-1.3	1,355
Female	5.7	26.1	-1.4	0.1	1.5	-0.3	0.8	13.4	-1.1	1,269
Child's schooling attainment										
No schooling	20.5	49.2	-2.0	0.3	2.1	-0.3	4.4	31.9	-1.6	718
Has only been in preschool	9.0	42.5	-1.8	0.0	2.1	-0.3	2.3	17.2	-1.4	113
Has been in primary	4.6	22.7	-1.2	0.2	2.2	-0.3	0.5	10.8	-1.1	1,793
Child's age for grade attended in 2002										
Under age	0.3	7.1	-0.7	0.3	2.8	-0.3	0.0	4.3	-0.7	364
On time	4.3	23.5	-1.3	0.2	2.2	-0.3	0.5	10.8	-1.1	1,224
Over age	17.8	53.2	-2.0	0.0	0.8	-0.2	2.6	26.5	-1.5	143
Residence										
Urban	3.4	19.8	-1.1	0.3	2.8	-0.3	0.4	9.2	-1.0	987
Rural	12.7	37.5	-1.7	0.1	1.8	-0.3	2.4	21.4	-1.4	1,637
Province										
Central	6.1	26.6	-1.4	0.3	1.7	-0.2	0.7	10.6	-1.1	189
Copperbelt	3.5	21.4	-1.1	0.3	3.5	-0.4	0.0	10.9	-1.1	562
Eastern	10.6	38.0	-1.7	0.0	0.6	-0.1	0.6	17.6	-1.2	338
Luapula	19.3	50.9	-2.1	0.6	1.2	0.1	2.3	24.0	-1.4	177
Lusaka	4.3	17.7	-1.1	0.0	2.2	-0.1	0.4	6.9	-0.9	355
Northern	19.2	50.4	-2.0	0.2	3.4	-0.4	6.3	31.1	-1.6	377
North-Western	12.6	38.1	-1.7	1.0	2.6	-0.4	4.2	22.9	-1.4	127
Southern	5.6	19.3	-1.2	0.0	0.4	-0.5	0.7	16.4	-1.2	317
Western	9.8	31.7	-1.6	0.0	2.7	-0.4	1.6	19.7	-1.3	183
Mother's education										
No schooling	12.1	34.8	-1.6	0.0	2.5	-0.3	1.8	17.8	-1.3	414
Primary	11.0	35.8	-1.6	0.3	2.3	-0.3	2.2	20.1	-1.3	1,414
Secondary or higher	4.0	19.8	-1.1	0.2	1.9	-0.3	0.5	10.2	-1.0	775
Father's education										
No schooling	10.1	32.9	-1.6	0.0	1.8	-0.3	2.8	17.3	-1.3	315

Primary	11.8	35.6	-1.7	0.0	1.7	-0.3	1.8	19.6	-1.3	932
Secondary or higher	7.3	27.3	-1.3	0.4	2.6	-0.3	1.3	14.8	-1.1	1,347
Wealth index (quintile)										
Lowest	16.2	41.7	-1.8	0.1	2.7	-0.3	3.5	26.1	-1.5	532
Second	13.7	40.4	-1.8	0.0	0.9	-0.3	2.7	23.1	-1.4	431
Middle	12.3	39.4	-1.8	0.4	1.9	-0.3	2.1	22.8	-1.4	520
Fourth	4.2	25.7	-1.4	0.1	1.4	-0.2	0.4	9.4	-1.1	529
Highest	1.5	11.8	-0.8	0.4	3.6	-0.3	0.0	5.7	-0.8	613
Total	9.2	30.8	-1.5	0.2	2.2	-0.3	1.6	16.8	-1.2	2,624

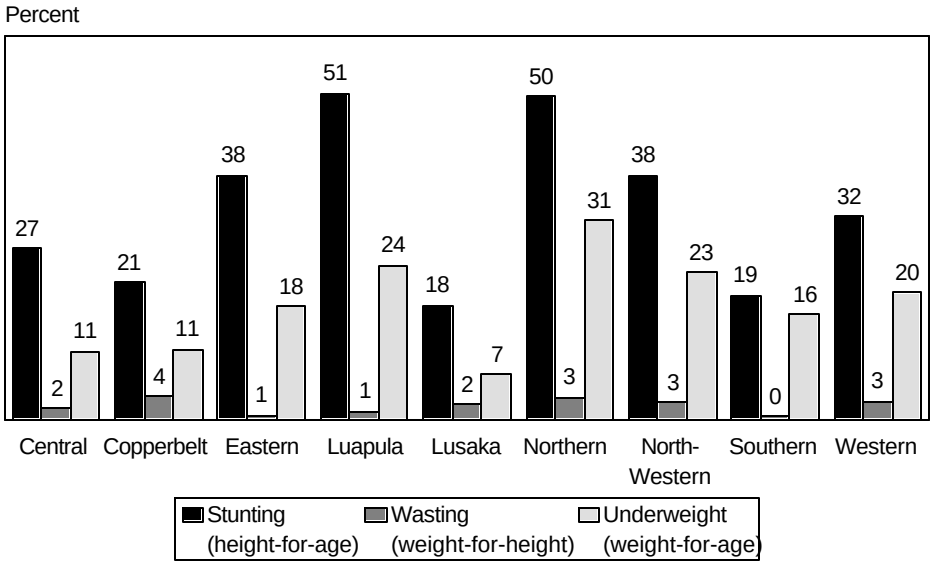
Note: Age for grade attended in 2002 excludes children not attending school in that year.

Stunting (Height-for-Age)

Thirty-one percent of children age 7-9 are moderately or severely stunted (below -2 SD), and 9 percent are severely stunted (below -3 SD). Male children are more likely to be stunted than female children (35 percent versus 26 percent), and are twice as likely as female children to be severely stunted (12 percent versus 6 percent). Children in rural areas are twice as likely to be classified as stunted (38 percent) as children in urban areas (20 percent), and four times as likely to be severely stunted as those in urban areas (13 percent versus 3 percent).

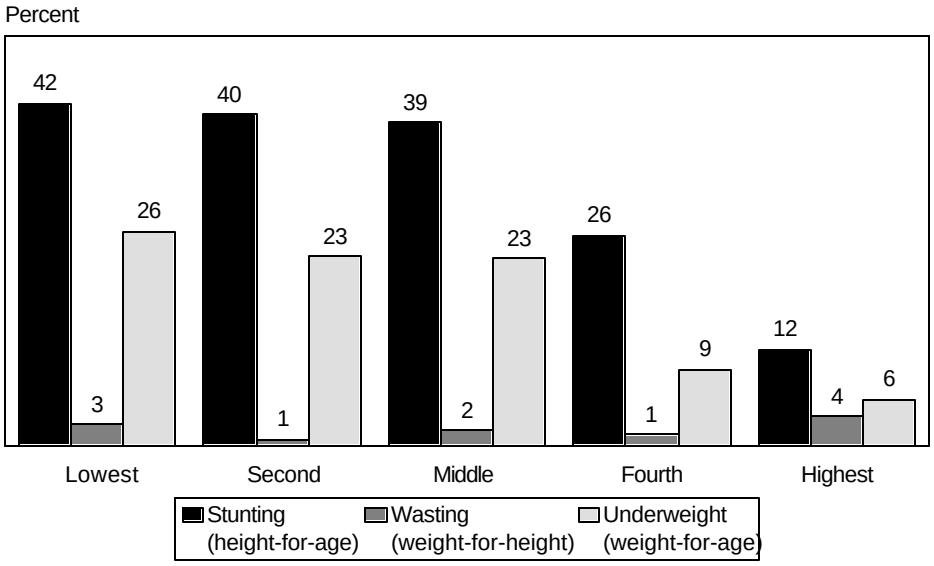
As shown in Figure 4.1, the highest rates of stunting are in Luapula Province (51 percent) and Northern Province (50 percent); the lowest rates of stunting are in Lusaka Province (18 percent) and Southern Province (19 percent). Severe stunting is highest in Northern Province (19 percent), and it is lowest in Copperbelt and Lusaka Provinces (4 percent). The poorer the household, the more likely the child is to be stunted: 42 percent of the poorest children are stunted, compared with 12 percent of the wealthiest children (see Figure 4.2).

Figure 4.1
Nutritional Status of Children Age 7-9, by Province



ZDES 2002

Figure 4.2
Nutritional Status of Children Age 7-9, by Wealth



ZDES 2002

Among children whose parents attended school to the secondary level or higher, there are lower rates of stunting. Thirty-five percent of children age 7-9 whose mothers have no schooling are stunted, while 20 percent of children age 7-9 whose mothers have some secondary education or more are stunted. A similar pattern is observed with fathers, although the association of secondary schooling with lower levels of stunting is not as strong for fathers as for mothers: the stunting rate for children whose fathers have no schooling is 33 percent and falls to 27 percent for children whose fathers have some secondary schooling or higher.

Wasting (weight-for-height)

Only two percent of children age 7-9 were found to be wasted, and almost none were found to be severely wasted. These findings are comparable to those of the NCHS reference population of well-nourished children, and falls with the normal population range of variability for weight-for-height.

Underweight (weight-for-age)

Seventeen percent of children age 7-9 are underweight, although only 2 percent are severely underweight. As with stunting and wasting, a higher percentage of male children age 7-9 are underweight (20 percent) than comparable female children (13 percent). [22] Children in rural areas are more than twice as likely to be underweight (21 percent) as children in urban areas (9 percent). Northern Province has the highest prevalence of underweight children (31 percent); Lusaka province has the lowest prevalence of underweight children (7 percent). Children from poorer households (the lowest, second and middle quintiles) are at least twice as likely to be underweight as children from wealthier households (the fourth and highest quintiles). For example, while 26 percent of the poorest children are underweight, only 6 percent of the wealthiest children are underweight.

[22] The evidence from recent studies of school-age children suggests that boys are more likely to be stunted and underweight than girls, and in some countries, more likely to be wasted than girls (Drake et al., 2002).

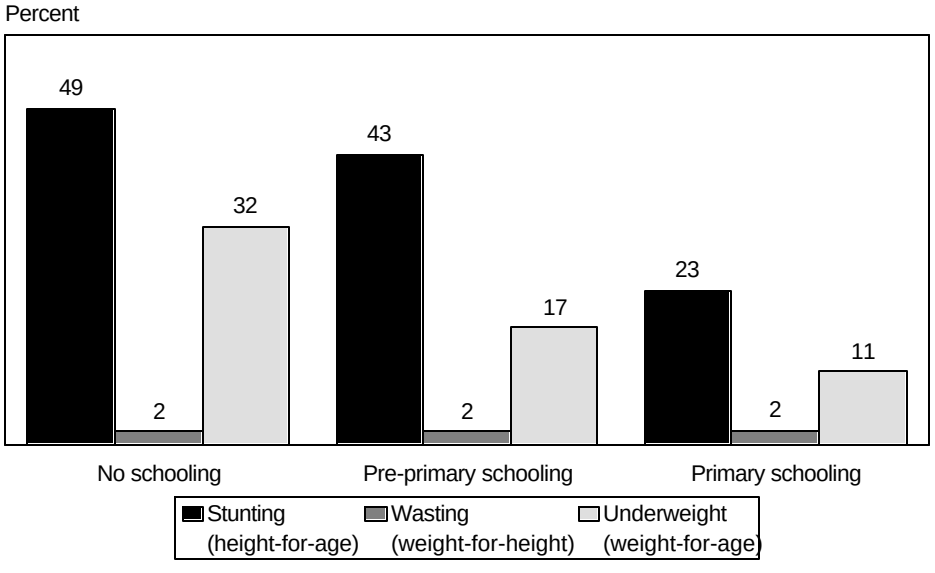
Children whose mothers attended secondary school or higher are considerably less likely to be underweight (10 percent) than those children whose mothers did not attend school (18 percent) or who only attended primary school (20 percent). A similar trend is found for fathers' schooling but the association is not as strong: 15 percent of children whose fathers attended secondary schooling or higher are underweight, compared with 17 percent of those children whose fathers have no schooling and 20 percent of those children whose fathers attended primary school.

Child Nutrition and Schooling in Zambia

Table 4.4 also presents the percentage of children age 7, 8 and 9 classified as malnourished according to height-for-age, weight-for-height, and weight-for-age indices by the level of schooling they have attained (no schooling, pre-primary only, some primary education), regardless of their attendance status during the 2002 school year. Data are also presented on the nutritional status of pupils age 7-9 who attended primary school during the 2002 school year by whether they are under age, on time, or over age for the grade attended.

As shown in Figure 4.3, children who attend or have attended primary school are less likely to be stunted (height-for-age) and underweight (weight-for-age) than children who have never attended school or those who attend or attended pre-primary school. While 23 percent of children with primary schooling are stunted, 43 percent of children with pre-primary schooling and 49 percent of children with no schooling are stunted. Moreover, children with no schooling are more likely to be severely stunted (21 percent) than children with some primary schooling (5 percent). Similarly, 32 percent of children with no schooling are underweight, compared with 17 percent of children with pre-primary schooling and 11 percent of children with some primary schooling. In addition, children with no schooling are more likely to be severely underweight (4 percent) than children with some primary schooling (1 percent).

Figure 4.3
Nutritional Status of Children Age 7-9, by Schooling Attainme



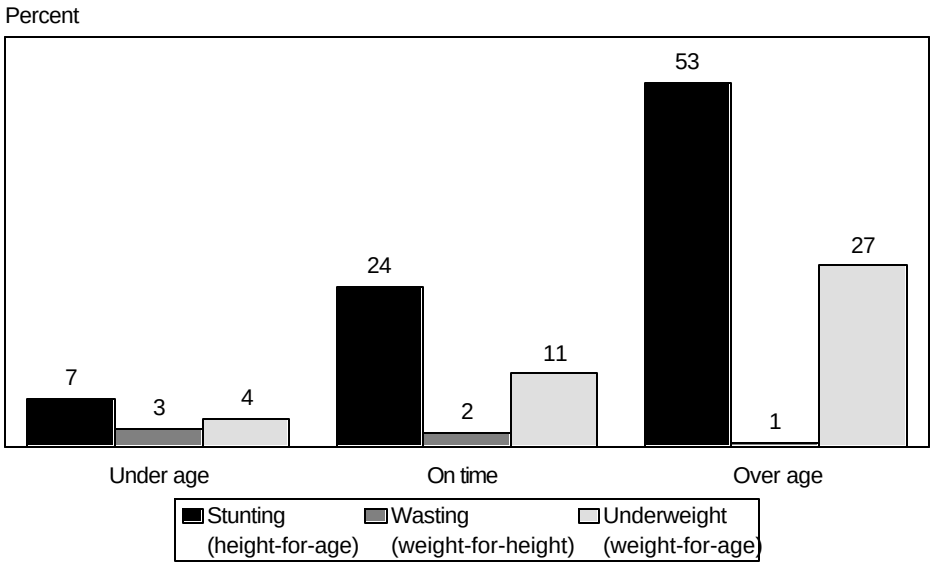
ZDES 2002

Overall, rates of wasting among children age 7-9 are low, and the differences in rates among children with no schooling, pre-primary schooling, and primary schooling are negligible. These findings

suggest that each group of children is equally unlikely to have suffered from recent inadequate food intake or episodes of illness.

As shown in Figure 4.4, among pupils who attended primary school in the 2002 school year, pupils who are over age for the grade they attended are more than twice as likely to be stunted (53 percent) as pupils who are on time for the grade they attended (24 percent), and seven times more likely to be stunted than pupils who are under age for the grade they attended (7 percent). Similarly, over-age pupils are more than twice as likely to be underweight (27 percent) as pupils who are on time for the grade they attended (11 percent), and seven times more likely to be underweight than pupils who are under age for the grade they attended (4 percent).

Figure 4.4
Nutritional Status of Children Age - , by Child's Age for Grad



ZDES 2002

Literacy and Numeracy among Children Age 7-10

The 2002 ZDES tested literacy and numeracy among young school-age children, regardless of whether they had ever attended school. Although the Ministry of Education (MOE) has instituted a pupil assessment system, has recently completed testing grade 4 pupils, and has participated in previous assessment studies (e.g. SACMEQ, MLA), pupil assessment is limited to children who are enrolled in or attending school. However, literacy and numeracy skills are not solely or necessarily acquired through formal schooling. The ZDES collected literacy and numeracy data on children age 7-10[23] who have never attended school, who are currently attending, or who have dropped out of school, in order to provide a general estimate of the level of basic literacy and numeracy among this age group.

Literacy and numeracy are complex constructs, not easily captured by one indicator. The ZDES provides only one measure each for literacy and numeracy, and therefore should be interpreted with some caution. Each child was given a simple test for literacy and numeracy. Basic literacy was assessed by

[23]The data presented in this section are for children age 7 years/0 months through 10 years/11 months. The percentages presented in the tables in this section are based on the number of children for whom data was obtained (i.e. children with missing data were excluded from the denominator).

asking the child to read a single short sentence in his/her preferred language (English or one of seven major local languages). Respondents were rated on whether they could not read the sentence at all, whether they could read part of the sentence, or whether they could read the entire sentence. Children who could read either part of or an entire sentence correctly are considered to have basic literacy skills. Basic numeracy was tested by asking a child to add two single-digit numbers, summing to less than 10. Respondents were rated on whether they correctly summed the numbers or not. Children who calculated the correct sum are considered to have basic numeracy skills.

Literacy

Literacy levels for children in the 7-10 age group are low: only 19 percent of children are able to read some or all of a sentence (see Tables 4.5.1 through 4.5.3). Older children are more likely than younger children to be literate: 11 percent of children age 7-8 have basic literacy skills, compared with 26 percent those age 9-10. Almost none of the children age 7-10 who have never attended school (1 percent) have acquired basic literacy skills, while 25 percent of children age 7-10 who have attended primary school are literate, suggesting that for this age group, literacy acquisition is primarily through formal primary schooling.[24]

Children in urban areas are more than five times as likely to be literate as children in rural areas (37 percent versus 7 percent). The highest basic literacy rates for children age 7-10 are found in the relatively urbanized provinces of Lusaka (43 percent) and Copperbelt (29 percent); all other provinces fall below the national average (19 percent). The wealthier the child, the higher the literacy rate: 46 percent of the wealthiest children can read some or all of a sentence, compared with only 3 percent of the poorest children.

[24] In assessing these results, it is important to keep in mind that pupils in the 7-10 age group are not likely to have progressed beyond grade 4, a grade level that is often used in international comparisons as a benchmark and proxy for literacy. Consequently, conclusions cannot be reliably drawn about the quality of instruction received in primary school. See Chapter 2 for discussion of educational attainment and literacy in adults and Chapter 5 for discussion of age-specific attendance.

Table 4.5.1 Literacy among male children

Percent distribution of male children age 7-10, by sex and by level of literacy and percent literate, according to background characteristics, ZDES 2002

Background characteristic	Cannot read at all	Can read part of a sentence	Can read a whole sentence	No card with required language	Total	Number of children	Percent literate
Age							
7-8	89.1	7.6	3.1	0.2	100.0	924	10.7
9-10	75.0	13.7	11.1	0.1	100.0	906	24.8
Education							
No schooling	99.1	0.5	0.2	0.2	100.0	449	0.7
Preschool	93.5	5.9	0.0	0.7	100.0	60	5.9
Primary	75.9	14.3	9.7	0.1	100.0	1,322	24.0
Residence							
Urban	65.8	21.5	12.7	0.0	100.0	663	34.2
Rural	91.4	4.5	3.8	0.2	100.0	1,167	8.3
Province							
Central	88.8	6.5	4.7	0.0	100.0	138	11.2
Copperbelt	73.5	16.6	10.0	0.0	100.0	348	26.5
Eastern	92.1	5.2	2.6	0.0	100.0	235	7.9
Luapula	92.0	3.6	4.4	0.0	100.0	142	8.0
Lusaka	59.0	25.9	15.1	0.0	100.0	272	41.0
Northern	87.2	8.2	4.3	0.4	100.0	258	12.5
North-Western	91.2	4.4	3.5	0.9	100.0	93	7.9
Southern	89.6	6.0	4.4	0.0	100.0	214	10.4
Western	89.3	1.5	8.4	0.8	100.0	131	9.9
Wealth index (quintile)							
Lowest	96.8	1.9	1.0	0.3	100.0	385	2.9
Second	94.5	2.1	2.9	0.5	100.0	317	5.0
Middle	90.4	5.6	4.0	0.0	100.0	348	9.6
Fourth	75.4	16.4	8.2	0.0	100.0	358	24.6
Highest	58.4	24.3	17.3	0.0	100.0	423	41.6
Total	82.1	10.6	7.1	0.1	100.0	1,830	17.7

Table 4.5.2 Literacy among female children

Percent distribution of female children age 7-10, by sex and by level of literacy and percent literate, according to background characteristics, ZDES 2002

Background characteristic	Cannot read at all	Can read part of a sentence	Can read a whole sentence	No card with required language	Total	Number of children	Percent literate
Age							
7-8	88.4	5.7	5.9	0.0	100.0	886	11.6
9-10	72.7	11.3	16.0	0.1	100.0	865	27.2
Education							
No schooling	99.1	0.9	0.0	0.0	100.0	361	0.9
Preschool	97.7	1.6	0.0	0.7	100.0	59	1.6
Primary	74.9	10.8	14.3	0.0	100.0	1,331	25.1
Residence							
Urban	61.3	15.8	22.9	0.0	100.0	700	38.7
Rural	93.5	3.5	2.8	0.1	100.0	1,051	6.4
Province							
Central	87.1	6.9	6.0	0.0	100.0	140	12.9
Copperbelt	69.6	9.7	20.7	0.0	100.0	390	30.4
Eastern	89.6	4.8	5.7	0.0	100.0	236	10.4
Luapula	95.5	1.1	3.4	0.0	100.0	91	4.5
Lusaka	54.7	25.5	19.8	0.0	100.0	246	45.3
Northern	89.7	5.2	5.2	0.0	100.0	231	10.3
North-Western	92.3	5.2	1.5	1.0	100.0	79	6.7
Southern	91.2	3.9	5.0	0.0	100.0	213	8.8
Western	89.4	0.8	9.8	0.0	100.0	123	10.6
Wealth index (quintile)							
Lowest	96.2	1.9	1.8	0.0	100.0	345	3.8
Second	96.7	1.4	1.6	0.3	100.0	280	3.0
Middle	91.9	5.0	3.1	0.0	100.0	330	8.1
Fourth	81.4	10.6	8.0	0.0	100.0	350	18.6
Highest	49.6	18.7	31.7	0.0	100.0	446	50.4
Total	80.6	8.5	10.9	0.0	100.0	1,750	19.3

Table 4.5.3 Literacy among children

Percent distribution of male and female children age 7-10, by sex and by level of literacy and percent literate, according to background characteristics, ZDES 2002

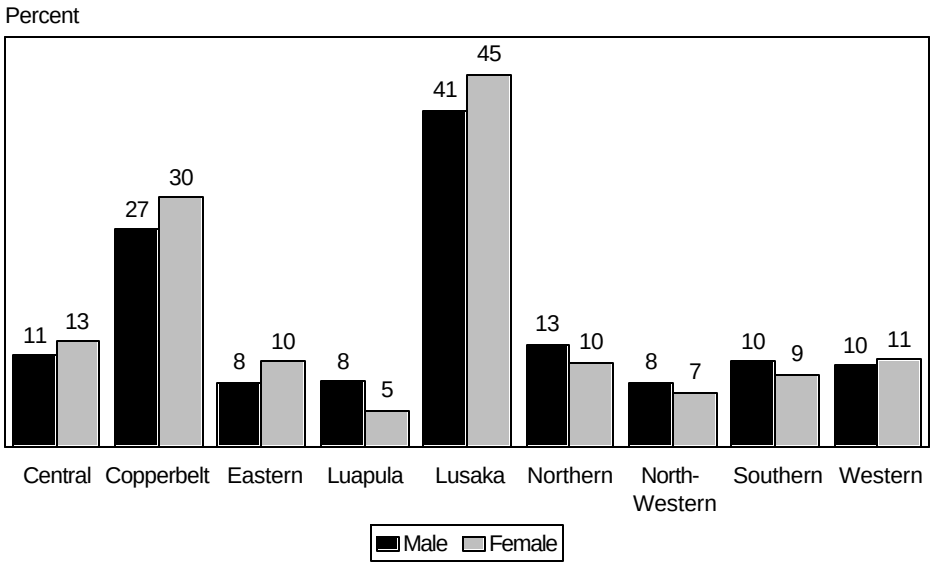
Background characteristic	Cannot read at all	Can read part of a sentence	Can read a whole sentence	No card with required language	Total	Number of children	Percent literate
Age							
7-8	88.8	6.7	4.4	0.1	100.0	1,809	11.1
9-10	73.9	12.5	13.5	0.1	100.0	1,771	26.0
Education							
No schooling	99.1	0.7	0.1	0.1	100.0	810	0.8
Preschool	95.6	3.7	0.0	0.7	100.0	118	3.7
Primary	75.4	12.6	12.0	0.1	100.0	2,653	24.6
Residence							
Urban	63.5	18.6	17.9	0.0	100.0	1,363	36.5
Rural	92.4	4.0	3.4	0.2	100.0	2,218	7.4
Province							
Central	87.9	6.7	5.3	0.0	100.0	278	12.1
Copperbelt	71.4	12.9	15.6	0.0	100.0	738	28.6
Eastern	90.8	5.0	4.1	0.0	100.0	471	9.2
Luapula	93.3	2.7	4.0	0.0	100.0	233	6.7
Lusaka	56.9	25.7	17.3	0.0	100.0	518	43.1
Northern	88.4	6.8	4.7	0.2	100.0	489	11.4
North-Western	91.7	4.8	2.6	1.0	100.0	172	7.4
Southern	90.4	5.0	4.7	0.0	100.0	427	9.6
Western	89.4	1.2	9.1	0.4	100.0	255	10.2
Wealth index (quintile)							
Lowest	96.5	1.9	1.4	0.1	100.0	729	3.3
Second	95.5	1.8	2.3	0.4	100.0	597	4.0
Middle	91.1	5.4	3.5	0.0	100.0	678	8.9
Fourth	78.4	13.5	8.1	0.0	100.0	707	21.6
Highest	53.9	21.4	24.7	0.0	100.0	869	46.1
Total	81.4	9.6	8.9	0.1	100.0	3,581	18.5

Whereas there is virtually no difference in the overall literacy rates for male and female children, there are some gender differences in the reading skill level. Among children age 9-10, 11 percent of boys are able to read an entire sentence correctly, while 16 percent of girls are able to read an entire sentence

correctly, demonstrating greater mastery of literacy skills. Female children in urban areas are somewhat more likely than male children in urban areas to be literate (39 percent versus 34 percent), but they are nearly twice as likely to read an entire sentence correctly as male children (23 percent versus 13 percent). There are no notable differences in the literacy rate and literacy skill level for male and female children in rural areas.

As shown in Figure 4.5, for male children, the highest rate of literacy is found in Lusaka Province (41 percent) and the lowest rates are found in Eastern, Luapula, and North-Western Provinces (8 percent each). For female children, the highest rate of literacy is found in Lusaka Province (45 percent) and the lowest rate is found in Luapula Province (5 percent).

Figure 4.5
Literacy among Children Age 7-10, by Sex and Province



ZDES 2002

Numeracy

A higher percentage of children age 7-10 exhibit rudimentary numeracy skills than literacy skills: over half (52 percent) can perform simple addition (see Tables 4.6.1 through 4.6.3). Sixty-five percent of children age 9-10 have numeracy skills, compared with 40 percent of children age 7-8. While only 11 percent of children with no schooling can add correctly two single-digit numbers totalling less than 10, 30 percent of children with pre-school education and 66 percent of children with some primary schooling can calculate the sum. It is interesting that while virtually none of the children with no schooling are able to read, one in ten children with no schooling is able to sum the numbers correctly, suggesting that in this age group, numeracy skills are more likely than literacy skills to be acquired outside the classroom.

Table 4.6.1 Numeracy among male children

Percent distribution of male children age 7-10, by numeracy, according to background characteristics, ZDES 2002

Background characteristic	Did not correctly sum numbers/no answer given	Correctly summed numbers	Total	Number of children
Age				
7-8	61.4	38.6	100.0	924
9-10	35.5	64.5	100.0	907
Education				
No schooling	88.7	11.3	100.0	449
Preschool	66.3	33.7	100.0	60
Primary	34.1	65.9	100.0	1,323
Residence				
Urban	24.9	75.1	100.0	663
Rural	62.0	38.0	100.0	1,168
Province				
Central	48.1	51.9	100.0	138
Copperbelt	20.9	79.1	100.0	348
Eastern	65.1	34.9	100.0	235
Luapula	65.0	35.0	100.0	142
Lusaka	31.6	68.4	100.0	272
Northern	63.5	36.5	100.0	258
North-Western	60.8	39.2	100.0	93
Southern	57.5	42.5	100.0	213
Western	57.6	42.4	100.0	132
Wealth index (quintile)				
Lowest	72.9	27.1	100.0	385
Second	68.3	31.7	100.0	317
Middle	57.2	42.8	100.0	348
Fourth	33.9	66.1	100.0	359
Highest	17.0	83.0	100.0	423
Total	48.6	51.4	100.0	1,831

Table 4.6.2 Numeracy among female children

Percent distribution of female children age 7-10, by numeracy, according to background characteristics, ZDES 2002

Background characteristic	Did not correctly sum numbers/no answer given	Correctly summed numbers	Total	Number of children
Age				
7-8	57.7	42.3	100.0	884
9-10	35.2	64.8	100.0	866
Education				
No schooling	89.7	10.3	100.0	359
Preschool	73.5	26.5	100.0	59
Primary	33.7	66.3	100.0	1,332
Residence				
Urban	21.9	78.1	100.0	700
Rural	63.0	37.0	100.0	1,050
Province				
Central	45.4	54.6	100.0	140
Copperbelt	19.7	80.3	100.0	392
Eastern	65.2	34.8	100.0	236
Luapula	58.6	41.4	100.0	90
Lusaka	27.1	72.9	100.0	246
Northern	67.2	32.8	100.0	232
North-Western	57.7	42.3	100.0	79
Southern	55.3	44.7	100.0	211
Western	66.7	33.3	100.0	123
Wealth index (quintile)				
Lowest	74.9	25.1	100.0	343
Second	67.7	32.3	100.0	280
Middle	53.7	46.3	100.0	330
Fourth	38.7	61.3	100.0	349
Highest	12.5	87.5	100.0	448
Total	46.6	53.4	100.0	1,750

Table 4.6.3 Numeracy among children

Percent distribution of male and female children age 7-10, by numeracy, according to background characteristics, ZDES 2002

Background characteristic	Did not correctly sum numbers/no answer given	Correctly summed numbers	Total	Number of children
Age				
7-8	59.6	40.4	100.0	1,807
9-10	35.4	64.6	100.0	1,774
Education				
No schooling	89.2	10.8	100.0	808
Preschool	69.9	30.1	100.0	118
Primary	33.9	66.1	100.0	2,655
Residence				
Urban	23.4	76.6	100.0	1,363
Rural	62.5	37.5	100.0	2,218
Province				
Central	46.8	53.2	100.0	278
Copperbelt	20.3	79.7	100.0	740
Eastern	65.1	34.9	100.0	471
Luapula	62.5	37.5	100.0	232
Lusaka	29.5	70.5	100.0	518
Northern	65.2	34.8	100.0	490
North-Western	59.4	40.6	100.0	172
Southern	56.4	43.6	100.0	424
Western	62.0	38.0	100.0	256
Wealth index (quintile)				
Lowest	73.9	26.1	100.0	728
Second	68.0	32.0	100.0	597
Middle	55.5	44.5	100.0	678
Fourth	36.2	63.8	100.0	708
Highest	14.7	85.3	100.0	871
Total	47.6	52.4	100.0	3,581

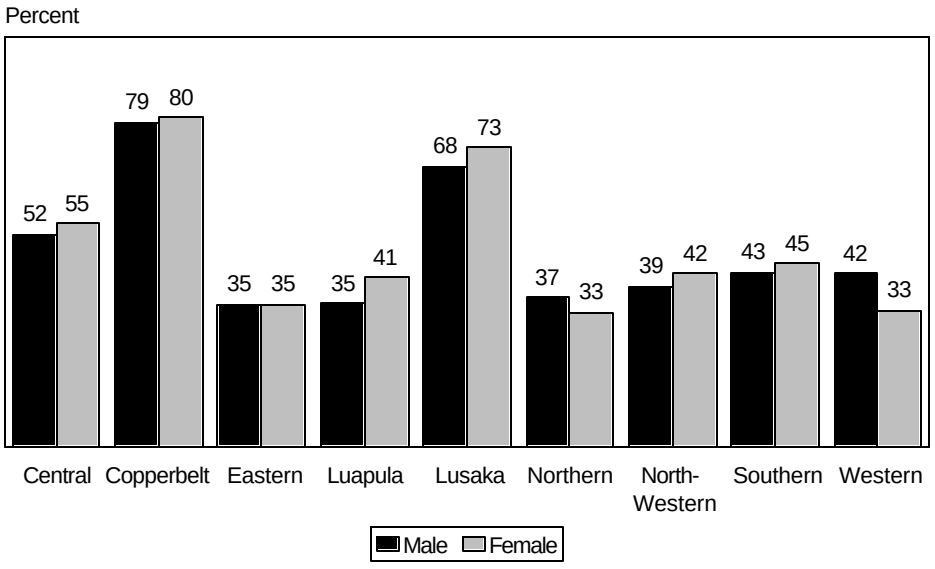
Children in urban areas are twice as likely to have basic numeracy skills (77 percent) as children in rural areas (38 percent). The highest percentages of children able to calculate the correct sum are found in Copperbelt Province (80 percent) and Lusaka Province (71 percent), followed by Central province

(53 percent). The other provinces—Eastern, Luapula, Northern, North-Western, Southern and Western—fall below the national average (52 percent). The percentage of children able to calculate sums correctly increases with household wealth: 26 percent of the poorest children answered correctly compared with 85 percent of the wealthiest children.

Female children and male children are almost equally able to calculate simple sums (53 percent and 51 percent, respectively). There is no difference between female children and male children in rural areas, and the difference between female children and male children in urban areas is minor. Male children with pre-primary schooling performed better (34 percent) than female children with pre-primary schooling (27 percent), although male and female children with no schooling and male and female children with some primary schooling performed equally, suggesting that primary schooling may level the numeracy playing field for female children, at least in the early primary grades.

As shown in Figure 4.6, female and male children are most likely to be numerate in Copperbelt Province (80 percent and 79 percent, respectively). Female children are least likely to be numerate in Northern and Western Provinces (33 percent), while male children are least likely to be numerate in Eastern and Luapula Provinces (35 percent).

Figure 4.6
Numeracy among Children Age 7-10, by Sex and Province



ZDES 2002

SCHOOL ATTENDANCE RATES 5

This chapter presents information on school attendance ratios and on the primary school pupils' age relative to the grade they attend. The chapter also presents dropout and repetition rates in the primary school grades.

Primary School Attendance Ratios

The 2001-2002 Zambia DHS survey collected information about school attendance in the 2000 and 2001 school years among youth age 5-24. This information is used below to calculate the net and gross attendance ratios (NAR and GAR), and the repetition and dropout rates (which are addressed in section 5.5). The 2001-2002 Zambia DHS survey and the 2002 ZDES approach to measuring children's participation in schooling differs both methodologically and substantively from those generally used by ministries of education and internationally in education statistics. The Ministry of Education (MOE) in Zambia collects data from school enrolment records, and uses population estimates to produce figures on children's school enrolment rates. The 2001-2002 Zambia DHS survey and the 2002 ZDES, on the other hand, measure children's participation in schooling using data on school attendance, collected from a representative sample of households. Attendance ratios indicate the percentage of children who attend school, based on the question: "During the current school year, has (NAME) attended school at any time?"

Tables 5.1 and 5.2 present primary school and secondary school net and gross attendance ratios for the 2001 school year and the gender parity index by household residence and region. The net attendance ratio (NAR) indicates participation in schooling among those of official school age, which is age 7-13 for primary and 14-18 for secondary. The gross attendance ratio (GAR) indicates school attendance among youth of any age, from age 5 to 24, and is expressed as a percentage of the school-age population for that level of schooling. The GAR is nearly always higher than the NAR for the same level, because the GAR includes participation by youth who are older or younger than the official age range for that level. A NAR of 100 percent would indicate that all of the children in the official age range for the level are attending that level. The GAR can exceed 100 if there is sizeable over-age or under-age participation at that level of schooling.

The gender parity index (GPI) measures sex-related differences in school attendance rates: It is calculated by dividing the gross attendance ratio for females by the gross attendance ratio for males. If the primary school GAR for females and males were the same, say 70, then the GPI would be 70/70, or 1, showing parity or equality between the rates of participation among female and male children. However, if males participate at a higher rate than do females, the GPI would be below 1. The closer the GPI is to 0, the greater is the gender disparity in favour of males. A GPI greater than 1 indicates a gender disparity in favour of females, meaning that a higher proportion of females than males attends that level of schooling.

As illustrated in Table 5.1, two-thirds (67 percent) of the primary-school-age children (age 7-13) attended primary school. There is no difference in the net attendance ratio (NAR) by sex, but there is a substantial urban-rural difference: 78 percent of children in urban areas attended primary school, compared with 61 percent in rural areas.

Table 5.1 Primary school attendance ratios

Primary net attendance ratios (NAR), gross attendance ratios (GAR), and the gender parity index (GPI) for the de jure household population age 5-24, by sex, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Net attendance ratio (NAR)[1]			Gross attendance ratio (GAR)[2]			Gender parity index[3]
	Male	Female	Total	Male	Female	Total	
Residence							
Urban	77.5	78.3	77.9	101.3	95.2	98.2	0.94
Rural	61.6	60.3	60.9	95.2	78.9	87.2	0.83
Province							
Central	71.9	71.1	71.5	108.3	95.2	102.0	0.88
Copperbelt	78.9	73.0	75.9	102.4	87.2	94.6	0.85
Eastern	53.0	55.7	54.3	77.1	72.8	75.0	0.94
Luapula	56.9	55.7	56.3	85.6	72.0	79.1	0.84
Lusaka	74.3	76.0	75.2	100.7	95.2	97.9	0.94
Northern	63.0	60.8	61.9	102.5	78.0	90.2	0.76
North-Western	75.3	77.5	76.4	117.3	106.3	111.8	0.91
Southern	67.8	72.1	70.0	100.8	88.3	94.4	0.88
Western	60.2	55.8	58.0	90.0	75.6	83.0	0.84
Mother's education							
No schooling	53.9	49.4	51.7	u	u	u	u
Some or completed primary	66.0	66.8	66.4	u	u	u	u
Some, completed or higher than secondary	79.8	82.1	81.0	u	u	u	u
Father's education							
No schooling	60.0	54.4	57.3	u	u	u	u
Some or completed primary	61.5	60.5	61.1	u	u	u	u
Some, completed or higher than secondary	74.7	76.5	75.6	u	u	u	u
Wealth index (quintile)							
Lowest	51.8	50.5	51.2	81.9	67.8	75.2	0.83
Second	59.2	56.1	57.7	90.6	74.1	82.6	0.82
Middle	64.9	64.0	64.5	101.1	79.7	90.1	0.79
Fourth	71.3	74.9	73.1	100.8	93.2	96.9	0.92
Highest	88.5	85.9	87.1	112.8	106.3	109.5	0.94
Total	67.2	66.9	67.1	97.4	84.9	91.2	0.87

[1] Percentage of the primary-school age (7-13 years) population that is attending primary school. By definition the NAR cannot exceed 100 percent.

[2] Total number of primary school students, expressed as a percentage of the official primary-school-age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100.

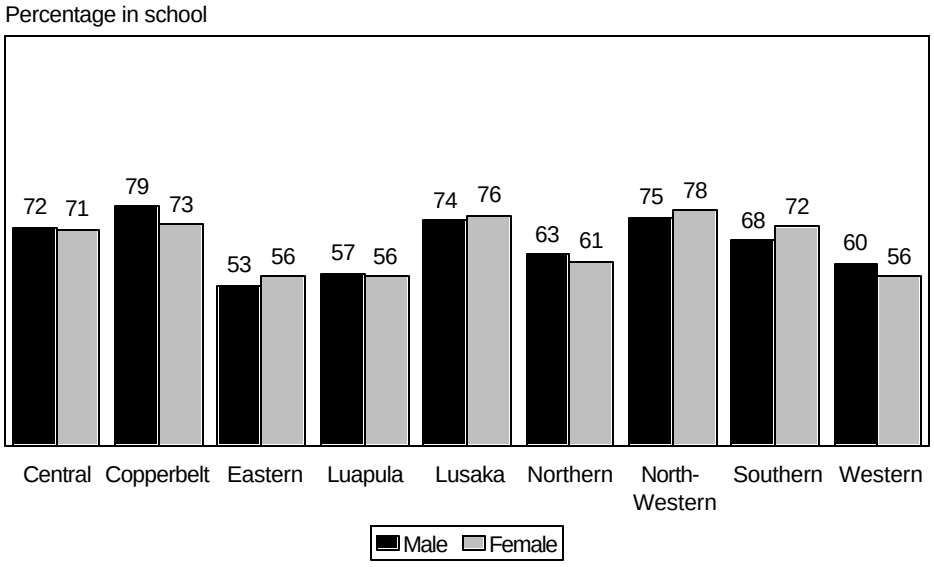
[3] Ratio of the primary school GAR for females to the GAR for males.

u = Unknown (not available)

In Zambia, a sizeable proportion of primary school pupils fall outside the official age range for primary schooling: whereas the primary school NAR is 67 percent, the GAR is 91, indicating that for every 67 pupils age 7-13, there are 24 pupils who are either younger than age 7 or older than age 13. While the NAR is 67 percent for both male and female children, the male GAR (97) exceeds the female GAR (85). This difference in the GAR, in comparison with the NAR, indicates that male pupils were more likely than female pupils to be outside the official age range. The gender parity index at the primary level is 0.87, suggesting that there was a moderate gender gap in favour of males.

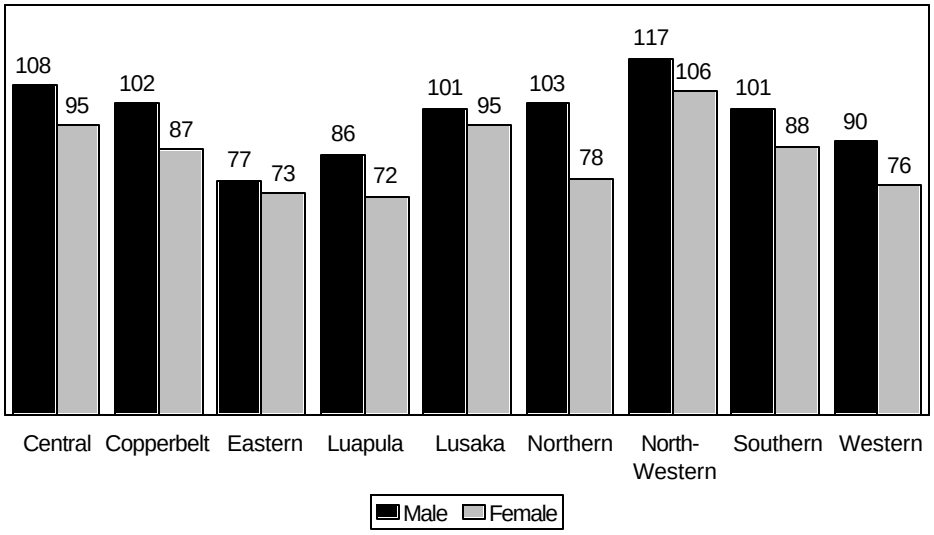
Provincial differences in both net and gross attendance ratios are notable (see Figures 5.1 and 5.2). The net primary school attendance ratios range from 54 percent in the Eastern Province to 76 percent in North-Western Province and Copperbelt Province. In Eastern, Luapula, Western, and Northern

Figure 5.1
Primary Net Attendance Ratio, by Province and Sex



Zambia DHS 2001-2002

Figure 5.2
Primary Gross Attendance Ratio, by Province and Sex



Zambia DHS 2001-2002

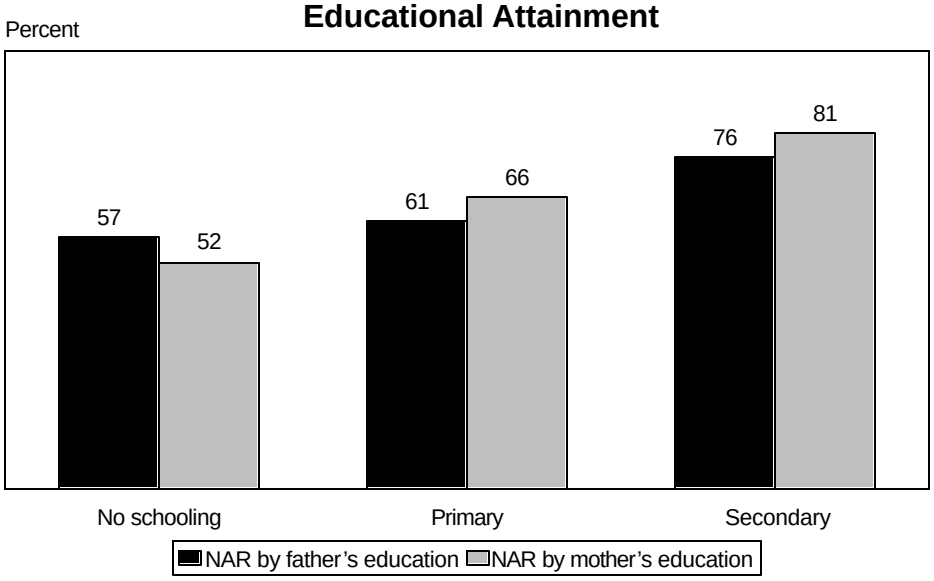
Provinces, the NAR is below the national NAR of 67 percent, while in the remaining provinces, the NAR is above the national NAR. A similar pattern exists for attendance among youth from age 5-24, with the ranking of provinces by GAR (from lowest to highest) being the same as for the NAR, with the exception of Central Province and Copperbelt Province.

Gender parity varies by province, with the lowest GPI in Northern Province (0.76) and the highest in Eastern and Lusaka Provinces (0.94). Interestingly, the province with the lowest proportion of children in school overall—Eastern Province—has the best record in terms of gender parity.

For children of primary school age, the 2002 ZDES provides information about parents' educational attainment, which allows for the calculation of the primary school NAR according to parents' educational attainment.[25] Many studies suggest that there are intergenerational benefits to schooling, with children being more likely to attend school and persist in school if their parents attended school. The results of the 2002 ZDES are consistent with this premise: the higher the level of schooling attained by a child's mother and father, the greater is the likelihood that the child attends primary school (see Figure 5.3). While the NAR is 52 percent among children whose mothers have never attended school, it is 66 percent among children whose mothers attended primary school, and 81 percent among children whose mothers attended secondary school or higher. There is a similar pattern according to the child's father's educational attainment, with the NAR at 57 percent among children whose fathers have never attended school, 61 percent among those whose fathers attended primary, and 76 percent among those whose fathers attended secondary school or a higher level.

[25] The GAR cannot be calculated according to parents' educational attainment because this information was collected only for children age 5-14, rather than for all youth.

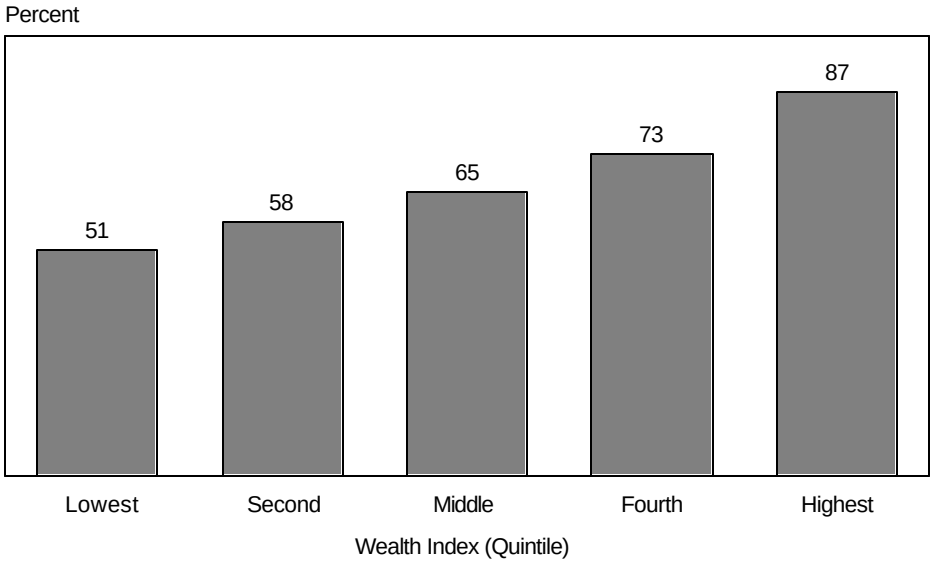
Figure 5.3
Primary Net Attendance Ratio, by Father's and Mother's Educational Attainment



Zambia DHS 2001-2002 and ZDES 2002

At the primary level, there are dramatic differences in NAR and GAR by wealth. Among children age 7 to 13 in the wealthiest quintile, 87 percent attend primary school, compared with 51 percent in the poorest quintile (see Figure 5.4). The gross attendance ratio follows a similar pattern, with a GAR of 110 in the wealthiest quintile and a GAR of 75 in the poorest quintile. Gender disparities (in favour of boys) in the GAR are the greatest in the lowest (i.e. poorest) three quintiles, gender disparities are the least in the highest two (wealthiest) quintiles.

Figure 5.4
Primary Net Attendance Ratio, by Wealth Index



Zambia DHS 2001-2002

Secondary School Attendance Ratios

At the secondary level, a far lower proportion of school-age youth attend school than is the case at the primary level (see Table 5.2). Twenty-two percent of youth age 14-18 attend secondary school in Zambia, which is only about one-third as high as the primary NAR. At the secondary level, there is a small difference in the NAR by sex, but there is a sizeable urban-rural difference: in urban areas, youth age 14-18 are nearly three times as likely to attend secondary school (37 percent) as their peers in rural areas (13 percent).[26]

At the secondary level, one in three students is outside the 14-18 year target age range for the level. The secondary NAR is 22 percent and the GAR is 33, indicating that for every 22 students age 14-18, there are 11 students who are either younger than age 14 or older than age 18. As with the NAR, the GAR in urban areas (56) is about three times as high as in rural areas (20). Among youth of secondary school age, there is a slight gender gap in favour of females (male NAR of 21 percent and female NAR of 23 percent). This pattern reverses for the GAR, with male youth up to the age of 24 being more likely than female youth to attend secondary school (male GAR of 36 and female GAR of 31), resulting in a gender parity index of 0.86. As is the case at the primary level, male students at the secondary level are more likely than female students to be outside the official age range.

[26] It should be noted, however, that these differences in rates of participation partly reflect the supply of secondary schooling. Since the majority of secondary schools are located in urban rather than rural areas, youth in rural areas may move to live with relatives or non-relatives in urban areas in order to attend secondary school. In the ZDES, youth who have moved to live in households in urban areas are counted as urban residents. However, if secondary school students from rural areas live in boarding schools located in urban areas, they are counted as residents of rural areas because they remain members of those households. In summary, the overall effect of secondary student migration from rural to urban areas is likely to add to the urban-rural disparity in attendance ratios.

Table 5.2 Secondary school attendance ratios

Secondary net attendance ratios (NAR), gross attendance ratios (GAR), and the gender parity index (GPI) for the de jure household population age 5-24, by sex, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Net attendance ratio (NAR)[1]			Gross attendance ratio (GAR)[2]			Gender parity index[3]
	Male	Female	Total	Male	Female	Total	
Residence							
Urban	36.0	38.1	37.1	61.4	51.8	56.3	0.84
Rural	13.0	12.6	12.8	23.2	17.3	20.4	0.74
Province							
Central	17.9	19.3	18.6	37.8	26.2	31.7	0.69
Copperbelt	33.8	39.1	36.5	56.1	50.6	53.3	0.90
Eastern	14.9	15.1	15.0	27.5	25.2	26.4	0.92
Luapula	12.1	6.4	9.2	19.5	8.9	14.1	0.46
Lusaka	28.9	25.1	27.0	52.6	35.7	43.8	0.68
Northern	16.4	21.0	18.5	30.3	27.6	29.1	0.91
North-Western	27.6	23.9	25.9	46.5	33.3	40.4	0.72
Southern	14.5	19.4	16.7	23.8	26.2	24.9	1.10
Western	11.5	13.0	12.2	15.3	17.5	16.4	1.14
Wealth index (quintile)							
Lowest	6.5	5.0	5.8	12.0	5.7	9.0	0.47
Second	9.3	7.4	8.4	19.1	10.3	14.9	0.54
Middle	9.4	14.0	11.7	16.7	19.2	17.9	1.15
Fourth	24.6	25.8	25.2	43.7	37.0	40.4	0.85
Highest	52.6	50.1	51.2	86.8	67.8	76.5	0.78
Total	20.6	22.5	21.5	35.9	30.7	33.3	0.86

[1] Percentage of the secondary-school age (14-18 years) population that is attending secondary school. By definition the NAR cannot exceed 100%.

[2] Total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100.

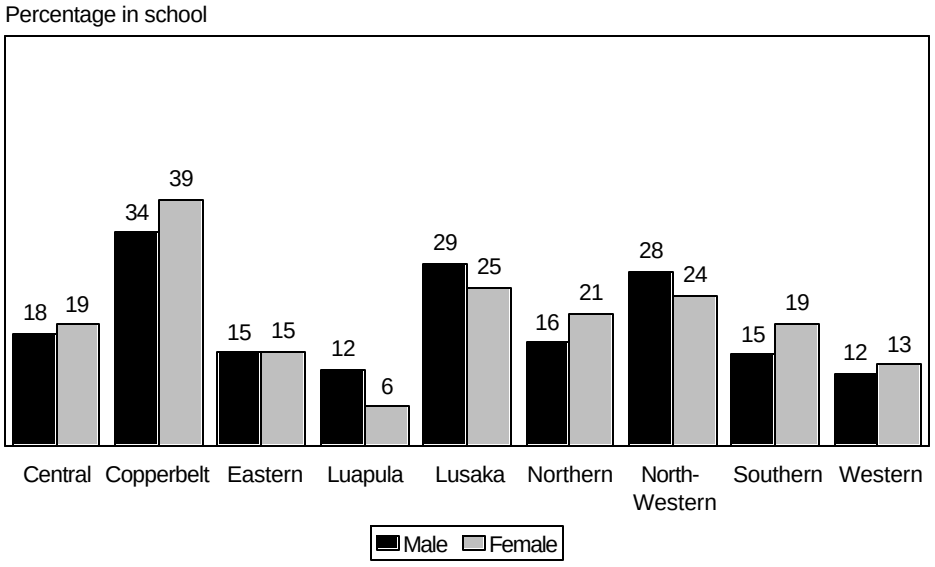
[3] Ratio of the secondary school GAR for females to the GAR for males.

Provincial differences in both net and gross attendance ratios are substantial (see Figures 5.5 and 5.6). The secondary school attendance ratios among children age 14-18 range from 9 percent in Luapula Province to 37 percent in Copperbelt Province. In Luapula, Western, Eastern, Southern, Central, and Northern Provinces, the NAR is below the national NAR, while in the remaining provinces, the NAR is above the national NAR of 22 percent. A similar pattern exists for attendance among youth from age 5-24, with the ranking of provinces by GAR (from lowest to highest) being similar to that for the NAR.

Among provinces, there are notable gender differences in the percentage of children age 14-18 attending secondary school. In Northern and Southern Provinces, there is a gender gap in favour of female youth of about 5 percentage points. In contrast, in Luapula Province, the male NAR is 6 percentage points higher than the female NAR.

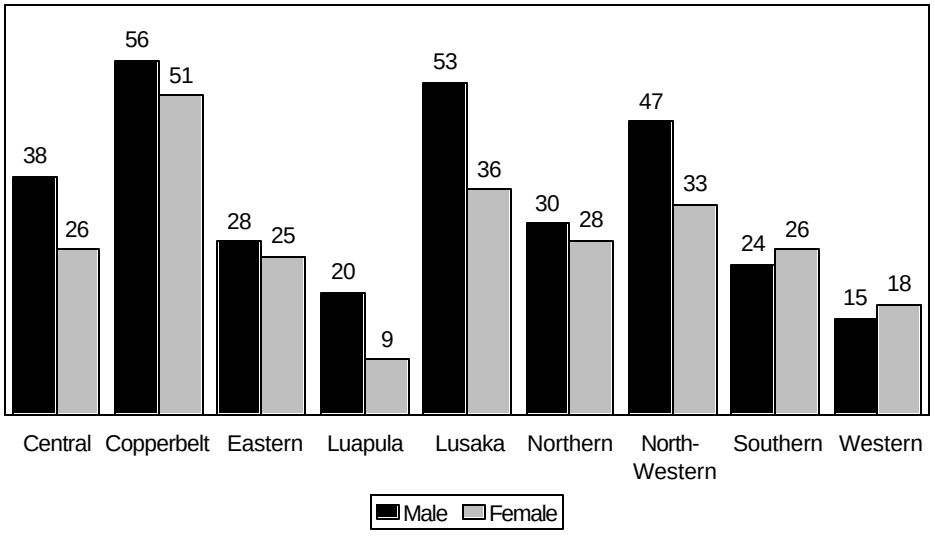
Within provinces, there is a wide range of difference in GAR by sex, with the female GAR lagging behind the male GAR in five provinces. The lowest GPI is in Luapula Province (0.46). There is a gender gap in favour of female youth in Western Province and Southern Province (GPI of 1.14 and 1.10, respectively).

Figure 5.5
Secondary Net Attendance Ratio, by Province and Sex



ZDES 2002

Figure 5.6
Secondary Gross Attendance Ratio, by Province and Sex

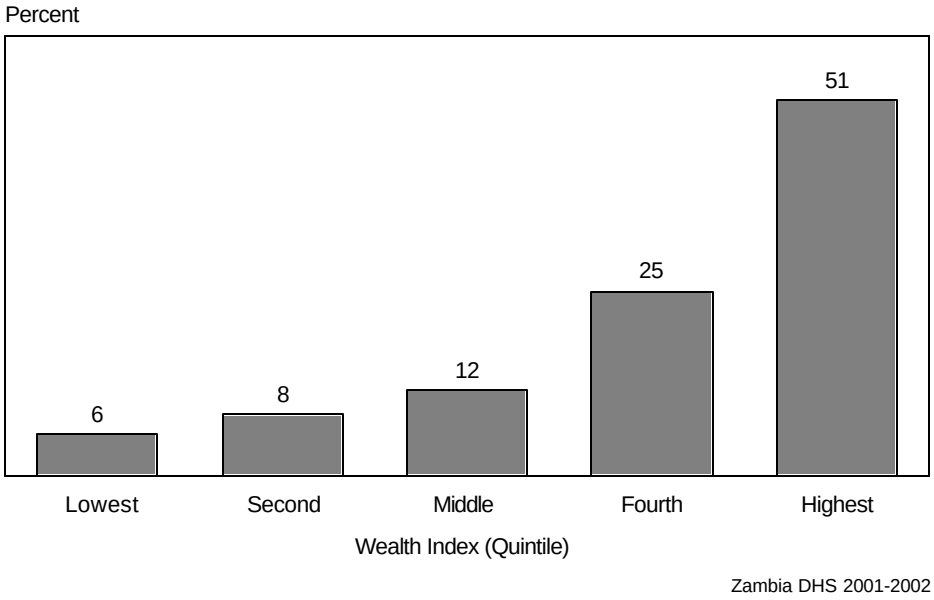


ZDES 2002

Differences in the NAR by wealth at the secondary level are far greater than differences in the NAR by wealth at the primary level (see Figure 5.7). Only youth in the wealthiest quintile appear to have meaningful access to secondary schooling: while 51 percent of the youth age 14-18 in the highest quintile

attend secondary school, 25 percent of the youth in the fourth quintile attend secondary school and only 6 percent of those in the poorest quintile attend secondary school. A similar pattern exists among youth up to age 24, with a GAR of 77 among the wealthiest youth, a GAR of 40 among youth in the fourth quintile, and a GAR of 9 among the poorest youth. Only in the middle wealth quintile does female GAR exceed male GAR (GPI of 1.15).

Figure 5.7
Secondary Net Attendance Ratio, by Wealth Index



Zambia DHS 2001-2002

Over-age, Under-age, and On-time Pupils

Table 5.3 presents information about the timeliness of pupils' progress through the primary school system, by primary school grade. Pupils 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. Pupils 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, a grade 1 pupil who is age 7 or 8 is considered to be on time, a pupil age 9 or older is over age, and a pupil 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 pupils outside the primary school age range (see discussion in sections 5.1 and 5.2 above) in that the proportion of pupils over age, on time, and under age is calculated for each primary school grade, rather than for primary school overall.

Having under-age and over-age pupils in class may have an impact on pupil learning, as well as on persistence in school. For example, in a class with pupils ranging in age from 5 to 15, teachers may have difficulty managing the learning environment, as younger and older pupils are at different stages of physical, social, and intellectual development. In addition, there is evidence that children who are over age for grade—especially girls—may be more likely to drop out before completing primary school. Finally, in systems where school places are limited, the presence of under-age children may displace over-age children, who are likely to have a smaller window of opportunity for schooling, before assuming adult productive and reproductive roles.

Table 5.3 Over-age, under-age, and on-time pupils

Percentage distribution of over-age, under-age, and on-time de jure pupils in primary school, by primary grade and sex, Zambia DHS 2001-2002

Primary grade	Over age	On time	Under age	Total	Number of children
MALE					
1	37.9	46.9	15.2	100.0	622
2	49.0	37.0	14.0	100.0	754
3	50.4	36.8	12.8	100.0	594
4	53.3	34.6	12.1	100.0	569
5	55.1	34.7	10.2	100.0	453
6	55.7	33.2	11.0	100.0	450
7	65.0	29.3	5.8	100.0	416
Total	51.3	36.7	12.1	100.0	3,857
FEMALE					
1	34.8	49.1	16.1	100.0	619
2	39.8	42.2	18.0	100.0	608
3	39.4	42.8	17.8	100.0	543
4	43.4	38.4	18.2	100.0	480
5	43.3	40.1	16.6	100.0	418
6	42.7	46.0	11.3	100.0	387
7	37.3	45.7	17.0	100.0	298
Total	39.9	43.5	16.6	100.0	3,351
TOTAL					
1	36.3	48.0	15.7	100.0	1,241
2	44.9	39.3	15.8	100.0	1,361
3	45.2	39.6	15.2	100.0	1,136
4	48.8	36.3	14.9	100.0	1,049
5	49.4	37.3	13.3	100.0	871
6	49.7	39.1	11.1	100.0	836
7	53.4	36.1	10.4	100.0	714
Total	46.0	39.9	14.2	100.0	7,208

Some children start school over age; others may repeat primary school grades or temporarily drop out of school, falling behind their peers. Over age among primary school pupils is widespread in Zambia, with 46 percent of primary school pupils being over age for the grade they attend. Forty percent are on time or are at the appropriate age for the grade, and a smaller percentage—14 percent—are under age. The prevalence of over-age pupils increases through the grades, rising from 36 percent in grade 1 to 53 percent in grade 7.

Male pupils are more likely than female pupils to be over age for the grade they attend, and the gap increases through the grades. In grade 1, nearly the same percentage of male and female pupils are over age (38 percent and 35 percent, respectively). By the time pupils reach grade 7, male pupils (65 percent) are almost twice as likely as female pupils (37 percent) to be over age.

Age-specific Schooling Status

Tables 5.4.1, 5.4.2, and 5.4.3 present information on the schooling status of youth age 5 to 24, by age. Youth either have never attended school, left school at some time before the 2001 school year, or attended school during the 2001 school year at the pre-primary, primary, or secondary/higher level.

The majority of youth (73 percent) either attended school in 2001 or previously, while 26 percent of youth age 5-24 have never attended school. Older youth are more likely than younger children to have attended school, with the percentage of youth who have never attended school decreasing progressively from age 5 to age 15. The percentage of school-age children who have never attended school is highest from age 5-9 (falling from 89 percent to 24 percent), followed by children age 10-14 (falling from 19 percent to 10 percent). Among youth age 15-19, the percentage ranges between 7 and 9 percent, suggesting that while children do not necessarily start attending primary school by the age of 7, they are likely to attend school at some point (see Table 5.4.3). Pre-primary school attendance is rare, even among children who are under age for grade 1: only 2 percent of children age 5 and 1 percent of children age 6 attend pre-primary school.

A higher percentage of youth age 5-24 in rural areas (31 percent) than youth in urban areas (17 percent) has never attended school. Among provinces, the relatively urbanized provinces of Copperbelt and Lusaka have the lowest percentages of children who have never attended school.

Table 5.4.1 Age-specific schooling status among male youth age 5-24

Percent distribution of de jure male youth age 5-24 by schooling status, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Never attended	Dropped out	Pre-primary	Primary	Secondary or higher	Missing	Total	Number of children
Age								
5	88.5	2.4	2.1	6.7	0.2	0.2	100.0	587
6	81.4	1.5	0.4	16.7	0.0	0.0	100.0	619
7	56.7	0.9	0.4	40.9	0.2	0.8	100.0	659
8	41.0	2.5	0.6	56.0	0.0	0.0	100.0	608
9	25.6	2.2	0.3	71.9	0.0	0.0	100.0	566
10	19.3	4.4	0.0	76.2	0.0	0.2	100.0	581
11	12.3	5.5	0.0	81.5	0.7	0.0	100.0	530
12	14.6	8.1	0.0	76.1	1.0	0.2	100.0	559
13	10.4	8.0	0.0	77.1	4.3	0.2	100.0	464
14	8.3	13.4	0.0	68.7	9.3	0.2	100.0	511
15	6.4	19.8	0.0	61.2	12.6	0.0	100.0	393
16	6.1	21.5	0.0	47.2	24.7	0.6	100.0	426
17	7.9	32.1	0.0	32.5	26.7	0.7	100.0	396
18	6.1	42.5	0.0	18.1	32.6	0.8	100.0	405
19	4.9	55.9	0.0	10.4	28.6	0.2	100.0	427
20	8.0	61.8	0.0	5.6	22.8	1.8	100.0	359
21	5.5	75.9	0.0	1.6	16.5	0.5	100.0	305
22	7.5	78.3	0.0	2.3	10.8	1.1	100.0	284
23	2.7	81.9	0.0	2.0	9.5	3.8	100.0	316
24	5.8	83.7	0.0	0.0	6.7	3.8	100.0	252
Residence								
Urban	17.1	25.2	0.4	43.0	13.9	0.4	100.0	3,337
Rural	30.3	21.6	0.2	41.6	5.7	0.6	100.0	5,912
Province								
Central	24.9	19.5	0.0	46.5	8.9	0.2	100.0	710
Copperbelt	15.7	27.3	0.4	43.3	13.1	0.3	100.0	1,792
Eastern	37.6	19.3	0.3	36.0	6.2	0.6	100.0	1,211
Luapula	31.6	22.9	0.2	40.0	5.0	0.3	100.0	664
Lusaka	20.6	26.0	0.6	41.2	11.0	0.6	100.0	1,285
Northern	28.1	19.4	0.1	43.8	7.9	0.8	100.0	1,318
North-Western	20.9	15.9	0.7	50.3	11.8	0.3	100.0	481
Southern	26.0	24.1	0.0	42.6	6.3	1.0	100.0	1,044
Western	30.7	24.9	0.0	39.6	4.0	0.8	100.0	743
Wealth index (quintile)								
Lowest	37.1	21.9	0.1	37.4	2.9	0.6	100.0	1,937
Second	32.0	21.0	0.2	41.8	4.4	0.7	100.0	1,580

Middle	29.6	23.2	0.2	42.1	4.1	0.8	100.0	1,810
Fourth	20.6	27.2	0.2	41.3	10.5	0.1	100.0	1,934
Highest	10.0	20.9	0.5	47.8	20.1	0.7	100.0	1,988
Total	25.5	22.9	0.2	42.1	8.7	0.6	100.0	9,249

Table 5.4.2 Age-specific schooling status among female youth age 5-24

Percent distribution of de jure female youth age 5-24 by schooling status, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Never attended	Dropped out	Pre-primary	Primary	Secondary or higher	Missing	Total	Number of children
Age								
5	90.2	1.5	2.1	5.6	0.5	0.0	100.0	598
6	77.7	1.2	1.7	19.5	0.0	0.0	100.0	633
7	54.9	1.6	1.1	41.4	0.0	1.0	100.0	617
8	39.3	3.6	0.6	56.4	0.0	0.0	100.0	637
9	23.0	3.3	0.4	73.1	0.0	0.2	100.0	570
10	19.4	4.0	0.0	76.5	0.1	0.2	100.0	577
11	17.4	5.2	0.0	77.4	0.0	0.0	100.0	491
12	13.0	6.3	0.0	78.9	1.4	0.4	100.0	552
13	12.3	11.3	0.0	71.1	5.3	0.0	100.0	511
14	10.7	17.3	0.0	59.0	12.5	0.5	100.0	487
15	7.7	29.1	0.0	38.1	24.0	1.1	100.0	410
16	7.5	41.3	0.0	20.8	28.7	1.7	100.0	374
17	9.2	51.7	0.0	8.4	29.4	1.3	100.0	359
18	10.9	64.0	0.0	2.4	21.7	1.0	100.0	445
19	9.3	72.1	0.0	1.5	16.6	0.4	100.0	391
20	12.5	75.5	0.0	0.5	9.3	2.3	100.0	411
21	11.8	78.3	0.0	0.3	7.8	1.9	100.0	366
22	11.1	80.7	0.0	0.0	5.2	3.0	100.0	336
23	13.9	79.4	0.0	0.0	2.8	3.9	100.0	301
24	10.2	82.4	0.0	0.0	3.0	4.4	100.0	338
Residence								
Urban	17.6	29.9	0.8	38.8	12.5	0.5	100.0	3,597
Rural	32.5	28.1	0.2	34.2	3.9	1.2	100.0	5,808
Province								
Central	26.4	29.3	0.0	37.4	6.6	0.3	100.0	726
Copperbelt	19.8	29.7	1.0	37.1	11.7	0.6	100.0	1,895
Eastern	36.2	26.7	0.2	30.9	5.6	0.4	100.0	1,194
Luapula	35.2	32.0	0.2	30.2	2.2	0.3	100.0	673
Lusaka	19.3	30.3	0.7	40.0	8.8	0.9	100.0	1,288
Northern	32.5	26.0	0.2	33.8	6.2	1.3	100.0	1,297
North-Western	22.6	22.1	0.3	46.4	7.5	1.1	100.0	478
Southern	23.6	28.8	0.0	39.6	5.7	2.2	100.0	1,070
Western	32.4	32.3	0.0	30.1	4.3	1.0	100.0	784
Wealth index (quintile)								
Lowest	39.1	29.6	0.1	29.1	1.3	0.8	100.0	1,897
Second	36.1	28.9	0.1	31.5	2.2	1.3	100.0	1,614

Middle	28.5	30.3	0.3	34.8	4.5	1.6	100.0	1,826
Fourth	21.2	30.0	0.6	39.5	8.2	0.6	100.0	1,940
Highest	12.5	25.5	0.8	43.2	17.6	0.6	100.0	2,129
Total	26.8	28.8	0.4	36.0	7.2	0.9	100.0	9,405

Table 5.4.3 Age-specific schooling status among youth age 5-24

Percent distribution of de jure youth age 5-24 by schooling status, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Never attended	Dropped out	Pre-primary	Primary	Secondary or higher	Missing	Total	Number of children
Age								
5	89.4	2.0	2.1	6.2	0.3	0.1	100.0	1,185
6	79.5	1.3	1.0	18.1	0.0	0.0	100.0	1,252
7	55.8	1.2	0.7	41.2	0.1	0.9	100.0	1,276
8	40.1	3.1	0.6	56.2	0.0	0.0	100.0	1,246
9	24.3	2.8	0.4	72.5	0.0	0.1	100.0	1,137
10	19.3	4.2	0.0	76.3	0.0	0.2	100.0	1,159
11	14.7	5.4	0.0	79.5	0.4	0.0	100.0	1,021
12	13.8	7.2	0.0	77.5	1.2	0.3	100.0	1,111
13	11.4	9.7	0.0	74.0	4.8	0.1	100.0	976
14	9.5	15.3	0.0	64.0	10.9	0.3	100.0	998
15	7.1	24.5	0.0	49.4	18.4	0.6	100.0	803
16	6.7	30.8	0.0	34.8	26.5	1.1	100.0	800
17	8.5	41.4	0.0	21.0	28.0	1.0	100.0	755
18	8.6	53.7	0.0	9.9	26.9	0.9	100.0	849
19	7.0	63.7	0.0	6.2	22.9	0.3	100.0	818
20	10.4	69.1	0.0	2.9	15.6	2.1	100.0	770
21	8.9	77.2	0.0	0.9	11.7	1.3	100.0	671
22	9.5	79.6	0.0	1.1	7.7	2.1	100.0	620
23	8.2	80.7	0.0	1.0	6.2	3.9	100.0	616
24	8.3	82.9	0.0	0.0	4.6	4.2	100.0	590
Residence								
Urban	17.4	27.6	0.6	40.8	13.1	0.5	100.0	6,935
Rural	31.4	24.8	0.2	38.0	4.8	0.9	100.0	11,720
Province								
Central	25.7	24.4	0.0	41.9	7.8	0.2	100.0	1,436
Copperbelt	17.8	28.5	0.7	40.1	12.4	0.4	100.0	3,687
Eastern	36.9	23.0	0.2	33.5	5.9	0.5	100.0	2,405
Luapula	33.4	27.5	0.2	35.1	3.6	0.3	100.0	1,337
Lusaka	19.9	28.1	0.7	40.6	9.9	0.8	100.0	2,573
Northern	30.3	22.6	0.1	38.8	7.1	1.1	100.0	2,615
North-Western	21.8	19.0	0.5	48.4	9.6	0.7	100.0	958
Southern	24.8	26.5	0.0	41.1	6.0	1.6	100.0	2,114
Western	31.5	28.7	0.0	34.7	4.1	0.9	100.0	1,527
Wealth index (quintile)								
Lowest	38.1	25.7	0.1	33.3	2.1	0.7	100.0	3,834
Second	34.1	25.0	0.1	36.6	3.3	1.0	100.0	3,193

Middle	29.0	26.8	0.2	38.5	4.3	1.2	100.0	3,637
Fourth	20.9	28.6	0.4	40.4	9.4	0.4	100.0	3,873
Highest	11.3	23.2	0.6	45.4	18.8	0.6	100.0	4,117
Total	26.2	25.8	0.3	39.0	7.9	0.8	100.0	18,655

Primary School Pupil Flow Rates

Repetition and dropout rates describe the flow of pupils through the system at the primary level. The repetition rates produced using 2001-2002 Zambia DHS survey education data indicate the percentage of pupils who attended a particular grade in 2000, who then attended that same grade in the 2001 school year. The dropout rates show the percentage of pupils in a grade in 2000 who no longer attended school in the 2001 school year. Tables 5.5 and 5.6 present repetition and dropout rates by primary school grade and for the level as a whole, according to pupils' background characteristics.

Repetition rates

The repetition rates produced using 2001-2002 Zambia DHS survey data do not distinguish between children who completed a school year and then repeated the same grade in the following year, and children who interrupted their schooling during one school year and returned to the same grade in the following school year. The latter phenomenon may be quite common, particularly in grade 1. Children starting school may have difficulty adjusting to the school environment, and school staff or children's families may decide that it is best for some children—especially the youngest—to stop attending grade 1 that year, and to return to school the following year when they are more mature and better prepared for schooling. Other children may remain in grade 1 throughout the entire school year, and yet not be prepared to continue to grade 2 the following year, so they repeat grade 1 in the following school year.

Repetition of primary school grades is relatively uncommon in Zambia. For the level as a whole, only 5 percent of the pupils in primary school in 2000 repeated the same grade in the 2001 school year (see Table 5.5). The highest rates are found at either end of the primary school cycle—in grade 7 and grade 1 (both 7 percent). Repetition rates are lowest in grades 3 through 6, ranging from 3 to 4 percent.

Table 5.5 Repetition rates by primary school grade

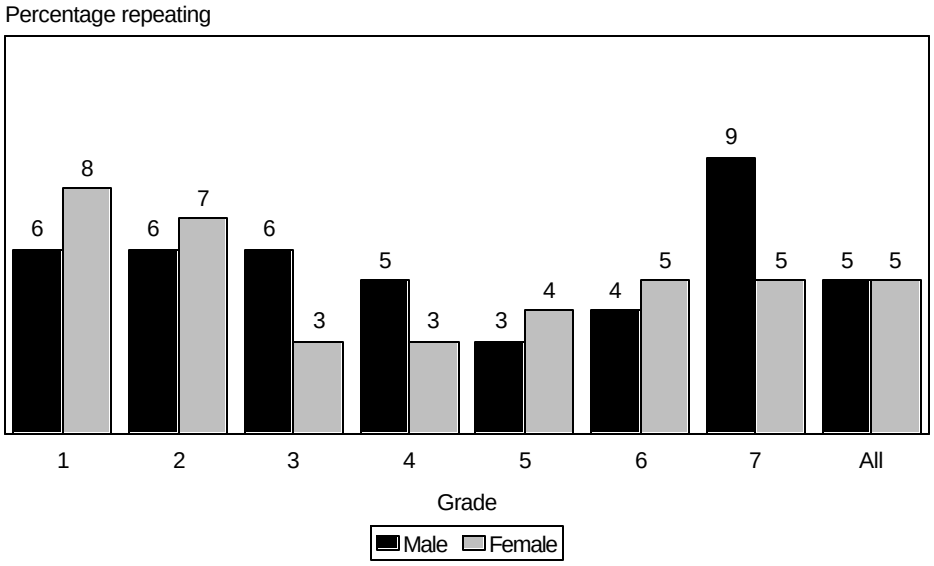
Repetition rates for the de jure household population age 5-24 years by primary school grade, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Primary school grade							All grades
	1	2	3	4	5	6	7	1-7
Sex								
Male	6.1	6.1	5.7	5.1	2.7	3.6	9.0	5.4
Female	7.8	6.5	2.6	2.5	3.5	5.0	4.7	4.9
Residence								
Urban	1.8	3.4	2.2	0.9	1.2	1.0	3.6	2.0
Rural	9.6	8.0	5.6	5.8	4.7	7.2	10.5	7.3
Province								
Central	4.3	5.1	2.9	3.6	5.7	3.8	12.9	5.0
Copperbelt	1.4	1.9	0.8	0.8	0.8	0.9	2.8	1.4
Eastern	8.1	7.7	4.1	0.0	0.0	5.6	4.2	4.8
Luapula	27.7	18.9	17.6	24.5	(10.8)	(23.5)	*	21.7
Lusaka	2.0	4.5	0.8	1.0	0.0	1.1	5.5	2.1
Northern	14.8	13.9	11.1	11.8	10.9	13.3	12.3	12.8
North-Western	5.6	8.1	7.8	2.4	4.5	3.1	4.2	5.5
Southern	0.7	1.7	0.0	0.0	2.0	0.0	5.5	1.1
Western	3.5	1.2	2.4	0.0	(0.0)	(0.0)	*	1.9
Total	6.9	6.3	4.3	3.9	3.1	4.2	6.9	5.2

Notes: The repetition rate, by grade, is the percentage of pupils in a grade in a given school year who attend that same grade in the following school year. An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 unweighted cases. Parentheses indicate that a figure is based on 25-49 unweighted cases.

There is no clear pattern of gender difference in repetition rates (see Figure 5.8). For the level as a whole, female pupils and male pupils repeat at nearly the same rate. It is notable, though, that male pupils are more likely than female pupils to repeat the last grade of primary school (9 percent versus 5 percent).

Figure 5.8
Primary Repetition Rate, by Grade and Sex

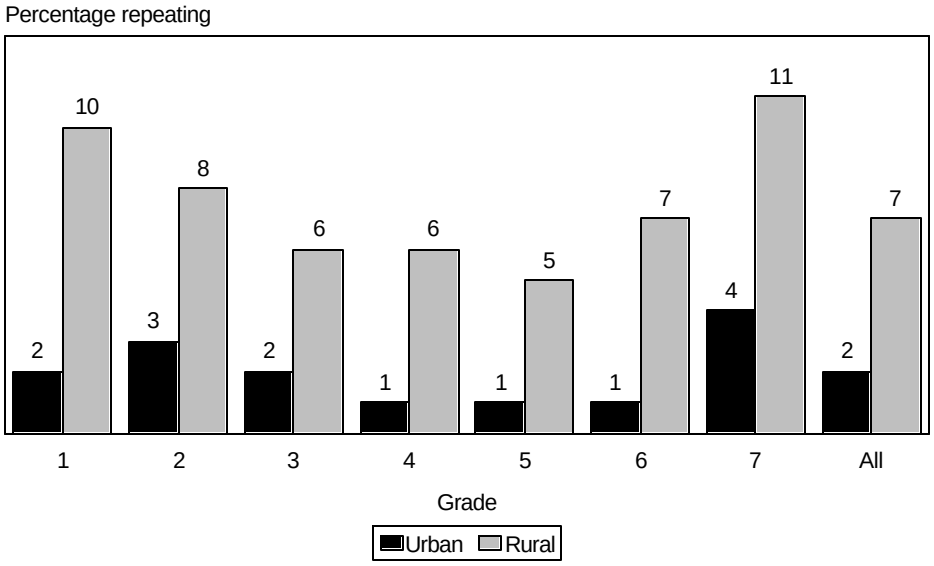


Zambia DHS 2001-2002

The most notable differences in repetition rates are by urban-rural residence (see Figure 5.9). At every grade, pupils in rural areas are more likely than pupils in urban areas to repeat the grade. For the level as a whole, 2 percent of pupils in urban areas repeated a grade in 2001, while 7 percent of pupils in rural areas repeated a grade. Repetition rates for pupils in urban areas are uniformly low, but are highest in grade 2 (3 percent) and grade 7 (4 percent). Repetition rates for pupils in rural areas are highest in grade 1 (10 percent) and grade 7 (11 percent).

Repetition rates vary considerably by province. For the level as a whole, just 1 percent of pupils in Southern Province repeated a grade, compared with 22 percent in Luapula Province. For the level as a whole, the repetition rates in five provinces—Copperbelt, Eastern, Lusaka, Southern, and Western—fall below the national average (5 percent), while the repetition rates in the remaining provinces equal or exceed the national average.

Figure 5.9
Primary Repetition Rate, by Grade and Residence



Zambia DHS 2001-2002

Dropout rates

For the level as a whole, the dropout rate is low: 4 percent of the pupils in primary school in 2000 dropped out of school before the 2001 school year. The dropout rate is lowest in grade 1 (2 percent), rising to 5percent in grade 6, and peaking at 17 percent in grade 7. It should be noted, however, that "dropout" is perhaps not the most accurate term for school leaving at the end of the primary school cycle, as some pupils leaving school likely would stay in school if offered a place at secondary school. Dropout that occurs because of a shortage in the supply of schooling is often referred to as "push-out."

Overall, dropout rates among male and female pupils are similar (see Figure 5.10). The dropout rates are highest in grade 7, with 19 percent of male and 15 percent of female pupils leaving school before completing the grade.

For the primary level as a whole, just under half of the pupils (47 percent) are female, while 53 percent are male (data not shown). In grade 1, 50 percent of the pupils are female, declining to 42 percent in grade 7. The patterns differ substantially by urban-rural residence. In urban areas, 49 percent of the pupils in both grades 1 and 7 are female, while in rural areas, 50 percent of the grade 1 pupils and just 35 percent of the grade 7 pupils are female.

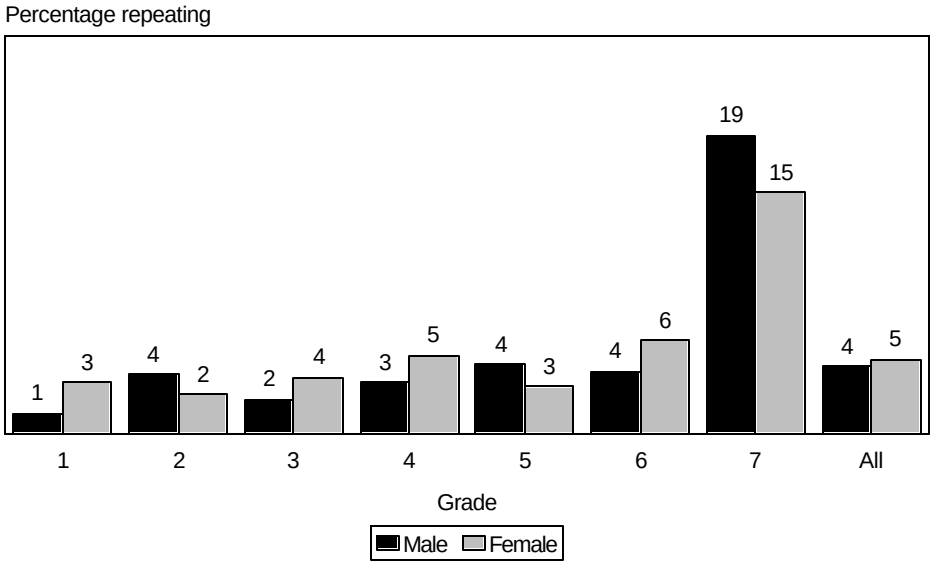
Table 5.6 Dropout rates by primary school grade

Dropout rates for the de jure household population age 5-24 years by primary school grade, according to background characteristics, Zambia DHS 2001-2002

Background characteristic	Primary school grade							All grades
	1	2	3	4	5	6	7	1-7
Sex								
Male	1.2	3.7	2.1	3.2	4.3	3.9	18.7	4.2
Female	3.2	2.4	3.5	4.9	2.9	5.8	15.1	4.6
Residence								
Urban	1.5	1.9	1.8	3.9	2.0	4.2	13.4	3.6
Rural	2.4	3.8	3.3	4.1	5.1	5.2	20.7	4.9
Province								
Central	0.6	0.0	0.0	3.6	4.1	1.9	12.9	2.5
Copperbelt	6.1	7.6	4.9	7.3	5.8	6.8	19.8	7.9
Eastern	2.0	5.6	4.1	6.0	2.6	5.6	12.5	4.7
Luapula	0.0	0.0	0.0	0.0	(0.0)	(0.0)	*	0.3
Lusaka	2.0	1.5	2.5	3.0	0.9	3.4	17.8	3.6
Northern	1.3	1.1	1.9	2.1	1.7	4.8	15.1	2.9
North-Western	0.5	0.0	1.2	0.8	0.0	1.0	1.4	0.7
Southern	1.4	2.6	4.7	6.1	9.1	7.7	29.1	6.9
Western	0.9	1.2	1.2	0.0	(2.2)	(2.4)	*	1.5
Total	2.1	3.1	2.8	4.0	3.7	4.7	17.0	4.4

Notes: The dropout rate, by grade, is the percentage of pupils in a grade in a given school year who do not attend school in the following school year. An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 unweighted cases. Parentheses indicate that a figure is based on 25-49 unweighted cases.

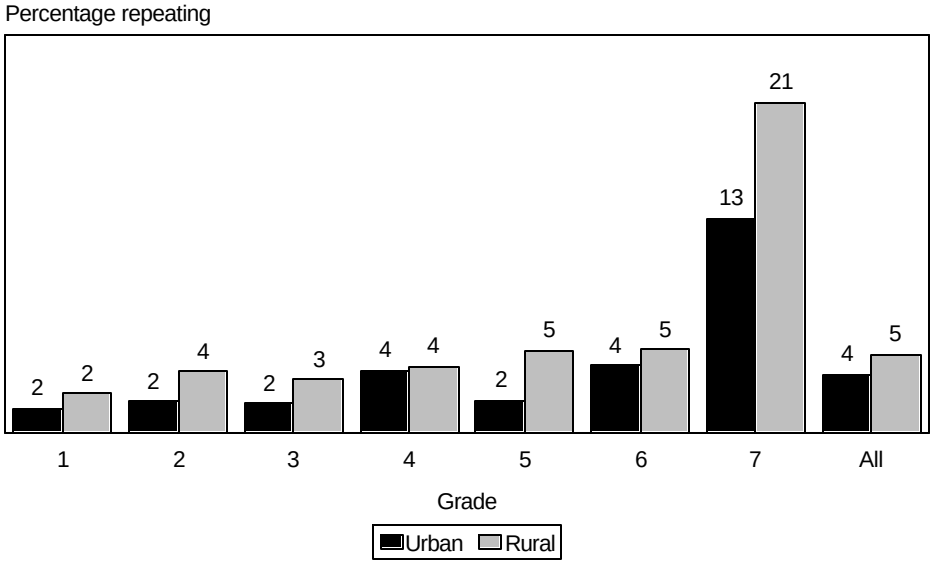
Figure 5.10
Primary Dropout Rate, by Grade and Sex



Zambia DHS 2001-2002

As shown in Figure 5.11, the overall dropout rates for pupils in urban and rural areas are nearly the same. However, there is a notable difference at grade 7, with 21 percent of pupils in rural areas leaving school, compared with 13 percent of those in urban areas.

Figure 5.11
Primary Dropout Rate, by Grade and Residence



Zambia DHS 2001-2002

The dropout rate varies among provinces, with the highest rate for the level as a whole in Copperbelt Province (8 percent) and the lowest rate in Luapula Province (0.3 percent).

HOUSEHOLD PROXIMITY TO SCHOOLS AND SCHOOL SELECTION

6

This chapter presents information about the distance and walking time from children's households to the nearest primary and secondary school and about the types of schools children attend (government, government assisted, and private).

Household Proximity to Schools

Primary Schools

Information about the walking time and distance to the nearest primary school is a useful indicator of children's access to schooling. As will be shown in Chapter 7, the distance to school partly explains why many children have never attended school. Children from households that are far from school in terms of distance and/or walking time may be less likely than other children to enrol in school at the target age of 7 years.

Table 6.1 shows the percent distribution of children age 6-14 by walking time, in minutes, to the nearest primary school, by children's background characteristics. These data, as well as those presented for walking time to the nearest secondary school, are based on a question, asked of children's parent/guardians, about how long it would take the parent/guardian to walk to the nearest primary school. It is important to note that the school closest to the household is not necessarily a school attended by one or more children in the household. Because the intent of the question is to measure access to and remoteness from the closest school, rather than the variation in walking time for each child within the household, the question asked for the best estimate of time required for an adult to walk the distance.

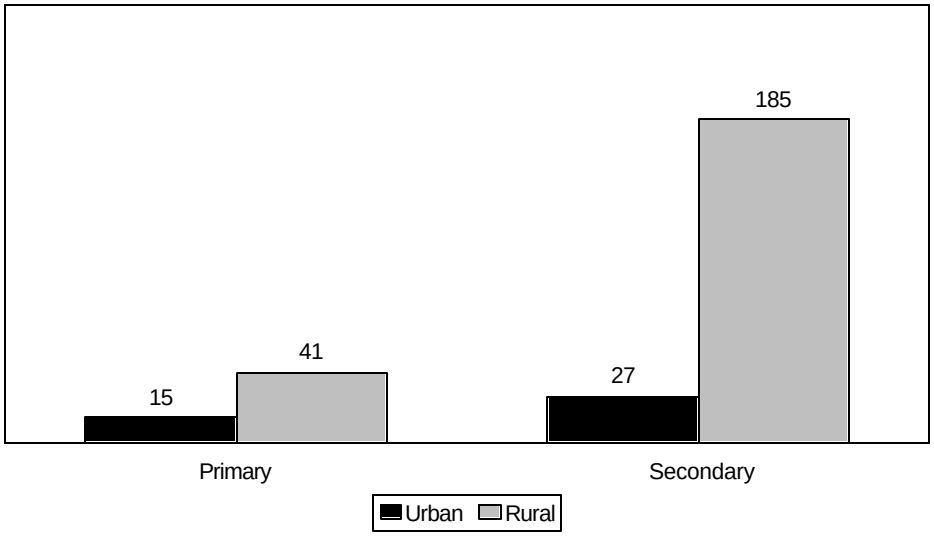
Table 6.1 Walking time to nearest primary school

Percent distribution of de jure children age 6-14 by walking time (in minutes) to the nearest primary school, according to background characteristics, ZDES 2002

Background characteristic	Minutes to nearest primary school						Total	Number of children	Mean walking time in minutes
	0-15	16-30	31-45	46-60	Over 60 minutes	DK/ missing			
Residence									
Urban	76.1	17.6	3.1	2.5	0.7	0.0	100.0	2,814	15
Rural	37.5	24.2	10.0	14.1	14.1	0.1	100.0	5,213	41
Province									
Central	35.1	26.0	12.1	15.4	11.2	0.2	100.0	598	39
Copperbelt	71.6	17.2	4.5	3.5	3.2	0.0	100.0	1,540	19
Eastern	50.4	25.7	6.1	11.0	6.7	0.0	100.0	1,090	28
Luapula	53.9	24.1	5.3	7.0	9.7	0.0	100.0	606	29
Lusaka	70.4	17.7	3.2	2.7	5.9	0.0	100.0	1,036	21
Northern	42.2	19.8	9.5	10.9	17.7	0.0	100.0	1,122	38
North-Western	42.5	24.0	15.5	11.1	7.0	0.0	100.0	418	30
Southern	35.2	27.5	9.7	17.1	10.4	0.0	100.0	1,016	46
Western	28.7	20.8	10.5	21.0	18.5	0.5	100.0	602	47
Total	51.1	21.9	7.6	10.0	9.4	0.1	100.0	8,027	32

As illustrated in Table 6.1, 73 percent of children in Zambia live within 30 minutes of the nearest primary school and 9 percent of children live over 60 minutes away. In terms of walking time to the nearest primary school, children in urban areas live closer to school than children in rural areas: 76 percent of children in urban areas and 38 percent of those in rural areas live within 15 minutes of the nearest school. The mean walking time from the household to the closest primary school is 15 minutes among children in urban areas and 41 minutes among children in rural areas (see Figure 6.1). There are also notable provincial differences, with pupils in Lusaka and Copperbelt Provinces more likely to be within 15 minutes of the nearest school than pupils in the rest of the provinces.

Figure 6.1
Mean Walking Time (Minutes) to Nearest Primary and Secondary Schools, by Residence



ZDES 2002

Table 6.2 shows the percent distribution of children by the distance in kilometres to the nearest primary school, by children's background characteristics. The findings are largely consistent with those in Table 6.1. Children in urban areas live closer to the nearest primary school than children in rural areas (0.6 kilometre in urban areas compared with 2.3 kilometres in rural areas). Seventy-five percent of children in Zambia live within 2 kilometres of the nearest primary school.

In Lusaka, Copperbelt, Luapula and North-Western Provinces, children face shorter distances to the nearest primary school than in the rest of the provinces. Sixty-two percent of children in Copperbelt Province are less than 1 kilometre from a primary school, compared with 21 percent in Western Province.

Table 6.2 Distance to nearest primary school

Percent distribution of de jure children age 6-14 by distance (in kilometres) to the nearest primary school, according to background characteristics, ZDES 2002

Background characteristic	Kilometres to nearest primary school						Total	Number of children	Mean distance (km)
	<1	1-2	3-4	5-6	>6	DK/ missing			
Residence									
Urban	63.9	30.3	4.2	0.6	0.6	0.4	100.0	2,814	0.6
Rural	30.5	34.5	17.9	7.5	6.9	2.6	100.0	5,213	2.3
Province									
Central	26.4	36.1	20.7	10.0	6.9	0.0	100.0	598	2.5
Copperbelt	61.8	28.3	5.1	1.8	2.7	0.2	100.0	1,540	0.9
Eastern	32.1	39.0	16.0	7.2	5.5	0.2	100.0	1,090	2.0
Luapula	57.5	30.5	8.4	1.5	2.0	0.0	100.0	606	1.0
Lusaka	59.4	27.6	6.4	1.2	5.3	0.0	100.0	1,036	1.3
Northern	35.9	30.5	19.8	7.5	6.1	0.2	100.0	1,122	2.0
North-Western	37.9	39.9	14.9	4.1	2.7	0.5	100.0	418	1.5
Southern	27.7	41.4	15.6	8.8	6.1	0.3	100.0	1,016	2.6
Western	20.5	29.0	18.5	5.0	4.5	22.5	100.0	602	2.3
Total	42.2	33.0	13.1	5.1	4.7	1.8	100.0	8,027	1.7

Secondary Schools

The 2002 ZDES also collected information about the walking time and distance to the nearest secondary school. As was the case with primary schools, the walking time and distance to the nearest secondary school are used to indicate children's access to and remoteness from secondary school.

Table 6.3 presents results for the estimated time (in minutes) needed to walk to the nearest secondary school. Urban-rural differentials are more pronounced for access to secondary schools than access to primary schools: 50 percent of children in urban areas are located within 15 minutes of a secondary school, compared with 14 percent of children in rural areas. The mean walking time to the nearest secondary school is 27 minutes for children in urban areas and 185 minutes for children in rural areas (see Figure 6.2). Mean walking times to the nearest secondary school vary enormously by province, with children in Lusaka Province having the shortest walking time (28 minutes) and those in Western Province (221 minutes) and Southern Province (332 minutes) having the longest walking times.

Table 6.3 Walking time to nearest secondary school

Percent distribution of de jure children age 6-14 by walking time (in minutes) to the nearest secondary school, according to background characteristics, ZDES 2002

Background characteristic	Minutes to nearest secondary school						Total	Number of children	Mean walking time in minutes
	0-15	16-30	31-45	46-60	Over 60 minutes	DK/ missing			
Residence									
Urban	49.6	27.2	9.9	8.9	4.5	0.0	100.0	2,814	27
Rural	13.9	10.4	5.4	11.6	58.3	0.3	100.0	5,213	185
Province									
Central	14.3	9.5	6.1	11.7	58.1	0.2	100.0	598	139
Copperbelt	29.2	31.6	13.2	12.6	13.5	0.0	100.0	1,540	52
Eastern	19.5	7.3	4.4	14.3	54.5	0.0	100.0	1,090	109
Luapula	27.0	16.9	8.0	12.3	35.8	0.0	100.0	606	75
Lusaka	62.7	20.3	4.3	4.0	8.7	0.0	100.0	1,036	28
Northern	16.7	10.9	5.4	10.5	56.2	0.2	100.0	1,122	152
North-Western	23.1	16.2	10.5	10.4	39.8	0.0	100.0	418	108
Southern	16.5	13.0	5.1	11.8	53.1	0.6	100.0	1,016	332
Western	17.7	8.8	4.0	6.2	62.2	1.2	100.0	602	221
Total	26.4	16.3	7.0	10.7	39.4	0.2	100.0	8,027	130

Distances to the nearest secondary school are presented in Table 6.4. On average, the distance from children's households to the nearest secondary school is 6.5 kilometres, compared with a distance of 1.7 kilometres to the nearest primary school (see Table 6.2). Children in urban areas are closer than those in rural areas to the nearest secondary school (1.4 kilometres versus 9.4 kilometres), which is consistent with the findings on walking time. Provincial differences in the distance to the nearest secondary school are similar to those found at the primary level, with mean distances being shortest in Lusaka Province (1.8 kilometres) and longest in Southern Province (12.9 kilometres).

School Type

The 2002 ZDES collected information about what types of schools primary school pupils attend and about whether these pupils board at school or are day pupils. Schools are classified as government schools, government-assisted schools, or private schools.[27] Government schools, owned and operated by the government, receive government assistance and funding. Government-assisted schools, which receive some support from government for teacher salaries or other costs, include grant-aided schools and community schools. Private schools, including those owned and operated by religious and non-religious organizations, do not receive government assistance and are run privately. A school founded many years ago by a religious group, but now assisted by the government, is classified as a government-assisted school, not as a private religious school.

The government is the major provider of primary schooling, with 87 percent of primary school pupils attending government schools, 7 percent attending private schools, and 6 percent attending government assisted schools (see Table 6.5).

Table 6.4 Distance to nearest secondary school

Percent distribution of de jure children age 6-14 by distance (in kilometres) to the nearest secondary school, according to background characteristics, ZDES 2002

Background characteristic	Kilometres to nearest secondary school						Total	Number of children	Mean distance (km)
	<1	1-2	3-4	5-6	>6	DK/ missing			
Residence									
Urban	41.2	40.6	12.8	3.3	1.9	0.3	100.0	2,814	1.4
Rural	11.7	16.2	14.1	12.6	41.4	3.9	100.0	5,213	9.4
Province									
Central	11.2	17.0	14.3	14.4	43.1	0.0	100.0	598	8.1
Copperbelt	25.0	43.3	18.1	5.7	7.9	0.0	100.0	1,540	2.8
Eastern	12.5	13.9	14.9	15.5	42.5	0.7	100.0	1,090	7.4
Luapula	30.4	27.0	16.6	10.4	15.7	0.0	100.0	606	3.2
Lusaka	53.4	28.3	8.7	2.5	7.2	0.0	100.0	1,036	1.8
Northern	14.0	17.2	13.5	11.4	43.1	0.7	100.0	1,122	10.1
North-Western	20.6	25.5	10.0	11.5	31.4	0.9	100.0	418	7.3
Southern	13.0	22.4	12.1	10.0	41.7	0.9	100.0	1,016	12.9
Western	11.2	13.8	10.3	7.0	27.0	30.7	100.0	602	6.8
Total	22.0	24.8	13.6	9.4	27.6	2.7	100.0	8,027	6.5

[27] There are five types of primary schools in Zambia. For ease of presentation and analysis, these schools were re-grouped into three categories: government schools, government-assisted schools (including grant-aided and community schools), and private schools (including religious and non-religious schools).

Table 6.5 Type of primary school

Percent distribution of de jure primary school pupils by type of school attended, according to background characteristics, ZDES 2002

Background characteristic	Government schools	Government-assisted (Grant-aided and Community)	Private (Religious and Non-religious)	Other/ missing	Total	Number of children
Sex						
Male	88.0	5.3	6.3	0.4	100.0	2,855
Female	86.0	6.5	7.3	0.2	100.0	2,820
Residence						
Urban	81.8	5.0	12.8	0.4	100.0	2,192
Rural	90.2	6.4	3.1	0.3	100.0	3,484
Province						
Central	86.4	8.6	5.0	0.0	100.0	466
Copperbelt	85.2	5.2	9.6	0.0	100.0	1,206
Eastern	86.8	10.9	2.3	0.0	100.0	623
Luapula	97.1	2.9	0.0	0.0	100.0	395
Lusaka	73.2	7.0	18.8	1.0	100.0	803
Northern	92.4	1.3	5.6	0.7	100.0	780
North-Western	90.5	2.6	6.5	0.4	100.0	310
Southern	87.5	10.0	2.1	0.3	100.0	718
Western	97.1	1.3	1.1	0.5	100.0	375
Total	87.0	5.9	6.8	0.3	100.0	5,676

At the primary level, the role of the private sector is more pronounced in urban areas than in rural areas, with 13 percent of primary school pupils in urban areas attending private schools compared with 3 percent in rural areas. The highest percentage of pupils attending private school is in Lusaka Province (19 percent), compared with the national average (7 percent). The highest percentages of pupils attending government-assisted schools are in Eastern Province (11 percent) and Southern Province (10 percent).

Most primary school pupils are day pupils, with minor differences by type of school attended and by children's characteristics (see Table 6.6).

Table 6.6 Day pupils and boarders at primary school

Percent distribution of de jure primary school pupils by status as day pupils or boarders, by type of school attended, according to background characteristics, ZDES 2002

Background characteristic	Pupil status			Total	Number of children
	Day pupil	Boarder	Missing		
Sex					
Male	99.5	0.4	0.0	100.0	2,855
Female	99.7	0.3	0.0	100.0	2,820
Residence					
Urban	99.6	0.3	0.1	100.0	2,192
Rural	99.6	0.4	0.0	100.0	3,484
Province					
Central	100.0	0.0	0.0	100.0	466
Copperbelt	99.2	0.8	0.0	100.0	1,206
Eastern	99.5	0.5	0.0	100.0	623
Luapula	100.0	0.0	0.0	100.0	395
Lusaka	99.4	0.5	0.2	100.0	803
Northern	99.6	0.2	0.1	100.0	780
North-Western	100.0	0.0	0.0	100.0	310
Southern	99.7	0.3	0.0	100.0	718
Western	100.0	0.0	0.0	100.0	375
School type					
Government	99.8	0.2	0.0	100.0	4,936
Government-assisted	100.0	0.0	0.0	100.0	333
Private	97.0	3.0	0.0	100.0	388
Total	99.6	0.4	0.0	100.0	5,676

Primary School Selection

As shown in Table 6.7, 77 percent of pupils attend the primary school that is closest to the household. Fifty-four percent of children in urban areas attend the closest school, while 91 percent of children in rural areas attend the closest school. There is considerable variation by province. In the relatively urbanized Lusaka Province, 49 percent of pupils attend the closest school, compared with 93 percent of pupils in the largely rural Luapula Province. These differences by urban-rural residence and province may reflect in part the fact that in urban areas, households have access to wider choice of schools.

Table 6.7 Pupils attending closest primary school

Percent of de jure primary school pupils who attend primary school closest to the household, by age and background characteristics, ZDES 2002

Background characteristic	Attending closest	Total	Number of children
Age			
6-7	71.9	100.0	670
8-10	74.8	100.0	2,268
11-14	79.1	100.0	2,738
Residence			
Urban	53.7	100.0	2,192
Rural	90.9	100.0	3,484
Province			
Central	87.0	100.0	466
Copperbelt	58.2	100.0	1,206
Eastern	85.0	100.0	623
Luapula	93.2	100.0	395
Lusaka	49.0	100.0	803
Northern	90.4	100.0	780
North-Western	91.8	100.0	310
Southern	86.2	100.0	718
Western	90.1	100.0	375
Wealth index (quintile)			
Lowest	91.4	100.0	974
Second	93.9	100.0	908
Middle	87.4	100.0	1,122
Fourth	67.3	100.0	1,218
Highest	55.1	100.0	1,454
Total	76.6	100.0	5,676

Pupils from poorer households are more likely than wealthier pupils to attend the closest school. Ninety-one percent of pupils from the lowest quintile attend the closest school, compared with 55 percent of pupils from the highest quintile.

Table 6.8 presents information on the main reasons households selected the primary schools that pupils age 6-14 attend. School proximity was by far the most frequently given reason, with school quality and cost infrequently cited, and school safety, religious affiliation, and other reasons rarely cited.

Table 6.8 Reason for choice of school

Percent distribution of pupils by the reason they attend a particular primary school, according to background characteristics, ZDES 2002

Background characteristic	Main reason for particular school choice							Total	Number of children
	Closest with class needed or place available	Better school	Less expensive	Religion	Safer school	Other	Missing		
Sex									
Male	82.5	9.6	5.7	0.1	0.6	0.8	0.6	100.0	2,855
Female	80.0	11.6	5.9	0.2	0.6	0.9	0.9	100.0	2,820
Age									
6-7	76.8	13.3	7.1	0.0	1.1	1.3	0.4	100.0	670
8-10	78.4	13.2	5.9	0.2	0.5	0.8	1.0	100.0	2,268
11-14	84.7	7.7	5.4	0.2	0.5	0.8	0.6	100.0	2,738
Residence									
Urban	62.2	21.8	12.2	0.4	1.2	1.3	0.9	100.0	2,192
Rural	93.2	3.5	1.8	0.0	0.2	0.6	0.6	100.0	3,484
Province									
Central	86.7	7.2	4.4	0.3	0.3	0.6	0.6	100.0	466
Copperbelt	63.3	23.2	11.6	0.0	0.1	1.0	0.8	100.0	1,206
Eastern	89.3	5.1	4.3	0.0	0.3	0.7	0.3	100.0	623
Luapula	96.9	2.1	0.8	0.0	0.0	0.3	0.0	100.0	395
Lusaka	62.9	20.9	9.4	0.8	2.7	1.9	1.3	100.0	803
Northern	91.9	3.6	3.3	0.0	0.2	0.6	0.4	100.0	780
North-Western	93.8	2.4	1.8	0.0	0.3	1.3	0.4	100.0	310
Southern	89.0	4.9	4.1	0.0	0.2	0.2	1.6	100.0	718
Western	94.7	1.9	0.8	0.3	0.8	1.1	0.5	100.0	375
Wealth index (quintile)									
Lowest	94.2	2.2	2.7	0.0	0.4	0.4	0.2	100.0	974
Second	95.9	1.6	0.8	0.0	0.2	0.5	1.0	100.0	908
Middle	88.1	4.2	5.9	0.1	0.3	0.5	0.9	100.0	1,122
Fourth	75.4	10.6	11.7	0.1	0.3	0.9	0.9	100.0	1,218
Highest	63.1	26.7	6.0	0.5	1.4	1.6	0.7	100.0	1,454
Total	81.3	10.6	5.8	0.2	0.6	0.9	0.7	100.0	5,676

Most pupils (81 percent) attend a given primary school because it is the closest one with either the necessary grade or a place available.[28] The percentage of pupils attending a school because of its proximity to the household varies with pupil age. A far higher percentage of pupils in rural areas than in urban areas attend a school because of its proximity (93 percent versus 62 percent), possibly reflecting the greater choice of schools in urban areas. Similarly, 97 percent of pupils in the largely rural Luapula Province attend a given school because of its proximity, compared with 63 percent of pupils in the more urbanized provinces of Copperbelt and Lusaka. The poorer the pupils' household, the more likely he or she is to attend a school because it is the closest one with the necessary grade or place available, possibly because the lack of resources in the household limits the range of choice in schools. For example, while 94 percent of the poorest pupils attend the closest school, only 63 percent of the wealthiest pupils do.

Eleven percent of pupils attend a particular school because it is better than other schools available. Pupils in urban areas are more likely than those in rural areas to attend a school because it is considered to be better than other schools (22 percent versus 4 percent). In addition, this reason is more often given for pupils in the largely urbanized provinces of Copperbelt (23 percent) and Lusaka Provinces (21 percent), than in the remaining provinces. School quality is more commonly cited in school selection for the wealthiest pupils (27 percent) than for the poorest pupils (2 percent).

Six percent of pupils attend a particular school because it is less expensive than other schools. Cost is cited as a reason for school selection far more often for pupils in urban than in rural areas (12 percent versus 2 percent). Religion, school safety, and other reasons are rarely cited as factors in school selection.

[28] It should be noted that the closest school to the household with the necessary grade or with a place available might not necessarily be the same as the closest primary school.

FACTORS AFFECTING CHILDREN'S SCHOOL ATTENDANCE

7

This chapter presents data on the circumstances surrounding decisions about children's school attendance. Information is presented on which household member decides whether children attend school. The chapter then presents data on children's pre-primary school participation rates, the age at which children first attend primary school, and—for those who have never attended school—the reasons that they are not currently attending school. Finally, for children who attended school at some point but were not attending at the time of the survey, data are presented on reasons for dropping out of school.

Starting School

Household Decision-making

Parent/guardians were asked which household member decides whether children attend school (see Table 7.1). While it is recognized that decision-making is a complex process and that more than one

Table 7.1 Household decision-making about education

Percent distribution of parent/guardians by which household member decides whether children attend school, according to background characteristics, ZDES 2002

Background characteristic	Household member making final decision									Total	Number of parent/ guardians
	Mother	Father	Both parents	Guardians	Child	Parent/ guardian with child	Someone else	Decision not made	DK/ missing		
Residence											
Urban	17.6	34.1	36.9	7.9	0.1	2.3	0.0	1.0	0.2	100.0	1,338
Rural	12.8	48.7	24.7	10.5	0.0	2.2	0.1	0.8	0.1	100.0	2,615
Province											
Central	15.6	48.5	18.5	12.1	0.0	4.6	0.2	0.5	0.0	100.0	281
Copperbelt	16.7	35.1	41.9	3.3	0.0	2.6	0.0	0.2	0.2	100.0	708
Eastern	13.0	48.8	22.2	13.8	0.0	1.9	0.0	0.4	0.0	100.0	552
Luapula	12.7	45.4	28.7	11.1	0.3	0.3	0.0	1.5	0.0	100.0	335
Lusaka	17.1	32.3	35.7	11.7	0.0	0.7	0.0	2.2	0.2	100.0	517
Northern	14.1	40.4	33.5	9.6	0.0	2.4	0.0	0.0	0.0	100.0	574
North-Western	15.6	53.7	17.5	4.9	0.0	8.3	0.0	0.0	0.0	100.0	208
Southern	9.4	39.9	33.3	13.4	0.0	1.0	0.3	2.6	0.0	100.0	448
Western	14.9	71.1	2.7	7.3	0.0	2.4	0.3	0.3	0.9	100.0	330
Total	14.4	43.8	28.8	9.6	0.0	2.3	0.1	0.9	0.2	100.0	3,953

household member may have input on the decision, the question asks parent/guardians who makes the final decision in the household on whether children attend school. Overall, fathers are more likely than mothers to make the decision about whether children attend school: 44 percent of parent/guardians said that the child's father makes the final decision, while 14 percent said that the child's mother makes the decision. Less than one-third (29 percent) said that both parents make the decision together. Less often did respondents say that guardians (10 percent), parent/guardians in consultation with the child (2 percent), or someone else (less than 1 percent) decide whether children should attend school. According to respondents, children themselves do not make the decision whether to attend school.

About half (49 percent) of parent/guardians in rural areas said that fathers alone decide whether children attend school, compared with one-third (34 percent) of parent/guardians in urban areas. Thirty-seven percent of parent/guardians in urban areas said that both parents decide whether children should attend school, compared with 25 percent of parent/guardians in rural areas. With one exception, in all provinces, the percentage of parent/guardians who said that mothers make the decision about whether children attend school was lower than the percentage of parent/guardians who said that either fathers or both parents together make the decision. Only in Western Province are mothers (15 percent) more likely than both parents (3 percent) to make the final decision about schooling, although they are much less likely to make the decision about schooling than fathers (71 percent).

Pre-primary School Attendance

There is considerable evidence that attending pre-primary school helps provide a foundation for learning and that children who attend pre-primary school are better prepared for primary school. Table 7.2 presents data on the percentage of children age 6-14 who have ever attended school who attended pre-primary school and mean number of years attended.[29] Overall, less than a quarter (22 percent) of children attended pre-primary school before starting primary school. There is little difference in pre-primary school participation between male and female children. As might be expected, children in rural areas are far less likely than those in urban areas to have attended pre-primary school (10 percent versus 42 percent). Children age 6-7 are more likely to have attended pre-primary school than children age 11-14 (37 percent versus 17 percent), suggesting that participation in pre-primary schooling is increasing over time.

Table 7.2 Pre-primary school participation

Percentage of de jure children age 6-14 who have ever attended school who attend pre-primary school and mean number of years attended, by background characteristics, ZDES 2002

Background characteristic	Percentage attended pre-primary	Number of children	Mean number of years attended pre-primary[1]
Age			
6-7	37.1	679	1.8
8-10	25.0	2,371	1.8
11-14	17.4	3,217	1.7
Sex			
Male	20.9	3,114	1.7
Female	23.8	3,154	1.8
Residence			
Urban	42.4	2,447	1.7
Rural	9.6	3,821	1.7
Province			
Central	18.8	497	1.6
Copperbelt	45.4	1,331	1.8
Eastern	12.1	731	1.6
Luapula	11.3	440	1.5
Lusaka	42.8	896	1.6
Northern	8.0	833	1.4
North-Western	7.3	331	1.5
Southern	11.1	797	2.7
Western	1.0	412	2.0
Wealth index (quintile)			
Lowest	4.1	1,111	1.9
Second	7.1	995	1.9
Middle	9.3	1,224	1.6
Fourth	22.0	1,334	1.5
Highest	54.8	1,605	1.8
Total	22.4	6,268	1.7

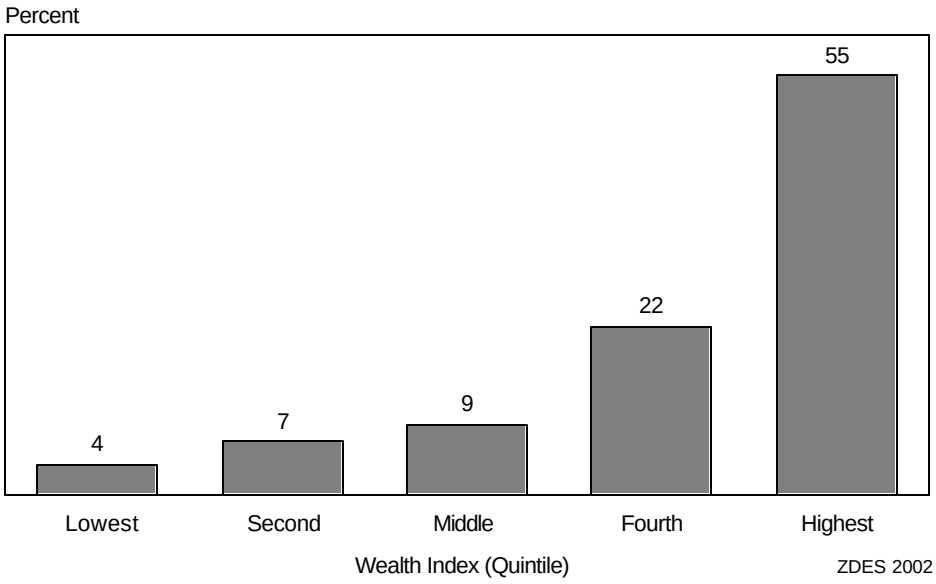
[1] Mean calculated only for those children who attended pre-primary.

[29] Pre-primary schooling is not yet widespread in Zambia, and there is greater availability of pre-primary schooling in urban areas than in rural areas. See the 2002 Education Statistical Bulletin (unpublished), Directorate of Planning and Information, Ministry of Education, Lusaka, Zambia.

Children in the relatively urbanized provinces of Copperbelt (45 percent) and Lusaka (43 percent) are far more likely to have attended pre-primary school than children in the other provinces, particularly in comparison with children in Western Province (1 percent). Children from wealthier households are far more likely to have attended pre-primary school than their peers from poorer households (see Figure 7.1). For example, children in the highest wealth quintile are more than twice as likely (55 percent) to have attended pre-primary school as those in the next wealthiest or fourth quintile (22 percent) and thirteen times as likely as children in the poorest quintile (4 percent).

Overall, the mean number of years a child attends pre-primary school is 1.7. There is no difference in the time spent in pre-primary school by rural-urban residence and minor differences among children by sex and age. However, variation by province is notable. For instance, in Southern Province children stay one year longer in pre-primary schools (2.7 years) than the national average (1.7 years).

Figure 7.1
Pre-Primary School Attendance among Children Age 6-14 Wh
Have Ever Attended School, by Wealth



Age at Primary School Entry

Table 7.3 presents information about the age at which children age 6-14 first attended the first grade of primary school (among those who have ever attended grade 1). Over half (54 percent) of children started school on time at the intended age for entry into grade 1 (age 7-8). Almost one third (29 percent) of children first attended primary school at an age below the official or target entry age for grade 1, and 16 percent started school over age (at age 9 or older).

Table 7.3 Age at first primary school attendance

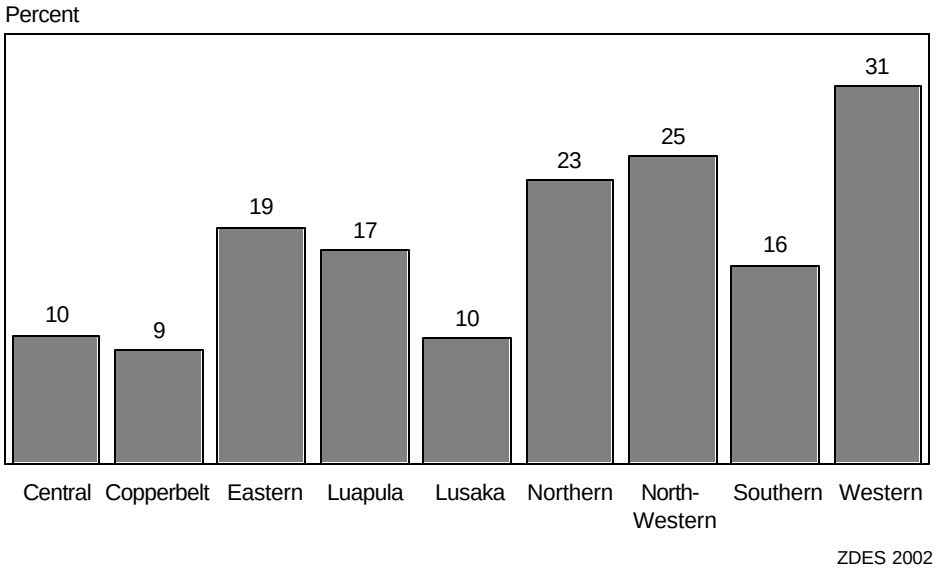
Percent distribution of de jure children age 6-14 who have ever attended primary school, by timeliness of first attendance and mean age at school entry, according to background characteristics, ZDES 2002

Background characteristic	Age at first grade 1 attendance: Under age (<7)	On time (7-8)	Over age (9+)	DK/ missing	Total	Mean age at entry	Number of children
Sex							
Male	26.0	56.1	17.4	0.5	100.0	7.4	3,114
Female	31.8	52.5	14.9	0.8	100.0	7.2	3,154
Residence							
Urban	42.0	50.2	6.8	0.9	100.0	6.8	2,447
Rural	20.6	56.9	22.1	0.5	100.0	7.6	3,821
Province							
Central	37.0	52.2	10.4	0.4	100.0	7.0	497
Copperbelt	35.8	53.8	9.2	1.2	100.0	6.9	1,331
Eastern	23.0	57.2	19.2	0.6	100.0	7.5	731
Luapula	28.7	53.2	17.4	0.7	100.0	7.4	440
Lusaka	39.1	50.3	10.2	0.4	100.0	6.9	896
Northern	26.4	50.3	23.1	0.2	100.0	7.5	833
North-Western	18.4	56.4	25.0	0.2	100.0	7.8	331
Southern	21.9	61.2	16.1	0.9	100.0	7.4	797
Western	12.9	56.2	30.7	0.2	100.0	8.0	412
Wealth index (quintile)							
Lowest	11.9	56.9	30.7	0.5	100.0	8.0	1,111
Second	17.3	57.6	24.6	0.5	100.0	7.7	995
Middle	21.9	57.0	20.4	0.7	100.0	7.5	1,224
Fourth	30.6	58.6	9.7	1.0	100.0	7.1	1,334
Highest	51.9	44.7	2.9	0.5	100.0	6.5	1,605
Total	28.9	54.3	16.1	0.6	100.0	7.3	6,268

A higher percentage of female children than male children started school under age (32 percent versus 26 percent). Children in urban areas are also more likely than those in rural areas to start school under age (42 percent versus 21 percent), while children in rural areas are more likely than those in urban areas to have started school over age (22 percent versus 7 percent). The mean age at entry into grade 1 for children in rural areas is 7.6 years, compared with 6.8 years for children in urban areas. Provincial

differences are also substantial. Whereas only 9 percent of children in Copperbelt Province started school at age 9 or older, 31 percent of children in Western Province did (see Figure 7.2).

Figure 7.2
Percentage of Children Who Have Ever Attended School Wh Started Grade 1 Over Age, by Province



Further, the results show that children from poorer households are more likely to have started school later than their counterparts from wealthier households. In the poorest quintile, 31 percent of the children started primary school at age 9 or older, compared with 3 percent in the wealthiest quintile. The mean age of entry for the poorest children was 8.0 years, while the mean age of entry for the wealthiest children was 6.5 years.

Parent/guardians of children who first attended primary school at age 9 or older were asked about reasons the children started school over age (see Table 7.4).[30] For 41 percent of children, the monetary costs of schooling partly explain why they started school over age. Monetary cost was cited more frequently for children in urban areas (63 percent) than for children in rural areas (37 percent). Seventy percent of children in Copperbelt Province started school over age partly because of cost. Surprisingly, poor households cited school cost as a reason for starting school over age less frequently than wealthier households.

[30] More than one reason could be cited, so the percentages do not add to 100 percent.

Table 7.4 Factors in over-age first-time school attendance

Percentage of de jure children age 9-14 who started primary school over age, by reasons for starting school at an age greater than 8, according to background characteristics, ZDES 2002

Background characteristic	Reasons for starting school at an age greater than 8						Number of children
	School too expensive	No school/ school too far	Labour needed	Child ill or disabled	Other factors	No reason given	
Sex							
Male	42.1	28.7	3.9	8.4	24.9	1.7	541
Female	40.5	32.5	2.7	6.5	25.4	2.9	470
Residence							
Urban	63.1	4.2	1.1	5.5	31.9	2.0	168
Rural	37.1	35.7	3.8	8.0	23.8	2.3	844
Province							
Central	45.0	32.5	6.3	5.0	20.0	3.8	52
Copperbelt	70.3	16.2	0.0	9.5	12.2	2.7	122
Eastern	36.5	24.1	5.1	6.6	29.9	0.0	141
Luapula	29.7	27.0	4.1	9.5	33.8	14.9	77
Lusaka	49.3	16.9	1.4	2.8	38.0	0.0	91
Northern	39.5	42.4	3.8	10.0	22.4	1.9	192
North-Western	30.7	33.7	1.5	4.5	36.6	0.5	83
Southern	36.7	26.6	7.3	7.3	24.8	0.9	128
Western	33.3	46.0	0.8	8.7	16.7	0.8	126
Wealth index (quintile)							
Lowest	38.3	35.4	3.9	7.8	25.2	0.5	341
Second	34.6	36.5	3.2	9.0	25.5	3.3	245
Middle	43.9	34.0	4.7	5.8	17.9	3.6	249
Fourth	53.2	9.2	0.0	7.9	33.7	0.7	130
Highest	(52.9)	(2.8)	(1.4)	(7.1)	(37.2)	(7.1)	46
Total	41.4	30.5	3.3	7.6	25.1	2.3	1,012

Note: More than one response is possible. Figures in parentheses are based on 25-49 unweighted cases.

The second most frequently cited reason for starting school over age was that the nearest school was too far for the child to walk at a young age (31 percent). Distance to school was given as a reason for children in rural areas far more frequently than for those in urban areas (36 percent versus 4 percent). Forty-six percent of children in Western Province and 42 percent of children in Southern Province started

school over age because of distance, compared to 16 percent in Copperbelt Province and 17 percent in Lusaka Province.

Three percent of the children who started school over age did so at least partly because of the household's need for the child's labour. This reason was more commonly cited for children from rural areas (4 percent) than for children from urban areas (1 percent). Children in Southern Province (7 percent) and in Central Province (6 percent) were more likely than children in other provinces to have started grade 1 over age because their labour was needed by the household.

When asked for other reasons children started school over age, parent/guardians cited illness or disability for 8 percent of children. This reason was given most often in Northern Province and least often in Lusaka Province. Other factors, cited for 25 percent of children, included the child being too young or not ready to start school, the child not being admitted to school, and the death of the child's parents.

Never Having Attended School

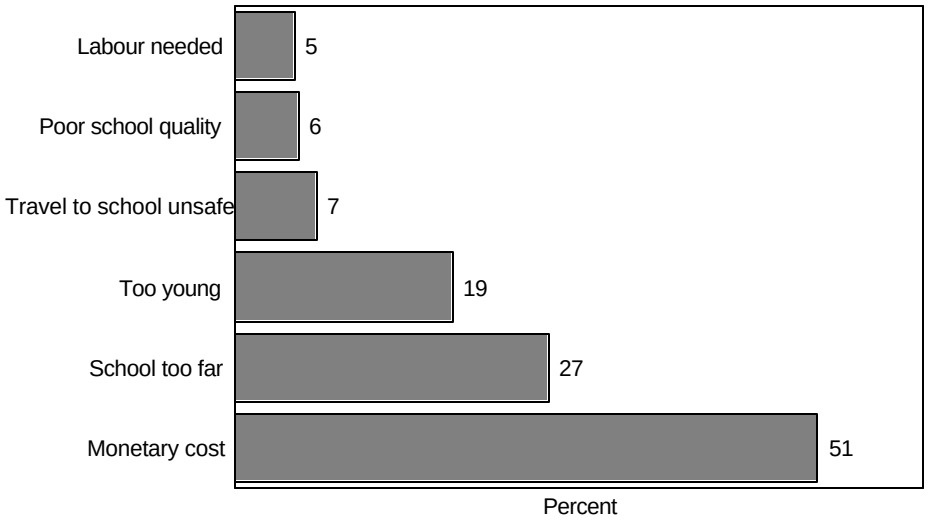
Reasons for Never Having Attended School

Table 7.5 and Figure 7.3 present information about why children age 7-14 who have never attended primary school did not attend primary school in 2002.[31] This table shows the percentage of children for whom each factor partly explains the reasons for not attending school in 2002. For each child, more than one factor may be involved in explaining why the child did not attend school. Factors are grouped under four headings: cost-related factors, child factors, school factors, and other factors.

By far, the most commonly cited factor for children not attending primary school in 2002 is the monetary cost of schooling. Half of the children (51 percent) who have never attended school did not attend partly because there was not enough money to pay for the various costs of schooling. These costs might include school fees and related costs such as uniforms or clothing, books and supplies, transportation, private tutoring and so on. Monetary cost was cited as a reason nearly twice as often for children in urban areas as for children in rural areas (84 versus 44 percent). Children age 8-14 are more likely not to attend school partly due to the monetary cost of schooling than children age 6-7 (56 percent versus 41 percent). Monetary cost was most often cited as a reason for children not attending school in Copperbelt Province (91 percent) and it was least often cited in North-Western Province (32 percent).

[31] The survey inquired about reasons that children were not attending school at the time of the survey (2002) because for a 12-year-old child who has never attended school, there may have been various reasons at different times. Perhaps at age 6, the child was considered unable to walk the distance to school, while at age 10, the child was needed to do work to support the household, and so on.

Figure 7.3
Selected Factors in Not Attending School in 2002, among Child Who Have Never Attended School



ZDES 2002

Table 7.5 Factors in children never having attended school

Percentage of de jure children age 7 -14 who have never attended school, by reasons for not currently attending and background characteristics, ZDES 2002

Background characteristic	Cost-related factors		Child factors					School factors										Number of children who have never attended
	Mone-tary cost	Labour needed	No inter-est	Too young	Too old	Very sick/ long-term illness	Dis-abled	Travel to school unsafe	School too far	Poor school quality	No sec-ondary school places	No good jobs for gradu-ates	School not rele-vant	School not impor-tant	Not ac-cepted/ no place at school	Other reason s	No reaso n	
Age																		
6-7	40.5	1.6	1.6	31.2	0.3	3.7	0.6	8.9	29.4	4.9	0.0	0.0	0.0	0.3	2.9	9.6	0.3	415
8-14	56.4	7.1	5.7	12.0	1.0	4.3	3.9	6.1	26.1	5.8	0.3	0.4	0.7	0.4	3.4	7.2	0.5	783
Sex																		
Male	51.3	5.8	3.1	18.6	0.6	4.1	2.0	7.4	28.0	5.1	0.3	0.3	0.5	0.3	2.8	6.8	0.4	652
Female	50.1	4.3	5.6	19.2	1.0	4.1	3.7	6.7	26.5	5.9	0.0	0.2	0.4	0.4	3.7	9.6	0.4	546
Residence																		
Urban	83.9	0.7	0.5	7.6	0.9	3.7	3.1	0.7	16.3	0.9	0.0	0.0	0.0	0.0	7.5	10.0	0.0	205
Rural	43.9	6.1	5.0	21.2	0.7	4.2	2.7	8.4	29.6	6.5	0.2	0.3	0.5	0.4	2.3	7.7	0.5	993
Province																		
Central	58.7	1.1	1.1	18.5	4.3	6.1	3.0	13.0	25.0	2.2	0.0	0.0	0.0	0.0	1.1	5.4	0.0	65
Copperbelt	91.2	0.0	0.0	1.5	1.5	6.8	1.4	4.4	27.9	5.9	0.0	0.0	0.0	0.0	1.5	10.3	0.0	122
Eastern	42.6	15.7	4.5	22.3	0.0	3.6	1.6	3.3	11.2	5.8	0.4	0.4	0.8	0.4	1.2	7.0	0.4	262
Luapula	38.4	1.0	15.2	31.3	0.0	4.8	1.9	11.1	32.3	13.1	1.0	0.0	1.0	1.0	1.0	14.1	1.0	110
Lusaka	69.5	1.7	1.7	11.9	0.0	0.0	1.7	1.7	18.6	0.0	0.0	0.0	0.0	0.0	15.3	5.1	0.0	77
Northern	46.6	4.4	2.9	28.4	1.5	6.8	2.7	17.2	39.7	8.3	0.0	0.5	1.0	0.5	3.9	10.3	0.0	206
North-Western	31.9	3.4	12.9	12.9	0.9	2.5	9.8	0.9	39.7	1.7	0.0	0.0	0.0	0.0	0.9	8.6	0.9	54
Southern	49.2	2.4	2.4	18.5	0.0	1.6	1.6	5.6	21.0	5.6	0.0	0.0	0.0	0.8	4.8	5.6	0.0	151
Western	42.0	1.4	2.2	10.9	0.7	2.8	6.0	3.6	43.5	0.7	0.0	0.7	0.0	0.0	2.2	5.8	1.4	151
Wealth index (quintile)																		
Lowest	49.3	7.2	4.4	18.3	0.7	3.4	2.6	7.6	25.9	4.8	0.2	0.0	0.4	0.3	3.0	5.6	0.5	472
Second	42.9	6.0	6.3	22.0	0.6	6.6	3.0	4.6	29.6	6.7	0.4	0.8	0.4	0.8	1.7	7.3	0.0	286
Middle	41.9	2.3	3.5	24.6	0.5	2.4	2.8	10.9	34.9	7.9	0.0	0.4	0.0	0.4	1.7	11.1	0.9	245
Fourth	75.4	2.6	2.6	9.7	2.1	4.0	4.3	5.6	11.9	2.1	0.0	0.0	1.7	0.0	7.2	10.5	0.0	130

Highest	(80.2)	(2.1)	(0.0)	(5.3)	(0.0)	(5.2)	(0.0)	(2.1)	(29.3)	(2.7)	(0.0)	(0.0)	(0.0)	(0.0)	(9.1)	(13.6)	(0.0)	64
Total	50.8	5.1	4.2	18.9	0.8	4.1	2.8	7.1	27.3	5.5	0.2	0.3	0.4	0.4	3.2	8.1	0.4	1,198

Note: More than one response possible. Figures in parentheses are based on 25-49 unweighted cases. Questions were asked about a total of 1,198 children who had not attended school. First, the parent/guardian was asked whether a child did not attend school because he/she was physically or mentally disabled, and if the answer was yes, no further questions were asked about reasons for not attending school. Next, the respondent was asked whether a child did not attend because he/she had been very sick for 3 months or longer, and if the answer was yes, no additional questions were asked. There were 34 children who did not attend because of a disability and 47 who did not attend because of a long-term illness, so for the remainder of the questions, the sample size was not 1,198, but 1,117.

Closely associated with the monetary costs of schooling are the opportunity costs of schooling. In sending a child to school, the household sacrifices the contribution the child otherwise would make to the household income or economic well-being. Five percent of children who had never attended school did not attend during the 2002 school year at least partly because of the household's need for the child's labour. This reason was given more frequently for children in rural areas than for those in urban areas (6 versus 1 percent), and for children age 8-14 than for children age 6-7 (7 versus 2 percent). In Eastern Province, this reason was given for 16 percent of children who had never attended school, with all other provinces falling below the national average (5 percent).

More than one in four children (27 percent) who have never attended school did not attend during the 2002 school year partly because the school was too far from the household. In addition, 7 percent of children overall did not attend school at least partly because travel to school was unsafe. Both of these reasons were more common in rural areas than in urban areas: distance was cited more often for children in rural areas as for those in urban areas (30 versus 16 percent), and unsafe travel was cited more often for children in rural areas as for those in urban areas (8 percent versus 1 percent). Forty-four percent of children in Western province, and 40 percent of those in Northern Province and North-Western Province who have never attended school did not attend partly because the school was too far away.

Age and maturity play roles in decisions about school attendance. When parent/guardians were asked for other reasons children did not attend school, the most frequently given reason was that the child was too young to attend school. Nineteen percent of children who have never attended school did not attend during the 2002 school year at least partly because they were considered too young, although they were at or beyond the age of 7, which is the target age of entry to grade 1. As expected, children age 6-7 were more likely than those age 8-14 not to attend because they were considered too young (31 percent versus 12 percent). Being too young was given as a reason more often for children in rural areas (21 percent) than for children in urban areas (8 percent). Only 2 percent of children in Copperbelt Province did not attend school because they were considered too young, compared with 31 percent in Luapula Province. Very few children (less than 1 percent) have never attended school because they are considered too old to start school.

Poor school quality was rarely cited as a contributing factor to non-attendance.[32] For 6 percent of the children who have never attended school, poor school quality partly explains why they did not attend during the 2002 school year. While poor school quality was cited as a reason for children not attending school in rural areas (7 percent), it was rarely given for children in urban areas (less than one percent). Poor school quality stands out as a contributing factor for non-attendance of children in Luapula Province (13 percent), compared with the other provinces.

Overall, parent/guardians rarely perceive schooling as not being important or irrelevant. The perceived shortage of secondary school places and the shortage of jobs for school graduates are also seldom cited as reasons for children not currently attending school. Also uncommon was children not attending school because they were not interested in schooling (4 percent). Children in Luapula Province (15 percent) and North-Western Province (13 percent) are more likely to not attend school because of lack of interest than were children in the other provinces.

Four percent of children who had never attended school did not attend during the 2002 school year partly because of lengthy illnesses (3 months or longer), and 3 percent because of a physical or mental disability. Three percent of children did not attend partly because the child was not accepted at school or there was no place available, with 8 percent of children in urban areas said not to have attended school partly because they were not accepted or there was no place available (compared with 2 percent in

[32] Poor school quality includes one or more of the following factors: teachers not performing well, lack of pupil safety at school, school buildings and/or facilities being in poor condition, and classrooms being overcrowded.

rural areas). Lusaka Province has the highest percentage of children (15 percent) who are reported not to have attended school during the 2002 school year partly because they were not accepted at school or a place was not available.

Pupil Dropout

In the 2002 ZDES, pupils are considered to have dropped out of school if they attended primary school at some point in time and no longer attend school. This group of pupils includes those who attended a grade without completing the year, as well as pupils who completed a grade of schooling before leaving school.

Table 7.6 presents the percent distribution of school dropouts by grade completed at the time of dropout. Pupils age 6-14 are far more likely to leave school during or upon completing grades 1-3 of primary school than during or upon completing grades 4-7 (80 percent versus 20 percent). One in three pupils (35 percent) who have left school dropped out before or upon completing grade 1, with female pupils more likely than male pupils to do so (39 percent versus 31 percent). Pupils in rural areas are more likely than pupils in urban areas to drop out during or upon completion of the early grades 1-3 (84 percent versus 73 percent).

Table 7.6 School dropouts by educational attainment and age at dropout

Percent distribution of de jure school dropouts age 6-14 by grade completed at dropout, according to residence, ZDES 2002

	Primary grade completed											
Residence	Did not complete grade 1	1	2	3	4	5	6	7	Total	Number of dropouts	Mean age at dropout	Mode age at dropout
						MALE						
Urban	3.8	15.8	43.8	19.3	7.1	0.7	2.6	6.9	100.0	63	9.2	8.0
Rural	3.2	34.1	33.5	13.5	4.1	5.3	4.4	2.1	100.0	126	9.8	8.0
Total	3.4	28.0	36.9	15.4	5.1	3.7	3.8	3.7	100.0	189	9.6	8.0
						FEMALE						
Urban	4.1	18.3	21.2	18.7	10.9	3.5	9.0	14.3	100.0	60	9.6	10.0
Rural	8.6	35.5	17.0	22.1	7.4	6.0	1.7	1.7	100.0	171	9.8	11.0
Total	7.5	31.0	18.1	21.2	8.3	5.3	3.6	4.9	100.0	231	9.7	10.0
						TOTAL						
Urban	3.9	17.0	32.8	19.0	9.0	2.0	5.7	10.5	100.0	123	9.4	10.0
Rural	6.3	34.9	24.0	18.4	6.0	5.7	2.8	1.8	100.0	297	9.8	10.0
Total	5.6	29.7	26.6	18.6	6.9	4.6	3.7	4.4	100.0	420	9.7	10.0

Overall, the mean age of drop out was 9.7 years, while the most common age of drop out (i.e. the mode) was 10 years. Although there was little difference in the average age female and male pupils leave school, the age at which the most male pupils left school (8 years) was two years younger than the age at which the most female pupils left school (10 years). There was a trivial difference in the age of dropout among pupils in rural and urban areas (9.8 years and 9.4 years).

Table 7.7 and Figure 7.4 present information about why pupils age 6-14 who dropped out of primary school left school, either during the cycle or at the end of primary school (see Figure 7.4). For

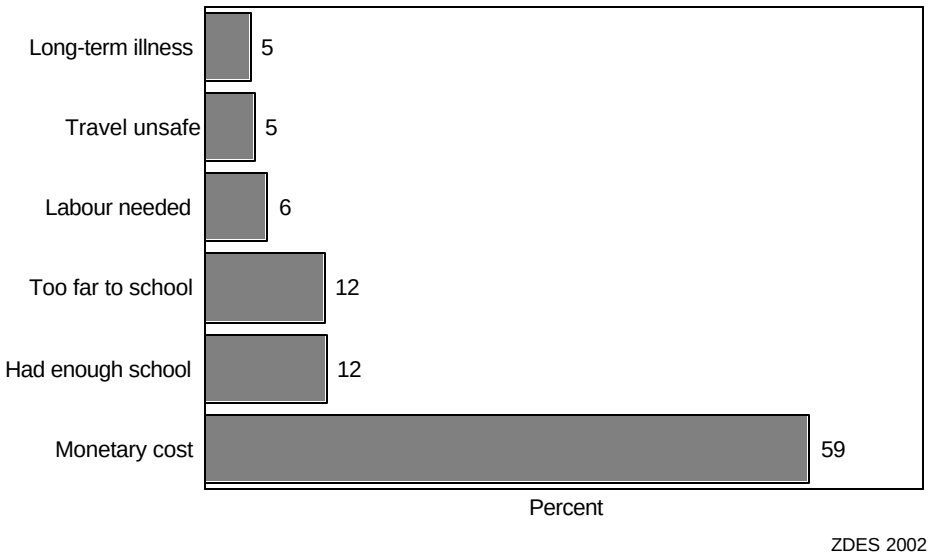
Table 7.7 Factors in primary school pupil dropout

Among de jure children age 6-14 who dropped out of primary school, the percentage who dropped out for specific reasons and the mean age of dropout, by background characteristics, ZDES 2002

	Cost-related factors		Child factors				School factors										
Background characteristic	Monetary cost	Labour needed	Failed exams/ had to repeat	No longer wanted to attend/had enough schooling	Very sick/ long-term illness	Disabled	Too far to school	Travel to school unsafe	Poor school quality	No secondary school places	No jobs	Either mother or father died or were ill	Moved	Other reasons	No reason	Number of dropouts	Mean age at dropout
Sex																	
Male	63.0	6.4	1.2	11.3	4.6	2.5	11.2	4.9	2.7	2.4	0.7	1.7	3.4	3.8	7.0	189	9.6
Female	55.6	5.9	4.5	12.4	4.5	3.2	12.1	4.8	2.9	3.1	0.5	2.5	1.2	11.8	8.3	231	9.7
Residence																	
Urban	76.2	1.4	7.9	3.6	3.7	1.5	1.8	1.5	2.2	5.4	0.0	3.1	4.9	7.4	1.8	123	9.4
Rural	51.6	8.2	0.9	15.5	4.9	3.4	15.9	6.2	3.0	1.7	0.8	1.7	1.1	8.5	10.3	297	9.8
Wealth index (quintile)																	
Lowest	60.2	8.4	0.0	8.1	5.7	1.5	13.3	6.1	0.0	0.7	0.0	0.3	0.8	6.8	13.4	132	9.8
Second	42.1	10.7	0.5	17.0	4.3	3.3	20.4	7.2	6.7	0.0	1.5	4.0	0.5	5.4	13.1	82	9.7
Middle	53.3	4.8	1.2	18.4	5.3	2.7	14.5	3.5	3.8	3.2	1.2	0.8	1.7	9.7	4.4	92	9.6
Fourth	74.5	1.4	5.3	10.6	3.7	5.1	1.7	3.7	3.4	5.2	0.0	5.7	3.3	11.1	0.0	81	9.3
Highest	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	32	*
Total	58.9	6.1	3.0	11.9	4.5	2.8	11.7	4.8	2.8	2.8	0.6	2.1	2.2	8.2	7.7	420	9.7

Note: More than one response possible. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Because in most of the provinces, unweighted sample sizes were below 25, results are not presented at the provincial level. Questions were asked about a total of 420 children who had dropped out of school. First, the parent/guardian was asked whether a child had dropped out because he/she was physically or mentally disabled, and if the answer was yes, no further questions were asked about reasons for dropping out of school. Next, the respondent was asked whether a child had dropped out because he/she had been very sick for 3 months or longer, and if the answer was yes, no additional questions were asked. There were 12 children who dropped out because of a disability and 19 who dropped out because of a long-term illness, so for the remainder of the questions, the sample size was not 420, but 389.

Figure 7.4
Selected Factors in Primary School Pupil Dropout



over half (59 percent) of the pupils who have dropped out of school, the monetary cost of schooling was cited as a factor in dropout. Monetary cost was cited more commonly for male than for female pupils (63 versus 56 percent) and for pupils in urban areas than for pupils in rural areas (76 versus 52 percent).

In contrast to monetary cost, the opportunity cost associated with needing children to do work for the household was a factor in school leaving for only 6 percent of pupils, with no difference between male and female pupils. However, eight times as many pupils in rural areas (8 percent) as pupils in urban areas (1 percent) left school partly because their labour was needed.

In comparison to cost-related factors, school-related and child-related factors are relatively uncommon. However, distance to closest school with the required grade and lack of safety in travelling to school were cited as factors in dropout for 12 percent and 5 percent, respectively, of the pupils who had left school. Both distance to school and lack of safety in travelling to school were given more often as factors for pupils in rural areas (16 percent and 6 percent) than for those in urban areas (2 percent and 2 percent).

Twelve percent of pupils who left school did so partly because parent/guardians thought the child had completed enough schooling or no longer wanted to attend. This factor was more widely given for pupils in rural areas (16 percent) than for those in urban areas (4 percent).

Five percent of pupils dropped out of school at least partly because of lengthy illness (3 months or longer), and 3 percent because of a physical or mental disability. Only 3 percent of pupils left school partly because they had failed the exams and/or had to repeat a grade. The same percentage left school due to poor perceived school quality (3 percent) and because of lack of secondary school places (3 percent). The perception that there were no jobs for school graduates was a factor for less than 1 percent of pupils who had dropped out of school.

Parent/guardians were asked whether there were other factors that contributed to a pupils dropping out of school. For 2 percent of pupils, the death or illness of a parent was cited as a factor. The same percentage (2 percent) of pupils was reported to have dropped out of school because they had moved.

HOUSEHOLD EXPENDITURES ON SCHOOLING 8

The cost of schooling to households includes the monetary costs associated with schooling, other non-monetary contributions such as the time spent by children in school and travelling to and from school, and other household members' time and labour in support of children's schooling. These costs of schooling, both monetary and non-monetary, may be difficult for some households to bear and may in some cases be so burdensome as to keep children from ever attending school or result in children leaving school. This chapter focuses on household expenditures on children's schooling at the primary level. The following chapter, Chapter 9, presents information on other costs of schooling borne by households, such as time devoted to school by children and other household members.

Overview of Expenditures on Primary Schooling

As discussed in Chapter 1, Free Basic Education (FBE) for grades 1-7, designed to reduce the monetary costs of primary schooling to households by eliminating tuition and other school fees in government primary schools, was introduced at the beginning of the 2002 academic year. However, the 2002 ZDES collected information about primary school costs to households during the previous 2001 school year (2001), before FBE. Consequently, the data presented below does not reflect the changes in cost incidence or expenditure, especially on tuition and other school fees, occasioned by the new FBE policy. Nevertheless, the discussion below provides a useful picture of the school-related items households generally spend money on, their priority expenditures, and the amounts they spend for children who attend primary school.

The 2002 ZDES collected information about whether households spent money on each pupil's schooling during the 2001 school year, and if so, how much was spent on which items. Questions were asked specifically about each possible cost, including the tuition,[33] PTA fees, sports fund, examination fees, boarding fees, school maintenance fees, uniforms and school-related clothing, school books and supplies, transportation, food, private tutoring, and other types of expenditures. It must be emphasised that the parent/guardian respondent was asked about expenditures made by members of the household, rather than all expenditures made on the pupil's behalf. If, for example, the household did not spend money on the sports fund, but an uncle living in another household paid this fee, the expenditure was not recorded for that pupil because it was not made from within the pupil's household.

The tables in this section of the chapter present data on per-pupil household expenditures on schooling. The discussion includes the type of school pupils attend because both the incidence and magnitude of expenditures are expected to differ according to the type of school attended.[34] Table 8.1.1 presents information on the incidence of expenditure, or the percentage of pupils whose households spent money on each item, according to background variables of sex, residence, province, school type, and household wealth. Table 8.1.2 presents information on the incidence of expenditure on the various items

[33] Pupils were still required to pay tuition and other school fees levied by the government in 2001, the last complete academic school year prior to ZDES data collection. Tuition and other government school fees were abolished by the MOE in academic year 2002.

[34] There are five types of primary schools in Zambia. For ease of presentation and analysis, these schools were re-grouped into three categories: government schools, government-assisted schools (including grant-aided and community schools), and private schools (including religious and non-religious schools).

that are included in the books and supplies cost category. Table 8.1.3 presents information on the incidence of expenditure by grade.

Table 8.2 presents the mean total sum spent on each pupil during the 2001 school year. Table 8.3.1 presents expenditure data for pupils with non-zero expenditures on various items such as tuition, school supplies, and so on. This table illustrates how much money was spent on each item, on average, among pupils whose households spent any money on that item. Table 8.3.2 presents information on the non-zero mean expenditure on the various items that are included in the books and supplies cost category.

Cost Incidence and Total Expenditures

Table 8.1.1 Household expenditures on primary schooling for pupils

Percentage of primary school pupils whose households spent money on various costs of schooling in the 2001 school year, by type of expenditure and background characteristics, ZDES 2002

	Expenditures on primary schooling													
Background characteristic	Tuition	PTA fees	Sports fund	Exam fees	Boarding fees	School maintenance contributions	Uniforms and clothing	Books and supplies	Transport	Food	Private tuition	Other	One or more types of expenditure	Number of pupils
Sex														
Male	74.2	66.3	24.6	2.2	0.4	8.8	79.8	98.2	3.1	25.4	11.5	5.1	99.2	2,327
Female	72.9	63.0	21.7	2.5	0.3	10.1	81.8	97.5	2.9	25.1	14.7	5.8	98.7	2,330
Residence														
Urban	86.8	72.0	26.4	4.4	0.2	18.8	86.3	98.6	6.7	42.5	26.6	9.4	99.6	1,948
Rural	64.0	59.4	20.9	0.8	0.5	2.7	76.8	97.2	0.3	12.9	3.4	2.6	98.5	2,709
Province														
Central	62.8	69.7	33.5	2.3	0.0	0.3	83.2	97.0	0.8	22.5	5.2	8.2	99.0	386
Copperbelt	87.8	69.2	7.1	4.4	0.9	14.8	86.3	98.4	6.1	33.8	24.6	9.3	99.4	1,049
Eastern	71.7	63.0	21.7	1.1	0.2	0.9	66.8	96.6	0.4	20.0	7.9	0.9	98.1	483
Luapula	60.6	31.5	6.2	0.0	0.0	0.0	89.0	97.3	0.3	6.5	4.8	2.1	98.6	302
Lusaka	91.0	75.6	54.7	4.9	0.4	31.9	83.8	99.5	6.3	59.2	27.3	12.3	100.0	711
Northern	60.3	62.2	15.7	0.6	0.4	5.6	78.5	97.8	0.7	13.0	7.0	1.9	98.8	619
North-Western	31.4	35.7	3.2	1.2	0.4	1.4	84.8	95.4	0.5	3.0	1.4	1.4	98.6	232
Southern	78.4	75.6	32.3	0.8	0.0	1.8	76.6	98.2	2.6	11.9	4.6	1.4	99.0	582
Western	62.0	58.2	24.3	1.0	0.0	1.0	75.0	96.6	0.7	14.0	4.1	1.4	97.3	293
School type														
Government	72.7	67.0	23.6	2.2	0.2	9.5	81.3	98.2	2.1	23.7	12.3	4.2	99.1	4,102
Government-assisted	73.1	41.4	15.8	2.2	0.0	5.2	63.2	93.8	0.6	13.6	4.4	7.2	96.1	217
Private	83.2	48.0	22.4	2.5	2.7	11.0	85.6	95.7	15.5	53.2	26.2	21.5	99.6	299
Wealth index quintile														
Lowest	59.1	58.6	17.7	0.3	0.1	0.7	68.8	95.7	0.3	6.6	1.2	2.0	97.2	697
Second	61.6	54.9	17.1	0.4	0.1	0.5	73.1	97.1	0.0	10.8	2.3	2.1	99.1	680
Middle	66.3	58.2	20.5	1.2	0.9	1.9	79.5	97.8	0.3	10.6	3.1	2.4	98.7	884
Fourth	76.7	63.8	25.6	1.9	0.0	14.2	84.1	98.5	1.5	30.9	11.5	2.7	99.2	1,028
Highest	89.0	77.4	29.0	5.5	0.6	19.6	89.0	98.8	8.7	47.2	32.1	12.9	99.8	1,368
Total	73.5	64.6	23.2	2.3	0.4	9.4	80.8	97.8	3.0	25.3	13.1	5.4	99.0	4,657

As illustrated in Table 8.1.1, virtually all primary school pupils' households spent money on primary schooling during the 2001 school year, regardless of the pupil's characteristics. Ninety-nine percent of government school pupils, 96 percent of government-aided school pupils, and nearly 100 percent of private school pupils spent money on one or more types of school costs during the 2001 school year.

Overall, the most commonly incurred expenditure was on school books and supplies (including

Table 8.1.2 Household expenditures on primary school supplies for pupils

Percentage of primary school pupils whose households spent money on textbooks, pens and pencils, exercise books, school bags, and other school supplies during the 2001 school year, by type of expenditure and background characteristics, ZDES 2002

	Expenditures on primary school books and supplies						
Background characteristic	Textbooks	Pens and pencils	Exercise books	School bags	Other school supplies	One or more types of expenditure	Number of pupils
Sex							
Male	11.3	96.9	97.4	32.7	17.3	98.2	2,327
Female	11.8	95.7	96.1	35.5	18.0	97.5	2,330
Residence							
Urban	21.9	96.6	97.3	55.6	28.2	98.6	1,948
Rural	4.1	96.1	96.4	18.7	10.1	97.2	2,709
Province							
Central	8.0	95.3	95.2	26.5	11.0	97.0	386
Copperbelt	23.1	96.5	97.3	51.6	26.8	98.4	1,049
Eastern	5.5	95.5	96.6	21.9	9.8	96.6	483
Luapula	7.2	96.6	96.2	22.9	7.5	97.3	302
Lusaka	19.3	97.3	98.2	57.6	33.2	99.5	711
Northern	8.3	96.9	96.9	26.7	22.4	97.8	619
North-Western	1.1	94.2	94.5	19.3	7.6	95.4	232
Southern	2.8	96.0	97.0	16.8	4.4	98.2	582
Western	2.7	96.2	95.2	17.8	3.4	96.6	293
School type							
Government	10.6	96.8	97.5	33.6	17.1	98.2	4,102
Government-assisted	6.2	92.8	92.1	13.3	8.7	93.8	217
Private	24.3	91.4	89.3	54.9	30.1	95.7	299
Wealth index quintile							
Lowest	1.2	94.5	95.3	9.2	5.0	95.7	697
Second	3.4	95.6	96.0	15.2	7.2	97.1	680
Middle	3.6	97.2	97.0	17.8	9.6	97.8	884
Fourth	11.7	97.4	97.7	38.1	19.8	98.5	1,028
Highest	25.8	96.2	97.0	63.7	32.9	98.8	1,368
Total	11.5	96.3	96.8	34.1	17.7	97.8	4,657

texts, exercise books, pens, pencils, etc.), with 98 percent of pupils' households spending money on one or more of these supplies. Table 8.1.2 provides more detailed information on expenditures on school supplies, showing that by far the most commonly purchased supplies were exercise books (97 percent) and pens and pencils (96 percent of pupils).

Also commonly purchased were uniforms and clothing needed for school (including shoes), tuition fees (including the cost of report books and cards), and PTA fees. As shown in Table 8.1.1, 81 percent of pupils' households bought school clothing or uniforms, 74 percent paid tuition or school report fees, and 65 percent paid PTA fees.

About one-fourth of pupils' households spent money on food for children to eat during the school day and a similar proportion paid a sports fund charge (23 percent). Less common were expenditures on private tutoring (13 percent), transport (3 percent), and exam fees (2 percent). When asked about other expenditures, 9 percent of pupils' parent/guardians named school maintenance contributions.

In general, nearly equal percentages of households incurred expenditure for male and female pupils in the various cost categories. In nearly all cost categories, the incidence of expenditures was higher in urban than in rural areas. The incidence of expenditure on many school costs was similar for pupils attending government, government-assisted, and private schools, though there were a few notable exceptions, as discussed below. Similarly, the percentage of pupils' households who spent money generally increased with wealth. In addition, as shown in Table 8.1.3, the percentage of pupils whose households spent money on schooling was higher among pupils in grade 7 than among those in grade 1.

Table 8.1.3 Household expenditures on primary schooling for pupils by grade

Percentage of primary school pupils whose households spent money on various costs of schooling in the 2001 school year, by type of expenditure, grade and background characteristics, ZDES 2002

Grade	Tuition	PTA fees	Sports fund	Exam fees	Boarding fees	School maintenance contributions	Uniforms and clothing	Books and supplies	Transport	Food	Private tuition	Other	One or more types of expenditure	Number of pupils
1	69.2	56.0	18.8	0.4	0.2	5.6	81.2	97.1	1.8	22.0	6.1	4.7	98.5	1,134
2	73.5	65.1	22.7	0.9	0.2	8.9	78.8	98.2	2.5	23.4	9.3	5.2	99.5	1,013
3	74.1	67.0	22.3	1.1	0.2	8.8	79.8	98.4	2.8	26.7	10.5	5.5	98.9	816
4	74.2	69.0	25.4	0.8	0.8	10.6	80.3	97.2	3.1	25.9	14.4	4.5	98.5	679
5	74.3	65.0	29.0	2.3	0.0	13.6	82.7	97.8	2.8	28.1	17.2	6.3	98.7	540
6	82.1	72.2	25.7	0.8	1.0	12.1	83.0	98.9	5.0	29.3	27.3	9.5	100.0	321
7	79.1	77.6	28.0	43.2	1.7	18.6	87.2	98.3	12.1	33.6	54.2	5.1	100.0	153

Although nearly all primary school pupils' households spent money on their schooling in the 2001 school year (on average ZK 202,899), the total amount of money spent per child differs according to various background characteristics (see Table 8.2). On average, more than twice as much money was spent on female pupils (ZK 278,000) than male pupils (ZK 127,704). Among pupils in urban areas, the mean expenditure on schooling (ZK 418,210) was nine times the mean expenditure among pupils in rural areas (ZK 48,097).

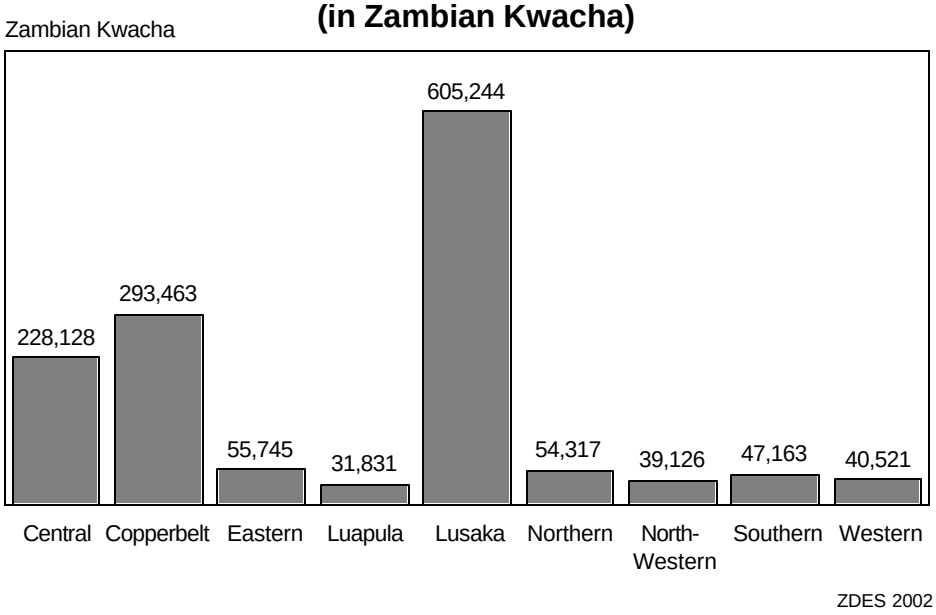
Table 8.2 Per-pupil household expenditures on primary schooling for pupils

Average annual per-pupil household expenditure (in Zambian Kwacha) on primary schooling in the 2001 school year, by background characteristics, ZDES 2002

Background characteristic	Mean total expenditures (Zambian Kwacha)	Number of primary school pupils
Sex		
Male	127,704	2,327
Female	278,000	2,330
Residence		
Urban	418,210	1,948
Rural	48,097	2,709
Province		
Central	228,128	386
Copperbelt	293,463	1,049
Eastern	55,745	483
Luapula	31,831	302
Lusaka	605,244	711
Northern	54,317	619
North-Western	39,126	232
Southern	47,163	582
Western	40,521	293
School type		
Government	106,146	4,102
Government-assisted	42,197	217
Private	1,643,255	299
Wealth index quintile		
Lowest	21,438	697
Second	24,139	680
Middle	34,741	884
Fourth	80,509	1,028
Highest	584,798	1,368
Total	202,899	4,657

There is extreme variation in total per pupil expenditures across provinces (see Figure 8.1). At ZK 605,244, mean per pupil expenditure in Lusaka Province was the highest in Zambia, about three times the national average and far greater than the next highest per pupil expenditures recorded for Copperbelt Province (ZK 293,463) and Central Province (ZK 228,128). Not only did per pupil expenditure in the remaining six provinces fall below the national average, but in none of these provinces did per pupil expenditure exceed more than ZK 60,000. Households spent the lowest amount per pupil in Luapula Province (ZK 31,831), about one twentieth of the amount spent per pupil in Lusaka Province.

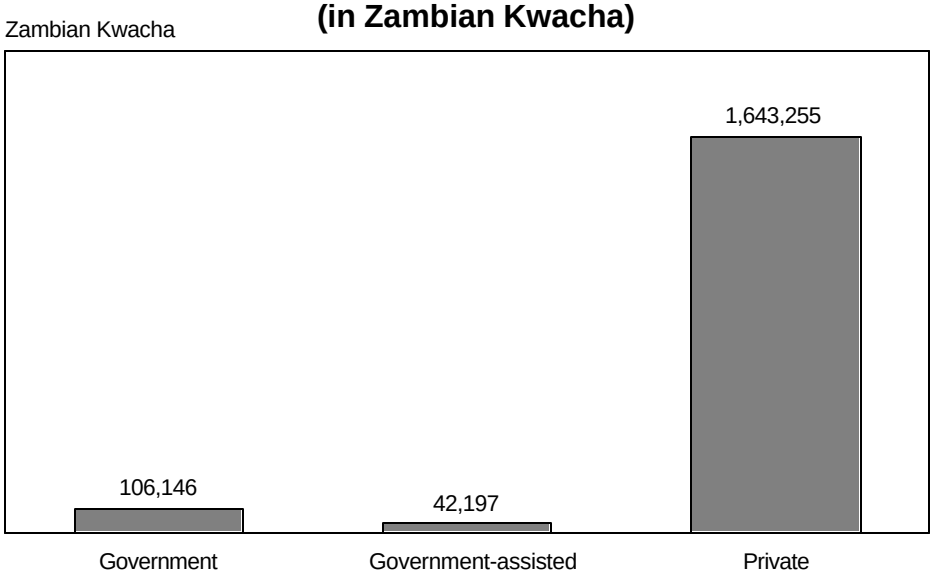
Figure 8.1
Mean Annual Per-Pupil Household Expenditure, by Province (in Zambian Kwacha)



Mean annual expenditure for pupils attending private schools far exceeded that for pupils attending government schools and government-assisted schools (see Figure 8.2). Mean per pupil expenditure for a private school pupil (ZK 1,643,255) was fifteen times greater than that for a government school pupil (ZK 106,146) and nearly forty times greater than that for a government-assisted school pupil (ZK 42,197).[35]

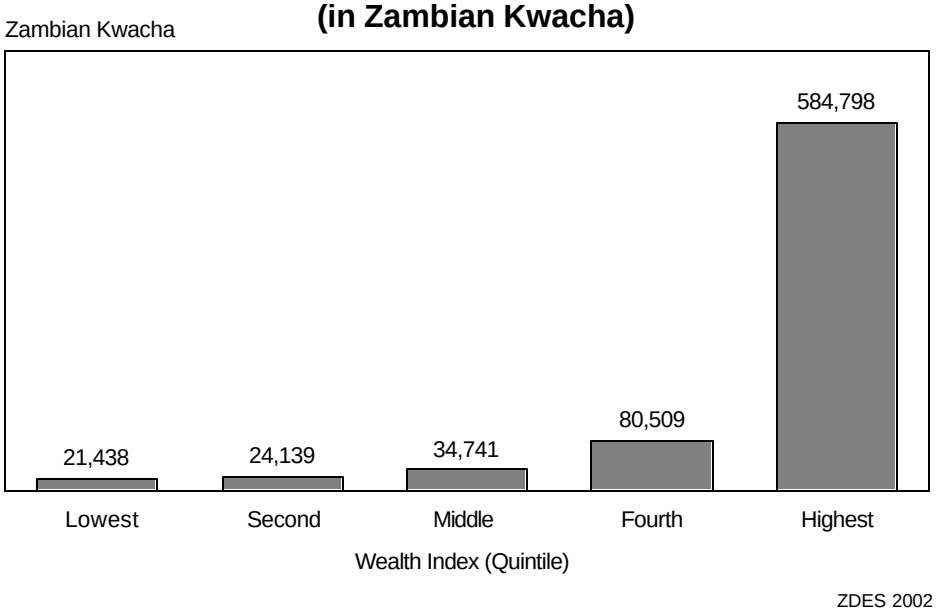
[35] In 2001, US$1 = ZK 3,600.

Figure 8.2
Mean Annual Per-Pupil Household Expenditure, by School Ty
(in Zambian Kwacha)



As might be expected, the wealthier the household, the greater the mean total expenditure per pupil (see Figure 8.3). Mean total expenditure on a pupil from the highest quintile (ZK 584,798) was dramatically (27 times) greater than mean total expenditure on a pupil from the lowest quintile (ZK 21,438). Moreover, mean total per pupil expenditure for the highest quintile was considerably (seven times) greater than that for the second highest quintile (ZK 80,509).

Figure 8.3
Mean Annual Per-Pupil Household Expenditure, by Wealth Ind
(in Zambian Kwacha)



Specific Non-Zero Expenditures

From this point onward, the discussion of expenditures on various types of school costs focuses on the incidence of expenditure by type, and on mean non-zero expenditures on various items to allow for a more realistic comparison of prices paid by pupils' households spending money on schooling. Non-zero expenditure is simply the average expenditure for all primary school pupils who spent money in a specific cost category. For example, since only 74 percent of pupils spent money on tuition, then the mean expenditure would be calculated using the actual number of pupils whose households spent money on this cost.

Tuition

Since expenditure data for ZDES were collected for the 2001 academic year, prior to the official introduction of the FBE policy in the 2002 academic year, it is not surprising that the majority (73 percent) of government school pupils' households paid some form of tuition or other school fee in 2001.[36] The same percentage (73 percent) of government-assisted school pupils paid tuition fees, but—as expected—a higher percentage (83 percent) of private school pupils paid tuition fees (see Table 8.1.1). Pupils in grade 6 and grade 7 were also more likely to pay tuition fees than those in grades 1-5 (see Table 8.1.3).

As shown in Table 8.1.1, female pupils were as likely as male pupils to pay tuition fees, but primary school pupils in urban areas were more likely than their rural peers to have paid tuition fees (87 percent versus 64 percent). There was also variation in the incidence of payment of tuition fees by province, with 91 percent of pupils in Lusaka Province and 88 percent of pupils in Copperbelt Province paying tuition fees, compared with 31 percent in North-Western Province. Children from the wealthiest households were more likely than those from the poorest households to have paid tuition fees (89 percent versus 59 percent).

[36] For ZDES, the definition of tuition fees includes those user fees that a pupil was required to pay by the government to enrol or attend the school (including mandatory school report fees) in 2001, rather than those fees that pupils already enrolled or attending school were asked to pay, as determined by a school education board or PTA.

Among children with non-zero expenditures, the mean annual tuition expenditure was ZK 43,399, although this masks tremendous variation in expenditure by sex, residence, province, school type, and wealth (see Table 8.3.1). Households paid, on average, nearly twice as much on tuition for a female pupil (ZK 56,839) as for a male pupil (ZK 30,228), while households in urban areas spent considerably more on a pupil's tuition (ZK 92,504) than households in rural areas did (ZK 7,360). Mean expenditures on tuition for pupils in the nine provinces ranged from ZK 1,991 in Western Province (about one-twentieth of the national average) to ZK 213,480 in Lusaka Province (five times the national average); mean expenditure on tuition fell below the national average in seven of the nine provinces. Households paid similar amounts on tuition for pupils in government (ZK 12,281) and government-assisted schools (ZK 10,674), but a

Table 8.3.1 Non-zero per-pupil household expenditures on primary schooling for pupils

Average annual per-pupil household expenditure (in Zambia Kwacha) on primary schooling in the 2001 school year for primary school pupils with non-zero expenditures, by type of expenditure and background characteristics, ZDES 2002

Background characteristic	Tuition	PTA fees	Sports fund	Exam fees	Boarding fees	School maintenance contributions	Uniforms and clothing	Books and supplies	Transport	Food	Private tuition	Other
Sex												
Male	30,228	4,703	3,569	(9,022)	*	5,551	34,923	14,980	(808,884)	95,320	49,403	21,621
Female	56,839	5,993	2,969	(7,509)	*	5,566	34,756	16,962	2,318,945	457,728	61,894	19,648
Residence												
Urban	92,504	8,118	5,708	(8,116)	*	5,861	50,330	26,367	1,534,365	366,631	59,104	23,531
Rural	7,360	3,817	2,193	*	*	4,032	22,322	8,384	*	62,374	37,226	11,767
Province												
Central	6,503	5,899	(3,723)	*	*	*	28,834	12,816	*	20,348	(73,704)	(8,505)
Copperbelt	66,595	6,864	(3,827)	(7,732)	*	3,106	47,878	21,286	1,794,464)	117,641	37,303	16,841
Eastern	8,302	5,349	*	*	*	*	27,162	8,587	*	70,701	(51,275)	*
Luapula	2,589	1,962	*	*	*	*	21,589	8,526	*	*	*	*
Lusaka	213,480	(9,891)	*	*	*	7,660	52,573	33,360	(456,682)	630,319	89,569	34,614
Northern	7,052	2,979	*	*	*	(3,266)	26,354	10,105	*	41,487	(49,588)	*
North-Western	12,374	2,814	*	*	*	*	25,657	8,294	*	*	*	*
Southern	11,479	6,865	1,727	*	*	*	22,646	8,926	*	62,242	*	*
Western	1,991	1,990	*	*	*	*	21,084	9,920	*	(43,049)	*	*
School type												
Government	12,281	4,958	2,739	(8,515)	*	4,269	33,044	14,589	1,345,419	72,902	50,063	6,216
Government-assisted	10,674	(6,900)	*	*	*	*	21,893	9,420	*	(51,751)	*	*
Private	363,661	(10,647)	*	*	*	(20,187)	63,085	37,196	2,028,771)	1,586,489	91,614	(60,743)
Wealth index quintile												
Lowest	2,738	3,534	(2,216)	*	*	*	15,001	5,575	*	(30,881)	*	*
Second	2,781	3,322	(2,066)	*	*	*	16,511	6,149	*	23,993	*	*
Middle	4,426	4,212	2,546	*	*	*	21,982	8,176	*	29,761	*	*
Fourth	13,163	6,369	3,340	*	*	6,489	35,443	16,675	*	46,017	34,366	(4,617)
Highest	146,569	8,106	(5,857)	(7,627)	*	5,227	57,112	30,354	1,754,103	472,209	63,145	27,308
Total	43,399	5,318	3,287	8,163	*	5,559	34,838	15,968	1,544,368	277,373	56,403	20,556

Note: An asterisk indicates that a figure has been suppressed because it is based on fewer than 25 unweighted cases.

great deal more on tuition for pupils in private schools (ZK 363,661). Mean per pupil expenditure for the wealthiest quintile (ZK 146,569) was 53 times higher than mean per pupil expenditure for the poorest quintile (ZK 2,738) and 11 times higher than the next wealthiest or fourth quintile (ZK 13,163).

Parent-Teacher Association Fees

Parent-teacher association fees are expected to vary among schools because they are set by agreement between teachers and parents, and the funds may be used for a variety of purposes, such as to support basic school operations, to make capital improvements, purchase materials and equipment, or even to provide teacher incentives. The majority of pupils' households (65 percent) paid PTA fees (see Table 8.1.1). Pupils in urban areas were more likely than those in rural areas to pay PTA fees (72 percent versus 59 percent). Households in Luapula Province (32 percent) and North-Western Province (36 percent) were the least likely to have paid PTA fees, while households in Lusaka Province and Southern Province were the most likely to have paid PTA fees (76 percent each). Pupils attending government schools (67 percent) were more likely to have spent money on PTA fees than pupils attending private schools (48 percent) and pupils attending government-assisted schools (41 percent).

Mean expenditures on PTA fees were somewhat higher for female pupils (ZK 5,993) than for male pupils (ZK 4,703), and were markedly higher in urban areas (ZK 8,118) than in rural areas (ZK 3,817). Pupils in private schools spent on average a greater amount on PTA fees (ZK 10,647) than pupils in government schools (ZK 4,958). Pupils from wealthier households spent more on PTA fees than those from poorer households.

Sports Fund

Schools frequently require pupils to pay into a sports fund if they want to participate in school sports activities. The sports fund is generally used for sports equipment, coaching, and associated operations; occasionally it may be used to purchase clothing, such as jerseys. There was little variation in incidence by sex or by residence (see Table 8.1.1). Sports fund fees were particularly uncommon (paid by 3 to 7 percent of pupils' households) in North-Western, Luapula, and Copperbelt Provinces, and were notably widespread (paid by 32 to 55 percent of pupils' households) in Southern, Central, and Lusaka Provinces. Pupils from the wealthiest quintile were more likely (29 percent) to have paid sports fees than those from the poorest quintile (18 percent).

Mean expenditures for sports fund payments differed only marginally between female pupils (ZK 2,969) and male pupils (ZK 3,569). Urban-rural differences were more substantial: pupils in urban areas paid more (ZK 5,708) than pupils in rural areas (ZK 2,193).

Examination Fees

At the primary level, pupils may have been assessed a fee for the Primary School Leaving Certificate Examination (PSLC) or asked to pay for paper or materials associated with examinations in 2001. Exam fees represent a minor category of expense.[37] Overall, only 2 percent of pupils paid exam fees (see Table 8.1.1). However, among pupils enrolled in grade 7, 43 percent paid for exam fees, compared with the 1-2 percent of pupils in grades 1-6 (see Table 8.1.3). Pupils from the wealthiest households were more likely than those from poorer households to have paid exam fees.

The mean per-pupil household expenditure for exam fees was ZK 8,163 (see Table 8.3.1).

[37] The Ministry of Education abolished exam fees during academic year 2001.

Boarding Fees

At the primary level, where boarding schools are uncommon, less than 1percent of primary school pupils' households paid boarding fees (see Table 8.1.1).[38]

School Maintenance Contributions

Although some pupils did not pay tuition fees, schools may have supplemented their budgets through other mechanisms. When asked about other types of expenditures on schooling, parent/guardians listed expenditures on school maintenance contributions for 9percent of pupils. This type of expense includes the purchase of floor wax, candles, tissue, dust cloths, rakes, brooms, buckets or fees, such as water or toilet fees. School maintenance contributions were more widespread among pupils in urban areas (19 percent) than in rural areas (3 percent), and in the more urbanized provinces of Lusaka (32 percent) and Copperbelt (15 percent). They were also more common among pupils attending private schools (11 percent) and among pupils attending government schools (10 percent) than among those attending government-assisted schools (5 percent). The wealthiest pupils (20 percent) were considerably more likely to spend money on school maintenance contributions than the poorest pupils (1 percent).

The mean expenditure on school maintenance supplies was ZK 5,559. There was little difference between the amounts paid by sex or by urban-rural residence.

Uniforms, Clothing, and Shoes Bought for Use at School

Prior to FBE in 2002, some schools in Zambia required that pupils wear uniforms, obliging households to purchase either ready-made uniforms or the fabric to make them.[39] But even when uniforms are not mandatory, pupils' households spend money on clothing and shoes intended primarily for use at school. The majority of pupils' households—irrespective of grade, sex, residence, province, school type, and wealth--spent money on school uniforms, clothing and/or shoes to be worn to school. Eighty-one percent of pupils' households spent money in 2001 on school-related clothing, averaging ZK 34,838 per pupil (see Tables 8.1.1 and 8.3.1). There were no gender differences in either the overall expenditure incidence or the amount spent. Pupils in urban areas were more likely to spend money on school uniforms, clothing and/or shoes (86 percent) than pupils in rural areas (77 percent), and they spent twice as much money on these items than their rural peers (ZK 50,330 versus ZK 22,322).

Pupils attending government-assisted schools were less likely to spend money on uniforms, clothing, and shoes (63 percent) than pupils attending private schools (86 percent) and pupils attending government schools (81 percent). Pupils attending private schools spent by far the greatest amount on these items (ZK 63,085), about three times the amount spent by pupils in government-assisted schools (ZK 21,893) and about twice the amount spent by pupils in government schools (ZK 33,044).

Pupils from the wealthiest households were more likely to have spent money on school uniforms and clothing (89 percent) than pupils from the poorest households (69 percent), and they spent considerably more on school-related clothing (ZK 57,112) than pupils from the poorest households (ZK 15,001).

School Supplies

Nearly all pupils' households (98 percent) paid for school supplies, including textbooks, exercise books, pens and pencils, school bags, and so on. This percentage remained constant for all primary grades

[38] As shown in Chapter 6, less than 1 percent of primary school pupils surveyed attend boarding schools.
[39] In 2002, the Government of Zambia decreed that school uniforms were no longer compulsory.

(see Tables 8.1.1 and 8.1.3). Households were as likely to purchase school supplies for female pupils as for male pupils, and spent nearly the same amount for both (see Tables 8.1.1 and 8.3.1). The percentages of households in urban areas and in rural areas spending money on school supplies were nearly identical, but rural households spent substantially less (ZK 8,384) on school supplies than urban households (ZK 26,367). Although the differences in the percentage of pupils spending money on school supplies were minor among the wealth quintiles, the disparities widened in the amount spent per pupil: mean per pupil expenditure for the poorest quintile (ZK 5,575) was less than one-fifth of mean per pupil expenditure for the wealthiest quintile (ZK 30,354).

The percentage of households paying for school supplies differed little across provinces. However, there was substantial variation in the mean expenditure on school supplies among provinces. Only in Lusaka Province (ZK 33,360) and Copperbelt Province (ZK 21,286) did the mean expenditure surpass the national average (ZK 15,968). Pupils in private schools spent far more on school supplies (ZK 37,196) than did pupils in government schools (ZK 14,589) and those in government-assisted schools (ZK 9,420).

As shown in Table 8.1.2, among the various school supplies, households most commonly purchased exercise books (97 percent) and pens and pencils (96 percent). These items were also the least costly of the specified school supplies, averaging ZK 2,694 for pens/pencils and ZK 6,133 for exercise books (see Table 8.3.2). [40] Households were less likely to purchase school bags (34 percent) and textbooks (12 percent), which were also the most costly items with expenditures averaging ZK 13,303 for school bags and ZK 16,802 for textbooks. A relatively small percentage of households (18 percent) spent money on other, non-specified school supplies, averaging ZK 3,491 per pupil. These supplies included items such as materials purchased for home-craft or home economics classes, among others.

Pupils' households were substantially more likely to spend money on school bags, textbooks and other, non-specified supplies in urban areas than in rural areas. The same holds true for pupils in Lusaka and Copperbelt provinces compared with the other provinces, for wealthier pupils than for poorer pupils, and for pupils attending private schools compared with pupils attending government schools and pupils attending government-assisted schools. In general, groups more likely to buy these items also spent more on these items. For example, pupils' households in urban areas spent ZK 15,405 for schoolbags, ZK 18,587 for textbooks, and ZK 4,156 for other, non-specified supplies, while pupils' households in rural areas spent ZK 8,808 for schoolbags, ZK 9,869 for textbooks and ZK 2,148 for other, non-specified supplies.

[40] "Specified" refers to those items about which respondents were specifically asked.

Table 8.3.2 Non-zero per-pupil household expenditures on primary school supplies for pupils

Average annual per-pupil household expenditure (in Zambia Kwacha) on primary schooling in the 2001 school year for primary school pupils with non-zero expenditures, by specified type of expenditure and background characteristics, ZDES 2002

Background characteristic	Textbooks	Pens and pencils	Exercise books	School bags	Other school supplies
Sex					
Male	15,460	2,588	5,789	12,790	3,673
Female	18,082	2,801	6,482	13,774	3,315
Residence					
Urban	18,587	3,966	8,601	15,405	4,156
Rural	9,869	1,775	4,342	8,808	2,148
Province					
Central	18,796	2,011	5,437	12,739	4,192
Copperbelt	16,490	2,806	5,867	14,962	3,725
Eastern	13,642	1,505	3,302	12,128	2,601
Luapula	8,874	1,903	4,256	7,072	1,302
Lusaka	22,144	6,072	12,800	15,529	4,471
Northern	9,650	1,769	4,812	8,453	2,009
North-Western	14,300	1,475	4,470	10,401	1,887
Southern	12,464	1,959	4,501	12,069	3,205
Western	14,500	2,033	5,482	10,494	4,030
School type					
Government	14,829	2,513	5,782	12,365	3,027
Government-assisted	20,825	2,043	4,051	12,354	3,115
Private	27,012	5,476	11,830	20,721	6,935
Wealth index quintile					
Lowest	3,443	1,365	3,462	7,218	842
Second	5,973	1,367	3,627	5,619	1,675
Middle	8,610	1,897	4,219	8,598	2,225
Fourth	13,311	3,105	6,959	11,831	2,694
Highest	19,745	4,223	9,316	16,181	4,491
Total	16,802	2,694	6,133	13,303	3,491

Transportation

The majority of pupils walk to school—particularly in rural areas—so it is to be expected that a relatively small proportion of pupils' households spent money on transportation. Overall, only 3 percent of pupils' households paid for transportation, although 7 percent of those in urban areas, 6 percent each in Lusaka and Copperbelt Provinces, 9 percent of the wealthiest households, and 16 percent of those attending private schools paid for transportation. Pupils in grade 7 were more likely to have spent money on transportation than pupils in all other grades (see Table 8.1.3). However, while the expenditure incidence for transportation was low overall, the amounts spent by households on transportation were not: households spent more money per pupil on transportation than on any other expenditure category.

Food

One in four pupils' households spent money on food or snacks for pupils to eat during the school day (see Table 8.1.1). These expenditures may have been on lunch or snacks bought on the way to school or at school or on food bought by the household for the child to take to school. For the small percentage of primary school pupils attending boarding schools, expenditures on food may also include the portion of boarding fees that covers the costs of pupils' meals at school.

As pupils progress from grade 1 to grade 7, they are more likely to have spent money on food (see table 8.1.3). Households in urban areas were more than three times more likely to spend money on food for pupils (43 percent) as households in rural areas (13 percent) (see Table 8.1.1). Households with children in private schools were also more likely to spend money on food (53 percent) than those with children in government schools (24 percent) and government-assisted schools (14 percent). Even more dramatic is the variation by household wealth: the wealthiest households were seven times more likely to spend money on food for pupils (47 percent) than the poorest households (7 percent). Six in ten (59 percent) pupils' households in Lusaka Province spent money on food, in contrast to the national average of one in four households.

Expenditure on food (ZK 277,373) was higher than expenditure on most other items, ranking only behind transportation. Households spent about five times as much money on food for a female pupil (ZK 457,728) as for a male pupil (ZK 95,320), and six times as much for a pupil in an urban area (ZK 366,631) as for a pupil in a rural area (ZK 62,374).

Private Tutoring

Private tutoring (or private teaching) is generally provided by teachers in addition to regular lessons at schools. Private tutoring provides supplementary instruction to pupils, and is generally most commonly—but not exclusively—used by parent/guardians to prepare pupils for the Primary School Leaving Examination at the end of grade 7. Fifty-four percent of pupils attending grade 7 paid for private tutoring, compared with 27 percent in grade 6 and 6 percent in grade 1 (see Table 8.1.3). As shown in Table 8.1.1, private tutoring appears to be more an urban phenomenon than a rural one: nearly 27 percent of urban pupils' households spent money on private tutoring fees, compared with only 3 percent of rural pupils' households, and about one in four pupils' households in the relatively urbanized provinces of Lusaka and Copperbelt paid for private tutoring, compared with the national average of 13 percent. Twenty-six percent of pupils attending private schools paid for private tutoring, in contrast to 12 percent of pupils in government schools and 4 percent in government-assisted schools. The wealthier the pupil's household, the more likely it was to have spent money on private tutoring.

Among households spending money on private tutoring, pupils in urban areas spent more (ZK 59,104) than pupils in rural areas (ZK 37,226), and female pupils spent more (ZK 61,894) than male pupils (ZK 49,403).

Other Expenditures

Parent/guardians were asked whether the household spent money on other school costs, and if so, these school costs were specified and the sum spent on them quantified. These other costs include items such as money for school trips and school entertainment, contributions to the school building fund, purchase of school-related supplies (soap, shoe polish, watch, lunch box, water bottle, etc.), payments to teachers, money for school fund-raising campaigns, and other miscellaneous expenditures. Only 5 percent of pupils' households spent money on other school costs, spending on average ZK 20,556 per pupil.

There was little difference between male pupils and female pupils in either the percentage of pupils' households that spent money on other school costs or in the amount spent by pupils' households for other school costs. Households in urban areas (9 percent) were more likely to have spent money on other costs than households in rural areas (3 percent), and on average spent twice as much money as rural households (ZK 23,531 versus ZK 11,767). In Lusaka Province, 12 percent of pupils' households spent money on other school costs, exceeding the national average (5 percent). Twenty-two percent of households with pupils attending private school spent money on other school costs, compared with only 4 percent of households with pupils attending government school and 7 percent of households of pupils attending government-assisted schools. The wealthiest households were more likely to spend money on other school costs (13 percent) than the poorest households (2 percent).

Summary

After a detailed discussion of the expenditures on various school costs, a brief summary is useful to underscore the main findings. Perhaps most important to emphasize is that virtually all primary school pupils' households (99 percent) spent money on schooling. Nearly all pupils' households spent money on books and supplies, and, of these, most spent money on exercise books and pens/pencils. Eight in ten (81 percent) pupils' households spent money on school uniforms and clothing, over seven in ten (74 percent) spent money on tuition, and over six in ten (65 percent) spent money on PTA fees. Much less common were expenditures by pupils' households on food (25 percent), the sports fund (23 percent), private tutoring (13 percent), school maintenance (9 percent), transport (3 percent), and exam fees (2 percent).

There was substantial variation in expenditures on pupils' schooling according to background characteristics, including sex, urban-rural residence, province, and wealth. On average, more was spent by households on female pupils than male pupils, on pupils in urban areas than pupils in rural areas, and on pupils in Lusaka Province, Copperbelt Province and Central Province than those in other provinces (see Table 8.2). Widely varying sums were spent on children attending government, government-assisted, and private schools, with overall expenditure for pupils in private schools considerably higher than that for pupils in government schools and in government-assisted schools. Pupils' households in the highest (or wealthiest) quintile spent more per pupil than pupils' households in the other wealth quintiles.

The findings suggest that there are many discretionary expenditures on primary schooling, from expenditures on private tutoring to food to PTA fees, that households may or may not spend money on for their children attending primary school. On the other hand, there are also items that are bought by a very high percentage of households, such as school supplies and uniforms or clothing, which suggests that some of the costs of schooling are borne by nearly all households with children in school. Although households are unlikely to avoid having to spend some money on schooling, they can minimize how much is spent on various costs—as indicated by the differential amounts spent by poorer and wealthier households, for instance.

Sources of Support for the Monetary Costs of Primary Schooling

Parent/guardians were asked about the various sources of monetary support for each child's primary schooling. These sources include those within the pupil's household (from the child's parents and/or other household members, or from the pupil himself or herself) and from outside the household (from extended family, a bursary or scholarship, borrowing, or a gift from a non-relative).

Almost all pupils (98 percent), regardless of age, sex, residence, province, or wealth received monetary support from their parents and/or others in the household (see Table 8.4). The next most commonly cited sources of support were extended family (14 percent) and borrowing (10 percent). Rarely did primary school pupils receive gifts or bursaries, or generate the funds themselves.

Table 8.4 Sources of support for the monetary costs of primary schooling

Percentage of primary school pupils who received support from various sources in the 2001 school year, by background characteristics, ZDES 2002

Background characteristic	Parent/ house-hold	Child himself/ herself	Ex-tended family	Bursary	Borrow-ing	Gift from non-relative	One or more sources of support	Number of pupils
Age								
6-7	98.1	1.2	10.5	1.2	8.4	7.3	99.4	188
8-10	97.9	0.9	11.6	1.3	9.9	5.0	99.3	1,777
11-14	97.3	2.6	15.5	1.3	9.9	4.8	99.3	2,692
Sex								
Male	97.9	2.0	12.6	1.2	9.5	4.2	99.3	2,327
Female	97.2	1.8	15.1	1.4	10.1	5.8	99.3	2,330
Residence								
Urban	98.5	0.5	15.9	1.5	16.1	6.6	99.7	1,948
Rural	96.9	2.9	12.3	1.2	5.3	3.9	99.0	2,709
Province								
Central	98.8	1.3	14.7	0.7	7.8	0.3	99.2	386
Copperbelt	98.0	0.2	12.4	0.8	12.4	5.2	99.7	1,049
Eastern	96.8	4.5	8.9	3.0	1.9	4.0	99.8	483
Luapula	94.5	0.3	14.0	0.3	1.7	1.7	99.3	302
Lusaka	99.6	0.9	24.9	4.5	30.9	14.8	100.0	711
Northern	97.5	7.4	20.3	0.0	5.0	3.3	98.5	619
North-Western	97.9	0.9	7.6	0.4	0.4	6.5	100.0	232
Southern	94.7	0.6	5.3	0.0	1.8	0.8	97.6	582
Western	99.0	0.3	7.2	0.3	6.8	2.4	100.0	293
Wealth index quintile								
Lowest	95.8	4.0	13.9	1.1	3.7	3.3	98.8	697
Second	96.7	3.9	11.6	1.7	4.5	2.8	98.5	680
Middle	97.2	2.2	13.4	0.8	5.3	4.7	99.1	884
Fourth	97.1	1.1	16.2	1.9	14.3	4.9	99.7	1,028
Highest	99.4	0.2	13.4	1.0	15.1	7.2	99.8	1,368
Total	97.5	1.9	13.8	1.3	9.8	5.0	99.3	4,657

The patterns of support for the costs of schooling differed little by gender. Pupils in urban areas were more likely to rely on other sources of support for the monetary costs of schooling in addition to the

household. Sixteen percent of pupils in urban areas received support for school costs through borrowing, while only 5 percent of pupils in rural areas did.

Nearly all pupils in Lusaka Province received support from their parents or households, and they were also most likely among the provinces to receive support from all other sources, with the exception of "the child himself/herself." Thirty-one percent of pupils in Lusaka Province paid for school through borrowing (compared with the national average of 10 percent); 25 percent of them received support from extended family (compared with the national average of 14 percent); 15 percent received a gift from a non-relative (compared with the national average of 5 percent); and 5 percent benefited from a bursary (compared with the national average of 1 percent). In comparison with those in the other provinces, pupils in Northern Province were most likely to provide support for themselves (7 percent).

The percentages of pupils receiving monetary support from borrowing and gifts from non-relatives increased with the wealth of the household: pupils from the wealthiest households were four times more likely to borrow money for schooling and twice as likely to receive gifts as pupils from the poorest quintile. The poorer the pupils' household, the more likely he/she was to provide support for his/her own schooling.

OTHER HOUSEHOLD CONTRIBUTIONS TO SCHOOLING

9

This chapter presents information mainly about non-monetary contributions made to schools and teachers by household members, including the time children spend in school, time spent on homework, parent/guardian visits to schools, and other household contributions. The time household members spend at school, visiting school, working at school to construct or maintain buildings, and so on has value to the household, and this time could alternatively be spent supporting the household in other ways. This chapter quantifies some of these additional household contributions to schooling and discusses patterns of difference across groups.

Time Children Spend on School-related Activities

Table 9.1 presents the distribution of primary school pupils by the amount of time spent on school-related activities on the average school day. This time includes time spent travelling to and from school, time spent in classes and after-class study sessions, and time spent on extracurricular activities such as sports or drama. This time explicitly does not include time spent on homework done outside of school, which is discussed in Section 9.2 below. Because of the difficulty of quantifying how much time is spent on school activities and on homework by children staying at boarding school, this question, as well as the questions used to produce Tables 9.2 and 9.3, were asked only about children who were day pupils at the time the household was interviewed by the ZDES.

On average, primary school pupils in Zambia spend about 5 hours per day on school-related activities. On average, pupils attending the lower primary grades (grades 1, 2, 3 and 4) spend a bit less than 5 hours per day on school activities, and those in the upper primary grades (grade 5, 6 and 7) spend more than 6 hours per day. Only 5 percent of primary school pupils spend more than 8 hours per day on school-related activities.

There are minor differences in the time spent on schooling by urban-rural residence and by province. Pupils in rural areas average about 30 minutes more per day than their urban peers on school and related activities (including travel). Pupils in Central, Southern and Western Provinces spend on average the most time (nearly 6 hours) on school-related activities, while those in Luapula and North-Western Provinces spend the least time (less than five hours).

Table 9.1 Time pupils spend at school

Percent distribution of de jure primary school day pupils by time spent at school per day and by level of schooling, according to school grade and background characteristics, ZDES 2002

Background characteristic	Hours spent at school				Total	Number of day pupils	Mean hours spent at school per day
	Up to 5	More than 5, up to 8	More than 8	DK, missing			
Grade							
1	74.0	22.6	3.1	0.4	100.0	1,167	4.7
2	72.3	24.2	3.0	0.5	100.0	1,167	4.7
3	71.7	24.5	3.7	0.1	100.0	1,020	4.7
4	69.4	26.0	4.4	0.1	100.0	835	4.8
5	25.2	65.7	8.5	0.6	100.0	648	6.1
6	18.2	72.1	9.2	0.5	100.0	524	6.4
7	7.1	85.2	7.7	0.0	100.0	290	6.4
Sex							
Male	59.2	36.2	4.4	0.2	100.0	2,842	5.1
Female	57.5	36.9	5.2	0.4	100.0	2,811	5.2
Residence							
Urban	63.6	33.3	2.7	0.3	100.0	2,183	4.7
Rural	55.0	38.5	6.1	0.4	100.0	3,469	5.3
Province							
Central	44.4	50.3	5.1	0.1	100.0	466	5.7
Copperbelt	60.1	37.5	2.1	0.4	100.0	1,196	4.8
Eastern	57.5	38.2	4.0	0.3	100.0	620	5.1
Luapula	72.3	25.9	1.8	0.0	100.0	395	4.7
Lusaka	62.1	30.1	7.9	0.0	100.0	798	5.0
Northern	56.0	40.3	3.5	0.1	100.0	777	5.2
North-Western	73.1	25.8	1.2	0.0	100.0	310	4.7
Southern	49.2	43.6	5.9	1.3	100.0	715	5.5
Western	59.4	25.9	14.4	0.3	100.0	375	5.5
School type							
Government	57.9	37.5	4.2	0.4	100.0	4,926	5.1
Government-assisted	72.5	24.3	3.2	0.0	100.0	333	4.7
Private	49.5	36.1	14.0	0.4	100.0	376	5.6
Wealth index (quintile)							
Lowest	52.0	40.3	7.4	0.3	100.0	974	5.5
Second	55.5	38.4	5.7	0.5	100.0	906	5.3

Middle	57.7	36.5	5.3	0.6	100.0	1,114	5.2
Fourth	65.0	32.1	2.6	0.3	100.0	1,215	4.8
Highest	59.3	36.6	4.0	0.1	100.0	1,443	4.9
Total	58.3	36.5	4.8	0.3	100.0	5,653	5.1

Homework

Table 9.2 presents information about how much time primary school pupils spent doing homework outside school during the average school week.[41] It should be noted that in addition to the homework done outside school, many pupils might also do homework during the school day. The 2002 ZDES captured this time as time spent on school-related activities, discussed in Section 9.1.

About half (54 percent) of the pupils in primary school do homework outside of school. As might be expected, pupils in the higher primary school grades are more likely than those in the lower grades to do homework. Twenty-three percent of grade 1 pupils do homework, compared with 91 percent of grade 7 pupils. The amount of time spent on homework per week also increased with the grade level, rising from about one-half hour in grade 1 to one and one-half hours in grade 7.

There are no gender differences in the percentage of pupils spending time on homework or the amount of time spent on homework, but there are differences by residence, province, and type of school. Pupils in urban areas are more likely than those in rural areas to do homework outside school (74 versus 42 percent), although the time spent on homework is the same for both groups. Provincial variation is considerable, ranging from nearly eight in ten pupils doing homework in Copperbelt Province to one in four pupils doing homework in North-Western Province and Western Province. Pupils in Northern Province spend the least time on homework (0.5 hours) and those in Southern Province spend the most time (1.4 hours).

While pupils in private, government and government-assisted schools alike spend one hour per week on homework, the percentages of pupils doing homework were not equal. Seventy-one percent of pupils attending private schools spend time on homework, followed by 54 percent of pupils attending government schools and 36 percent of pupils attending government-assisted schools. More striking are the differences by wealth, with 82 percent of the wealthiest pupils and 31 percent of the poorest pupils doing homework outside school.

In addition to the time children spend doing homework, other household members may spend time helping children with homework (see Table 9.3). Among primary school pupils doing homework outside school, most (86 percent) pupils received assistance with homework from someone in the household. There is little difference by sex in the percentage of pupils receiving assistance. Urban-rural differences at the primary level are moderate, with 81 percent of pupils in rural areas and 91 percent of pupils in urban areas receiving assistance. Pupils in Central, Copperbelt and Lusaka Provinces are more likely than those in the remaining provinces to receive assistance with homework. The differences in the percentages of pupils who received assistance with homework by school type were minor.

The wealthier the pupil's household, the more likely he or she is to receive assistance from someone in the household. Ninety-three percent of the pupils in the wealthiest quintile receive homework assistance, compared with 76 percent of pupils in the poorest quintile.

[41] Time spent at study sessions at school is not included. Only time spent studying at home, at a library, at friends' or relatives' homes, and at other non-school sites is included.

Table 9.2 Time pupils spend on homework

Percent distribution of de jure primary school day pupils by whether pupils do homework outside school and time spent per week on homework and by level of schooling, according to school grade and background characteristics, ZDES 2002

Background characteristic	No homework	Hours spent on homework per week: Up to 3	4	More than 4	DK/ missing	Total	Number of day pupils	Mean hours spent on homework per week
Grade								
1	77.0	22.6	0.0	0.2	0.1	100.0	1,167	0.5
2	57.5	41.2	0.2	1.0	0.1	100.0	1,167	0.7
3	43.7	53.3	0.6	1.7	0.7	100.0	1,020	0.9
4	33.4	63.3	0.4	2.5	0.5	100.0	835	1.0
5	24.5	71.4	1.3	2.7	0.1	100.0	648	1.0
6	17.9	76.1	1.5	4.0	0.5	100.0	524	1.2
7	8.6	83.7	1.8	5.4	0.5	100.0	290	1.5
Sex								
Male	45.6	52.1	0.4	1.6	0.3	100.0	2,842	0.9
Female	45.5	51.3	0.7	2.2	0.3	100.0	2,811	1.0
Residence								
Urban	25.5	70.0	0.9	3.2	0.3	100.0	2,183	1.0
Rural	58.1	40.1	0.4	1.0	0.3	100.0	3,469	0.9
Province								
Central	44.1	54.5	0.1	0.7	0.6	100.0	466	0.7
Copperbelt	20.5	74.9	0.6	3.7	0.3	100.0	1,196	0.9
Eastern	55.5	43.9	0.3	0.3	0.0	100.0	620	1.1
Luapula	49.0	46.1	0.3	4.7	0.0	100.0	395	1.2
Lusaka	33.0	63.2	1.0	2.4	0.5	100.0	798	1.0
Northern	46.8	52.0	0.7	0.5	0.0	100.0	777	0.5
North-Western	74.9	23.5	1.2	0.1	0.3	100.0	310	1.3
Southern	62.0	35.2	0.8	1.3	0.7	100.0	715	1.4
Western	75.4	22.5	0.0	1.3	0.8	100.0	375	0.9
School type								
Government	45.5	51.7	0.6	1.9	0.4	100.0	4,926	1.0
Government-assisted	64.2	35.3	0.0	0.5	0.0	100.0	333	0.9
Private	28.9	66.9	0.8	3.4	0.0	100.0	376	1.0

Wealth index (quintile)								
Lowest	68.3	30.9	0.2	0.3	0.3	100.0	974	0.8
Second	65.0	33.4	0.5	0.7	0.4	100.0	906	0.8
Middle	53.3	45.2	0.3	1.0	0.3	100.0	1,114	0.9
Fourth	39.0	56.6	1.1	2.9	0.3	100.0	1,215	1.1
Highest	17.4	78.1	0.7	3.4	0.3	100.0	1,443	1.0
Total	45.5	51.7	0.6	1.9	0.3	100.0	5,653	1.0

Table 9.3 Household assistance with homework

Among children who have homework, percent distribution of de jure primary school day pupils by whether a household member assists the pupil with homework and the frequency of this assistance and by level of schooling, according to school grade and background characteristics, ZDES 2002

Background characteristic	No assistance provided	Assistance provided			Total	Number of day pupils
		Sometimes	Frequently	DK/missing		
Grade						
1	9.8	55.2	35.0	0.0	100.0	268
2	10.9	57.7	31.4	0.0	100.0	496
3	13.6	61.3	25.1	0.0	100.0	574
4	12.2	66.2	21.1	0.6	100.0	556
5	15.5	68.2	15.1	1.1	100.0	489
6	17.0	65.4	17.6	0.0	100.0	430
7	18.5	67.3	14.2	0.0	100.0	265
Sex						
Male	14.9	63.2	21.7	0.2	100.0	1,546
Female	12.7	63.3	23.7	0.3	100.0	1,533
Residence						
Urban	8.9	61.4	29.3	0.4	100.0	1,626
Rural	19.3	65.3	15.3	0.2	100.0	1,453
Province						
Central	12.6	68.1	19.3	0.0	100.0	260
Copperbelt	8.8	58.2	32.6	0.3	100.0	950
Eastern	17.1	62.1	20.8	0.0	100.0	276
Luapula	30.3	59.0	10.8	0.0	100.0	202
Lusaka	10.6	65.7	23.5	0.2	100.0	535
Northern	16.2	71.2	12.2	0.4	100.0	413
North-Western	17.9	56.8	25.3	0.0	100.0	78
Southern	16.5	71.9	10.8	0.9	100.0	272
Western	18.5	44.6	37.0	0.0	100.0	92
School type						
Government	13.9	64.1	21.7	0.3	100.0	2,685
Government-assisted	16.1	72.0	11.9	0.0	100.0	119
Private	11.7	51.0	37.3	0.0	100.0	267
Wealth index (quintile)						
Lowest	23.8	63.5	12.7	0.0	100.0	309
Second	21.7	67.7	10.6	0.0	100.0	317

Middle	17.2	68.1	14.4	0.2	100.0	520
Fourth	15.1	62.3	22.0	0.6	100.0	741
Highest	6.7	60.5	32.5	0.2	100.0	1,191
Total	13.8	63.3	22.7	0.3	100.0	3,079

Parent/Guardian Involvement at Primary Schools

One measure of parent/guardian or household involvement in children's primary schooling is the frequency with which parent/guardians or other adult household members visit school for various reasons. Table 9.4 presents information on visits made by parent/guardian households to primary schools within the 12 months preceding the interview for the purpose of attending parent-teacher association meetings; attending a celebration, performance or sports event; meeting with a head teacher or teacher; or to collect school forms, such as report cards.[42] It is possible that during a single visit to the school, an adult from a parent/guardian household participated in more than one of the events asked about, perhaps attending a PTA meeting and meeting with the head teacher on that single visit.

[42] Only parent/guardians with one or more children in primary school were asked these questions.

In the 12 months preceding the survey interview, 93 percent of parent/guardians indicated that they or other adult members of their household went to a primary school for one or more of the aforementioned reasons. Adults from parent/guardian households were more likely to have attended a PTA meeting (82 percent) or a meeting with the head teacher or teacher (73 percent) than to have attended a celebration, performance, or sporting event (54 percent) or to have gone to collect forms (47 percent). Although nearly the same percentage of parent/guardians from rural and urban areas said that they or adult members of their household had made one or more visits to a primary school, adults from parent/guardian households in rural areas were more likely than those in urban areas to have attended a school PTA meeting or to have met with a head teacher or teacher. Moreover, adults from parent/guardian households in rural areas were twice as likely to have attended a celebration, performance, or sporting event than those in urban areas (66 percent versus 33 percent). In urban areas, however, adults from parent/guardian households were twice as likely to visit a primary school to collect forms than were those in rural areas (73 percent versus 32 percent).

Table 9.4 Parent/guardian involvement at primary school

Percentage of parent/guardians with one or more de jure children in primary school who have gone to a primary school in the last 12 months for a PTA meeting; a celebration, performance, or sports event; a meeting with a head teacher or teacher; or to collect forms, by background characteristics, ZDES 2002

	Parent/guardian involvement at primary school					
Background characteristic	Attended PTA meeting	Attended celebration, performance, sports event	Attended meeting with head teacher or teacher	Collected forms	One or more visits	Number of parent/guardians
Sex						
Male	85.4	63.7	76.3	45.5	95.3	1,234
Female	79.8	47.9	70.3	48.1	90.8	1,938
Residence						
Urban	77.8	33.1	69.0	73.0	91.6	1,174
Rural	84.3	66.3	74.8	31.9	93.2	1,998
Province						
Central	82.3	60.2	79.7	41.4	90.6	241
Copperbelt	82.1	34.4	70.3	68.2	92.7	628
Eastern	88.4	57.6	82.0	31.9	93.6	371
Luapula	82.0	54.8	79.3	9.1	90.5	249
Lusaka	78.0	34.1	76.5	88.2	96.2	436
Northern	79.0	70.5	62.8	22.7	93.9	468
North-Western	83.4	39.8	83.7	36.2	90.9	171
Southern	80.1	72.0	51.9	26.1	87.7	374
Western	86.0	79.9	87.6	74.4	94.4	235
Wealth index (quintile)						
Lowest	83.0	67.8	72.0	30.7	92.6	607
Second	83.9	65.5	71.4	26.2	91.7	542
Middle	82.7	61.0	74.1	31.9	91.4	641
Fourth	80.6	43.9	73.7	59.5	92.1	657
Highest	80.3	37.0	72.0	78.6	94.7	725

Among provinces, roughly similar percentages (ranging from 88 percent to 96 percent) of parent/guardians indicate that they or other adult household members had made one or more visits to a primary school in the 12 months preceding the survey interview. Similar percentages also attended a PTA meeting (ranging from 78 percent to 88 percent). However, there is considerable variation among provinces in the percentage of adults from parent/guardian households who visited a primary school to collect forms, attend a celebration, performance and sports event, or attend a meeting with the head teacher.

Overall, there is little variation in the level of parent/guardian household involvement at primary school among the wealth quintiles: adults from the poorest parent/guardian households were almost as likely as adults from the wealthiest parent/guardian households to have made one or more visits to a primary school. However, the poorer the parent/guardian household, the more likely an adult member of the household was to have attended a celebration, performance or sports event at the school. The wealthier parent/guardian households (i.e. the fourth and highest quintiles) were more likely to have had an adult member visit a primary school to collect school reports or forms than the poorer parent/guardian households (lowest, second and middle quintiles) were.

Other Contributions to Schooling

Table 9.5 presents information on other parent/guardian household contributions to schools and to teachers over the 12 months prior to the survey interview.[43] Households often contribute additional money to support the construction or maintenance of school buildings and teachers' houses, to pay for the digging and construction of a toilet block, or to support other school projects and activities. Households may provide materials to the school, such as roofing, stone, sand, and other materials. Household members may also donate their labour to schools, working to mould bricks, construct or maintain school buildings, and so on. Some of these same kinds of contributions may be made to school teachers.

[43] Only parent/guardians with one or more children in primary school were asked these questions.

Table 9.5 Other household contributions to schooling

Percentage of parent/guardians whose households have contributed money, materials, or labour to primary schools and/or teachers within the last 12 months, by background characteristics, ZDES 2002

Background characteristic	Contributions to schools				Contributions to teachers				Number of parent/ guardians
	Money	Materi-als	Labour	One or more contribu-tions	Money	Food	Labour	One or more contribu-tions	
Residence									
Urban	20.9	9.7	18.8	35.3	6.4	2.1	5.1	10.8	1,338
Rural	27.5	39.5	72.9	77.0	3.6	12.4	11.1	21.6	2,615
Province									
Central	38.0	35.5	73.5	79.6	6.9	10.3	21.5	30.7	281
Copperbelt	23.7	11.2	18.8	36.7	7.4	2.6	7.9	14.0	708
Eastern	26.3	45.8	82.7	88.1	4.3	10.2	4.3	14.2	552
Luapula	9.6	3.1	56.8	59.9	4.0	8.3	16.4	25.0	335
Lusaka	14.4	10.7	26.3	37.0	3.2	1.7	5.2	8.4	517
Northern	22.5	47.3	74.6	80.0	5.8	17.1	15.5	28.4	574
North-Western	5.1	8.1	51.0	52.2	0.6	2.8	2.4	4.9	208
Southern	39.4	42.5	59.8	69.8	3.1	9.7	6.8	16.3	448
Western	47.4	56.8	70.2	73.9	1.5	19.5	3.6	22.2	330
Wealth index (quintile)									
Lowest	28.3	44.1	76.0	78.9	2.3	11.1	7.2	17.5	901
Second	28.1	43.7	76.9	80.3	3.6	13.3	12.9	23.5	725
Middle	23.5	29.7	66.2	71.2	4.4	10.0	12.3	21.2	792
Fourth	23.4	18.1	36.9	48.0	6.6	6.6	9.0	16.8	760
Highest	22.7	9.8	14.2	34.1	6.1	3.3	4.4	11.1	776
Total	25.3	29.4	54.5	62.9	4.5	8.9	9.1	18.0	3,953

Overall, 63 percent of parent/guardian households made one or more contributions (of money, materials, or labour) to primary schools in the 12 months prior to the survey interview. A much smaller proportion of parent/guardian households (18 percent) contributed money, food, or labour to primary school teachers.

There are notable urban-rural differences in the percentage of parent/guardian households making contributions to schools. Parent/guardian households in rural areas are more than twice as likely as those in urban areas to have made one or more contributions to schools (77 versus 35 percent) and to teachers (22 versus 11 percent). Parent/guardian households in rural areas were much more likely to have contributed labour (73 percent) to schools than materials (40 percent) and money (28 percent). Parent/

guardian households in urban areas were more likely to have contributed money (21 percent) or labour (19 percent) to schools than materials (10 percent).

Parent/guardian households in Eastern (88 percent), Central (80 percent), Northern (80 percent), Western (74 percent), and Southern (70 percent) Provinces were more likely than the other provinces to have made one or more cost contributions to schools.

The wealthiest parent/guardian households were the least likely to have made a contribution to the school: 34 percent of parent/guardian households in the wealthiest quintile contributed one or more inputs to schools, compared with 79 percent of the parent/guardian households in the poorest quintile.

PERCEIVED SCHOOL QUALITY 10

This chapter presents information on parent/guardians' perceptions of the quality of the schools that their children attend, as well as on various education policies, such as uniform requirements and discipline. Perceptions of school quality may well influence parent/guardians' willingness to send children to school or to keep them in school through the end of primary school and beyond.

Presence of PTAs

Table 10.1 shows the percentage of parent/guardians whose children attended schools that have or do not have Parent-Teacher Associations (PTA), by background characteristics. PTAs are not mandatory, but are encouraged by the Ministry of Education.

Ninety-four percent of respondents said there are PTAs at the schools their children attend (see Table 10.1). Eighty-nine percent of parent/guardians in urban areas and 96 percent of parent/guardians in rural areas said there are PTAs at the schools their children attend. Among the provinces, parent/guardians in Lusaka Province (84 percent) are the least likely to say there are PTAs at the schools their

Table 10.1 Parent-teacher association (PTA)

Percent distribution of parent/guardians by presence of PTA in the school attended by their children, according to background characteristics, ZDES 2002

Background characteristic	PTA at school	No PTA at school	DK/ missing	Total	Number of parent/ guardians
Residence					
Urban	89.2	6.2	4.5	100.0	1,174
Rural	96.4	2.3	1.4	100.0	1,998
Province					
Central	93.9	2.7	3.5	100.0	241
Copperbelt	92.4	4.5	3.1	100.0	628
Eastern	97.5	1.4	1.1	100.0	371
Luapula	94.6	2.5	2.9	100.0	249
Lusaka	84.4	9.7	5.9	100.0	436
Northern	98.0	0.8	1.2	100.0	468
North-Western	94.0	5.5	0.5	100.0	171
Southern	94.7	3.1	2.2	100.0	374
Western	97.4	2.1	0.4	100.0	235
Wealth index (quintile)					
Lowest	97.1	1.7	1.2	100.0	607
Second	96.5	2.0	1.6	100.0	542
Middle	93.6	4.0	2.4	100.0	641
Fourth	87.5	7.4	5.1	100.0	657
Highest	94.6	3.2	2.2	100.0	725

children attend, while parent/guardians in Northern Province (98 percent) are the most likely to say there are PTAs.

School Facilities

Parent/guardians were asked whether they agreed or disagreed that in order for a primary school to be a good school, its buildings had to be permanent structures (see Table 10.2). Virtually all (99 percent) parent/guardians agreed that a good school had to have permanent buildings, and differences by the parent/guardians' gender, urban-rural residence, and wealth are minimal.

Table 10.2 Importance of permanent school buildings

Percent distribution of parent/guardians by whether they agree or disagree that all school buildings must be permanent structures in order for a school to be a good school, according to background characteristics, ZDES 2002

Background characteristic	Must have permanent buildings			Total	Number of parent/ guardians
	Agree	Disagree	DK/missing		
Sex					
Male	99.4	0.6	0.0	100.0	1,513
Female	98.7	1.3	0.0	100.0	2,440
Residence					
Urban	98.1	1.9	0.0	100.0	1,338
Rural	99.4	0.5	0.0	100.0	2,615
Province					
Central	99.3	0.7	0.0	100.0	281
Copperbelt	99.5	0.5	0.0	100.0	708
Eastern	99.6	0.4	0.0	100.0	552
Luapula	98.8	0.9	0.3	100.0	335
Lusaka	94.8	5.2	0.0	100.0	517
Northern	99.8	0.2	0.0	100.0	574
North-Western	100.0	0.0	0.0	100.0	208
Southern	99.7	0.3	0.0	100.0	448
Western	100.0	0.0	0.0	100.0	330
Wealth index (quintile)					
Lowest	99.6	0.4	0.0	100.0	901
Second	99.3	0.6	0.1	100.0	725
Middle	100.0	0.0	0.0	100.0	792
Fourth	97.3	2.7	0.0	100.0	760
Highest	98.5	1.5	0.0	100.0	776
Total	99.0	1.0	0.0	100.0	3,953

Parent/guardians were also asked about their perceptions of whether the schools their children attend have big, small, or no problems with school buildings and facilities, classroom overcrowding, and pupil safety at school (see Table 10.3). Overall, the majority of primary school pupils attend schools that their parent/guardians consider to have relatively few problems, although parent/guardians' perceptions vary with the type of problem. Forty-three percent of pupils attend schools that their parent/guardians think have problems (both large and small) with school buildings and facilities, while 30 percent of pupils

Table 10.3 Perceived problems with primary school buildings and facilities, classroom overcrowding, and pupil safety

Percent distribution of public and non-public school pupils by parents'/guardians' perceptions of problems with primary school buildings and facilities, classroom overcrowding, and pupil safety, according to background characteristics, ZDES 2002

	School buildings and facilities					Classroom overcrowding					Pupil safety					
Background characteristic	Big problem	Small problem	No problem	DK/ missing	Total	Big problem	Small problem	No problem	DK/ missing	Total	Big problem	Small problem	No problem	DK/ missing	Total	Number of pupils
Residence																
Urban	14.1	11.2	72.7	2.0	100.0	17.9	9.8	64.4	8.0	100.0	2.0	3.1	93.6	1.3	100.0	2,192
Rural	42.4	11.6	44.6	1.4	100.0	23.5	8.5	63.2	4.8	100.0	3.7	2.5	92.0	1.8	100.0	3,484
Province																
Central	46.5	7.9	44.7	1.0	100.0	31.7	5.3	57.1	5.9	100.0	10.0	3.0	86.3	0.7	100.0	466
Copperbelt	15.4	10.8	71.4	2.3	100.0	19.0	9.8	62.7	8.5	100.0	0.5	1.5	95.9	2.0	100.0	1,206
Eastern	49.6	22.9	27.3	0.2	100.0	30.1	12.2	54.0	3.6	100.0	3.1	1.8	94.2	0.8	100.0	623
Luapula	40.3	5.2	54.2	0.3	100.0	31.7	9.4	56.0	2.9	100.0	2.1	0.8	96.9	0.3	100.0	395
Lusaka	13.1	13.3	71.2	2.4	100.0	17.1	13.7	59.7	9.4	100.0	3.2	7.3	87.9	1.6	100.0	803
Northern	38.1	12.7	48.2	1.1	100.0	14.6	9.6	68.9	6.9	100.0	2.8	2.2	93.5	1.4	100.0	780
North-Western	26.2	10.0	60.9	2.9	100.0	12.0	5.5	78.5	4.0	100.0	6.2	3.3	85.9	4.6	100.0	310
Southern	43.9	4.6	48.9	2.6	100.0	28.9	3.3	63.1	4.8	100.0	3.0	1.5	93.4	2.1	100.0	718
Western	30.7	13.4	55.3	0.5	100.0	7.0	7.5	85.0	0.5	100.0	1.3	2.9	94.9	0.8	100.0	375
School type																
Government	30.8	12.0	55.6	1.5	100.0	20.6	9.0	64.0	6.4	100.0	2.7	2.7	93.0	1.6	100.0	4,936
Government-assisted	53.8	6.6	38.7	0.9	100.0	42.8	8.5	46.7	2.0	100.0	6.7	1.1	91.3	0.8	100.0	333
Private	20.0	8.7	69.4	2.0	100.0	11.8	9.9	75.1	3.2	100.0	4.2	4.4	90.3	1.2	100.0	388
Wealth index (quintile)																

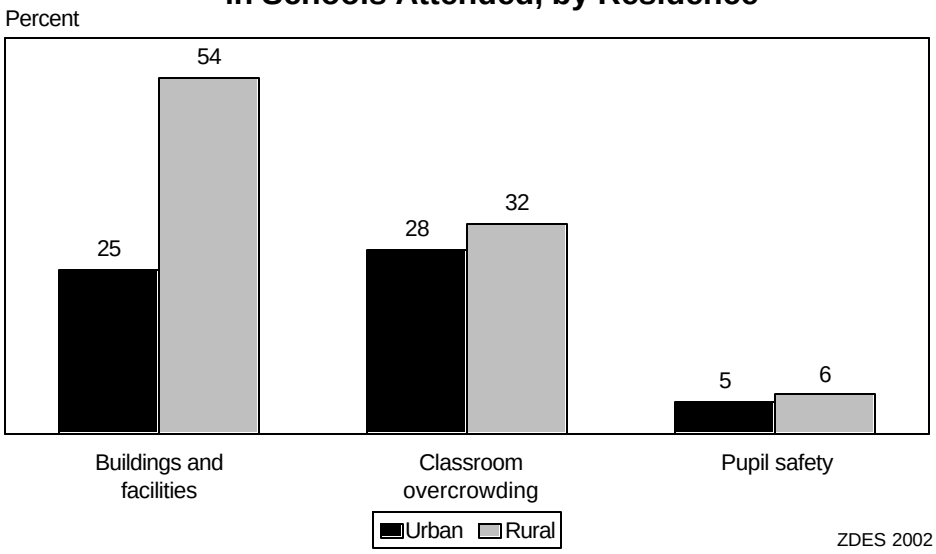
Lowest	43.5	11.6	44.1	0.8	100.0	23.3	8.8	65.2	2.7	100.0	3.7	3.1	92.4	0.8	100.0	974
Second	44.8	11.1	42.3	1.9	100.0	23.0	8.4	62.1	6.5	100.0	4.2	2.1	91.5	2.2	100.0	908
Middle	41.0	10.2	47.6	1.2	100.0	21.3	8.4	65.0	5.3	100.0	3.8	1.5	92.9	1.8	100.0	1,122
Fourth	23.9	11.6	62.8	1.7	100.0	24.0	8.7	60.3	6.9	100.0	2.0	3.9	92.1	2.1	100.0	1,218
Highest	14.0	12.4	71.3	2.2	100.0	16.7	10.2	65.3	7.8	100.0	2.3	2.9	93.7	1.2	100.0	1,454
Total	31.4	11.5	55.5	1.6	100.0	21.3	9.0	63.6	6.0	100.0	3.1	2.7	92.6	1.6	100.0	5,676

attend schools that their parent/guardians think have problems with classroom overcrowding. Only 6 percent of pupils attend school that their parent/guardians think have a problem with pupil safety.

Parent/guardians' perceptions of problems at the schools their children attend differ by the type of school pupils attend. Sixty percent of pupils attending government-assisted schools attend schools with perceived problems with school buildings and facilities, compared to 43 percent of pupils attending government schools and 29 percent of pupils attending private schools. Similarly, 51 percent of pupils attending government-assisted schools attend schools with perceived problems with overcrowding, compared to 30 percent of pupils attending government schools and 22 percent of pupils attending private schools.

In the case of problems with buildings and facilities, there is a notable urban-rural difference: pupils in rural areas are twice as likely as pupils in urban areas to attend schools with perceived problems with buildings and facilities (54 percent versus 25 percent). The rural-urban gap disappears, however, for problems with overcrowding and with pupil safety (see Figure 10.1).

Figure 10.1
Percentage of Primary School Pupils Whose Parent/Guardians Perceive Problems (Big or Small) in Schools Attended, by Residence



There are substantial provincial variations in perceived problems. For example, in Lusaka and Copperbelt Provinces, 71 percent of pupils in each province attend schools with no perceived problems with buildings and facilities, while in Eastern Province nearly the same percentage of pupils (73 percent) attend schools with perceived big and small problems with buildings and facilities. Only 15 percent of pupils in Western Province attend schools with perceived problems with overcrowding, compared to 42 percent of pupils in Eastern Province. Pupils in Central Province and North-Western Province (10 percent and 6 percent, respectively) are more likely to attend schools that parent/guardians perceive have big problems with safety, compared to the national average (3 percent).

School Policies

Parent/guardians were asked their opinion about whether requiring pupils to wear uniforms improved primary school quality, had no effect, or worsened school quality (see Table 10.4). Parent/

guardians (95 percent) overwhelmingly agreed that having pupils wear uniforms improved the quality of a school. This view was held by most parent/guardians regardless of sex or residence. In 2002, the MOE declared that wearing uniforms in school was not compulsory.

Table 10.4 Importance of required uniforms

Percent distribution of parent/guardians by perceived effect of requiring pupils to wear uniforms on school quality, according to background characteristics, ZDES 2002

Background characteristic	Effect of uniform requirement on school quality				Total	Number of parent/ guardians
	Better	No effect	Worse	DK/ missing		
Sex						
Male	94.1	4.1	1.9	0.0	100.0	1,513
Female	96.2	2.7	1.1	0.1	100.0	2,440
Residence						
Urban	94.2	4.7	1.1	0.0	100.0	1,338
Rural	96.0	2.4	1.5	0.1	100.0	2,615
Province						
Central	95.9	2.1	1.8	0.2	100.0	281
Copperbelt	93.3	6.5	0.2	0.0	100.0	708
Eastern	98.1	1.9	0.0	0.0	100.0	552
Luapula	92.3	1.5	5.9	0.3	100.0	335
Lusaka	92.3	6.5	1.2	0.0	100.0	517
Northern	92.3	4.2	3.5	0.0	100.0	574
North-Western	99.0	0.8	0.2	0.0	100.0	208
Southern	99.7	0.0	0.3	0.0	100.0	448
Western	100.0	0.0	0.0	0.0	100.0	330
Wealth index (quintile)						
Lowest	97.6	1.7	0.8	0.0	100.0	901
Second	95.8	2.3	1.8	0.1	100.0	725
Middle	93.7	3.3	2.9	0.1	100.0	792
Fourth	94.8	4.3	0.9	0.0	100.0	760
Highest	94.8	4.6	0.6	0.0	100.0	776
Total	95.4	3.2	1.4	0.0	100.0	3,953

The Ministry of Education has officially prohibited corporal punishment, encouraging other ways to enforce discipline such as digging, cleaning, and so on. The majority of parent/guardians (72 percent), however, maintain that caning pupils to enforce discipline improves school quality (see Table 10.5). Sixteen percent of parent/guardians said that caning students negatively affected school quality, while 12 percent said that caning had no effect on school quality. Male and female parent/guardians' perceptions do not differ appreciably, but a higher percentage of parent/guardians in rural areas (76 percent) than in urban areas (64 percent) said caning had a positive effect on school quality. Eighty-six percent of parent/guardians in Western Province think that caning improves school quality, compared with 61 percent in Copperbelt Province. The wealthier the parent/guardian, the less likely he or she is to think caning pupils improves school quality: the wealthiest parent/guardians were twice as likely as the poorest parent/guardians to say that caning had a detrimental effect on school quality (24 percent versus 11 percent).

Table 10.5 Importance of caning pupils to maintain discipline

Percent distribution of parent/guardians by perceived effect of caning pupils to maintain discipline on school quality, according to background characteristics, ZDES 2002

Background characteristic	Effect of caning pupils on school quality				Total	Number of parent/ guardians
	Better	No effect	Worse	DK/ missing		
Sex						
Male	69.9	13.2	16.8	0.1	100.0	1,513
Female	72.9	11.0	15.9	0.3	100.0	2,440
Residence						
Urban	64.0	15.2	20.5	0.3	100.0	1,338
Rural	75.7	10.1	14.1	0.1	100.0	2,615
Province						
Central	77.8	13.0	8.9	0.2	100.0	281
Copperbelt	60.7	19.1	20.2	0.0	100.0	708
Eastern	78.2	3.7	18.1	0.0	100.0	552
Luapula	68.5	10.5	21.0	0.0	100.0	335
Lusaka	71.7	10.9	17.1	0.2	100.0	517
Northern	63.1	19.2	17.4	0.3	100.0	574
North-Western	63.8	17.1	18.9	0.2	100.0	208
Southern	84.3	7.9	7.1	0.8	100.0	448
Western	85.7	0.9	13.4	0.0	100.0	330
Wealth index (quintile)						
Lowest	80.7	7.9	11.4	0.0	100.0	901
Second	76.7	8.9	14.2	0.1	100.0	725
Middle	72.4	10.8	16.4	0.4	100.0	792
Fourth	69.2	14.4	16.0	0.4	100.0	760
Highest	58.5	17.7	23.8	0.0	100.0	776
Total	71.7	11.8	16.2	0.2	100.0	3,953

Parent/guardians were also asked about their perceptions of whether the schools their children attend have big, small, or no problems with head teacher performance and with teacher performance (see Table 10.6). In general, about three in four pupils attend schools that their parent/guardians perceive have no problems with head teacher performance (76 percent) or with teacher performance (73 percent). Only 16 percent of pupils attend schools with perceived problems (big and small) with head teacher performance, and 25 percent attend schools with perceived problems with teacher performance. Pupils in

private schools are less likely than those in either government schools or government-assisted schools to attend schools their parent/guardians consider to have problems with head teacher performance.

There are also variations in parent/guardian perceptions of head teacher performance and of teacher performance by residence, province and wealth. Thirteen percent of parent/guardians in rural areas perceive big problems with head teacher performance, compared to 8 percent of parents in urban areas. Similarly, 13 percent of the poorest parent/guardians perceive big problems with head teacher performance, compared to 9 percent of the wealthiest parent/guardians. Only 4 percent of pupils in Western Province attend schools where head teacher performance is perceived as a big problem, compared with 17 percent of pupils in Luapula Province, Central Province, and Southern Province.

Table 10.6 Perceived problems with primary school head teacher and teacher performance

Percent distribution of public and non-public school pupils by parents'/guardians' perceptions of problems with primary school head teacher and teacher performance, according to background characteristics, ZDES 2002

	Head teacher performance					Teacher performance					
Background characteristic	Big problem	Small problem	No problem	DK/ missing	Total	Big problem	Small problem	No problem	DK/ missing	Total	Number of pupils
Residence											
Urban	8.4	4.9	78.4	8.4	100.0	16.2	11.4	70.1	2.2	100.0	2,192
Rural	12.7	5.5	75.1	6.7	100.0	15.9	7.8	74.0	2.3	100.0	3,484
Province											
Central	16.7	3.6	75.5	4.1	100.0	19.9	5.1	74.0	1.0	100.0	466
Copperbelt	9.6	5.3	76.5	8.6	100.0	17.8	11.2	68.0	3.0	100.0	1,206
Eastern	5.6	7.6	78.7	8.1	100.0	13.2	11.9	73.5	1.5	100.0	623
Luapula	17.3	1.8	76.2	4.7	100.0	23.6	6.8	68.3	1.3	100.0	395
Lusaka	7.8	5.4	76.0	10.7	100.0	13.1	15.0	70.9	1.0	100.0	803
Northern	13.3	6.5	75.2	5.1	100.0	18.4	9.5	69.4	2.6	100.0	780
North-Western	9.6	3.7	78.7	7.9	100.0	12.7	9.4	71.6	6.3	100.0	310
Southern	16.7	4.4	69.5	9.3	100.0	15.2	4.6	76.9	3.3	100.0	718
Western	3.5	6.7	88.0	1.9	100.0	7.8	1.6	89.8	0.8	100.0	375
School type											
Government	11.6	5.3	76.0	7.1	100.0	16.2	9.7	72.0	2.1	100.0	4,936
Government-assisted	8.9	7.4	75.4	8.3	100.0	17.7	4.3	76.3	1.6	100.0	333
Private	5.0	3.4	83.5	8.0	100.0	11.8	8.0	77.4	2.9	100.0	388
Wealth index (quintile)											
Lowest	12.9	5.4	75.0	6.7	100.0	13.0	6.9	77.5	2.6	100.0	974
Second	13.5	4.7	74.3	7.5	100.0	19.8	5.8	71.4	3.1	100.0	908
Middle	9.9	5.8	78.1	6.2	100.0	15.7	7.9	74.8	1.5	100.0	1,122
Fourth	11.8	5.1	75.9	7.3	100.0	13.9	9.8	74.3	2.0	100.0	1,218
Highest	8.5	5.3	77.7	8.6	100.0	17.7	13.4	66.5	2.4	100.0	1,454
Total	11.0	5.2	76.4	7.3	100.0	16.0	9.2	72.5	2.3	100.0	5,676

Curriculum

Parent/guardian respondents were asked whether they agreed or disagreed that primary schools should teach more practical skills, such as carpentry or sewing (see Table 10.7). Most parent/guardians

(94 percent) agreed that schools should teach more practical skills than they do at present. Differences in responses by backgrounds characteristics were minor.

Table 10.7 Importance of learning practical skills in primary school

Percent distribution of parent/guardians by whether they agree or disagree that primary schools should teach more practical skills, according to background characteristics, ZDES 2002

Background characteristic	Primary schools should teach more practical skills				Number of parent/ guardians
	Agree	Disagree	DK/missing	Total	
Sex					
Male	94.9	4.4	0.8	100.0	1,513
Female	93.4	5.9	0.7	100.0	2,440
Residence					
Urban	91.3	8.1	0.6	100.0	1,338
Rural	95.3	3.9	0.8	100.0	2,615
Province					
Central	98.4	1.6	0.0	100.0	281
Copperbelt	91.6	8.4	0.0	100.0	708
Eastern	92.2	7.6	0.2	100.0	552
Luapula	96.9	2.8	0.3	100.0	335
Lusaka	90.3	8.4	1.2	100.0	517
Northern	98.7	1.0	0.3	100.0	574
North-Western	96.3	3.7	0.0	100.0	208
Southern	87.9	8.1	3.9	100.0	448
Western	99.4	0.3	0.3	100.0	330
Wealth index (quintile)					
Lowest	95.0	4.1	0.9	100.0	901
Second	95.9	3.5	0.6	100.0	725
Middle	94.1	5.0	0.9	100.0	792
Fourth	94.0	5.1	1.0	100.0	760
Highest	90.8	8.9	0.3	100.0	776
Total	94.0	5.3	0.7	100.0	3,953

Parental Involvement

Parent/guardian respondents were asked whether having parents actively involved in a primary school improved school quality, had no effect, or made a school worse. Ninety-three percent of parent/ guardians agreed that parental involvement made a school better, while 5 percent said it had no effect, and only 1 percent said it worsened school quality (see Table 10.8).

There are notable provincial variations in the parent/guardians' perceptions of the effect of parental involvement. Among provinces, parent/guardians in Eastern Province (99 percent) and Central Province (98 percent) are mostly likely to say parental involvement has a positive effect on school quality, while parent/guardians (76 percent) in Luapula Province are the least likely to say so. However, in no province do more than 2percent of parent/guardians think parental involvement worsens school quality.

Table 10.8 Importance of parents being actively involved in school

Percent distribution of parent/guardians by perceived effect of parents being actively involved in the school on school quality, according to background characteristics, ZDES 2002

Background characteristic	Effect of parental involvement on school quality				Total	Number of parent/ guardians
	Better	No effect	Worse	DK/ missing		
Sex						
Male	94.0	5.0	0.8	0.2	100.0	1,513
Female	92.7	5.6	1.3	0.4	100.0	2,440
Residence						
Urban	93.2	5.2	1.4	0.2	100.0	1,338
Rural	93.1	5.5	1.0	0.4	100.0	2,615
Province						
Central	97.5	1.8	0.5	0.2	100.0	281
Copperbelt	93.5	4.9	1.4	0.2	100.0	708
Eastern	99.3	0.7	0.0	0.0	100.0	552
Luapula	76.2	21.3	2.2	0.3	100.0	335
Lusaka	94.8	4.0	1.2	0.0	100.0	517
Northern	97.0	1.8	1.3	0.0	100.0	574
North-Western	82.9	15.0	2.2	0.0	100.0	208
Southern	97.1	0.5	0.3	2.1	100.0	448
Western	87.8	10.0	2.1	0.0	100.0	330
Wealth index (quintile)						
Lowest	92.3	6.2	1.2	0.3	100.0	901
Second	92.6	5.6	1.1	0.7	100.0	725
Middle	93.5	5.4	0.7	0.4	100.0	792
Fourth	92.1	6.4	1.4	0.2	100.0	760
Highest	95.4	3.2	1.3	0.2	100.0	776
Total	93.2	5.4	1.1	0.3	100.0	3,953

PERCEIVED VALUE OF SCHOOLING 11

This chapter provides information on parent/guardian perceptions of the importance of post-primary schooling, of the benefits of schooling, and of the disadvantages of schooling. Parent/guardian attitudes about schooling may affect the likelihood of sending their children to school and keeping children in school through the end of the primary cycle, as well as the likelihood of children continuing to secondary school. The data presented below provide some insight into parent/guardian opinions on schooling.

Importance of Schooling

Parent/guardians were asked whether they agreed or disagreed with the following statement: Girls do not need more than a primary school education. This question was followed by a similar question about boys' schooling to determine whether respondents perceived girls' and boys' needs for post-primary schooling differently.

Parent/guardians almost unanimously disagreed that girls (98 percent) and boys (99 percent) do not need more than a primary school education (see Tables 11.1 and 11.2). Differences by background characteristics are trivial.

Table 11.1 Importance of schooling for boys

Percent distribution of parent/guardians by whether they agree or disagree that boys do not need more than primary school education, according to background characteristics, ZDES 2002

Background characteristic	Boys do not need more than a primary school education			Total	Number of parent/guardians
	Agree	Disagree	DK/ missing		
Sex					
Male	0.2	99.5	0.3	100.0	1,513
Female	0.8	99.1	0.0	100.0	2,440
Residence					
Urban	0.8	99.2	0.0	100.0	1,338
Rural	0.5	99.3	0.2	100.0	2,615
Province					
Central	0.0	100.0	0.0	100.0	281
Copperbelt	0.7	99.3	0.0	100.0	708
Eastern	0.2	99.6	0.2	100.0	552
Luapula	1.5	98.5	0.0	100.0	335
Lusaka	1.2	98.8	0.0	100.0	517
Northern	0.3	99.7	0.0	100.0	574
North-Western	0.4	99.4	0.2	100.0	208
Southern	0.5	98.7	0.8	100.0	448
Western	0.3	99.7	0.0	100.0	330
Wealth index (quintile)					
Lowest	0.5	99.5	0.0	100.0	901
Second	0.9	98.8	0.3	100.0	725
Middle	0.1	99.7	0.1	100.0	792
Fourth	0.3	99.5	0.2	100.0	760
Highest	1.1	98.9	0.0	100.0	776

Table 11.2 Importance of schooling for girls

Percent distribution of parent/guardians by whether they agree or disagree that girls do not need more than primary school education, according to background characteristics, ZDES 2002

Background characteristic	Girls do not need more than a primary school education			Total	Number of parent/ guardians
	Agree	Disagree	DK/missing		
Sex					
Male	1.2	98.5	0.3	100.0	1,513
Female	1.6	98.4	0.0	100.0	2,440
Residence					
Urban	1.5	98.5	0.0	100.0	1,338
Rural	1.4	98.4	0.2	100.0	2,615
Province					
Central	0.5	99.5	0.0	100.0	281
Copperbelt	1.4	98.6	0.0	100.0	708
Eastern	2.6	97.4	0.0	100.0	552
Luapula	2.2	97.5	0.3	100.0	335
Lusaka	2.7	97.3	0.0	100.0	517
Northern	1.0	99.0	0.0	100.0	574
North-Western	0.4	99.6	0.0	100.0	208
Southern	0.8	98.4	0.8	100.0	448
Western	0.0	100.0	0.0	100.0	330
Wealth index (quintile)					
Lowest	1.6	98.3	0.1	100.0	901
Second	1.7	97.9	0.3	100.0	725
Middle	1.0	98.9	0.1	100.0	792
Fourth	1.1	98.9	0.0	100.0	760
Highest	1.7	98.3	0.0	100.0	776
Total	1.4	98.4	0.1	100.0	3,953

Benefits of Schooling

This section of the chapter presents parent/guardians' opinions on the benefits of schooling. Parent/guardians were asked to consider a 15-year-old boy who had completed primary school and who had left school thereafter and to consider a boy of the same age who had never attended school. Next, parent/guardians were asked what advantages, if any, the boy who finished primary school had over the boy who had never attended school. This question was followed by a similar question about girls.

Because parent/guardians could list numerous benefits, the percentages in Tables 11.3 and 11.4 do not add to 100 percent.[44]

Overwhelmingly, parent/guardians consider primary schooling to be beneficial. Only 2 percent of the parent/guardian respondents said that a boy or a girl who completed primary school has no advantage over a boy or a girl of the same age who had never attended school (see Tables 11.3 and 11.4). However,

[44] Parent/guardians were not asked to answer 'yes' or 'no' to specific benefits, but instead were asked to list benefits without prompting. The interviewer then recorded the benefits listed by the respondent.

Table 11.3 Perceived benefits of primary school completion for boys

Percentage of parent/guardians who perceive specific benefits to completing primary school for a 15-year-old boy, according to background characteristics, ZDES 2002

	Perceived benefits of primary school completion for boys													
			Economic benefits		Academic skills					Skills for life				
Background characteristic	No benefits	Chance to go to secondary school	Find a better job	Provide support to household/ parents	Literacy	Learn languages	Numeracy	Critical thinking	Vocational/ technical	Morals/ values	Make a better marriage	Be a better parent	Other	Number of parent/ guardians
Sex														
Male	1.4	7.6	39.8	12.8	87.8	18.8	20.2	34.9	18.2	31.7	0.8	2.7	4.3	1,513
Female	2.2	6.5	42.4	13.3	85.0	14.1	16.1	29.9	14.7	28.9	1.0	3.2	3.8	2,440
Residence														
Urban	3.7	8.8	34.8	9.9	81.0	23.1	14.7	34.8	18.1	27.8	0.7	1.4	3.6	1,338
Rural	1.0	6.0	44.7	14.8	88.7	12.2	19.2	30.3	15.0	31.1	1.1	3.8	4.2	2,615
Province														
Central	0.9	3.7	43.9	15.8	86.5	9.6	11.0	33.2	16.0	45.3	1.1	3.9	0.7	281
Copperbelt	4.9	6.0	23.0	2.1	80.5	21.6	13.0	41.2	20.5	12.6	0.7	0.9	4.2	708
Eastern	1.3	5.8	51.8	12.7	88.8	13.8	7.6	56.2	8.8	48.2	1.7	2.6	2.6	552
Luapula	0.9	6.5	61.1	15.1	87.3	3.4	40.7	13.6	9.9	21.3	0.0	5.9	6.5	335
Lusaka	3.0	11.7	48.6	19.1	76.2	30.5	8.4	33.0	20.3	41.9	1.0	1.2	4.2	517
Northern	1.3	7.5	26.7	15.3	95.8	21.2	24.8	39.9	21.1	23.6	1.6	7.3	4.8	574
North-Western	0.2	15.9	36.4	24.0	87.8	17.1	21.9	9.3	2.6	20.1	1.0	3.3	7.1	208
Southern	0.5	4.2	49.9	18.1	86.1	9.2	12.3	15.5	12.1	37.8	0.8	2.6	5.0	448
Western	0.3	3.6	47.1	6.7	89.4	1.5	33.4	8.5	23.4	20.4	0.0	0.0	0.9	330

Wealth index (quintile)														
Lowest	0.9	5.4	50.7	16.6	86.7	9.2	19.2	26.7	12.5	30.4	1.2	3.1	1.8	901
Second	1.0	5.5	41.9	14.5	89.6	11.7	19.2	30.4	15.3	31.0	0.8	4.3	4.3	725
Middle	1.0	6.9	43.2	14.7	89.2	14.4	19.9	29.1	16.8	29.0	1.2	4.8	4.7	792
Fourth	2.0	7.3	42.7	12.5	84.7	19.5	15.7	31.7	17.6	32.2	0.9	1.7	5.0	760
Highest	4.6	9.8	27.0	6.9	80.3	25.6	14.2	42.0	18.4	27.4	0.5	1.2	4.4	776
Total	1.9	6.9	41.4	13.1	86.1	15.9	17.7	31.8	16.0	30.0	0.9	3.0	4.0	3,953

Table 11.4 Perceived benefits of primary school completion for girls

Percentage of parent/guardians who perceive specific benefits to completing primary school for a 15-year-old girl, according to background characteristics, ZDES 2002

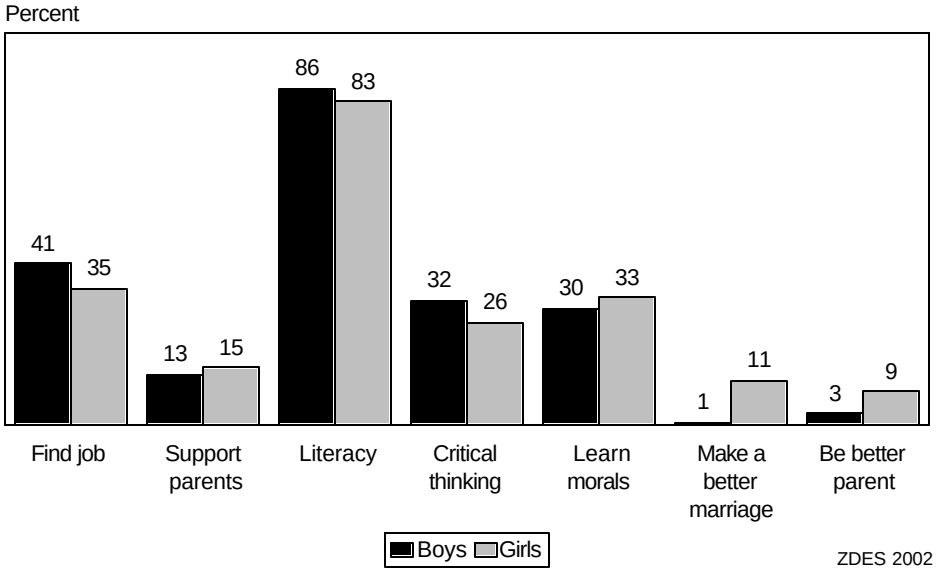
	Perceived benefits of primary school completion for girls													
			Economic benefits		Academic skills					Skills for life				
Background characteristic	No benefits	Chance to go to secondary school	Find a better job	Provide support to household/ parents	Literacy	Learn languages	Numeracy	Critical thinking	Vocational/ technical	Morals/ values	Make a better marriage	Be a better parent	Other	Number of parent/ guardians
Sex														
Male	1.3	6.2	34.9	13.4	84.7	15.4	17.2	28.0	16.4	33.3	13.0	10.2	6.4	1,513
Female	2.4	6.2	35.2	15.5	81.5	12.8	14.0	25.5	13.6	32.3	10.4	7.8	5.6	2,440
Residence														
Urban	4.0	7.6	27.4	13.4	76.7	19.6	10.6	29.8	14.1	36.4	7.2	4.9	4.3	1,338
Rural	0.9	5.5	39.0	15.3	85.8	10.8	17.6	24.7	14.9	30.8	13.6	10.6	6.8	2,615
Province														
Central	1.1	3.7	38.7	14.9	81.7	8.2	10.3	30.7	18.1	46.0	5.7	6.4	0.9	281
Copperbelt	5.6	4.0	16.0	3.3	74.9	18.8	6.3	35.6	14.0	30.0	4.9	3.7	5.6	708
Eastern	0.9	5.0	46.6	14.7	85.8	13.0	7.3	52.3	8.0	49.9	12.8	7.8	3.4	552
Luapula	0.6	7.7	48.5	17.9	84.6	1.9	37.7	11.4	15.1	18.8	22.8	9.3	5.9	335
Lusaka	3.0	10.9	39.2	27.8	71.2	24.8	7.2	23.8	13.2	42.7	9.4	6.9	3.0	517
Northern	1.3	6.2	19.3	14.5	94.6	18.1	22.0	27.3	22.0	19.6	16.6	27.8	16.8	574
North-Western	0.2	17.5	36.2	24.4	87.6	17.5	21.1	8.1	2.8	19.5	23.6	4.9	6.3	208
Southern	0.5	2.9	45.4	17.6	82.7	8.1	10.8	12.9	13.4	38.3	11.3	2.4	5.5	448
Western	0.6	4.0	46.2	5.5	87.8	1.5	32.2	7.9	22.8	20.1	2.7	2.7	1.2	330

Wealth index (quintile)														
Lowest	0.9	5.1	45.1	18.1	85.0	8.5	16.7	21.5	12.6	28.9	12.9	9.2	4.9	901
Second	1.0	6.4	36.3	13.1	86.0	10.2	18.5	24.8	15.1	30.6	12.3	10.6	8.1	725
Middle	1.3	5.5	36.9	15.1	85.7	12.4	19.5	23.3	16.5	30.9	14.4	10.4	6.9	792
Fourth	2.3	6.0	36.1	17.2	79.3	15.9	11.6	26.3	14.9	33.3	11.8	8.2	5.4	760
Highest	4.5	8.4	19.4	9.5	77.4	22.5	9.6	37.1	14.6	40.2	5.4	5.1	4.5	776
Total	2.0	6.2	35.1	14.7	82.7	13.8	15.2	26.4	14.7	32.7	11.4	8.7	5.9	3,953

wealthier respondents were 5 times as likely as poorer respondents to say that boys and girls who complete primary school have no advantage over their peers who had never attended school.

The parent/guardians who believed that boys and girls who completed primary school had an advantage over those who did not attend primary school listed one or more advantages for boys and for girls (see Figure 11.1). In the discussion below, the benefits of schooling are discussed individually according to category, namely, economic benefits, academic skills, skills for life, and other.

Figure 11.1
Percentage of Parent/Guardians Who Perceive Specific Benefi
Primary School Completion for Boys and Girls



Economic benefits were commonly cited among the benefits of schooling. Forty-one percent of parent/guardians listed the possibility of finding a job (or a better job than would otherwise be available) as a benefit of primary schooling for boys, and 35 percent of parent/guardians listed this benefit for girls. Clearly, primary schooling is seen to give both male and female children an advantage in the job market over children who have never attended school. In comparison, the perception that a child with a primary school education will help support the household and his/her parents was listed as a benefit less frequently (13 percent for boys, 15 percent for girls). Parent/guardians in Copperbelt Province are the least likely among the provinces to cite finding a better job as a benefit of completing primary school.

Academic skills were frequently given as benefits of schooling, with literacy being listed by a higher percentage of parent/guardians than any other benefit (86 percent for boys and 83 percent for girls). Although less common, numeracy was also listed as a benefit by 18 percent of parent/guardians for boys and by 15 percent of parent/guardians for girls. Parent/guardians considered learning other languages to be an advantage of primary schooling for boys (16 percent) and for girls (14 percent). Parent/guardians also said that the ability to think critically or analytically is a benefit to both boys and girls who complete primary school (32 and 26 percent, respectively). Nearly equal percentages of parent/guardians listed vocational or technical skills as benefits of schooling for boys (16 percent) and girls (15 percent).

Skills for life also figured among the perceived benefits of primary schooling. Although nearly equal percentages of parent/guardians listed the development of moral values as a benefit for boys and for

girls (30 percent and 33 percent), they differed considerably about the role of primary schooling in helping a boy or a girl make a better marriage and become a better parent. Whereas less than 1 percent of parent/guardians said that completing primary school would help a 15-year-old boy make a better marriage, 11 percent of parent/guardians cited this benefit for a girl. In North-Western and Luapula provinces, nearly one in four parent/guardians said that making a better marriage is a benefit of schooling for girls, compared with one in one hundred for boys. In addition, parent/guardians were three times as likely to say that finishing primary school would make a girl a better mother as to say it would make a boy a better father (9 versus 3 percent). In Northern Province, parent/guardians cited becoming a better parent as a benefit of schooling for girls far more often than for boys (28 percent versus 7 percent).

There were a few differences in perceptions among male and female parent/guardians: male respondents were more likely than female respondents to cite academic skills as a benefit of primary schooling for both boys and girls, as well as to cite skills for life as a benefit for girls. However, there were considerable differences between parent/guardians by rural-urban residence. Parent/guardians in rural areas were more likely than those in urban areas to list the finding a better job and providing support to the household as benefits for boys and girls. Literacy and numeracy were also more likely to be cited by respondents in rural than in urban areas. In contrast, critical thinking skills, and learning a language were more likely to be listed by parent/guardians in urban areas than those in rural areas. Skills for life—including making a better marriage and being a better parent—were more likely to be cited as benefits of schooling by parent/guardians in rural areas than in urban areas.

Poorer parent/guardians were more likely than wealthier parent/guardians to cite the benefits of finding a better job and providing support to the household, while wealthier parent/guardians were more likely than poorer parent/guardians to consider a chance to go to secondary school as a benefit. Poorer parent/guardians were also more likely than wealthier parent/guardians to list literacy and numeracy as benefits, while wealthier parent/guardians were more likely than poorer parent/guardians to list the ability to learn different languages and the development of critical thinking skills.

Disadvantages of Schooling

Parent/guardians were also asked about the disadvantages of sending a boy to primary school and about the disadvantages of sending a girl to primary school. The results are shown in Tables 11.5 and 11.6.

Most parent/guardians said that there were no disadvantages to sending a boy or a girl to primary school (94 percent, for both boys and girls). While there were no differences by sex, residence and wealth, there was some provincial variation. Seventy-five percent of parent/guardians in North-Western Province said there are no disadvantages to sending a boy or girl to primary school, compared with 99 percent in Copperbelt, Luapula and Eastern provinces.

Overall, the most commonly cited disadvantage of schooling was monetary cost, noted by 5 percent of parent/guardians for both boys and girls. However, while 25 percent of parent/guardians in North-Western Province, 10 percent in Lusaka Province, 9 percent in Northern Province and 6 percent in Western Province perceive the monetary cost of schooling as a disadvantage of primary schooling for boys and girls, virtually no parent/guardians in Copperbelt and Luapula Provinces and only 1 percent of parent/guardians in Southern, Central, and Eastern Provinces do. Other factors—loss of a child's labour, bad manners, unwillingness to work and migration from the village—were rarely cited as disadvantages of primary schooling for either boys or girls.

Table 11.5 Perceived disadvantages of primary schooling for boys

Percentage of parent/guardians who perceive specific disadvantages to sending a boy to primary school, by background characteristics, ZDES 2002

Background characteristic	No disadvantages	Disadvantages of a primary school education for boys						Number of parent/guardians
		Monetary costs of schooling	Loss of child's labour	Bad manners	Not willing to work	Migrates from village	Other	
Sex								
Male	94.5	4.5	0.1	0.5	0.3	0.3	0.3	1,513
Female	94.4	4.9	0.1	0.4	0.2	0.1	0.1	2,440
Residence								
Urban	94.6	4.4	0.0	0.8	0.2	0.0	0.2	1,338
Rural	94.4	4.9	0.2	0.3	0.3	0.3	0.2	2,615
Province								
Central	98.2	1.1	0.0	0.5	0.0	0.0	0.2	281
Copperbelt	99.5	0.0	0.0	0.0	0.0	0.2	0.0	708
Eastern	98.5	0.6	0.2	0.2	0.0	0.2	0.6	552
Luapula	99.4	0.3	0.0	0.0	0.0	0.3	0.0	335
Lusaka	87.8	10.4	0.0	1.5	0.2	0.0	0.5	517
Northern	90.3	8.8	0.2	0.6	0.6	0.2	0.0	574
North-Western	74.8	25.0	1.0	0.0	0.6	1.0	0.4	208
Southern	98.7	1.0	0.0	0.3	0.0	0.0	0.0	448
Western	92.7	5.5	0.3	0.9	0.9	0.0	0.0	330
Wealth index (quintile)								
Lowest	94.0	5.3	0.0	0.3	0.2	0.1	0.0	901
Second	94.3	5.3	0.4	0.3	0.4	0.1	0.0	725
Middle	95.4	3.8	0.2	0.2	0.4	0.2	0.2	792
Fourth	92.3	6.7	0.1	0.4	0.0	0.2	0.5	760
Highest	96.2	2.4	0.0	1.0	0.2	0.2	0.3	776
Total	94.4	4.7	0.1	0.5	0.2	0.2	0.2	3,953

Table 11.6 Perceived disadvantages of primary schooling for girls

Percentage of parent/guardians who perceive specific disadvantages to sending a girl to primary school, by background characteristics, ZDES 2002

Background characteristic	No disadvantages	Disadvantages of a primary school education for girls: Monetary costs of schooling	Loss of child's labour	Bad manners	Not willing to work	Migrates from village	Later marriage/harder to find husband	Other	Number of parent/guardians
Sex									
Male	94.3	4.2	0.3	0.7	0.4	0.1	0.3	0.4	1,513
Female	94.3	4.9	0.1	0.4	0.3	0.3	0.2	0.1	2,440
Residence									
Urban	94.7	4.3	0.1	0.4	0.3	0.1	0.1	0.0	1,338
Rural	94.0	4.8	0.2	0.5	0.4	0.3	0.3	0.3	2,615
Province									
Central	96.8	0.9	0.0	2.1	0.0	0.0	0.0	0.9	281
Copperbelt	99.3	0.0	0.2	0.0	0.0	0.0	0.2	0.2	708
Eastern	99.1	0.6	0.0	0.2	0.0	0.0	0.2	0.2	552
Luapula	99.4	0.0	0.3	0.0	0.0	0.0	0.0	0.3	335
Lusaka	88.3	10.2	0.2	0.7	0.5	0.0	0.0	0.0	517
Northern	89.3	8.6	0.2	0.5	1.0	0.3	0.8	0.2	574
North-Western	74.8	25.0	0.2	0.0	1.2	3.1	1.2	0.4	208
Southern	98.4	1.0	0.0	0.5	0.0	0.0	0.0	0.0	448
Western	92.7	5.5	0.3	0.9	0.9	0.0	0.0	0.0	330
Wealth index (quintile)									
Lowest	93.3	5.1	0.0	0.7	0.3	0.5	0.4	0.3	901
Second	93.7	5.5	0.3	0.4	0.4	0.3	0.3	0.0	725
Middle	95.7	3.6	0.2	0.3	0.6	0.2	0.2	0.1	792
Fourth	92.2	6.5	0.0	0.6	0.0	0.1	0.4	0.3	760
Highest	96.5	2.4	0.4	0.3	0.3	0.0	0.0	0.3	776
Total	94.3	4.6	0.2	0.5	0.3	0.2	0.2	0.2	3,953

ABSENTEEISM AMONG PRIMARY SCHOOL PUPILS 12

This chapter examines the issue of absenteeism among primary school pupils. Pupils who are absent frequently or for long periods are likely to have difficulty mastering the material presented in class, making absenteeism a critical education issue.

Information on the frequency of pupil absenteeism, however, can be difficult to obtain. Well-kept school records can be an invaluable source of information on the frequency of pupil absenteeism. Household surveys, on the other hand, depend on the accuracy of the respondents' recollection over a period of time. Recognizing that parent/guardians' recall may be problematic, the 2002 ZDES collected information about children's school attendance over two periods: the 2001 school year (for children who were pupils in that school year) and the seven days preceding the interview (for children who were pupils at the time the household was surveyed).[45]

Primary School Pupil Absenteeism in the 2001 School Year

Table 12.1 presents data on the extent of absenteeism among primary school pupils in the 2001 school year and on reasons for those absences.[46] Eighty-six percent of pupils were absent one or more days during the 2001 school year and, on average, pupils who were absent from school missed a total of 13 days of school during the year. Pupils in rural areas were more likely than those in urban areas to have missed school (89 percent versus 80 percent), and they missed more days of school than their urban peers (14 days versus 12 days). In the provinces, the percentage of pupils missing one or more days of school ranged from 76 percent in Western Province to 93 percent in Central Province.

[45] Primary school was in session during the three months ZDES data collection took place.

[46] Absenteeism is defined as missing one or more complete days of school.

Table 12.1 Reasons for primary school absenteeism

Percentage of primary school pupils who missed school in the 2001 school year, by reasons for absenteeism and background characteristics, ZDES 2002

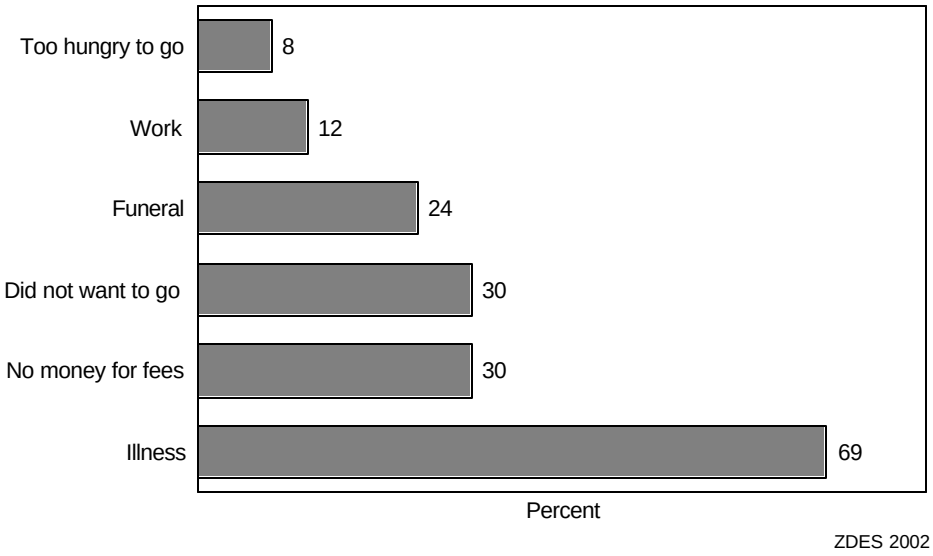
	Reason pupil missed school																
Background characteristic	Care for sick relative	Domestic work	Work for family farm/ business	Work for employer	Any work (first four columns)	No money for fees	Did not want to go	Funeral	Initiation ceremony	Illness	Too hungry to go	Lacking appropriate clothing	Inclement weather	Other	Percentage missing one or more days	Number of pupils	Total days missed
Age																	
6-7	0.9	2.4	0.0	0.0	3.3	16.4	32.1	21.3	0.0	55.2	5.2	0.0	0.9	4.2	78.0	188	13.3
8-10	3.0	4.2	1.4	0.4	7.8	26.4	30.1	22.1	0.1	68.2	8.3	1.2	1.6	2.7	83.8	1,777	11.6
11-14	6.2	7.9	3.1	1.1	14.6	33.4	28.8	25.2	0.6	70.9	8.6	2.1	1.4	1.6	87.1	2,692	14.4
Sex																	
Male	4.0	5.0	2.6	1.0	10.2	29.7	33.7	24.6	0.1	69.2	8.8	1.4	1.1	2.2	85.8	2,327	13.2
Female	5.5	7.6	2.0	0.6	12.8	30.5	25.2	23.1	0.6	69.3	7.9	1.9	1.8	2.1	85.1	2,330	13.5
Residence																	
Urban	3.2	2.7	0.4	0.4	5.8	34.1	25.4	16.9	0.4	60.6	6.7	1.6	0.4	2.6	80.1	1,948	12.3
Rural	5.9	8.9	3.7	1.1	15.7	27.2	32.4	28.9	0.4	75.4	9.6	1.7	2.2	1.8	89.3	2,709	14.0
Province																	
Central	6.5	9.0	5.0	1.7	17.0	38.5	27.2	42.8	0.2	75.8	9.5	0.8	8.0	3.0	92.8	386	14.9
Copperbelt	1.6	3.0	0.8	0.8	5.2	39.4	23.4	18.2	0.6	60.9	9.9	1.9	0.0	2.4	80.4	1,049	11.7
Eastern	4.7	7.2	1.3	0.2	11.9	20.6	32.6	34.7	0.6	76.2	8.9	0.6	2.6	1.9	89.6	483	13.9
Luapula	4.1	9.9	4.1	1.0	15.1	21.6	42.8	25.7	0.0	68.2	5.5	2.4	0.7	2.7	87.3	302	11.0
Lusaka	5.8	3.1	1.1	0.0	9.0	34.8	29.6	16.4	0.2	62.1	6.5	1.6	0.0	2.2	81.8	711	14.1
Northern	7.4	14.2	7.4	3.0	23.6	24.4	40.3	28.3	0.1	79.1	6.1	4.3	2.1	1.9	91.6	619	10.3
North-Western	2.1	0.9	0.9	0.0	3.9	11.1	28.8	12.4	0.9	71.4	4.9	2.3	1.8	4.1	86.9	232	11.7
Southern	4.8	6.7	1.0	0.2	10.7	33.9	29.1	21.2	0.4	77.0	11.9	0.2	0.2	0.2	87.5	582	18.2
Western	8.6	3.8	0.3	0.0	11.3	17.5	13.4	22.6	0.3	59.2	8.6	0.0	1.4	2.7	76.0	293	15.0
School type																	
Government	4.8	6.5	2.5	0.8	11.9	29.8	30.2	24.5	0.4	69.7	8.5	1.7	1.5	2.2	86.1	4,102	13.3

Government-assisted	4.4	7.4	1.9	0.5	10.9	38.9	28.4	29.1	0.5	71.9	11.8	2.7	2.0	3.3	91.0	217	15.2
Private	3.3	2.5	1.2	0.9	7.0	27.2	20.4	10.8	0.0	61.1	5.4	1.2	0.1	1.0	73.3	299	11.4
Wealth index (quintile)																	
Lowest	7.1	9.5	3.1	1.1	16.5	30.0	32.7	30.3	0.0	74.1	11.6	1.2	3.5	1.2	88.1	697	15.4
Second	6.5	10.2	3.8	1.8	18.2	27.2	37.3	29.4	1.0	76.1	14.5	2.5	2.1	1.1	91.6	680	15.5
Middle	5.1	8.9	4.5	0.6	15.2	30.1	32.3	29.5	0.3	75.5	8.3	2.0	1.9	3.4	90.6	884	13.6
Fourth	5.1	4.6	1.7	1.1	10.0	34.3	30.1	24.5	0.2	68.8	7.6	1.4	0.8	1.9	85.9	1,028	13.5
Highest	2.3	2.3	0.3	0.1	4.5	28.3	21.6	13.8	0.4	59.6	4.3	1.5	0.3	2.5	77.4	1,368	10.5
Total	4.8	6.3	2.3	0.8	11.5	30.1	29.5	23.9	0.4	69.2	8.4	1.7	1.4	2.1	85.5	4,657	13.3

Pupils from the wealthiest quintile were less likely to have missed school than were those from the poorest quintile (77 percent versus 88 percent), and they missed fewer days of school during the year than the poorest children (11 days versus 15 days). Pupils attending private schools were the least likely to miss one or more days of school (73 percent), followed by pupils attending government schools (86 percent), and then by pupils attending government-assisted schools (91 percent). Private school pupils also missed the least number of days in the 2001 school year (11 days), compared with pupils in government schools (13 days) and pupils in government-assisted schools (15 days).

The most commonly cited reason for absenteeism was illness, with 69 percent of pupils missing school for this reason (see Figure 12.1). Pupils in rural areas were more likely than those in urban areas to have missed school because of illness (75 versus 61 percent), perhaps reflecting differential access to quality health care and to health-promoting living conditions. Pupils from the poorest households were also more likely to miss school because of illness (74 percent) than pupils from the wealthiest households (60 percent). Illness was more commonly cited as a reason for absenteeism among pupils in government-assisted schools (72 percent) and in government schools (70 percent) than among pupils in private schools (61 percent). Seventy-nine percent of pupils in Northern province missed school because of illness, compared with 59 percent of pupils in Western Province.

Figure 12.1
Percentage Absent for Specific Reasons Among Pupils Missing School in 2001



Nearly one in three (30 percent) primary school pupils missed school because fees were due and there was no money available to pay the fees or other monetary costs. An additional 2 percent missed school because they lacked the appropriate clothing—or it was too worn or soiled—to attend school. In both instances, there were no gender differences. In urban areas, 34 percent of pupils missed school because fees were due, compared with 27 percent of pupils in rural areas. In the provinces, the percentage of pupils missing one or more days of school because fees were due ranged from 11 percent in North-Western Province to 39 percent in Copperbelt Province and Central Province. Thirty-nine percent of pupils attending government-assisted schools missed school because money was not available to pay fees, compared with 30 percent of government school pupils and 27 percent of private school pupils. Surprisingly, there is little variation by wealth in the percentage of pupils missing school because fees were due and there was no money to cover the costs.

Another common reason for primary school absenteeism in the 2001 school year was that pupils simply did not want to go to school: 30 percent of pupils missed school for this reason. Male pupils were more likely than female pupils to be absent from school because they did not want to go (34 percent versus 25 percent). Similarly, pupils in rural areas were more likely than pupils in urban areas to miss school for this reason (32 percent versus 25 percent). Not wanting to go to school was more commonly cited as a cause of absenteeism for government school pupils (30 percent) and for government-assisted school pupils (28 percent) than for private school pupils (20 percent). High percentages of pupils missed school for this reason in Luapula Province (43 percent) and Northern Province (40 percent), compared with pupils in Western Province (13 percent). Pupils from wealthier households were less likely than those from poorer households to miss school for this reason.

Twenty-four percent of pupils missed school because they were attending funerals or busy with activities associated with funerals. Pupils in rural areas were more likely than those in urban areas to miss school for funeral-related activities (29 percent versus 17 percent). A striking 43 percent of pupils in Central Province missed school because of funerals, compared with 12 percent of pupils in North-Western Province. Pupils attending private school were the least likely to be absent from school because of funerals (11 percent), in contrast to pupils attending government schools (25 percent) and government-assisted schools (29 percent). The percentage of pupils missing school because of a funeral diminishes as household wealth increases: 30 percent of the pupils in the poorest households were absent for this reason, compared with 14 percent of pupils in the wealthiest households.

Twelve percent of primary school pupils missed school to do some type of work (domestic, on the family farm or business, or for an employer) in support of the household. Pupils age 11-14 were more likely than younger pupils to have missed school to do work. Pupils in rural areas were more likely than their urban peers to have missed school to do work for the household (16 percent compared with 6 percent). Differences by sex were minor. While 17 percent of the pupils in the poorest households missed school to do work for the household, only 5 percent of pupils in the wealthiest households missed school for this reason. Pupils attending private schools (7 percent) were only somewhat less likely than those in government schools (12 percent) and government-assisted schools (11 percent) to have missed school to do work for the household. In Northern Province, 24 percent of pupils missed school because of work, compared to only 4 percent in North-Western Province.

Among pupils missing school in order to work to support the household, the most common type of work was domestic work (6 percent), such as caring for young children, cooking or cleaning, or fetching water or wood. Caring for sick relatives caused 5 percent of pupils to miss school. A very small percentage of children missed school to work on the family farm or business (2 percent) or for an employer (1 percent).

Other reasons for absenteeism during the 2001 school year were cited less frequently. Overall, 8 percent of pupils missed school because of hunger. Absenteeism because of hunger was particularly notable in Southern Province, where the highest percentage of pupils (12 percent) among the provinces missed school because of hunger and pupils missed the highest number of school days (18 days), possibly reflecting the drought and food shortages the province experienced in 2001. Inclement or bad weather—such as floods, heavy rains, and cold weather—was given as a reason for absenteeism for only 1 percent of the pupils. Less than one percent of pupils missed school to participate in initiation ceremonies.

Among the other causes of absenteeism (given by parent/guardians for 2 percent of pupils) were child fatigue, the distance to school, religious events, and teacher absences (because of illness or strikes).

Primary School Pupil Absenteeism in the Week Preceding the Interview

This section of the chapter presents information on pupil absenteeism during the seven days preceding the survey interview.[47] Twenty-five percent of pupils were absent one or more days during the week preceding the interview (see Table 12.2).[48] There is minor variation by pupil age, sex, residence, and wealth quintile. Among provinces, pupils in Lusaka Province had the highest rate of absenteeism in

Table 12.2 Absenteeism among primary school pupils in the week of school preceding the interview

Percent distribution of primary school day pupils by absenteeism in the week of school preceding the interview, according to background characteristics, ZDES 2002

Background characteristic	Pupil absenteeism: Attended all school days	Pupil absenteeism: Absent one or more days	Pupil absenteeism: DK/missing	Total	Number of pupils	Mean number of missed days for children who missed school days
Age						
6-7	74.9	25.0	0.2	100.0	552	2.8
8-10	73.8	25.7	0.5	100.0	1,898	3.2
11-14	74.8	25.0	0.2	100.0	2,258	2.9
Sex						
Male	73.6	26.1	0.3	100.0	2,361	3.0
Female	75.2	24.4	0.4	100.0	2,348	3.0
Residence						
Urban	72.2	27.6	0.2	100.0	1,874	3.2
Rural	75.8	23.7	0.5	100.0	2,835	2.8
Province						
Central	71.9	27.6	0.5	100.0	378	3.1
Copperbelt	76.5	23.0	0.5	100.0	1,023	2.8
Eastern	69.8	29.9	0.4	100.0	550	2.6
Luapula	78.5	21.5	0.0	100.0	307	2.6
Lusaka	63.1	36.9	0.0	100.0	653	3.6
Northern	76.8	22.3	0.9	100.0	608	2.8
North-Western	83.3	16.4	0.3	100.0	269	2.5
Southern	76.5	23.3	0.2	100.0	606	2.9
Western	81.8	18.2	0.0	100.0	315	3.6
Wealth index (quintile)						
Lowest	73.7	25.9	0.5	100.0	808	3.2
Second	73.5	26.5	0.0	100.0	763	2.8
Middle	76.1	23.3	0.5	100.0	886	2.6
Fourth	76.6	23.4	0.1	100.0	1,024	3.0
Highest	72.8	27.0	0.2	100.0	1,229	3.2
Total	74.4	25.3	0.3	100.0	4,709	3.0

[47] Primary school pupils attending boarding schools were not included in the calculations, on the reasoning that parent/guardians would be less likely to know whether the children had missed school during the given week of school.

[48] Information was missing on less than 1 percent of pupils.

the week preceding the interview (37 percent), and pupils in North-Western Province had the lowest rate of absenteeism (16 percent).

Table 12.3 presents information on the mean number of days missed as well as the reasons children missed school during the week preceding the interview. Among children who missed school during the week preceding the interview, the mean number of days missed was 3. On average, pupils in Western Province and Lusaka Province missed more school days than did pupils in the other provinces.

The primary reasons given for absenteeism in the week of school preceding the survey are similar to those given for absenteeism in the 2001 year. Illness was the most commonly cited reason for missing school (24 percent), and pupils in rural areas (30 percent) were nearly twice as likely as those in urban areas (17 percent) to have missed school because of illness. Female pupils were more likely than male pupils to miss school because of illness (27 percent versus 21 percent). The pupils in the lowest three wealth quintiles were more likely than those in the highest two wealth quintiles to cite illness as a reason for absenteeism. Pupils in Lusaka were less likely to miss school because of illness than pupils in the other provinces.

Parents were asked for other reasons pupils missed school during the week before the interview. For 21 percent of pupils, a teacher's absence from the classroom or a teacher shortage (because of illness, strikes or meetings) was given as the reason for absenteeism. Pupils in urban areas were considerably more likely (40 percent) than pupils in rural areas (6 percent) to have missed school for these reasons. Teacher absence and shortage were most commonly given as reasons for pupils' absenteeism in Lusaka province (55 percent), and least commonly given for pupils' absenteeism in North-Western Province (1 percent). Poorer pupils were less likely than wealthier pupils to have missed school because of teacher absences and shortage. For example, 43 percent of pupils from the highest quintile missed school for this reason, compared with 10 percent from the lowest quintile.

Not wanting to go to school was cited as a reason for 22 percent of pupils missing one or more days of school in the week preceding the interview. This reason was more commonly cited for male pupils (26 percent) than for female pupils (17 percent), for pupils in rural areas (27 percent) than for pupils in urban areas (15 percent), and for the pupils in the poorest households (28 percent) than for the pupils in the wealthiest households (12 percent). Forty-one percent of pupils in Luapula Province were absent because they did not want to go to school, compared with only 9 percent of pupils in Western Province.

Pupils also missed school because of various costs of schooling. Eight percent of pupils were absent during the week preceding the interview because school fees or other school-related costs were due and there was no money to pay them. In addition, 4 percent of pupils missed school because they did not have uniforms or clothing needed for school or because their uniforms or clothing were not clean enough to wear to school. This reason was most common among pupils in North-Western Province, where 11 percent stayed home from school for this reason.

For only 4 percent of pupils was the need to do work (including domestic work, work on the family farm or in the family business, and work for an employer) cited as a reason for absenteeism during the week preceding the interview. Other reasons given for absenteeism in the week prior to the interview were attending a funeral (3 percent) or religious event (2 percent), hunger (3 percent), and the pupil had moved or was visiting elsewhere (3 percent), among others.

Table 12.3 Reasons for absenteeism among primary school pupils in the week of school preceding the interview

Percentage of primary school day pupils who missed school in the week preceding the interview, by reasons for absenteeism and background characteristics, ZDES 2002

	Reason pupil missed school																		
Background characteristic	Domestic work	Work for family farm/ business	Work for employer	Any work	No money for fees	Did not want to go	Funeral	Initiation ceremony	Illness	Hunger	Bad weather	Child moved/ or visiting others	Religious event	Teacher absence/ shortage	School closed	Child stopped schooling	Lack of appropriate clothing	Other	Number of pupils	Mean days missed
Age																				
6-7	2.7	0.9	0.0	3.6	8.5	24.0	1.6	0.0	24.0	3.1	1.6	0.0	1.7	22.4	1.2	1.5	4.0	5.4	138	2.8
8-10	2.5	0.3	0.0	2.8	7.6	20.8	2.8	0.3	24.7	2.4	0.0	2.3	1.3	25.0	1.7	1.5	4.0	4.4	488	3.2
11-14	4.1	1.4	0.2	5.7	8.3	21.8	4.3	0.2	24.0	4.3	0.0	4.4	1.5	16.8	2.0	1.6	4.1	2.7	564	2.9
Sex																				
Male	2.3	1.5	0.0	3.8	9.4	25.7	3.8	0.3	21.4	2.8	0.4	2.7	1.4	18.6	1.8	1.2	4.8	3.6	617	3.0
Female	4.3	0.3	0.2	4.8	6.5	17.3	3.0	0.2	27.4	3.9	0.0	3.3	1.5	23.1	1.7	1.9	3.3	3.9	572	3.0
Residence																				
Urban	0.5	0.0	0.0	0.5	9.1	15.0	2.0	0.4	17.1	2.5	0.2	2.8	0.3	39.6	2.7	0.2	4.3	3.7	517	3.2
Rural	5.4	1.6	0.2	7.2	7.2	26.8	4.5	0.1	29.8	4.0	0.1	3.2	2.3	6.4	1.0	2.5	3.9	3.7	673	2.8
Province																				
Central	3.1	1.2	0.0	4.3	12.3	20.4	3.7	0.0	24.1	0.6	0.0	1.2	3.7	29.0	0.0	0.0	1.9	0.0	104	3.1
Copperbelt	2.1	0.0	0.0	2.1	11.9	14.7	2.8	0.0	23.1	3.5	0.0	4.2	2.8	21.0	4.9	0.0	6.3	3.5	236	2.8
Eastern	5.6	0.6	0.0	6.3	8.8	33.8	3.1	0.0	28.1	0.0	0.0	2.5	0.0	7.5	0.0	5.0	5.0	1.3	164	2.6
Luapula	1.6	0.0	1.6	3.1	4.7	40.6	10.9	0.0	29.7	0.0	0.0	1.6	0.0	3.1	0.0	7.8	3.1	1.6	66	2.6
Lusaka	0.5	0.5	0.0	1.1	4.8	10.1	0.0	0.5	16.0	1.6	0.5	0.5	0.0	55.3	0.5	0.5	3.2	6.4	241	3.6
Northern	5.4	0.7	0.0	6.1	7.4	27.7	4.7	0.7	29.1	0.7	0.7	6.8	4.7	2.7	0.0	2.7	2.0	5.4	136	2.8
North-Western	3.7	0.9	0.0	4.6	6.5	33.3	0.0	0.9	25.9	0.0	0.0	5.6	0.9	0.9	0.0	0.0	11.1	11.1	44	2.5
Southern	6.7	3.3	0.0	10.0	7.5	26.7	4.2	0.0	28.3	15.8	0.0	2.5	0.0	3.3	0.8	0.0	3.3	1.7	141	2.9
Western	1.8	1.8	0.0	3.5	3.5	8.8	8.8	0.0	24.6	7.0	0.0	5.3	0.0	19.3	12.3	0.0	1.8	5.3	57	3.6
Wealth index (quintile)																				
Lowest	3.2	1.2	0.0	4.4	7.1	27.8	3.9	0.0	26.2	4.3	0.0	5.8	1.2	9.6	1.9	3.0	5.8	2.0	209	3.2
Second	8.6	2.8	0.0	11.3	10.8	25.1	3.5	0.0	28.8	6.2	0.0	3.3	0.2	5.0	1.0	2.4	3.6	2.3	202	2.8
Middle	4.9	0.9	0.5	6.3	6.2	24.9	6.3	0.2	28.6	4.1	0.4	2.5	4.5	7.8	1.1	2.9	2.7	2.8	207	2.6
Fourth	2.1	0.3	0.0	2.4	10.3	23.6	3.5	0.4	20.9	1.0	0.0	0.8	1.4	25.0	0.0	0.5	4.2	7.2	240	3.0
Highest	0.0	0.0	0.0	0.0	6.5	12.2	1.0	0.4	20.0	2.3	0.4	3.0	0.5	42.5	3.9	0.0	4.0	3.8	332	3.2

Pupil Absenteeism and Household Work

Parent/guardians were asked whether they agreed or disagreed with a statement saying that children should be kept home from school whenever necessary to work or help at home (see Table 12.4). Most parent/guardian respondents (95 percent) disagreed with the statement, with virtually no difference by sex or by residence of the respondent.

Table 12.4 Importance of child's work or help in the household

Percent distribution of parent/guardians by whether they agree or disagree that parents should keep their children home from school whenever necessary to work or help in the household, according to background characteristics, ZDES 2002

Background characteristic	Parents should keep children home to work or help in the household			Total	Number of parent/ guardians
	Agree	Disagree	DK/missing		
Sex					
Male	4.6	95.0	0.4	100.0	1,366
Female	4.5	95.4	0.1	100.0	2,258
Residence					
Urban	3.6	96.3	0.1	100.0	1,310
Rural	5.0	94.7	0.3	100.0	2,313
Province					
Central	3.4	96.3	0.2	100.0	281
Copperbelt	4.0	95.6	0.5	100.0	708
Eastern	11.7	88.3	0.0	100.0	552
Luapula	1.2	98.8	0.0	100.0	335
Lusaka	4.2	95.8	0.0	100.0	517
Northern	5.4	94.1	0.5	100.0	574
North-Western	0.6	99.4	0.0	100.0	208
Southern	0.5	99.0	0.5	100.0	448
Wealth index (quintile)					
Lowest	5.5	94.4	0.1	100.0	714
Second	5.5	94.3	0.2	100.0	652
Middle	4.3	95.4	0.4	100.0	746
Fourth	5.0	94.6	0.4	100.0	740
Highest	2.5	97.3	0.2	100.0	771
Total	4.5	95.3	0.2	100.0	3,624

SEXUAL MATTERS, AIDS, AND EDUCATION 13

This chapter presents data on parent/guardians' views on teaching sex (or reproductive health) education and AIDS education in primary school. It examines parent/guardians' beliefs about the ways their children presently learn about sexual (or reproductive) matters, and their opinions about whether sex education should be included in the curriculum, why it should not be taught in school (if they believe it should not be taught), and at what age and grade children should start learning about sexual matters. It also presents data on parent/guardians' awareness of AIDS, their perceptions of its impact on children's schooling, and their opinions about whether AIDS education should be included in the curriculum, why it should not be taught (if they believe it should not be taught), and at what grade children should start learning about AIDS.

Parent/guardians' views on sex education and AIDS education can inform whether and how these subjects are introduced and taught in primary school. The findings of this chapter show that parent/guardians are more supportive of AIDS education than sex education, but the data also suggest that the majority of parent/guardians would support primary school instruction on both sexual/reproductive matters and AIDS if done at the upper primary grade levels.

Sexual Matters and Sex Education

Sources of Information about Sexual Matters

Table 13.1 shows the percentage of parent/guardian respondents who named specific sources of information from which they believe the children in their community learn about sexual or reproductive matters, such as conception, contraception and hygiene.

The sources of information most often cited by parent/guardian respondents are parent/guardians, teachers, clinics and health centres, friends, and other relatives. The majority (58 percent) of parent/guardian respondents said that the parent/guardians of individual children provide information about sex and reproductive matters. Nearly half (43 percent) of the parent/guardians cited teachers as sources of information, followed by clinics and health centres (29 percent of respondents). Children's friends (25 percent) were cited more often as sources of information than either children's other relatives—apart from parent/guardians and siblings—(17 percent), or religious leaders (12 percent). Children's siblings (2 percent), pupils (3 percent) and community-based health information projects or organizations (2 percent) are seen as sources of information by only small percentages of parent/guardians. One percent of respondents said that children learn about sexual matters spontaneously, either by themselves or through God.

The same pattern holds by sex with no striking gender differences among parent/guardian respondents. Female parent/guardians were somewhat more likely to name children's friends as sources of information (28 percent) than male parent/guardian respondents (21 percent). Female respondents were also more likely to cite television/movies and radio (12 percent and 10 percent) as information sources than were male respondents (7 percent for each).

Table 13.1 Children's sources of information on reproductive matters

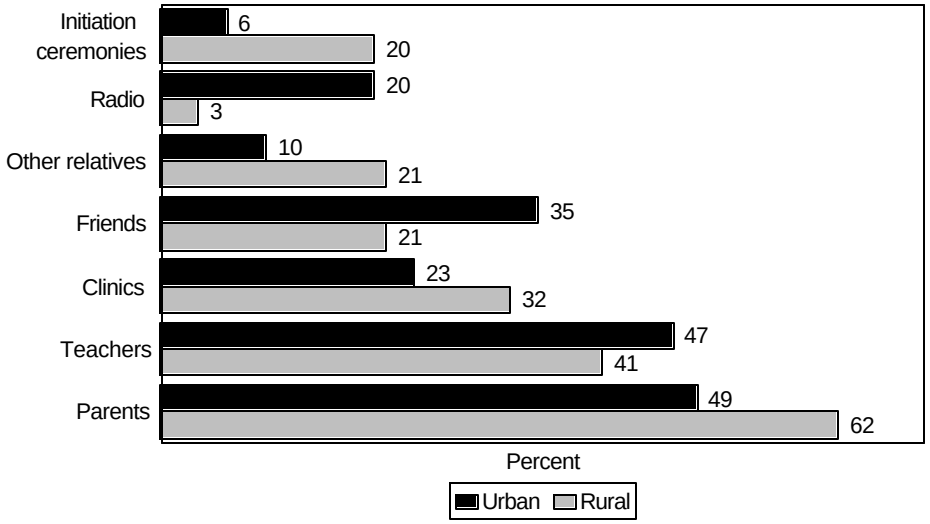
Percentage of parent/guardians listing specific sources of information on reproductive matters for children, by background characteristics, ZDES 2002

Background characteristic	Parent/ guardi-ans	Broth-ers/ sisters	Other rela-tives	Friends	Initia-tion cere-monies	Reli-gious leaders	Teach-ers	Pupils	News-papers	Radio	Televi-sion or movies	Community based edu-cators/ or-ganizations	Clinic/ health centre	Self-derived knowl-edge	Other	Miss-ing	Number of parent/ guardians
Sex																	
Male	60.3	1.9	16.7	21.3	16.3	12.9	44.7	2.4	0.9	7.2	7.3	1.9	29.7	1.4	1.5	0.2	1,513
Female	56.1	2.1	17.0	27.8	14.1	10.7	41.5	3.3	1.0	9.8	11.7	1.6	28.7	1.0	2.1	0.0	2,440
Residence																	
Urban	49.2	1.3	9.7	34.6	6.1	14.7	47.0	4.8	1.8	19.5	25.8	2.5	23.3	0.4	3.0	0.1	1,338
Rural	62.1	2.4	20.6	20.6	19.5	9.9	40.5	2.0	0.5	3.4	2.0	1.4	32.1	1.5	1.4	0.1	2,615
Province																	
Central	83.3	2.1	24.9	6.2	4.3	16.7	53.8	0.0	2.5	7.6	4.6	0.9	37.5	0.0	0.5	0.0	281
Copperbelt	42.8	0.5	7.9	28.8	9.5	13.3	50.5	5.3	0.9	14.0	26.0	0.9	26.0	0.0	3.7	0.0	708
Eastern	67.8	1.1	30.7	10.2	30.9	8.6	46.0	0.4	0.7	3.0	1.7	0.2	46.0	0.2	0.7	0.0	552
Luapula	44.8	0.3	7.7	63.9	10.5	3.4	33.3	7.4	0.6	1.9	3.1	0.6	21.3	0.0	1.5	0.0	335
Lusaka	60.5	1.2	12.7	46.4	5.5	14.1	37.7	5.2	2.2	31.8	30.5	3.7	11.9	0.2	3.0	0.0	517
Northern	32.1	0.0	8.3	2.2	34.0	22.4	41.4	0.0	0.0	1.3	0.5	2.9	43.5	5.1	1.3	0.3	574
North-Western	58.3	5.9	15.4	36.8	5.7	5.3	22.8	7.5	0.0	3.9	2.8	0.2	16.9	4.3	1.4	0.2	208
Southern	79.0	7.3	9.7	29.7	1.8	6.6	43.6	0.8	1.0	3.4	2.4	4.5	39.6	0.0	1.0	0.0	448
Western	75.4	3.6	47.7	14.0	18.8	4.3	42.2	2.1	0.3	3.3	1.2	0.0	3.3	1.5	2.4	0.3	330
Wealth index (quintile)																	
Lowest	64.6	3.4	25.4	18.4	22.1	6.4	38.4	2.4	0.3	1.4	0.6	1.0	30.2	0.8	1.0	0.0	901
Second	60.0	1.9	21.4	16.9	20.0	10.9	40.8	1.8	0.5	2.0	0.7	1.2	31.8	2.8	0.9	0.3	725
Middle	57.0	2.0	15.6	28.7	16.7	10.6	39.4	2.2	0.4	3.7	3.0	1.9	32.7	1.5	1.8	0.1	792

Fourth	54.3	1.3	12.5	32.4	9.6	12.5	42.5	2.3	1.5	15.0	13.0	2.3	29.9	0.5	2.5	0.1	760
Highest	51.7	1.3	8.4	30.8	5.3	18.1	53.1	6.3	2.1	23.0	34.0	2.3	20.8	0.3	3.4	0.0	776
Total	57.7	2.0	16.9	25.3	15.0	11.5	42.7	3.0	0.9	8.8	10.1	1.7	29.1	1.2	1.9	0.1	3,953

Rural-urban differences are more substantial, as shown in Figure 13.1. A higher percentage (62 percent) of parent/guardian respondents in rural areas named parent/guardians as sources of information on sexual and reproductive matters for children than did parent/guardian respondents in urban areas (49 percent). Clinics and health centres were more often seen to play a role in providing information about sexual matters in rural areas than urban ones: 32 percent of parent/guardians in rural areas listed them, compared with 23 percent of parent/guardians in urban areas. Initiation ceremonies were listed as sources of information by 20 percent of parent/guardian respondents in rural areas (compared with 6 percent in urban areas), while religious leaders were listed by 15 percent of parent/guardian respondents in urban areas (compared with 10 percent in rural areas). Parent/guardians in urban areas cited children's friends more frequently as a source of information (35 percent) than those in rural areas (21 percent), and cited other relatives (10 percent) less frequently as a source of information than parent/guardian respondents in rural areas (21 percent).

Figure 13.1
Sources of Information on Sexual Matters for Children, by Residence



ZDES 2002

Perhaps the most notable urban-rural difference is the role parent/guardians ascribe to the media in providing children with information about sexual matters. In urban areas, 26 percent of parent/guardians said that television/movies were sources of information for the children in their community (compared with 2 percent of parent/guardians in rural areas) and 20 percent of parent/guardians in urban areas point to radio as an information source (compared with 3 percent of parent/guardians in rural areas).

There is tremendous variation across provinces in views on where the children in the community learn about sex and reproductive matters. The majority of parent/guardians in Central Province (83 percent), Southern Province (79 percent), and Western Province (75 percent) listed parent/guardians as sources of information, compared with less than half of parent/guardians in Northern Province (32 percent), Copperbelt Province (43 percent), and Luapula Province (45 percent). In the relatively urbanized Lusaka Province, about one third of the parent/guardians said children learn about sex and reproductive matters through television/movies (31 percent) and radio (32 percent), possibly reflecting the prevalence of and ready access to the media, in contrast to Northern Province where a negligible percentage of the parent/guardians said children learn about sex and reproductive matters through television/movies (1 percent) and radio (1 percent), possibly reflecting the dearth and lack of access to the

media. In Northern Province, initiation ceremonies and religious leaders were listed by 34 percent and 22 percent of parent/guardian respondents, respectively, compared with 2 percent and 7 percent of parent/guardian respondents in Southern Province.

The wealthier the parent/guardian's household, the less likely he/she was to cite parent/guardians as a source of information about sexual matters for children: 52 percent of the parent/guardians from the wealthiest households named parent/guardians as a source, compared with 65 percent of the parent/guardians from the poorest households. Parent/guardians from the wealthiest households were the most likely to identify teachers as a source of information on sexual matters (53 percent), while the parent/guardians from the poorest households were the least likely to do so (38 percent). The media also appears to play a major role in providing information on sex to children from wealthy households: respondents from the wealthier households more commonly listed television/movies, radio and newspapers than did respondents from the poorer households. In contrast, parent/guardians from the poorer households were more likely than respondents from wealthier households to list health centres, other relatives and initiation ceremonies as sources.

Sex Education and Primary Schooling

As shown in Table 13.2, 62 percent of respondents said that primary schools should teach pupils about sexual and reproductive matters, while 38 percent disagreed.[49] Male parent/guardians (68 percent) were more likely to favour the inclusion of sex or reproductive health education in the primary school curriculum than female parent/guardians (58 percent). Parent/guardians in rural areas (68 percent) were also more likely to support primary schools providing sex education than were parent/guardians in urban areas (51 percent).

Provincial differences are substantial. Only in Copperbelt Province (59 percent) were the majority of parent/guardians against primary schools teaching pupils about sexual or reproductive matters (see Figure 13.2). In contrast, an overwhelming 82 percent of parent/guardians in Southern Province and 75 percent of parent/guardians in Eastern Province said that primary schools should teach about sexual or reproductive matters. Parent/guardians from poorer households were more likely than those from wealthier households to favour teaching sex education in primary school: 68 percent of the respondents from the poorest households supported sex education, compared with 56 percent of the respondents from the wealthiest households.

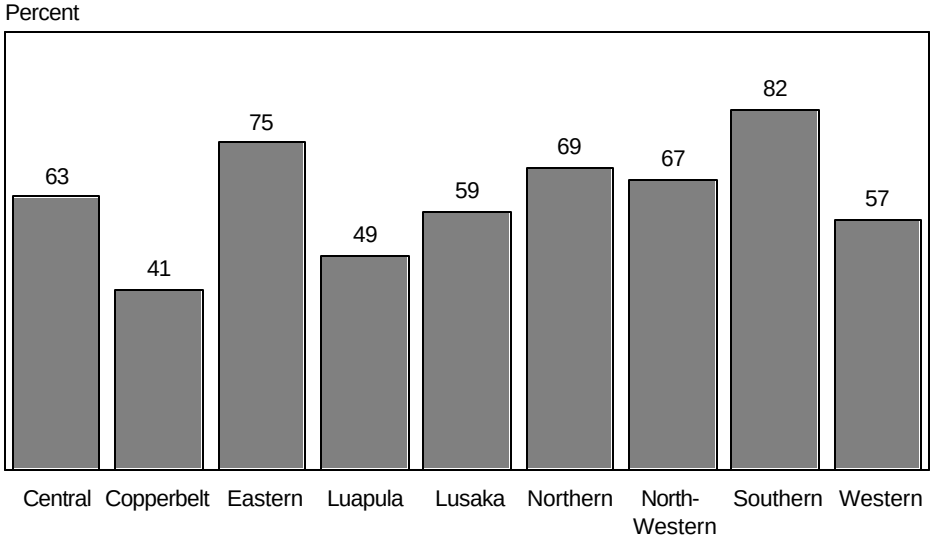
[49] Parent/guardians appear to have strong views, as less than 1 percent could not respond or said, "it depends".

Table 13.2 Whether primary schools should teach sex education

Percent distribution of parent/guardians by whether they think primary schools should teach pupils sex education, by background characteristics, ZDES 2002

Background characteristic	Primary schools should teach sex education			Total	Number of parent/ guardians
	Yes	No	DK/depends/ missing		
Sex					
Male	68.0	31.5	0.5	100.0	1,513
Female	58.0	41.2	0.8	100.0	2,440
Residence					
Urban	50.9	48.5	0.6	100.0	1,338
Rural	67.5	31.8	0.7	100.0	2,615
Province					
Central	62.5	37.1	0.5	100.0	281
Copperbelt	41.4	58.6	0.0	100.0	708
Eastern	74.9	24.8	0.4	100.0	552
Luapula	49.1	49.1	1.9	100.0	335
Lusaka	59.1	40.0	1.0	100.0	517
Northern	69.2	29.9	1.0	100.0	574
North-Western	66.5	33.1	0.4	100.0	208
Southern	82.4	17.1	0.5	100.0	448
Western	57.4	41.6	0.9	100.0	330
Wealth index (quintile)					
Lowest	67.8	31.6	0.5	100.0	901
Second	69.1	29.7	1.2	100.0	725
Middle	61.6	37.5	0.9	100.0	792
Fourth	54.7	45.0	0.3	100.0	760
Highest	55.5	44.0	0.5	100.0	776
Total	61.9	37.5	0.7	100.0	3,953

Figure 13.2
Percentage of Parent/Guardians in Favour of Sex Education Primary Schools, by Province



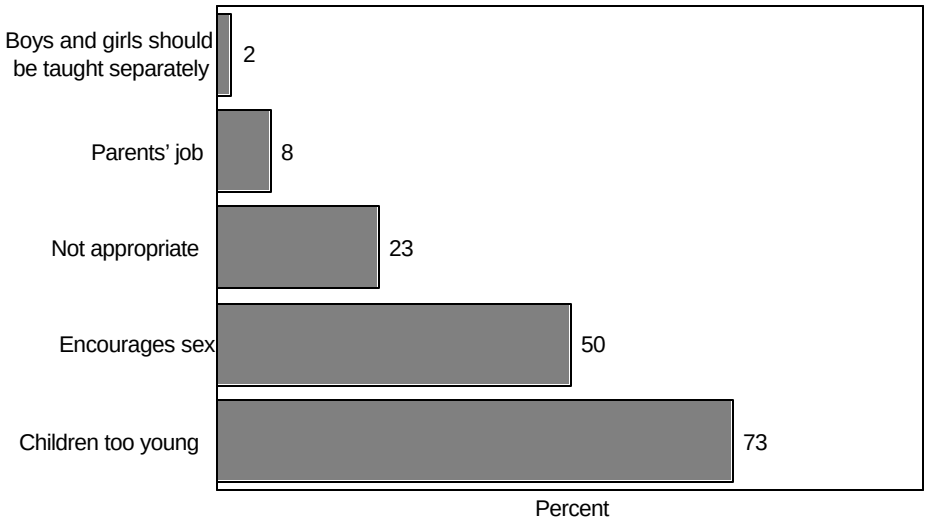
As shown in Table 13.3 and Figure 13.3, among those parent/guardians who said that schools should not teach about sexual or reproductive matters, the highest percentage (73 percent) said that children are too young, followed by concerns that sex or reproductive health education encourages children to have sex (50 percent), and that it simply is not appropriate to teach in primary school (23 percent). Very few parent/guardians expressed concerns that sex education was against religion (less than 1 percent) or that male and female children should be taught separately (2 percent). Female respondents were more likely to object to sex education on the grounds that children are too young (75 percent) and that sex education encourages sexual activity (51 percent) than male respondents (68 percent and 48 percent). Likewise, parent/guardians in urban areas were more likely to say that children are too young (81 percent) and that sex education encourages sexual activity (58 percent) than did parent guardian respondents in rural areas (67 percent and 44 percent).

Table 13.3 Reasons primary schools should not teach sex education

Among parent/guardians who think that primary schools should not teach sex education, the percentage listing specific reasons for not teaching it, by background characteristics, ZDES 2002

Background characteristic	Reasons schools should not teach sex education								Number of parent/ guardians
	Not appropriate to teach sex education in schools	Sex education is the parent's job	Children are too young	Boys and girls should be taught separately	Against religion	Encourages children to have sex	Other	Missing	
Sex									
Male	28.5	7.5	68.3	1.4	0.4	47.5	1.0	0.2	484
Female	20.3	7.6	75.3	2.2	0.4	51.2	0.9	0.0	1,024
Residence									
Urban	16.6	2.3	81.0	2.0	0.2	57.7	1.2	0.0	657
Rural	27.8	11.6	67.0	2.0	0.6	44.1	0.7	0.1	851
Province									
Central	19.5	7.3	50.0	2.4	0.0	45.7	2.4	0.0	106
Copperbelt	13.5	2.0	87.7	0.4	0.0	69.0	0.8	0.0	415
Eastern	40.0	13.3	63.7	5.2	0.0	17.0	0.7	0.0	139
Luapula	28.5	1.8	81.2	0.6	0.0	63.6	0.6	0.0	171
Lusaka	16.4	1.2	74.5	4.8	1.2	50.9	1.2	0.0	212
Northern	37.3	2.1	85.5	0.0	0.0	50.3	1.0	0.0	177
North-Western	5.3	53.5	26.5	7.1	0.0	21.2	1.2	0.0	70
Southern	32.8	1.5	41.8	0.0	0.0	44.8	0.0	0.0	79
Western	24.3	22.9	69.3	1.4	2.9	28.6	0.7	0.7	140
Wealth index (quintile)									
Lowest	30.9	16.6	59.9	2.3	1.0	36.9	1.0	0.0	290
Second	29.0	12.5	69.1	1.0	0.4	40.6	0.9	0.4	224
Middle	25.8	7.4	69.5	2.8	0.0	50.6	0.1	0.0	304
Fourth	20.4	3.1	74.3	2.5	0.0	55.5	0.8	0.0	344
Highest	12.1	1.4	88.5	1.0	0.7	61.3	1.7	0.0	346
Total	22.9	7.6	73.1	2.0	0.4	50.0	0.9	0.1	1,507

Figure 13.3
Among Parent/Guardians Against Sex Education in Primary Schools, the Percentage Objecting, by Selected Reasons



ZDES 2002

Parent/guardians in North-Western Province were the least concerned about children being too young (27 percent) for sex education, but were most likely to view sex education as the parent's job instead of the school's job (54 percent). In contrast, parent/guardians in Copperbelt Province were most concerned about children being too young (88 percent) for sex education and that it may encourage them to engage in sexual activity (69 percent), while only 2percent indicated that sex education was the parents' job. The wealthier the parent/guardian, the more likely he/she was to object to sex education in school on the grounds that children are too young and that it encourages them to have sex. Parent/ guardians from poorer households were more likely than those from wealthier households to object to sex education because it is the parents' job and is inappropriate to teach in school.

As shown in Table 13.4, among parent/guardians who said that primary schools should include sex or reproductive health education in their curriculum, the highest percentages indicated that the upper primary grades (grades 5, 6 and 7) are when pupils should first be taught about sexual or reproductive matters: 32 percent of parent/guardians specified grade 5, 20 percent grade 6, and 29 percent grade 7. Overall, only 8percent of parent/guardians in favour of sex education being taught in primary school identified grade 1 as the earliest grade for its introduction, although the percentages are higher in Southern Province (18 percent) and in Eastern Province (16 percent) than in the rest of the country.

Table 13.4 When pupils should be taught sex education

Among parent/guardians who think that primary schools should teach sex education, the percent distribution by primary school grade in which parent/guardians think pupils should first be taught sex education and mean age at which they should be taught, by background characteristics, ZDES 2002

Background characteristic	Grade in which pupils should be taught sex education								Parent/guardians agreeing it should be taught in primary	
	1	2	3	4	5	6	7	Missing	Total	Number
Sex										
Male	8.7	0.9	2.7	8.9	32.5	18.6	27.4	0.3	100.0	1,030
Female	7.4	0.8	2.6	6.7	32.1	20.5	29.7	0.1	100.0	1,416
Residence										
Urban	4.9	0.7	1.5	6.6	34.1	22.6	29.6	0.0	100.0	682
Rural	9.1	0.9	3.1	8.0	31.6	18.6	28.4	0.2	100.0	1,764
Province										
Central	9.9	0.4	2.2	8.1	33.0	19.0	27.1	0.4	100.0	176
Copperbelt	2.2	1.1	1.1	3.4	27.5	30.3	34.3	0.0	100.0	293
Eastern	16.4	2.2	5.2	9.0	31.8	13.7	21.6	0.0	100.0	413
Luapula	4.4	0.0	1.9	9.4	25.2	18.9	40.3	0.0	100.0	164
Lusaka	6.7	0.4	2.9	8.4	38.7	15.1	27.7	0.0	100.0	305
Northern	1.6	0.5	0.9	5.5	29.6	25.6	36.0	0.2	100.0	397
North-Western	2.4	0.3	2.1	9.2	36.4	23.7	25.7	0.3	100.0	138
Southern	17.5	0.6	3.2	9.9	31.2	14.3	22.9	0.3	100.0	369
Western	0.5	1.1	3.2	6.9	40.7	20.1	27.0	0.5	100.0	189
Wealth index (quintile)										
Lowest	8.8	1.3	3.4	9.1	32.1	17.5	27.4	0.4	100.0	611
Second	9.6	0.8	2.9	7.9	30.5	19.8	28.3	0.2	100.0	501
Middle	6.9	1.1	3.3	7.3	31.4	19.0	31.0	0.0	100.0	488
Fourth	6.7	0.5	1.9	6.8	31.6	22.3	30.3	0.0	100.0	415
Highest	7.5	0.5	1.3	6.3	36.4	20.9	27.0	0.1	100.0	431
Total	8.0	0.9	2.7	7.6	32.3	19.7	28.7	0.2	100.0	2,446

All parent/guardian respondents were asked at what age children should start learning about sexual matters. Parent/guardians who supported teaching sex education in primary school identified a lower mean age for first instruction than parent/guardian respondents who object to teaching sex or reproductive health education in primary school (data not shown). On average, parent/guardians who responded that primary schools should include sex or reproductive health education in the curriculum said age 13 is the most appropriate age for children to start learning about sexual matters. In contrast, parent/

guardians who said that primary schools should not include sex education in the curriculum said children should start learning about these matters at age 16.

Impact of AIDS and AIDS Education

Awareness and Impact of AIDS on Children's School Attendance

Parent/guardians' views on AIDS education in primary school may be influenced by their awareness of its prevalence and impact in their community. Virtually all parent/guardian respondents have heard about AIDS, with no variation by sex, residence, province, or wealth (see Table 13.5). As shown in Table 13.6, half (50 percent) of these parent/guardians said that some children in their community do not attend school because their parents or guardians are sick or have died from AIDS, while 39 percent said this was not the case in their community and 11 percent did not answer or did not know. Twelve percent of respondents disclosed that a child in their own family does not attend school because his/her parent/guardian was suffering from AIDS or had died from AIDS.

Table 13.5 Awareness of AIDS

Percentage of parent/guardians who have heard of AIDS, by background characteristics, ZDES 2002

Background characteristic	Has heard of AIDS	Number of parent/ guardians
Sex		
Male	99.8	1,513
Female	99.5	2,440
Residence		
Urban	99.6	1,338
Rural	99.6	2,615
Province		
Central	99.3	281
Copperbelt	99.8	708
Eastern	99.6	552
Luapula	99.1	335
Lusaka	99.8	517
Northern	99.4	574
North-Western	100.0	208
Southern	100.0	448
Western	99.4	330
Wealth index (quintile)		
Lowest	99.5	901
Second	99.4	725
Middle	99.4	792
Fourth	99.9	760
Highest	99.8	776
Total	99.6	3,953

Table 13.6 Effects of AIDS on children's schooling

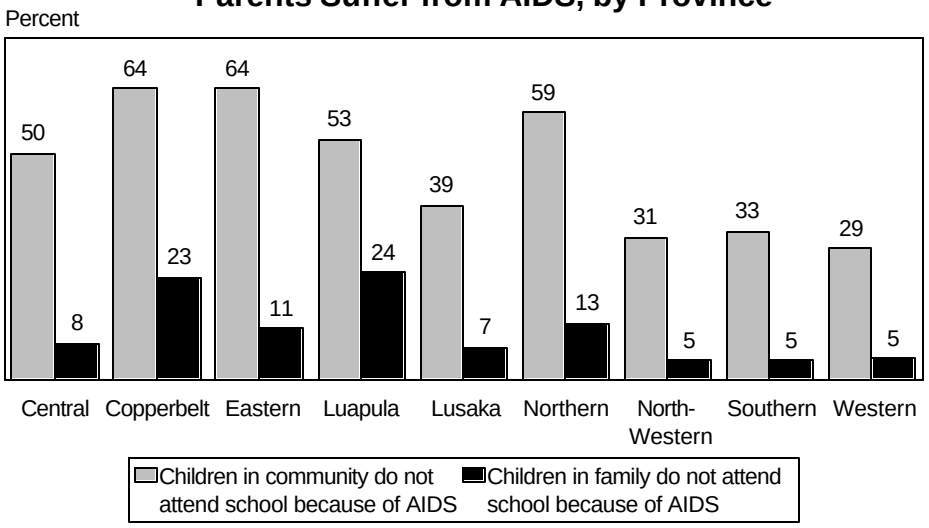
Percent distribution of parent/guardians by whether children in the community and children in the family do not attend school because their parent/guardians are sick or have died of AIDS, by background characteristics, ZDES 2002

Background characteristic	Children in the community do not attend school because of AIDS				Children in the family do not attend school because of AIDS				Number of parent/guardians
	Yes, as their parent or guardian died or is sick with AIDS	No	DK/ missing	Total	Yes, as their parent or guardian died or is sick with AIDS	No	DK/ missing	Total	
Sex									
Male	50.2	39.7	9.8	100.0	10.8	88.2	0.7	100.0	1,513
Female	49.5	38.8	11.1	100.0	12.9	86.1	0.5	100.0	2,440
Residence									
Urban	55.2	29.1	15.3	100.0	15.4	83.5	0.6	100.0	1,338
Rural	47.0	44.3	8.2	100.0	10.4	88.6	0.5	100.0	2,615
Province									
Central	49.9	40.0	9.4	100.0	8.2	90.8	0.2	100.0	281
Copperbelt	64.4	23.7	11.6	100.0	22.6	76.0	1.2	100.0	708
Eastern	63.5	30.2	6.0	100.0	11.4	87.9	0.4	100.0	552
Luapula	52.8	39.8	6.5	100.0	23.8	74.1	1.2	100.0	335
Lusaka	38.5	43.2	18.1	100.0	7.2	92.3	0.2	100.0	517
Northern	58.9	27.3	13.1	100.0	12.5	86.1	0.8	100.0	574
North-Western	31.3	59.6	9.1	100.0	4.5	94.9	0.6	100.0	208
Southern	32.8	54.3	12.9	100.0	4.5	95.5	0.0	100.0	448
Western	28.9	66.9	3.6	100.0	4.9	94.5	0.0	100.0	330
Wealth index (quintile)									
Lowest	40.2	51.3	7.9	100.0	8.7	90.2	0.6	100.0	901
Second	47.9	42.9	8.7	100.0	9.2	90.0	0.2	100.0	725
Middle	52.2	37.8	9.4	100.0	13.5	85.1	0.9	100.0	792
Fourth	53.8	31.3	14.8	100.0	13.9	85.8	0.2	100.0	760
Highest	56.3	30.7	12.8	100.0	15.8	83.2	0.9	100.0	776
Total	49.8	39.2	10.6	100.0	12.1	86.9	0.6	100.0	3,953

Parent/guardians in urban areas (55 percent) were more likely to acknowledge knowing children who do not attend school due to the illness or death of a parent/guardian from AIDS than those in rural

areas (47 percent), as well as to state that a child in their own family does not attend school due to AIDS (15 percent), compared with parent/guardians in rural areas (10 percent). As shown in Figure 13.4, the highest percentages of parent/guardians who know of children in the community not attending school due to AIDS are in Copperbelt and Eastern Provinces (64 percent each). The highest percentages of parent/guardians who have children in their own families who do not attend school because of parent/guardian illness or death from AIDS are in Luapula Province (24 percent) and Copperbelt Province (23 percent). The wealthier the parent/guardian's household, the more likely he/she was to say that there are children in the community who do not attend school because of parent/guardian illness or death from AIDS, and that a child in the family does not attend school because of parent/guardian illness or death from AIDS.

Figure 13.4
Percentage of Parent/Guardians Saying that Children in the Community and in the Family Do Not Attend School because th Parents Suffer from AIDS, by Province



AIDS Education and Primary Schooling

As shown in Table 13.7, the vast majority of parent/guardian respondents (91 percent) said that primary schools should teach pupils about AIDS. In Western Province (22 percent), Copperbelt Province (12 percent), and Central Province (11 percent) the percentages of parent/guardians who disapprove of AIDS education in primary school exceeds the national average (8 percent).

Table 13.7 Whether primary schools should teach about AIDS

Percent distribution of parent/guardians by whether they think primary schools should teach pupils about AIDS, by background characteristics, ZDES 2002

Background characteristic	Primary schools should teach about AIDS			Total	Number of parent/ guardians
	Yes	No	DK/missing		
Sex					
Male	93.4	6.2	0.1	100.0	1,513
Female	89.4	9.7	0.4	100.0	2,440
Residence					
Urban	89.9	9.6	0.2	100.0	1,338
Rural	91.5	7.7	0.3	100.0	2,615
Province					
Central	88.6	10.5	0.2	100.0	281
Copperbelt	87.9	11.9	0.0	100.0	708
Eastern	93.3	6.1	0.2	100.0	552
Luapula	92.3	6.5	0.3	100.0	335
Lusaka	93.1	6.2	0.5	100.0	517
Northern	93.1	5.9	0.3	100.0	574
North-Western	94.9	5.1	0.0	100.0	208
Southern	96.9	2.6	0.5	100.0	448
Western	76.6	22.2	0.6	100.0	330
Wealth index (quintile)					
Lowest	89.4	9.7	0.4	100.0	901
Second	91.0	7.9	0.5	100.0	725
Middle	91.8	7.4	0.3	100.0	792
Fourth	90.8	9.1	0.0	100.0	760
Highest	91.9	7.6	0.3	100.0	776
Total	90.9	8.4	0.3	100.0	3,953

As shown in Table 13.8 and Figure 13.5, among parent/guardians who said that schools should not teach about AIDS, the highest percentage (66 percent) indicated that children are too young, followed by concerns that AIDS education encourages children to have sex (42 percent) and that it simply is not appropriate to teach in primary school (24 percent). Very small percentages of respondents expressed

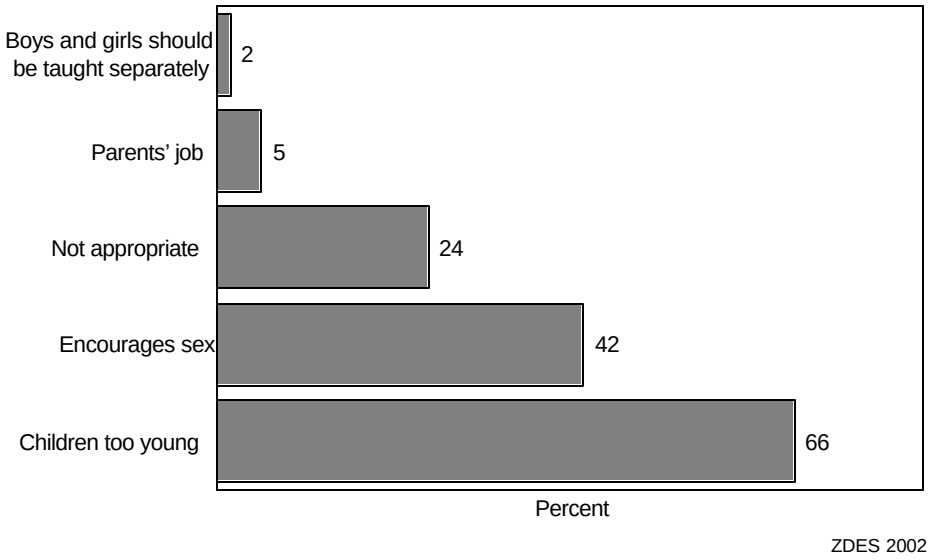
concerns that AIDS education is against religion or that male and female children should be taught separately. Female parent/guardians (44 percent) are more likely to raise objections that AIDS education encourages sexual activity in children than male parent/guardians (36 percent). Likewise, parent/guardians in urban areas are considerably more likely to say that AIDS education encourages sexual activity in children (56 percent) than parent/guardian respondents in rural areas (32 percent). The wealthier the parent/guardian's household, the more likely he/she was to object to AIDS education in school because children are too young and that it encourages them to have sex.

Table 13.8 Reasons primary schools should not teach about AIDS

Among parent/guardians who think that primary schools should not teach about AIDS the percentage, listing specific reasons for not teaching about these matters, by background characteristics, ZDES 2002

Background characteristic	Reasons schools should not teach about AIDS								Number of parent/ guardians
	Not appropriate to teach sex education in schools	Sex education is the parent's job	Children are too young	Boys and girls should be taught separately	Against religion	Encourages children to have sex	Other	Missing	
Sex									
Male	22.1	5.3	63.2	2.7	2.6	35.6	5.2	3.9	100
Female	24.6	4.9	66.4	1.0	2.2	43.8	0.0	5.1	258
Residence									
Urban	24.6	1.1	67.2	2.0	1.2	56.4	0.7	3.6	136
Rural	23.4	7.4	64.5	1.1	3.0	32.4	1.9	5.5	222
Province									
Central	4.0	4.0	56.0	0.0	0.0	50.0	2.0	6.0	32
Copperbelt	26.9	0.0	75.0	1.9	3.8	61.5	1.9	1.9	86
Eastern	25.0	8.3	61.1	0.0	0.0	27.8	2.8	5.6	37
Luapula	44.0	0.0	56.0	4.0	4.0	32.0	0.0	12.0	26
Lusaka	25.0	0.0	60.7	3.6	0.0	53.6	0.0	3.6	36
Northern	23.3	0.0	65.1	0.0	0.0	32.6	2.3	9.3	39
North-Western	15.4	23.1	46.2	11.5	0.0	19.2	0.0	3.8	11
Southern	33.3	0.0	33.3	0.0	0.0	50.0	0.0	0.0	14
Western	20.8	14.3	75.3	0.0	5.2	26.0	1.3	3.9	77
Wealth index (quintile)									
Lowest	23.7	11.4	61.9	0.4	3.2	28.4	2.1	5.9	95
Second	25.2	4.7	63.0	3.2	3.1	30.0	1.0	7.2	65
Middle	22.3	4.4	55.1	2.2	5.1	42.1	2.5	7.1	65
Fourth	21.9	1.5	72.3	1.8	0.0	55.1	1.3	1.3	70
Highest	26.7	0.0	77.0	0.0	0.0	57.7	0.0	2.1	62
Total	23.9	5.0	65.5	1.5	2.3	41.5	1.5	4.8	358

Figure 13.5
Among Parent/Guardians Against AIDS in Primary Schools, tl
Percentage Objecting, by Selected Reasons



As shown in Table 13.9, among parent/guardians who said that primary schools should include AIDS education in the curriculum, the highest percentages indicate that the upper primary grades (grades 5, 6 and 7) are when pupils should first be taught about AIDS: 35 percent of parent/guardians specified that grade 5 was the earliest grade the topic should be taught, 18 percent specified grade 6, and 24 percent specified grade 7 (see Table 13.9).

Male respondents appear to support introduction of AIDS education earlier in the primary cycle than female respondents. For example, male respondents (11 percent) were more likely than female respondents (7 percent) to say that AIDS education should start in grade 1, while female respondents (27 percent) were more likely than male respondents (19 percent) to say that AIDS education should start in grade 7. Parent/guardians in rural areas also appear to support the introduction of AIDS education earlier than parent/guardian in urban areas. Respondents from the wealthiest households are twice as likely as those from the poorest households to name grade 1 as the earliest grade to start AIDS education.

Table 13.9 When pupils should be taught about AIDS

Among parent/guardians who think that primary schools should teach about AIDS, the percentage distribution by primary school grade in which parent/guardians think pupils should first be taught about AIDS, by background characteristics, ZDES 2002

Background characteristic	Grade in which pupils should be taught about AIDS								Parent/guardians agreeing it should be taught in primary	
	1	2	3	4	5	6	7	Missing	Total	Number
Sex										
Male	11.0	1.4	3.6	11.9	36.4	16.4	19.2	0.1	100.0	1,413
Female	7.3	0.8	3.2	9.3	33.8	18.9	26.7	0.0	100.0	2,182
Residence										
Urban	8.7	0.5	2.2	6.3	33.4	20.1	28.8	0.0	100.0	1,203
Rural	8.8	1.3	3.9	12.3	35.6	16.9	21.2	0.0	100.0	2,393
Province										
Central	9.3	0.8	3.9	7.8	28.4	22.2	27.6	0.0	100.0	249
Copperbelt	7.4	0.8	1.3	4.5	32.3	25.4	28.3	0.0	100.0	623
Eastern	10.6	1.4	4.6	14.0	37.5	14.6	17.4	0.0	100.0	515
Luapula	5.7	1.7	1.7	15.4	30.1	18.4	27.1	0.0	100.0	309
Lusaka	11.7	0.5	4.5	5.6	35.7	17.3	24.5	0.0	100.0	481
Northern	6.0	1.2	2.9	12.2	37.0	16.6	23.8	0.2	100.0	534
North-Western	5.6	1.7	6.0	19.7	32.2	17.2	17.6	0.0	100.0	197
Southern	14.1	0.8	3.5	10.6	37.1	11.4	22.5	0.0	100.0	434
Western	4.8	1.2	3.6	10.7	39.7	17.5	22.6	0.0	100.0	253
Wealth index (quintile)										
Lowest	7.3	1.5	5.0	14.5	34.7	15.6	21.5	0.0	100.0	805
Second	7.4	1.5	3.2	12.8	36.6	17.3	21.3	0.0	100.0	660
Middle	7.0	1.1	2.8	10.6	36.5	19.0	22.9	0.0	100.0	727
Fourth	9.1	0.6	2.4	7.8	30.2	19.7	30.2	0.1	100.0	690
Highest	13.0	0.6	3.2	5.4	36.2	18.4	23.1	0.0	100.0	714
Total	8.7	1.1	3.3	10.3	34.8	17.9	23.7	0.0	100.0	3,595

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SAMPLE DESIGN

APPENDIX A

The major objective of the 2002 ZDES sample design was to provide information on decision-making about education for children of primary school age. The 2002 ZDES was designed to be linked to the 2001-2002 Zambia DHS survey, and used the same sampling frame. To give a complete explanation of the sample, it is necessary to first address the sample design for the 2001-2002 Zambia DHS survey, then the subsequent design for the 2002 ZDES.

Zambia DHS Survey

The principal objective of the Zambia DHS survey was to provide current and reliable data on fertility and family planning behaviour, child mortality, children's nutritional status, the utilization of maternal, child health services, knowledge and prevalence of HIV and syphilis.

The population covered by the 2001-2002 Zambia DHS survey was defined as the universe of all women age 15-49 in Zambia and all men age 15-59. A sample of households was selected and all women age 15-49 identified in the households were interviewed. In addition, in a subsample of one-third of all the households selected for the Zambia DHS survey, all men 15-59 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey.

Sample Domains

The Zambia DHS survey collected demographic and health information from a nationally representative sample of women and men age 15-49 and 15-59, respectively. The primary focus of the 2001-2002 Zambia DHS survey was to provide estimates of key population and health indicators, including fertility and mortality rates, for the country as a whole, and for urban and rural areas separately. Also, the sample was designed to provide estimates of key variables for the nine provinces, namely, Central, Copperbelt, Eastern, Luapula, Lusaka, Northern, North-Western, Southern, and Western. In addition, the sample provides basic information for a total of 12 combined districts (not each separately) that are the special focus of the Zambia Integrated Health Programme (Livingstone, Kalomo, Chibombo, Kabwe Urban, Ndola Urban, Kitwe, Chipata, Lundazi, Chama, Kasama, Samfya, and Mwense).

Sample Frame

Zambia is divided into nine provinces. In turn, each province is subdivided in districts, each district into constituencies, and each constituency into wards. In addition to these administrative units, during the 2000 population census, each ward was subdivided into convenient areas called census supervisory areas (CSAs), and in turn each CSA into standard enumeration areas (SEAs). In total Zambia has 72 districts, 150 constituencies, 1,289 wards, about 4,400 CSAs, and about 16,400 SEAs. Preliminary information on the counts of households and population, as well as cartographic materials were available from the 2000 population census for the SEAs. The sample frame for this survey was the list of SEAs developed from the 2000 population census.

Stratification

In the preliminary census frame and for the purpose of the 2001-2002 Zambia DHS survey, the SEAs were grouped by CSAs, by CSAs within a ward, by wards within a constituency, by constituencies

within a district and by districts within a province. The SEAs were further stratified separately by urban and rural areas within each province.

Sample Allocation

The primary sampling unit (PSU), the cluster for the 2001-2002 Zambia DHS survey, is defined on the basis of SEAs from the census frame. In the design, a minimum requirement of 85 households for the cluster size was imposed. If an SEA did not have 85 households, it was combined with an adjacent SEA. The number of clusters in each district was not allocated proportional to the total population because of the need to present estimates by province.

The target for the 2001-2002 Zambia DHS sample was 8,000 completed interviews. Based on the level of non-response found in the 1996 Zambia DHS survey, to achieve this target, approximately 8,200 households were selected, with all women age 15-49 being interviewed. The target was to reach a minimum of 750 completed interviews per province. In each province the number of households was distributed proportionately among the urban and rural areas.

In Zambia, two-thirds of the population resides in rural areas and one-third in urban areas. This urban-rural distribution was also taken into account in distributing the sample.

Sample Selection

The 2001-2002 Zambia DHS sample was selected using a stratified two-stage cluster design consisting of 320 clusters, 100 in urban and 220 in rural areas. Once the number of households was allocated to each province by urban and rural areas, the number of clusters was calculated based on an average sample take of 25 completed interviews among women 15-49 years. In each urban or rural area in a given province, clusters were selected systematically with probability proportional to the number of households in each cluster. The selection was done using the following formula:

$$P_{1i} = (a * M_i) / (\Sigma M_i)$$

where

a is the number of clusters to be selected in the given combination of province by residence area,

M_i is the number of households of the i^{th} clusters reported in the 2000 summary census information,

ΣM_i is the number of households in the urban (or rural) area in the province according to the 2000 summary census information.

In each selected cluster, a complete household listing operation was carried out and households were selected to achieve a self-weighted sampling fraction in each province. However, since the 2001-2002 Zambia DHS sample is unbalanced among provinces, a final weighing adjustment procedure is required to provide estimates at every other domain of study.

In a given province, if the overall sampling fraction (f) has been calculated, and if c_i is the number of households selected out of the total households (L_i)—found in the 2001 listing process—for the i^{th} cluster, then the self-weighting condition can be expressed as

$$f = P_{1i} * (c_i / L_i)$$

The final number of households in the i^{th} cluster could be calculated as

$$c_i = (f * L_i) / P_{1i}$$

and the household selection interval for the i^{th} cluster is given as

$$I_i = L_i / c_i$$

$$I_i = P_{1i} / f$$

Response Rates

A total of 8,050 potential households were selected for the 2001-2002 Zambia DHS survey, of which 7,261 were actual households. Household interviews were completed for 98 percent of the actual households.

Zambia DHS EdData Survey

The sample was design to provide data at the national, urban-rural, and in most cases, regional levels. The goal of the 2002 ZDES sample was to obtain 8,000 completed interviews with information on children age 6-14. The final sample was 8,027 completed eligible child questionnaires.

For the 2002 ZDES, all of the 2001-2002 Zambia DHS clusters were sampled. Within the 320 SEAs, households with children who were age 6-14 at the time of the 2000-2001 ZDHS were included in the 2002 ZDES sample. Within these households with one or more children in the age range of interest, all children within the age range were included in the sample.

Of the 4,701 potential households selected, the 2002 ZDES fieldwork teams successfully interviewed 4,245 households (see Table 1.1 in Chapter 1). The main reasons that potential households were not interviewed were the household had moved or that that the entire household was absent, and in total, this accounted for 8 percent of potential households. A total of 4,306 households were occupied, of which 4,245 were successfully interviewed, for an overall response rate of 99 percent. The household response rate was similar in urban and rural areas. In the interviewed households, 8,027 children were found and Eligible Child Questionnaires were completed for all of these children.

ESTIMATES OF SAMPLING ERRORS *APPENDIX* **B**

The estimates from a sample survey are affected by two types of errors: 1) nonsampling errors and 2) sampling errors. Nonsampling errors are the result of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2001-2002 Zambia DHS survey and the 2002 ZDES to minimise this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2001-2002 Zambia DHS and the 2002 ZDES is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2001-2002 Zambia DHS and the 2002 ZDES samples are the result of a multistage stratified design, and consequently, it was necessary to use more complex formulas. The computer software used to calculate sampling errors for the 2001-2002 Zambia DHS and the 2002 ZDES is the ISSA Sampling Error Module (ISSAS). This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$\text{var}(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - r.x_{hi}, \text{ and } z_h = y_h - r.x_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of enumeration areas selected in the h^{th} stratum,
y_{hi} is the sum of the values of variable y in EA i in the h^{th} stratum,
x_{hi} is the sum of the number of cases in EA i in the h^{th} stratum, and
f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2001-2002 Zambia DHS and the 2002 ZDES, there were 320 nonempty clusters (PSUs). Hence, 320 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = \text{var}(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)\, r_{(i)}$$

where r is the estimate computed from the full sample of 320 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 319 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, ISSAS computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSAS also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2001-2002 Zambia DHS and the 2002 ZDES are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 9 subdomains (provinces) in the country. For each variable, the type of statistic (mean or proportion) and the base population are given in Table B.1. Tables B.2 to B.9 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is 0 (when the estimate is close to 0 or 1).

The estimates from a sample survey are affected by two types of errors: 1) nonsampling errors and 2) sampling errors. Nonsampling errors are the result of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2001-2002 Zambia DHS and the 2002 ZDES to minimise this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

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been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

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$$\text{var}(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - r.x_{hi}, \text{ and } z_h = y_h - r.x_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of enumeration areas selected in the h^{th} stratum,
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f is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2001-2002 Zambia DHS and the 2002 ZDES, there were 320 nonempty clusters (PSUs). Hence, 320 replications were created. The variance of a rate r is calculated as follows:

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in which

$$r_i = kr - (k - 1)\, r_{(i)}$$

where r is the estimate computed from the full sample of 320 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 319 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, ISSAS computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSAS also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2001-2002 Zambia DHS and the 2002 ZDES are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the 9 subdomains (provinces) in the country. For each variable, the type of statistic (mean or proportion) and the base population are given in Table B.1. Tables B.2 to B.15 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is 0 (when the estimate is close to 0 or 1).

In general, the relative standard error for most estimates for the country as a whole is small, except for estimates of very small proportions. There are some differentials in the relative standard error for the estimates of sub-populations. For example, for the variable *never attended school*, the relative standard errors as a percentage of the estimated mean for the whole country, for urban areas, and for rural ares are 4.0 percent, 8.5 percent, and 4.2 percent, respectively.

The confidence interval (e.g., as calculated for the variable *never attended school*) can be interpreted as follows: the overall national sample proportion is 0.196 (or 20 percent) and its standard error is 0.008. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $0.196 \pm 2 \times 0.008$. There is a high probability (95 percent) that the *true* proportion of children age 6-14 who have never attended school is between 18 and 21.2 percent.