Ministry of Primary and Secondary Education

SACMEQ IV PROJECT

# FOREWORD

At independence in 1980, the Government of Zimbabwe declared education a basic human right and worked to ensure that all people of Zimbabwe had access to education. During the past 33 years the country has achieved quantitative expansion in education and focus is now on improvement of quality. As one of the strategies for the achievement of quality, the country collaborated with 14 other states and formed Southern and East Africa Consortium for Monitoring Educational Quality (SACMEQ) in 1995. Since then, Zimbabwe has been a member of SACMEQ. The Ministry of Primary and Secondary Education attaches great importance to the achievement of quality education and has been a regular participant of the SACMEQ projects.

The SACMEQ IV project was carried out during 2012 -2014 at a time the country was in the process of reviewing its primary and secondary school curriculum. The findings of this study are presented in the ensuing chapters.

# ACKNOWLEDGEMENT

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# ABBREVIATIONS

| | |
|---|---|
| SACMEQ | Southern and Eastern Africa Consortium for Monitoring Educational Quality |
| MoPSE | Ministry of Primary and Secondary Education |
| MoHTESTD | Ministry of Higher and Tertiary Education, Science and Technology Development |
| ZIMSTAT | Zimbabwe National Statistics Agency |
| ECD | Early Childhood Development |
| ZJC | Zimbabwe Junior Certificate |
| A Level | Advanced Level |
| O Level | Ordinary Level |
| ZimSEC | Zimbabwe Schools Examination Council |
| HAKT | HIV and AIDS Knowledge Test |
| PICES | Poverty, Income, Consumption and Expenditure Survey |
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# Chapter 1 Setting for the Study

## Zimbabwe: Location, Area and Population.

Zimbabwe is a landlocked country which is located in Southern Africa surrounded by Zambia, Botswana, Mozambique and South Africa which are at the North, West, East and South respectively. It has tourist attractions like Great Zimbabwe (which was built from stones in Masvingo), Victoria Falls(also known as Mosi-oa-Tunya the smoke that thunders), Vumba Mountains in Nyanga and Hwange game park. Zimbabwe has 10 provinces which are Bulawayo, Harare, Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Masvingo, Matabeleland North, Matabeleland South and Midlands.


*Figure 1.1: Zimbabwe Map*

*Figure 1.2: Victoria Falls*

*Figure 1.3: Great Zimbabwe*

Zimbabwe has a literacy rate of 96% (ZimStat, 2012)

**Population (2012 Census):** 13 061 239 (growth rate: 1.1%);

**Land area:** 386,669 sq. km (149,293 square miles)

T**otal area:** 390,580 sq. km (150,804 square miles)

## Recent Education Reviews and Reforms

In 2014 the Ministry of Primary and Secondary Education launched the curriculum review exercise where parents and other stakeholders participated in the school based consultations. The aim of this curriculum review was to have an education system that prepares learners for the challenges of the twenty- first century, in line with some recommendations of the 1999 Presidential Commission of Inquiry into Education and Training.

The new curriculum aims to transform the education system from a content-based and examination driven curriculum to a competency and skills-based curriculum that is grounded on both continuous school-based assessment and public examinations. Further, the curriculum has a values-oriented system where learning areas that instill national values such as self-reliance, entrepreneurship, responsible citizenship, critical global awareness, environmental stewardship, inclusiveness multi-culturalism and tolerance, among others, have been adopted.

## Structure of Education System in Zimbabwe

Zimbabwe has two ministries of education. The two ministries are Ministry of Primary and Secondary Education (MoPSE) which offers basic education; and Ministry of Higher and Tertiary Education, Science and Technology Development (MoHTESTD) which offers tertiary education. The education system in Zimbabwe consists of 9 years primary schooling and 6 years of secondary schooling before learners can enter into university, college, or other higher education institutions.

i. Primary education is broken down into two modules which are:

   a. **Infant** school which starts in the year children turn 4 years old, and lasts up to 7 years old. It comprises of 4 grades of schooling: ECD A, ECD B, Grade 1 and Grade 2.

   b. **Junior** school which starts at age 8 and ends at age 12, from grade 3 up to grade 7 where learners take their first national examination.

ii. **Secondary** schooling consists of lower secondary (Form 1-4) and upper secondary (Form5-6). The official entry age into secondary level is 13 and the learners are enrolled in Government and Non-Government schools. Learners normally write their "O" level examinations when they are 16 years old. To proceed to 'A' level, a learner needs to have passed at least five subjects with a grade "C" or better. Learners who have not managed to proceed to "A" level will join the workforce, enrol at a technical / vocational college and a nursing or teachers' college. Only those with the best scores manage to find a place in an "A" level program.

**Non-formal Education** refers to part-time schooling in the evening, day and study groups. Learners do academic and professional courses. The Government and private institutions run evening classes. In government run schools, the individuals pay minimal amounts of fees and teachers are paid by Government. In Private institutions, the individuals pay tuition while the respective institution may supply tuition/learning material. However teachers in Private institutions are paid by the institution. Non-Formal Education has

significantly expanded due to dropouts and repeaters who fail to get places at formal institutions.

The Zimbabwean Education System can be illustrated as below.

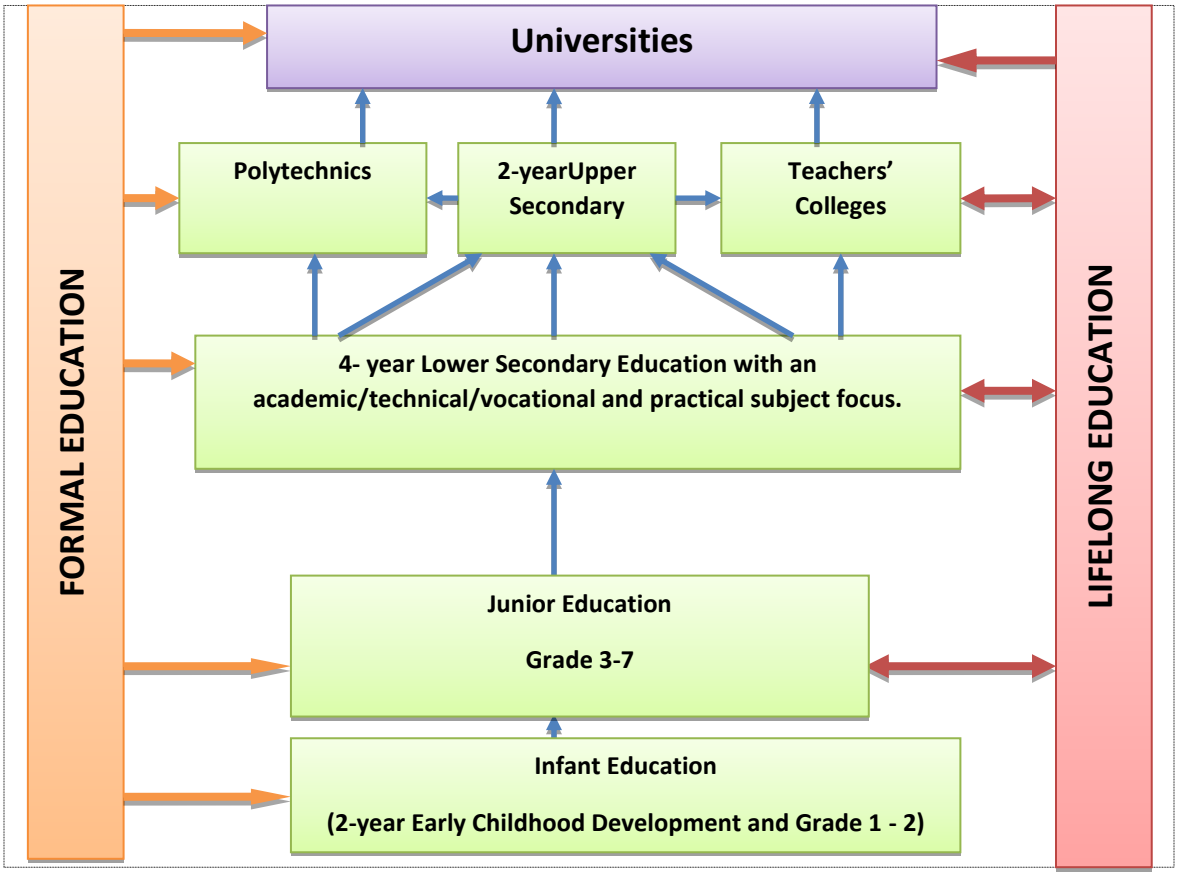



*Figure 1.4: Zimbabwean Education System*

## Education Status

Education in Zimbabwe is under the jurisdiction of the Ministry of Primary and Secondary Education for primary and secondary education and the Ministry of Higher and Tertiary Education, Science and Technology Development for tertiary education.

The Ministry of Primary and Secondary Education is structured for easier management and accountability. Administratively Zimbabwe is divided into 10 provinces which are Bulawayo, Harare, Manicaland, Mashonaland Central, Mashonaland East, Mashonaland

West, Masvingo, Matabeleland North, Matabeleland South and Midlands. Each province is divided into approximately 5-9 districts.

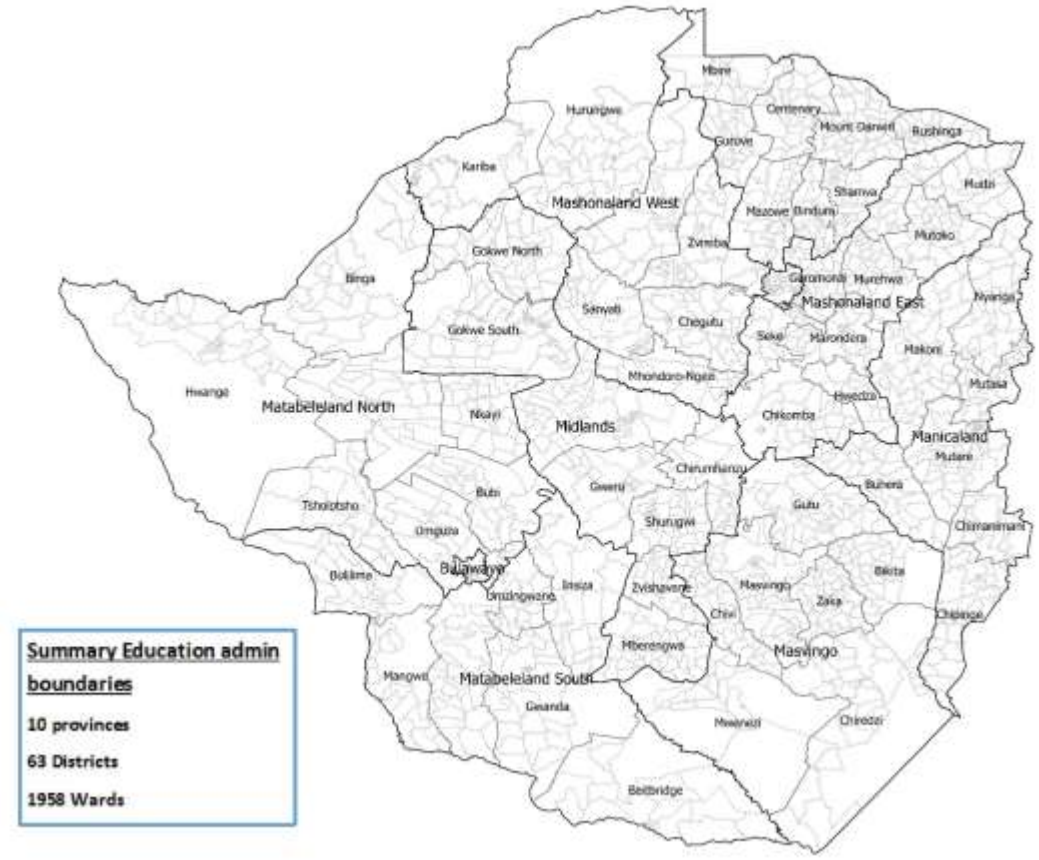



*Figure 1.5: Map of Education Administration*

The Provincial Education Office is headed by the Provincial Education Director with 2 Deputy Directors, one responsible for primary education and the other one for secondary education.

There are 72 education administrative districts which are headed by the District Schools Inspector who works with a team of officers who include education inspectors, district literacy coordinators, Early Childhood Development trainers and remedial tutors. All heads of schools report to the District Schools Inspectors. Below the district level there are 1075 clusters. Each cluster is a grouping of schools in the same neighbourhood that are brought together for knowledge and skills sharing and professional development including sporting activities.

## Education Environment

The Ministry of Primary and Secondary Education carried out a mapping exercise in 2013 to assess the number of new schools that were needed at this point in time. The total number of new schools that were needed by then was 2,056. An additional 33,636 classrooms were needed in existing schools. To cope with the number of learners, 41% of primary schools and 36% of secondary schools were running double sessions.

There is inadequate provision of infrastructure and furniture in schools, particularly schools in newly resettled areas. Infrastructure for Science and Technical/Vocational teaching, special needs teaching and Information Communication Technology (ICT) resources are limited in schools: 55% of schools have electricity, 846 primary schools and 1,151 secondary schools have computers for the learners, 618 primary schools and 528 secondary schools have internet, and 303 primary schools and 347 secondary schools have e-learning programmes. The ratio of learner to computer teachers is 526:1 in primary schools and 404:1 in secondary schools. The infrastructure situation is better in urban areas than in rural areas due to the funding available through parents in these schools. Resources vary greatly by province and responsible authority.

## Education Financing

The Zimbabwean economy has experienced severe challenges during the past years. Indeed, in 2008 the peak of a ten year crisis, the real GDP was one third lower than in 2000. The year 2009 marked the dollarization of the economy and also the beginning of a period of recovery. Therefore, between 2009 and 2014 the average annual growth of GDP was 8.4%, but compared to 2000 the growth was only 2.3%. This performance of the economy is better than the demographic growth rate of 1.1% although it is not enough to let the population out of poverty. According to PICES in 2011, 72% of the population was living under the poverty datum line.

That being said, the biggest chunk of education spending is devoted to salaries at school level which absorb not less than 95% of the sector budget leaving a very narrow room for

other recurrent and capital expenditures. Distribution across the levels of schooling indicated that infant and junior education accounted for 50% of the budget in 2014, while secondary education absorbed 27% and Higher education 17%. When compared to the enrolment at different levels in 2014, the government spent US$216 per student in junior, US$328 in secondary and US$3,309 in higher education (15 times the unit cost of junior education).

Since employment costs at school level constitute the biggest part of the budget, it's worth analyzing the teachers' remuneration and distribution within the system. On average, in 2013, ECD and Primary teachers earned roughly US$526 per month, representing 6 units of GDP per capita. The analysis indicates a strongly coherent distribution of teachers according to the enrolment, with a coefficient of determination of 92% in primary and 93% in secondary education. Zimbabwe appears to be one of the top performing countries on the continent in terms of teacher allocation to schools. In fact, the degree of randomness (the indicator of inconsistency of teacher distribution) for primary schools is the second lowest among selected African countries where similar analyses have been recently conducted. When it comes to textbook distribution to schools based on enrolment, the coefficient of determination dropped to 56%, meaning the existence of a larger room of improvement.

## Issues to Consider for the Improvement of the Education Sector

Demographic pressure on the education system is set to increase. The number of learners is expected to increase by 12.7% from 2012 to 2022. There will be a need to increase the size of existing schools and build new schools. Huge investments are needed in infrastructure and learning materials in the education sector. Investments are also needed in water and sanitation, classroom furniture, textbooks, infrastructure for Science, Technical/Vocational teaching, special needs teaching and Information Communication Technology.

Equity issues concerning school financial resources, grant type, urban/rural, registered/satellite, province and district need to be addressed. School resources need to

be distributed equitably to achieve equitable learning outcomes. The most affected children in terms of learning outcomes are those in remote schools. Programmes should be targeted to the areas where households can least afford education. There is need to strengthen the capacity of schools to identify learners that are at risk of dropping out and how they can be kept in school. For all these challenges to be adequately addressed, substantial financial resources are required.

## Structure and Content of the Report

In Chapter 1 of this report the reader was introduced to a brief background of Zimbabwe and its education system. In Chapter 2 a discussion of how the study was conducted is presented. Crucial issues pertaining to the planning of the study, instrument construction, sampling, data collection, data entry, cleaning and merging, data analysis and write up of the results are outlined.

In Chapter 3, grade 6 learners' personal characteristics (like age and gender) and home background characteristics (such as parental education, meals provisions, spoken language at home) that might have an impact on teaching and learning. In Chapter 4, information about teachers' characteristics and their views about teaching, classroom resources, professional support, etc are reported. Chapter 5 highlights school principals' characteristics and viewpoints on educational infrastructure, learners and teachers. School resources are presented in Chapter 6. Chapter 7 contains a discussion of learners and teachers' reading and mathematics achievement levels while Chapter 8 highlights learners and teachers' knowledge, behavior and attitude about HIV and AIDS. The last chapter, Chapter 9 closes with the conclusions of the study and its report as well as an agenda for the future actions of SACMEQ.

# Chapter 2 The Conduct of the study

Over the years since its first project in 1995, SACMEQ has developed research instruments and collected useful information using advanced research methods. An important principle in the studies is to ensure that SACMEQ is able to generate valid measures of levels and changes in achievement: (a) across countries at single time points, and (b) across time points for individual countries. To achieve this goal SACMEQ follows virtually the same methodologies across studies and uses the same instruments which must be kept confidential to remain valid. The methodology and instruments that were used in the SACMEQ IV project in 2013 were, therefore, the same as in SACMEQ II, and III. For a detailed account of the study design, sampling techniques and the development of the instruments reference should be made to the second chapter of the SACMEQ II report. SACMEQ IV research project also includes HIV and AIDS knowledge test (HAKT) for Grade 6 learners and their teachers.

SACMEQ IV project represents a major increase in the scale and complexity of SACMEQ's research and training programmes. The focus of the project was on conditions of schooling and the quality of education in fourteen school systems: Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania (Zanzibar), Uganda, Zambia, and Zimbabwe. The purpose of the project was to gather information on a) the general conditions of schooling, b) the reading and mathematics achievement levels of Grade 6 learners and their teachers, and c) the knowledge that learners and their teachers have about HIV and AIDS. The main data collection for the project covered a total of around **62, 218** learners, **6, 667** teachers, and **2, 507** School Heads.

In this chapter specific aspects of the methodology followed in SACMEQ IV project are outlined and these include a description of the sample used, data collection, cleaning and analysis.

## The Study Population

### (a) Desired Target Population

The desired target population definition for SACMEQ IV Project was exactly the same (except for the year) as was employed for the SACMEQ II and III Projects. This consistency was maintained in order to be able to make valid cross-national and cross-time estimates of "change" in the conditions of schooling and the quality of education. The desired target population definition for SACMEQ IV Project is as follows:

*"All learners at Grade 6 level in 2013(at the first week of the eighth month of the school year) who were attending registered mainstream (primary) schools."*

### (b) Excluded Target Population

One of the rules followed by SACMEQ for ensuring valid data in large-scale studies is that no more than 5 percent of the learners in the desired target population may be excluded from the defined target population. Like in SACMEQ II and III, special schools which provide education to learners with severe educational needs were excluded from SACMEQ IV sample. "Small" mainstream schools which had less than 15 learners enrolled in Grade 6 in 2013 were also allocated to the excluded population to reduce data collection costs – without the risk of leading to major distortions in the study population.

### (c) Defined Target Population

The "defined target population" was constructed by removing the "excluded target population" from the "desired target population". In Table 2.1 the numbers of schools and learners in the desired, defined and excluded populations have been presented.

*2.1: Desired, Defined, and Excluded Populations*

| | **Desired** | | **Defined** | | **Excluded** | | **Learners** |
|---|---|---|---|---|---|---|---|
| | Schools | Learners | Schools | Learners | Schools | Learners | **% Excluded** |
| **Country** | **5,638** | **349,816** | **4,836** | **337,367** | **802** | **12,449** | **3.56** |

From the last column of **Table2.1** it can be observed that the excluded population of learners was 3.56% and this is less than the stipulated 5% that meets the SACMEQ criteria for accuracy in large-scale assessment data.

## Data Collection

In this report "*Data Collection"* includes preparations before the field work, the actual field work and activities that followed field work.

**Preparations for the main data review**

Preparations focused on instrument review, communication to schools, printing and distribution of instruments and training of data collectors.

**(a) Instrument review**

As soon as the 2011SACMEQ Assembly of Ministers took a decision to conduct SACMEQ IV project in 2013, the National Research Teams (NRTs) under the auspices of the SACMEQ Coordinating Centre in Paris, set out to prepare and update the instruments (tests and questionnaires). Between 2012 and 2013 the SACMEQ Coordinating Centre hosted at least three working sessions for the NRTs in Nairobi (Kenya),Lusaka (Zambia), and Pretoria (South Africa) that were focused on reviewing existing test items and ensuring that, where there had been curriculum changes, the items were still relevant. Invariably, there were no significant changes on the Reading, Mathematics and Health Knowledge test items. SACMEQ IV test items were piloted, first, in a few primary schools in South Africa, and then in individual member countries. The pilot study was intended to ensure that the language in SACMEQ IV tests was accessible to learners, that there were no cultural biases in the items and learners comprehended how to write their responses.

In some countries the tests were subsequently translated into respective language(s) of instruction (Kiswahili and Portuguese). Care was taken to ensure that the English and other languages used for the tests were equivalent to avoid unfair advantage in any of the language(s).

The final statistical and content validity and reliability checks of the instruments were carried out by NRTs and specialists at the SACMEQ Coordinating Centre who then declared the instruments ready to print and take to the field.

### (b) Communication to schools

Officials in the respective Ministries of Education informed the sampled schools through the Regional offices during mid-2013. The National Research Teams were responsible for distributing the data collection schedules, intensifying and monitoring communication to schools and among data collectors.

### (c) Printing and distribution of data collection instruments

Data collection instruments included a) School Head Booklets, b) School Information Booklets, c) Teacher Booklets, d) Learner Booklets e) Learner Name Forms and f) School Forms. Each participating country received print-ready copies from the Coordinating Centre and was responsible for printing correct numbers of copies for their respective schools.

When all instruments were printed, the NRTs conducted a "hand check" of all materials so as to verify that there were no missing/ extra pages, misprints or omissions. All work related to the printing and packaging of the data collection instruments was undertaken under strict security arrangements – so that there was no possibility of "leakage" of information about the content of the learner and teacher Reading, Mathematics, and Health Knowledge Tests.

The printed materials were distributed to leaders of research teams that were assigned to collect data in each school. The Team Leaders were responsible for checking the accuracy of the instruments in terms of correctness of numbers and languages before carrying the instruments to the schools. The first level of checking was done during data collection training sessions. The data collectors were charged with further and final checks a day before the data collection.

### (d) Training of data collectors

On the first day of training the NRT presented a "simulated" data collection exercise in which they acted as a data collectors and the trainees took the roles of learners, teachers, and School Heads. The second day involved an intensive study of the Manual for Data Collectors. This document sets out, in sequential order, all of the actions to be taken by the data collectors from the time of receiving packages of data collection instruments from the Ministry of Education to the time when the data collectors had completed the data collection and was preparing all materials for return. The third day involved a second "simulated" data collection whereby the trainees supervised a full-fledged data collection in several schools that were not involved in the main data collection. The experiences gathered during these exercises were shared and discussed during a meeting so that all data collectors understood the procedures to be completed within schools.

## Main Data Collection

"Main Data Collection" in this report refers to the actual field work. Three data collectors were assigned three sampled schools to carry out the data collection exercise. Special effort was made to ensure that data collection was conducted according to explicit and fully-scripted steps so that the same verbal instructions were used (for learners, teachers, and School Heads) by the data collectors in all sample schools, in all countries, and for each aspect of the data collection. This was a very important feature of the study because the validity of cross-national comparisons arising from the data analyses depended, in large part, on achieving carefully structured and standardized data collection environments. The main SACMEQ IV data collection occurred for most SACMEQ Ministries of Education in the period September to December 2013.

Two days of data collection were required for each sampled school. On the first day the data collectors had to sample learners from all the Grade 6 classes in the sampled schools, using a list of provided random numbers. The sampled learners were then given the Pupil Questionnaire, the HAKT and the Reading test. On the second day they were given the Mathematics test. Part of the Pupil Questionnaire required learners to get confirmation of the accuracy of the information from their parents; therefore the questionnaires were

taken home by the learners and returned the following day. In addition to completing a questionnaire, one teacher who taught the majority of the sampled learners for each of Reading, Mathematics Health and Life skills also completed the relevant tests.

The data collectors were provided with a 40-point checklist in order to ensure that they completed all important tasks that were required before, during, and after their visits to schools. Each task was cross-referenced to specific pages of instructions in the data collectors' manual. The data collectors also checked all completed questionnaires (Pupil, Teacher, and School Head) and, if necessary, obtained any missing or incomplete information on the second day before they left the school. The materials were then handed over to the Regional Coordinator for safekeeping, "hand editing" and dispatching to the National Research Coordinator (NRC) at the Ministry of Education as soon as all data collection was completed.

## Sampling and Sample Characteristics

A two-stage sampling design was employed. In the first stage schools in the defined target population were sampled on a "Probability-Proportional-to-Size" (PPS) basis from sampling frames that individual countries submitted to the SACMEQ Coordinating Centre. In the second stage of sampling learners were sampled from all the Grade 6 classes in each of the sampled schools using Simple Random Sampling. Computer-generated random numbers were used to facilitate the sampling of learners. Twenty five (25) learners (minimum cluster size) were sampled where the total number of all enrolled Grade 6 learners at the time of data collection was greater than 25. Where the number of Grade 6 learners was 25 or less than 25 in a school, all the Grade 6 learners were included in the sample.

For a detailed account of how the sampling of schools and learners was carried out, including the software that was used in the SACMEQ IV project the reader may refer to Ross and Saito (in press). The numbers of schools and learners in the planned and actually achieved sample have been presented in Table 2.2.

***2.2**: Planned and Achieved Samples for SACMEQ IV*

| | Schools | | Learners | |
|---|---|---|---|---|
| | **Planned** | **Achieved** | **Planned** | **Achieved** |
| | **213** | **190** | **5,250** | **5,089** |

Table 2.2 shows that out of 213 schools planned 190 schools was achieved, meaning that 23 schools did not participate which resulted in learners not being able to participate. 5,089 learners participated in SACMEQ IV out of 5,250 planned. The reasons for non-participation was of accessibility among other reasons.

## Response rates, design effects, effective sample sizes

The size and the quality of the sample are critical to the accuracy of the research. The response rate, the design effect and the effective sample size are some of the characteristics that SACMEQ monitors in all the projects. The response rates, design effects and effective sample sizes for SACMEQ IV project have been presented in Table 2.3.

Figures in the first two columns under the heading "Response Rate (%)" in Table 2.3 are the response rates for schools and learners, respectively. The third, fourth and fifth columns under the heading "Design Effects" are numbers (ratios) that indicate the amount of "sampling error" associated with the two-stage sample for each of Reading, Mathematics and HAKT estimates. Columns six, seven and eight under the heading "Effective Sample Sizes" are numbers of sample units (learners) in a simple random sample that would give the same level of accuracy as the two-stage sample that was used in the study for each of Reading, Mathematics and HAKT.

***2.3**: Response Rates, Design Effects, Effective Sample Sizes for SACMEQ IV*

| Response Rate (%) | | Design Effect | | | Effective Sample Size | | |
|---|---|---|---|---|---|---|---|
| **Schools** | **Learners** | **Reading** | **Mathematics** | **HAKT** | **Reading** | **Mathematics** | **HAKT** |
| **89.2** | **96.9** | **7.97** | **7.56** | **5.86** | **364** | **384** | **495** |

The following observations can be made from Table 2.3:

**Response rate** in surveys refers to the percentage of the total sample units that were planned who actually participate in the study. The SACMEQ rule is that the overall response

rate for both the schools and the learners should not be less than 90%, hence Zimbabwe was able to meet this criteria slightly at 89.2% response rate for schools and a learners response at 96.9%.

**Design effect** is a number (ratio) which indicates the amount of "sampling error" that is introduced by the use of a clustered (two-stage) sampling method in relation to the "sampling error" that would result if a simple random sample of the same size had been used. Alternatively, the "design effect" is the ratio of the variance (of the sample mean) for a multi-stage sample to the variance for a simple random sample of the same size. Generally, the inaccuracy associated with a multi-stage sample is many times greater than the inaccuracy associated with a simple random sample of the same size. In SACMEQ IV, this means that for Reading the achieved two-stage sample of 5,089 had a variance (of the sample mean) which was 7.97 times the variance that would be realized if a simple random sample of the same size was used. For Mathematics this ratio was 7.56 while for HAKT it was 5.86. Generally, the inaccuracy associated with a multi-stage sample is many times greater than the inaccuracy associated with a simple random sample of the same size.

**Effective sample size** is calculated from the design effect. It is the size of a simple random sample that would be required to give the same level of accuracy as the given multi-stage sample. Generally, the "Effective Sample Size" will be smaller than the given actual multi-stage sample. For Mathematics in this case, a simple random sample of 384 pupils would have given the same level of accuracy as the two-stage sample of 5,089. The "Effective Sample Size" for Mathematics = 5,089/7.56= 673. Possible (small) inaccuracies in this calculation may be due to the fact that not all 5,089 learners in Zimbabwe took *all* three tests. The "Effective Sample Sizes" of each of Reading and HAKT can be calculated in the same way provided care is taken to use the correct values. Generally, the "Effective Sample Size" will be smaller than the given actual multi-stage sample.

The sample designs used in SACMEQ IV Project were selected so as to meet the standards set by the International Association for the Evaluation of Educational Achievement (IEA). These standards require that sample estimates of important learner population parameters

in multi-stage designs should have sampling accuracy that is at least equivalent to a simple random sample of 400 learners (thereby guaranteeing 95 percent confidence limits for sample means of plus or minus one tenth of a learner standard deviation unit).

## Data entry, Data checking and Data cleaning

In this section the processes that were followed at national level to check, enter and clean the data have been described.

Data preparation started soon after data collection was completed. The NRCs organized safe return of all materials to the Ministry of Primary and Secondary Education where data collection instruments could be checked, entered into computers, and then "cleaned" to remove errors prior to data analyses. Data-checking involved "hand editing" of data collection instruments by a team of trained staff. They were required to check that: (i) all questionnaires, tests, and forms had arrived back from the sampled schools, (ii) the identification numbers on all instruments were complete and accurate, and (iii) certain logical linkages between questions made sense (for example, the two questions to School Heads concerning "Do you have a school library?" and "How many books do you have in your school library?")

The next step was the entry of data into computers using the Data Management Expert (DME) software. A team of 5-10 staff members normally undertake this exercise. Data entry was done using ***'Windows® Data Entry Manager Software (WinDEM).'*** This software was provided for entering, editing, and verifying the SACMEQ IV data. Along with the software, countries also received codebooks, which described the properties and the layout of the variables to be entered from each assessment instrument. Data entry in Zimbabwe was done in the last quarter of the year 2013.

At individual country level, NRTs followed a "cyclical" process whereby data files were cleaned by the NRT and then emailed to the Coordinating Centre for checking and then emailed back to the NRC for further cleaning.

To clean the data, using the Data Management Expert (DME) software, the NRTs followed specific directions to (i) identify major errors in the sequence of identification numbers, (ii) cross-check identification numbers across files (for example, to ensure that all learners were linked with their own Reading and Mathematics teachers), (iii) ensure that all schools listed on the original sampling frame also had valid data collection instruments and vice-versa, (iv) check for "wild codes" that occurred when some variables had values that fell outside pre-specified reasonable limits, and (v) validate that variables used as linkage devices in later file merges were available and accurate.

## Merging and Weighting

When data cleaning was complete, the NRT merged the data from all the sources and submitted to SACMEQ Coordinating Centre for further processing. At the Coordinating Centre, a further merging process required the construction of a single data file in which learners were the units of analysis and the rest of the data from the other respondents were linked to the learner data. That is, each record of the final data file for the country consisted of the following four components: (a) the questionnaire and test data for an individual learner, (b) the questionnaire and test data for his/her Mathematics, Reading, and Health teacher, (c) the questionnaire data for his/her School Head, and (d) school and learner forms.

To illustrate, with the merged file it was possible to examine questions of the following kind: "What are the average Reading and Mathematics test scores (based on information taken from the learner tests) for groups of learners who attend urban or rural schools (based on information taken from the School Head questionnaire), and who are taught by male or female teachers (based on information taken from the teacher questionnaire)?"

The calculation of sampling weights could only be conducted after all files had been cleaned and merged. Sampling weights were used to adjust for missing data and for variations in probabilities of selection that arose from the application of stratified multi-stage sample designs. There were also certain country-specific aspects of the sampling procedures, and these had to be reflected in the calculation of sampling weights.

Two forms of sampling weights were prepared for SACMEQ IV Project. The first sampling weight (RF2) was the inverse of the probability of selecting a learner into the sample. These "raising factors" were equal to the number of learners in the defined target population that were "represented by a single learner" in the sample. The second sampling weight (pweight2) was obtained by multiplying the raising factors by a constant so that the sum of the sampling weights was equal to the achieved sample size. A detailed account of weighting procedures can be found in Ross et al (2004).

## Analyzing the data

The data analyses for SACMEQ IV Project were very clearly defined because they were focused specifically on generating results that could be used to "fill in the blank entries" in given Dummy Tables. There were two main tasks in this area. First, SPSS software was used to construct new variables (often referred to as "indices") or to re-code existing variables. For example, an index of "socioeconomic level" was constructed by combining re-coded variables related to learners' homes, and the number of possessions in learners' homes. Second, the Coordinating Centre used SPSS tools to populate Dummy Tables with appropriate estimates and corresponding sampling errors.

## Writing the SACMEQ IV National Reports

The NRT commenced the process of drafting their national reports during 2015. A working meeting held in Mbabane Swaziland during February 2015 was organized to support the NRT in this work. This working meeting permitted the NRT to work together and exchange ideas concerning the policy implications of the research results.

## Conclusion

The aim of this Chapter was to describe the research procedures that were applied for the execution of SACMEQ IV project. The Chapter was prepared to give an overview of how the study was conducted in individual countries. The sample design procedures and the construction of the Reading, Mathematics and HAKT tests for learners and their teachers were to a large extent modeled on the SACMEQ II and III projects.

Following the trend started in SACMEQ II project, the fourth SACMEQ project moved away from traditional approaches of calculating test scores (based on numbers of correct responses to test items) to the use of Modern Item Response Theory to generate descriptions of "levels of increasing learner competence". This approach to describing learner Reading, Mathematics and HAKT achievements offered a mechanism for describing the performance of learners in a manner that was more meaningful within a teaching and learning context. One of the important messages that emerged from this part of the Project was that the speed at which a cross-national research project proceeds is strongly influenced by the speed with which the slowest country can complete all aspects of its data collection and data preparation.

# Chapter 3 Learners' Characteristics and their Learning Environment

## Introduction

The aim of this chapter is to present information on some of the characteristics of learners, their homes and schools. The data presented and discussed in this chapter presents a context for the later analyses and discussions in this report. The chapter compares grade 6 learners and their learning environments at different time periods and looks at learners' home background, an important aspect of their learning experience. It is from the home context that the socioeconomic scale is constructed, thus it is important that the reader knows exactly which variables are included in a scale. Schools that have an intake of learners from better home backgrounds are expected to achieve better than schools with learners from poor home backgrounds. In addition, many other school and teacher variables that appear in later chapters of this report will be examined for their effect on learner achievement. It is important when investigating the impact of such factors to take note of such learners' socio-economic status. In this chapter the results were not compared to previous SACMEQ III, since we do not have the results.

## Personal Characteristics of Learners

A prerequisite for gender equity in education is to ensure an even distribution of both sexes in the school system. The table and figure below show distribution of learners' by sex and province. The table shows that the highest percentage of female learners were in Bulawayo (54.7) and the least percentage was recorded in Harare (46.1) relative to the provinces.

*3.1: Distribution of Learners by Sex and Province*

| Province | Male % | Female % | SE |
|---|---|---|---|
| **Bulawayo** | 45.3 | 54.7 | 3.7 |
| **Harare** | 53.9 | 46.1 | 1.6 |
| **Manicaland** | 48.2 | 51.8 | 1.5 |
| **Mashonaland Central** | 53.3 | 46.7 | 1.9 |
| **Mashonaland East** | 48.2 | 51.8 | 2.0 |
| **Mashonaland West** | 49.4 | 50.6 | 2.3 |
| **Masvingo** | 50.9 | 49.1 | 2.7 |
| **Matabeleland North** | 50.0 | 50.0 | 3.1 |
| **Matabeleland South** | 49.9 | 50.1 | 1.5 |
| **Midlands** | 53.7 | 46.3 | 1.9 |
| **Zimbabwe** | **50.6** | **49.4** | **0.7** |

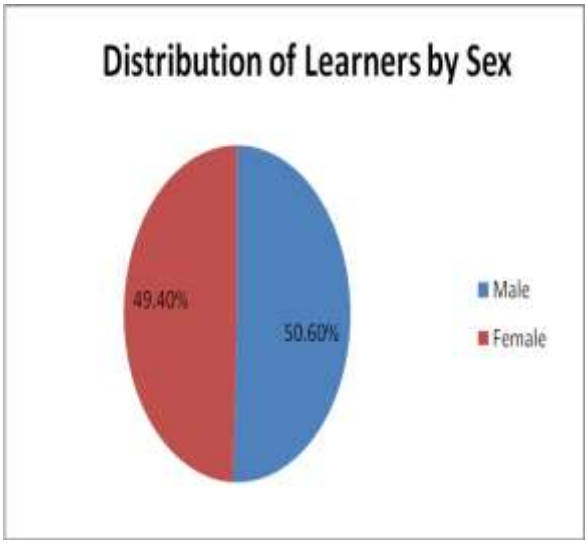


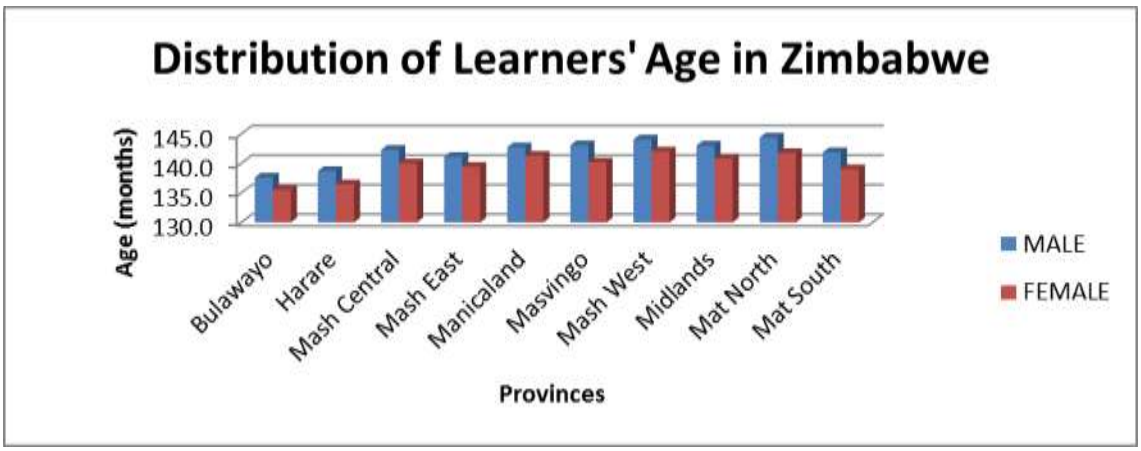

*Figure 3.1: Distribution of learners by sex*

## Age of Grade 6 learners

The official age to enter primary school was 6 years and the primary age cycle is 6 to 12 years. In the table below, it can be noted that the average age of the learners that participated by province was between the age of 136.5 – 143.1 months (approximately 11.4 – 11.9 years) and as shown in table *3.2* below showing the average age (in months) by sex. Male learners in Mashonaland West and Matabeleland North provinces were around 12 years of age.

*3.2: Learners Mean Age by Gender*

| Province | MALE (Estimate) | | | FEMALE (Estimate) | | | TOTAL (Estimate) | | |
|---|---|---|---|---|---|---|---|---|---|
| | Months | Years | SE | Months | Years | SE | Months | Years | SE |
| **Bulawayo** | 137.6 | 11.5 | 1.0 | 135.5 | 11.3 | 0.7 | 136.5 | 11.4 | 0.8 |
| **Harare** | 138.7 | 11.6 | 1.0 | 136.4 | 11.4 | 0.9 | 137.7 | 11.5 | 0.9 |
| **Manicaland** | 142.7 | 11.9 | 0.6 | 141.3 | 11.8 | 0.9 | 142.0 | 11.8 | 0.7 |
| **Mashonaland Central** | 142.3 | 11.9 | 1.1 | 140.0 | 11.7 | 0.9 | 141.2 | 11.8 | 0.9 |
| **Mashonaland East** | 141.1 | 11.8 | 1.0 | 139.4 | 11.6 | 0.9 | 140.2 | 11.7 | 0.8 |
| **Mashonaland West** | 144.1 | 12.0 | 0.8 | 142.0 | 11.8 | 0.9 | 143.0 | 11.9 | 0.7 |
| **Masvingo** | 143.1 | 11.9 | 1.0 | 140.2 | 11.7 | 1.1 | 141.7 | 11.8 | 0.9 |
| **Matabeleland North** | 144.4 | 12.0 | 1.0 | 141.8 | 11.8 | 0.9 | 143.1 | 11.9 | 0.8 |
| **Matabeleland South** | 141.9 | 11.8 | 1.0 | 139.0 | 11.6 | 1.0 | 140.5 | 11.7 | 0.9 |
| **Midlands** | 143.0 | 11.9 | 0.8 | 140.8 | 11.7 | 0.8 | 142.0 | 11.8 | 0.7 |
| **Zimbabwe** | **142.1** | **11.8** | **0.3** | **140.0** | **11.7** | **0.3** | **141.1** | **11.8** | **0.3** |




## Where do learners stay during the school week?

Circumstances, in which the learners live, influence their learning behavior at school. Unstable family situation may interfere with learning and may lead to anti-learning behavior. The table below shows the distribution of learners' place of stay during the school week. It can be noted that 84.9% of the grade 6 learners stay at home with their families.

*3.3: Percentage distribution of grade 6 learners by province and the place the stay during the school week SACMEQ IV*

| | Home with Family | | Home with Other People who are not Family | | Hostel/ Boarding School | | Orphanage or Children's Home | | Other | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Province** | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** |
| **Bulawayo** | 96.4 | 1.1 | 1.9 | 0.8 | 0.4 | 0.4 | 0.0 | 0.0 | 1.3 | 0.7 |
| **Harare** | 92.2 | 1.7 | 4.8 | 1.2 | 2.3 | 1.5 | 0.0 | 0.0 | 0.8 | 0.6 |
| **Manicaland** | 82.4 | 2.7 | 10.2 | 1.7 | 3.5 | 1.3 | 1.9 | 0.8 | 1.9 | 0.8 |
| **Mashonaland Central** | 82.8 | 3.4 | 6.9 | 1.3 | 7.2 | 2.5 | 0.7 | 0.5 | 2.4 | 0.9 |
| **Mashonaland East** | 81.8 | 4.5 | 9.9 | 2.1 | 6.5 | 4.6 | 1.0 | 0.5 | 0.8 | 0.5 |
| **Mashonaland West** | 83.5 | 4.0 | 7.2 | 1.9 | 5.7 | 3.8 | 1.9 | 0.8 | 1.9 | 0.8 |
| **Masvingo** | 83.3 | 3.0 | 11.0 | 1.6 | 1.5 | 0.7 | 2.1 | 1.2 | 2.1 | 0.8 |
| **Matabeleland North** | 87.3 | 3.9 | 7.0 | 1.6 | 2.8 | 1.5 | 2.6 | 1.0 | 0.3 | 0.3 |
| **Matabeleland South** | 80.7 | 3.2 | 10.7 | 2.3 | 4.8 | 1.2 | 1.9 | 0.7 | 1.9 | 0.7 |
| **Midlands** | 85.8 | 2.6 | 10.2 | 2.4 | 2.1 | 0.7 | 1.2 | 0.6 | 0.7 | 0.4 |
| **Zimbabwe** | **84.9** | **1.1** | **8.5** | **0.6** | **3.8** | **0.8** | **1.4** | **0.3** | **1.4** | **0.2** |

## Who stays with learners during the school week?

Learner performance is affected by whom the learner stays with since they are the ones providing them with support.

Table *3.4* shows responses for who the learners stay with during the school week. Most of the learners stay with either biological parents or sibling (65.1% and 50.6% respectively). Bulawayo, Harare and Mashonaland Central provinces have more learners that stay with their biological parents. 13.9% of grade 6 learners responded that they stay on their own, with Matabeleland South recording the highest percentage of learners 23.3%.

*3.4: Percentage distribution of Grade 6 learners by province and whom they stay with during the week (SACMEQ IV)*

| Province | Biological Parents | | Guardian | | Grandparents | | Siblings | | Other Relatives | | Another Family | | Other Children | | My friend | | Myself | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 70.2 | 2.5 | 29.2 | 3.7 | 28.1 | 3.4 | 58.3 | 2.5 | 27.1 | 3.5 | 10.3 | 3.4 | 6.9 | 1.5 | 10.0 | 2.8 | 7.2 | 1.5 |
| **Harare** | 79.2 | 1.7 | 28.6 | 2.6 | 20.9 | 2.5 | 61.9 | 2.9 | 21.2 | 2.5 | 12.7 | 1.6 | 9.2 | 1.6 | 14.6 | 2.6 | 9.5 | 2.3 |
| **Manicaland** | 61.8 | 3.5 | 28.2 | 2.2 | 39.7 | 6.3 | 53.1 | 3.4 | 25.4 | 1.8 | 19.7 | 3.0 | 19.5 | 3.4 | 28.4 | 6.9 | 15.1 | 3.5 |
| **Mashonaland Central** | 69.8 | 2.4 | 34.3 | 3.5 | 36.6 | 3.8 | 53.9 | 4.9 | 31.2 | 3.5 | 26.2 | 4.4 | 20.8 | 3.1 | 27.4 | 5.1 | 15.3 | 2.9 |
| **Mashonaland East** | 62.0 | 3.9 | 34.9 | 3.4 | 35.9 | 4.2 | 45.8 | 4.0 | 24.6 | 3.6 | 23.5 | 3.9 | 18.9 | 5.1 | 20.4 | 2.0 | 14.1 | 2.5 |
| **Mashonaland West** | 60.4 | 3.0 | 31.2 | 3.7 | 35.6 | 4.2 | 36.9 | 4.3 | 27.9 | 3.3 | 20.9 | 3.4 | 20.1 | 3.8 | 24.7 | 4.1 | 15.6 | 2.5 |
| **Masvingo** | 64.1 | 3.1 | 32.6 | 2.7 | 42.5 | 2.9 | 47.8 | 3.2 | 27.5 | 2.4 | 19.2 | 3.3 | 15.6 | 2.6 | 24.0 | 3.5 | 13.1 | 3.1 |
| **Matabeleland North** | 59.9 | 5.0 | 30.0 | 5.4 | 43.3 | 3.1 | 47.9 | 7.4 | 29.8 | 4.1 | 20.9 | 4.6 | 19.4 | 4.6 | 15.6 | 4.0 | 12.2 | 4.2 |
| **Matabeleland South** | 62.1 | 3.5 | 33.9 | 3.1 | 49.6 | 3.5 | 58.1 | 3.7 | 29.6 | 2.9 | 25.0 | 4.3 | 20.8 | 1.9 | 28.4 | 4.1 | 23.3 | 4.4 |
| **Midlands** | 63.4 | 2.9 | 32.8 | 3.9 | 36.7 | 2.9 | 47.6 | 4.0 | 25.4 | 3.3 | 22.0 | 2.4 | 13.6 | 1.9 | 16.3 | 3.0 | 12.1 | 2.5 |
| **Zimbabwe** | **65.1** | **1.1** | **31.5** | **1.1** | **36.8** | **1.6** | **50.6** | **1.4** | **26.6** | **1.0** | **20.5** | **1.1** | **16.9** | **1.1** | **21.9** | **1.8** | **13.9** | **1.0** |

## Sources of light in homes where learners stay during the week

*3.5: Percentage and sampling errors of learners by province and source of light at home (SACMEQ IV)*

| Province | Fire | | Candle | | Paraffin / Oil | | Gas Lamp | | Electricity | | None | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 1.2 | 0.6 | 7.7 | 1.7 | 5.5 | 1.2 | 0.6 | 0.4 | 84.1 | 2.9 | 1.0 | 0.5 |
| **Harare** | 0.4 | 0.4 | 17.0 | 3.0 | 6.2 | 1.8 | 0.8 | 0.4 | 75.1 | 4.5 | 0.4 | 0.3 |
| **Manicaland** | 17.2 | 2.4 | 21.8 | 1.9 | 32.5 | 2.7 | 6.3 | 2.2 | 18.7 | 4.1 | 3.5 | 1.6 |
| **Mashonaland** | 12.7 | 2.7 | 21.6 | 3.7 | 28.5 | 4.4 | 2.5 | 1.0 | 32.4 | 8.2 | 2.3 | 1.0 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Central** | | | | | | | | | | | | |
| **Mashonaland East** | 9.8 | 2.1 | 24.4 | 3.1 | 34.8 | 4.0 | 2.8 | 1.1 | 26.6 | 7.2 | 1.7 | 0.9 |
| **Mashonaland West** | 10.1 | 2.5 | 29.7 | 4.2 | 24.8 | 3.2 | 2.9 | 1.0 | 30.9 | 5.7 | 1.6 | 0.6 |
| **Masvingo** | 16.2 | 3.1 | 30.1 | 3.6 | 25.6 | 4.1 | 1.7 | 0.7 | 25.1 | 6.3 | 1.3 | 0.5 |
| **Matabeleland North** | 28.0 | 4.9 | 39.3 | 4.0 | 20.4 | 2.4 | 1.5 | 0.7 | 9.3 | 2.9 | 1.5 | 0.8 |
| **Matabeleland South** | 21.5 | 5.1 | 38.5 | 4.9 | 18.4 | 2.8 | 2.5 | 1.0 | 17.0 | 5.7 | 2.1 | 0.7 |
| **Midlands** | 18.2 | 3.6 | 35.8 | 3.3 | 21.0 | 3.2 | 2.4 | 0.9 | 19.4 | 5.6 | 3.2 | 0.9 |
| **Total** | **13.7** | **1.0** | **26.8** | **1.1** | **23.6** | **1.1** | **2.8** | **0.5** | **31.1** | **2.1** | **2.1** | **0.4** |

Lighting in the home is among the factors that enhance the Learner's opportunity for extended learning after school. The type of lighting in learners' homes can reflect the Socio-Economic Status of the learners' homes, particularly where a range of lighting sources, like the most expensive electrical lighting to the cheapest and crudest one like paraffin, is available. In Zimbabwe 80 percent of the provinces are rural, with 67% [1]of its population living in the rural setting. Unlike the urban areas, in rural areas there is less accessibility to social amenities like electricity and piped water. It is expected that learners in rural homes would have much less access to electricity than those in the urban areas. It was important to establish the types of lighting in the home environment of the learner as an important attribute to the personal characteristics of the Learner. Also the source of lighting determines if the learners will be able to do their homework in the evening since during the day they are at school or playing with their friends. The main sources of lighting that are used at home are electricity, candle and paraffin/ oil which are 31.1%, 26.8% and 23.6% respectively.

## Percentage of Learners Speaking English at Home

English is the medium of instruction used in schools in Zimbabwe. From the table below it can be noted that most of the learners either sometimes or never speak English at home (65.1% and 22.3% respectively).

*3.6: Percentage distribution of learners by province and frequency of speaking English at home*

| Province | Never | | Sometimes | | Most of the Time | | All the Time | |
|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 5.5 | 1.4 | 85.9 | 2.8 | 8.3 | 2.1 | 0.3 | 0.3 |

[1] 2012 Census Report

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Harare** | 9.9 | 1.5 | 76.4 | 1.8 | 10.0 | 1.9 | 3.6 | 0.9 |
| **Manicaland** | 25.1 | 3.0 | 60.9 | 2.8 | 11.0 | 1.4 | 3.0 | 1.1 |
| **Mashonaland Central** | 26.1 | 5.5 | 55.7 | 4.1 | 10.8 | 2.3 | 7.3 | 1.7 |
| **Mashonaland East** | 21.0 | 4.0 | 61.5 | 4.8 | 12.4 | 2.2 | 5.2 | 1.9 |
| **Mashonaland West** | 25.3 | 5.4 | 65.2 | 5.1 | 6.1 | 1.5 | 3.4 | 1.1 |
| **Masvingo** | 24.6 | 4.5 | 67.1 | 4.3 | 5.9 | 1.4 | 2.4 | 0.8 |
| **Matabeleland North** | 30.5 | 6.6 | 62.9 | 6.8 | 4.3 | 1.8 | 2.3 | 1.1 |
| **Matabeleland South** | 18.9 | 3.6 | 68.9 | 5.0 | 6.1 | 1.4 | 6.2 | 1.4 |
| **Midlands** | 25.7 | 4.7 | 62.9 | 5.2 | 8.0 | 2.6 | 3.4 | 1.3 |
| **Zimbabwe** | **22.3** | **1.4** | **65.1** | **1.5** | **8.8** | **0.6** | **3.8** | **0.4** |

## Number of books at learners' homes

Many researches have shown that learners with books at home constitute a very important reading source that will help the learners to develop their literacy and numeracy skills. Availability of books at home is associated with achievement in reading prowess.

The findings of this study indicate that on average, every grade 6 learner in Zimbabwe has 9 books at home, though it can be noted that in provinces like Bulawayo, Harare, Mashonaland East and Masvingo, the learners have books above national average which are 16.6, 12.5, 13.3 and10.0 respectively.

*3.7: Mean number of books at home by province (SACMEQ IV)*

| Province | Number | SE |
|---|---|---|
| **Bulawayo** | 16.6 | 3.1 |
| **Harare** | 12.5 | 2.3 |
| **Manicaland** | 7.6 | 1.0 |
| **Mashonaland Central** | 7.5 | 2.5 |
| **Mashonaland East** | 13.3 | 5.8 |
| **Mashonaland West** | 7.1 | 1.4 |
| **Masvingo** | 10.0 | 2.3 |
| **Matabeleland North** | 6.9 | 2.1 |
| **Matabeleland South** | 5.8 | 1.0 |
| **Midlands** | 9.7 | 2.2 |
| **Zimbabwe** | **9.4** | **0.9** |

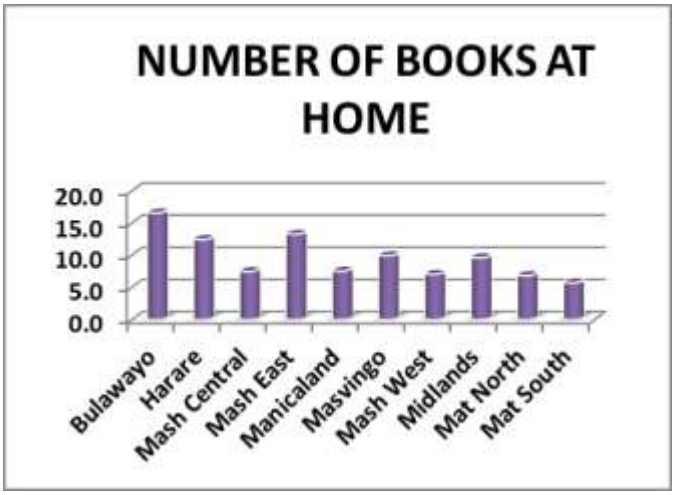



*Figure 3.2: Number of books at home*

## School location

School location has a great impact on the learning and teaching processes. Learning can be affected by the inaccessibility of the school and / or poor environment.

From the findings, it reveals that about 72.3% of the learners are from rural provinces. Bulawayo and Harare are the provinces that have a higher proportion of urban schools which are 93.5% and 93.8% respectively. This is because Bulawayo and Harare are urban provinces, while the other 8 are rural provinces.

*3.8: Percentage of school location by province*

| Province | Rural | Urban |
|---|---|---|
| **Bulawayo** | 6.5% | 93.5% |
| **Harare** | 6.2% | 93.8% |
| **Manicaland** | 87.2% | 12.8% |
| **Mashonaland Central** | 79.5% | 20.5% |
| **Mashonaland East** | 95.2% | 4.8% |
| **Mashonaland West** | 65.6% | 34.4% |
| **Masvingo** | 78.2% | 21.8% |
| **Matabeleland North** | 87.0% | 13.0% |
| **Matabeleland South** | 86.0% | 14.0% |
| **Midlands** | 88.8% | 11.2% |
| **Zimbabwe** | **72.3%** | **27.7%** |

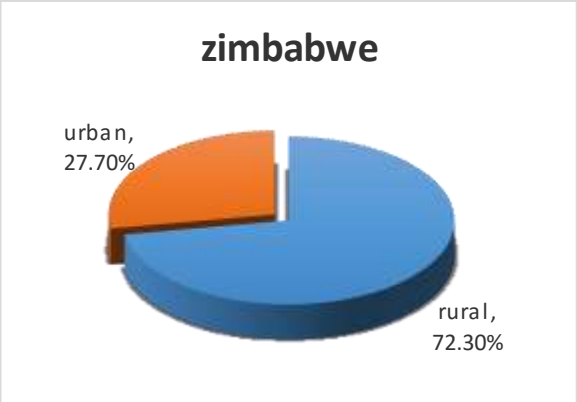



*Figure 3.3:Distribution of school location*

## Learners' distance to school

Long distances between schools and learners' homes have been a problem in some rural provinces in Zimbabwe, contributing to non-enrolment at school. Distance travelled to and from schools has an effect on the child's learning. A learner who travels long distance to and from school is likely to be tired, has less time for revision and homework and will have poor concentration, which might also lead to drop out and absenteeism.

Therefore one of the policies of the Ministry of Primary and Secondary Education is to provide more schools close to where learners live so that those of school going age have the opportunity to attend school within walking distance from their homes (Circular P.73 of 1991).

From the findings of the sample that was used in this study, most of the learners live within 5 kilometers, i.e. about 20% live within a distance of less than a kilometer and 13.7% of the learners live within a distance of more than 5 kilometers. Those in urban schools have easier access to school because they either use public transport or are driven to school by parents. However, children in rural areas have to walk to school and as noted above most of the schools are in rural location, meaning that about 33.7% of the learners are travelling more than 3 kilometers.

*3.9: Percentage distribution of learners travelling to school by province*

| Province | 0 - 0.5 km | 0.5-1 km | 1 - 2 km | 2 - 3 km | 3 - 4 km | 4 - 5 km | > 5 km |
|---|---|---|---|---|---|---|---|
| **Bulawayo** | 34.2% | 20.1% | 15.2% | 7.6% | 5.4% | 3.3% | 14.1% |
| **Harare** | 36.5% | 15.9% | 16.2% | 8.4% | 5.5% | 6.2% | 11.3% |
| **Manicaland** | 19.1% | 7.2% | 24.7% | 13.4% | 8.7% | 13.5% | 13.3% |
| **Mashonaland Central** | 20.8% | 15.3% | 21.2% | 22.8% | 5.5% | 7.7% | 6.6% |
| **Mashonaland East** | 24.0% | 10.5% | 20.0% | 15.6% | 10.5% | 7.6% | 11.8% |
| **Mashonaland West** | 16.7% | 10.0% | 17.6% | 15.1% | 12.0% | 11.8% | 16.9% |
| **Masvingo** | 16.6% | 10.2% | 20.4% | 15.9% | 11.6% | 11.1% | 14.2% |
| **Matabeleland North** | 10.2% | 6.4% | 16.5% | 13.9% | 11.3% | 18.8% | 22.9% |
| **Matabeleland South** | 13.8% | 11.6% | 21.1% | 17.5% | 11.6% | 9.5% | 14.9% |
| **Midlands** | 12.4% | 11.4% | 19.8% | 17.8% | 9.2% | 13.9% | 15.4% |
| **Zimbabwe** | **20.0%** | **11.3%** | **19.9%** | **15.2%** | **9.2%** | **10.8%** | **13.7%** |

It can be deduced from the table above that Matabeleland North Province has the highest percentage of learners travelling the longest distance to school whilst Mashonaland

Central Province has the least percentage of learners who travel distances above 5km to school.

## Learners' access to school library books

School library is an important facility that learners should have access to and are said to create conducive learning environment. Learners with access to library books have a greater chance of being informed and have a broad knowledge.

*3.10: Percentage distribution of learners with access to school library by province*

| Province | No School Library | | Not Allowed to Borrow Books | | Allowed to Borrow Books | | Do not Know | |
|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 71.4 | 12.2 | 4.8 | 2.4 | 18.7 | 8.8 | 5.0 | 2.9 |
| **Harare** | 55.5 | 10.5 | 17.2 | 5.6 | 21.5 | 6.2 | 5.8 | 1.6 |
| **Manicaland** | 90.3 | 5.1 | 1.6 | 0.9 | 6.0 | 3.4 | 2.1 | 1.2 |
| **Mashonaland Central** | 65.8 | 10.9 | 7.4 | 3.1 | 21.0 | 7.0 | 5.8 | 2.1 |
| **Mashonaland East** | 81.5 | 8.7 | 4.3 | 3.2 | 10.9 | 5.8 | 3.3 | 2.3 |
| **Mashonaland West** | 73.6 | 10.7 | 3.4 | 1.5 | 18.4 | 7.7 | 4.6 | 2.6 |
| **Masvingo** | 68.3 | 10.3 | 3.1 | 1.3 | 26.3 | 9.3 | 2.3 | 1.4 |
| **Matabeleland North** | 60.6 | 13.7 | 4.3 | 2.1 | 32.0 | 12.1 | 3.2 | 2.2 |
| **Matabeleland South** | 83.8 | 9.2 | 3.9 | 2.4 | 10.5 | 6.1 | 1.9 | 1.3 |
| **Midlands** | 93.4 | 4.5 | 1.4 | 1.0 | 3.7 | 2.6 | 1.5 | 1.0 |
| **Zimbabwe** | **76.7** | **3.0** | **4.9** | **0.9** | **15.1** | **2.2** | **3.4** | **0.6** |

From the findings above, it can be noted that 76.7% of primary schools from the sample do not have libraries. Of the 20% of schools that have libraries, 4.9% of them do not allow learners to borrow books while 15.1% allow learners to borrow books.

## Frequency of Homework Corrected by Teacher

Learners were asked "*How often the teacher corrected their homework?*" Learners are normally given homework by their teachers. It is important that it forms part of the basic learning experience of learner and that it increases as the learner ascends the school system. Homework is associated with increased learner achievement. The Ministry requires teachers to give learners homework and correct it regularly since it is one of the ways to track learners' levels of mastery in the skills taught. From the findings in table 3.11,

it can be noted that 41.9% of the teachers always correct learners' homework, 29.1% mostly correct while 24.8% sometimes correct.

*3.11: Percentage distribution of teacher's frequency on correcting homework by province*

| Province | No Homework | | Never Corrected | | Sometimes Corrected | | Mostly Corrected | | Always Corrected | |
|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.3 | 0.3 | 1.2 | 0.5 | 38.3 | 3.1 | 22.0 | 2.1 | 38.2 | 3.4 |
| **Harare** | 0.0 | 0.0 | 1.8 | 0.6 | 23.0 | 2.7 | 26.3 | 2.9 | 48.9 | 4.7 |
| **Manicaland** | 0.4 | 0.3 | 4.2 | 1.8 | 18.7 | 3.2 | 26.4 | 3.9 | 50.3 | 6.5 |
| **Mashonaland Central** | 0.8 | 0.8 | 3.3 | 2.0 | 28.7 | 5.7 | 27.7 | 3.5 | 39.6 | 5.2 |
| **Mashonaland East** | 0.9 | 0.6 | 3.1 | 0.7 | 26.9 | 3.7 | 30.9 | 4.3 | 38.2 | 5.6 |
| **Mashonaland West** | 1.4 | 0.8 | 3.0 | 1.2 | 22.3 | 5.7 | 33.5 | 5.0 | 39.8 | 5.0 |
| **Masvingo** | 0.3 | 0.3 | 6.8 | 1.9 | 28.8 | 4.7 | 30.6 | 3.5 | 33.5 | 5.5 |
| **Matabeleland North** | 0.0 | 0.0 | 2.9 | 1.1 | 25.0 | 5.1 | 30.9 | 3.1 | 41.3 | 4.2 |
| **Matabeleland South** | 0.8 | 0.4 | 6.2 | 2.0 | 28.5 | 3.4 | 23.6 | 3.3 | 41.0 | 4.5 |
| **Midlands** | 0.6 | 0.4 | 3.1 | 1.0 | 22.2 | 3.1 | 33.7 | 3.4 | 40.3 | 5.4 |
| **Zimbabwe** | **0.6** | **0.2** | **3.6** | **0.5** | **24.8** | **1.4** | **29.1** | **1.3** | **41.9** | **2.0** |

## Summary

In conclusion, it can be seen that the average age of learners in grade 6 is 141.1 months (11 years 7 months), it therefore can be concluded that the Ministry's policies of having learners enter school at the appropriate age are being implemented.

# Chapter 4 Teachers' Characteristics and views about classroom resources, professional support and job satisfaction

## Introduction

In this chapter we aim to look at the characteristics of grade 6 teachers and views about classroom resources, professional support and job satisfaction of the teacher. Several characteristics have been measured in this study and these concerned the age and gender of teachers, whether they were specialists or general class teachers, their academic and professional qualifications, their years of teaching experience, and the number of in-service courses attended.

In Zimbabwe, we have class teachers in primary schools and these are the ones that teach both Reading, Mathematics and Health and Life Skills, very few schools have subject teachers in private schools. In some schools in the rural areas with sparse population the schools might have one teacher who teaches all the grades or two teachers, that is, one teaching the lower grades and the other teaching the upper grades. In most cases the teacher who takes them at grade six proceeds with them to grade seven.

The purpose of the chapter is to present the context for interpreting the achievement data later on in chapter 7 and also to show how such inputs to grade 6 changes over time. It also depicts a picture of the quality of human resource inputs into education and how they are likely to shape learner outcomes as well as views on teaching, learning, classroom resources, and professional support.

## Personal characteristics of teachers

The table below shows the distribution of grade 6 teachers by gender, province and subject (Reading, Mathematics and Health) and the average age (years) of teachers by province and subject in Table 4.1and 4.2 respectively.

From table 4.1 it can be noted that nationally the distribution of teachers by gender is not equal in all subjects with 67.9%, 69.7% and 68.9% in Reading, Mathematics and Health subjects respectively in favour of male teachers. This means that the Ministry needs to address this situation so that we have gender balance by recruiting more female teachers.

*4.1: Percentage distribution of Grade 6 teachers by subject, sex and province*

| Province | Reading | | Mathematics | | Health/ Life Skills | |
|---|---|---|---|---|---|---|
| | Male % | Female % | Male % | Female % | Male % | Female % |
| **Bulawayo** | 19.4 | 80.6 | 16.0 | 84.0 | 17.6 | 82.4 |
| **Harare** | 46.6 | 53.4 | 43.6 | 56.4 | 44.5 | 55.5 |
| **Manicaland** | 82.7 | 17.3 | 90.5 | 9.5 | 88.1 | 11.9 |
| **Mashonaland Central** | 64.4 | 35.6 | 64.4 | 35.6 | 70.1 | 29.9 |
| **Mashonaland East** | 72.0 | 28.0 | 77.7 | 22.3 | 72.0 | 28.0 |
| **Mashonaland West** | 87.2 | 12.8 | 87.2 | 12.8 | 87.2 | 12.8 |
| **Masvingo** | 71.0 | 29.0 | 71.0 | 29.0 | 70.1 | 29.9 |
| **Matabeleland North** | 62.4 | 37.6 | 62.4 | 37.6 | 65.5 | 34.5 |
| **Matabeleland South** | 68.3 | 31.7 | 73.0 | 27.0 | 69.5 | 30.5 |
| **Midlands** | 67.9 | 32.1 | 67.9 | 32.1 | 64.7 | 35.3 |
| **Zimbabwe** | **67.9** | **32.1** | **69.7** | **30.3** | **68.9** | **31.1** |

*4.2: Average age of grade 6 teachers by province and subject*

| Province | Reading | | Mathematics | | Health/ Life Skills | |
|---|---|---|---|---|---|---|
| | Mean Age yrs | SE | Mean Age yrs | SE | Mean Age yrs | SE |
| **Bulawayo** | 45.1 | 1.9 | 45.0 | 2.0 | 44.7 | 1.8 |
| **Harare** | 40.9 | 1.3 | 40.7 | 1.2 | 40.1 | 1.3 |
| **Manicaland** | 37.9 | 1.3 | 37.0 | 1.5 | 37.5 | 2.3 |
| **Mashonaland Central** | 37.9 | 1.7 | 37.3 | 1.9 | 37.0 | 1.7 |
| **Mashonaland East** | 39.5 | 2.0 | 40.0 | 2.2 | 38.9 | 1.9 |
| **Mashonaland West** | 40.6 | 1.8 | 40.6 | 1.8 | 41.0 | 1.8 |
| **Masvingo** | 39.2 | 1.5 | 40.5 | 1.5 | 40.1 | 1.5 |
| **Matabeleland North** | 36.1 | 2.1 | 36.3 | 2.2 | 36.0 | 2.2 |
| **Matabeleland South** | 38.4 | 1.5 | 38.6 | 1.4 | 38.5 | 1.3 |
| **Midlands** | 37.3 | 1.2 | 37.3 | 1.2 | 37.5 | 1.3 |
| **Zimbabwe** | **38.9** | **0.5** | **38.9** | **0.6** | **38.8** | **0.6** |

The national average age of grade 6 teachers for all the subjects (Reading, Mathematics and Health and Life Skills) was 39, and these are still in the productive age and yet to serve the Ministry for the next 20 to 25 years depending on the date joined service. Bulawayo has on average teachers that are 45 years in all subject areas, while Matabeleland North has

teachers on average of 36 years in all subject areas in the SACMEQ IV project. This table shows us whether teachers in the provinces are towards retirement and where there is need to replace them.

**4.1 Policy Suggestion**

There is need for the Ministry to have an in depth analysis through Education Management Information System (EMIS) on where there is need for teacher replacement for those that are reaching retirement age, since through this analysis, the outliers are obscured.

## Hours spent by teachers on marking and preparing lessons

Teachers' time spent in lesson preparation and marking learners work provides effective teaching and evaluation of learners' progress, assessing learners and providing feedback that informs the teachers on their teaching methods.

From table 4.3 it can be noted that on average teachers spend 9 hours in all subject areas a week in lesson preparations and marking. Matabeleland North and Matabeleland South's engagement is higher (ranging between 10.2 to 11.5 hours weekly) in all subject areas whilst the least province is Midlands (7.1 hours).

*Table 4.3Mean and Sampling Errors of grade 6 teachers on time spent marking and lesson planning by Province (SACMEQ IV)*

| Province | Reading | | Mathematics | | Health | |
|---|---|---|---|---|---|---|
| | Mean hrs | SE | Mean hrs | SE | Mean hrs | SE |
| **Bulawayo** | 9.5 | 1.3 | 9.0 | 1.1 | 9.4 | 1.3 |
| **Harare** | 8.6 | 1.1 | 8.7 | 1.2 | 8.6 | 1.1 |
| **Manicaland** | 8.6 | 0.7 | 8.7 | 0.7 | 8.3 | 0.7 |
| **Mashonaland Central** | 7.7 | 0.9 | 9.2 | 1.2 | 9.0 | 1.1 |
| **Mashonaland East** | 9.6 | 1.3 | 9.9 | 1.3 | 10.9 | 1.3 |
| **Mashonaland West** | 9.7 | 1.1 | 9.7 | 1.1 | 9.7 | 1.1 |
| **Masvingo** | 8.8 | 1.0 | 9.1 | 1.1 | 9.2 | 1.1 |
| **Matabeleland North** | 10.3 | 1.9 | 10.3 | 1.9 | 11.5 | 1.9 |
| **Matabeleland South** | 11.5 | 1.9 | 11.1 | 1.8 | 10.2 | 1.8 |
| **Midlands** | 7.1 | 1.1 | 7.1 | 1.1 | 7.1 | 1.1 |
| **Zimbabwe** | **8.9** | **0.4** | **9.1** | **0.4** | **9.2** | **0.4** |

**4.2 Policy suggestion**

School Inspection should be strengthened to ensure that lesson planning done by teachers and marking of learners work is done on time

## Teachers' average number of periods per week

The teacher's load has an effect on teaching, i.e., teachers with many periods of teaching may have less time and drive to properly organize and plan lessons, hence leading to less time to go through learners work and teacher learner interaction.

Table 4.4 shows the average number of periods per week nationally in all subject areas is 40 hours, though Manicaland and Midlands have the least average number of periods spent per week which is approximately 36 hours

*Table 4.4: Number of periods per week of grade 6 teachers by subject and province*

| Province | Reading | | Mathematics | | Health | |
|---|---|---|---|---|---|---|
| | Mean | SE | Mean | SE | Mean | SE |
| **Bulawayo** | 42.7 | 1.8 | 42.7 | 1.8 | 41.3 | 2.6 |
| **Harare** | 42.6 | 2.8 | 41.5 | 3.0 | 42.6 | 2.7 |
| **Manicaland** | 36.7 | 3.2 | 36.0 | 3.3 | 37.0 | 3.2 |
| **Mashonaland Central** | 39.4 | 3.1 | 36.4 | 3.9 | 39.7 | 3.2 |
| **Mashonaland East** | 38.9 | 3.1 | 38.4 | 3.2 | 38.9 | 3.1 |
| **Mashonaland West** | 42.7 | 2.6 | 42.7 | 2.6 | 42.0 | 2.7 |
| **Masvingo** | 41.2 | 3.2 | 41.2 | 3.2 | 42.0 | 3.2 |
| **Matabeleland North** | 41.8 | 4.0 | 40.6 | 4.3 | 41.1 | 4.5 |
| **Matabeleland South** | 46.2 | 1.9 | 46.6 | 2.0 | 46.5 | 2.0 |
| **Midlands** | 36.5 | 5.0 | 36.5 | 5.0 | 36.4 | 5.0 |
| **Zimbabwe** | 40.1 | 1.1 | 39.4 | 1.2 | 40.1 | 1.1 |

### 4.3 Policy Suggestion

The Ministry needs to make sure that the period allocation per subject per week is strictly adhered to.

## Asking parents to sign homework

Parents are important stakeholders in education, since they are investing in their children's future. Some of the survey questions were asking teachers if parents sign learner's homework. By parents signing learner's homework, it demonstrates their commitment to

children's progress while it helps in making sure that learners do their part knowing parents are checking their work.

Table 4.5 shows that nationally in all subjects more than 50% of the teachers ask parents to sign their children's work. Mathematics (56.6%) is the most asked subject that teachers ask parents to sign for while Health and Life Skills (54.3%) was the least asked. Manicaland has the least percentage of teachers who ask parents to sign their children's homework.

*Table 4.5: Percentage distribution of grade 6 teachers that ask parents to sign for learners' homework by subject and province*

| Province | Reading | | Mathematics | | Health and Life Skills | |
|---|---|---|---|---|---|---|
| | % signed | SE | % signed | SE | % signed | SE |
| **Bulawayo** | 68.2 | 10.0 | 68.2 | 9.9 | 71.6 | 9.6 |
| **Harare** | 72.4 | 8.5 | 68.6 | 8.7 | 63.9 | 9.0 |
| **Manicaland** | 36.6 | 11.9 | 44.4 | 13.7 | 33.3 | 11.2 |
| **Mashonaland Central** | 74.2 | 10.2 | 72.2 | 10.1 | 65.0 | 11.1 |
| **Mashonaland East** | 43.7 | 10.3 | 43.7 | 10.3 | 49.7 | 10.5 |
| **Mashonaland West** | 57.7 | 11.8 | 57.7 | 11.8 | 62.3 | 11.5 |
| **Masvingo** | 60.3 | 9.1 | 58.3 | 9.1 | 57.0 | 9.2 |
| **Matabeleland North** | 41.6 | 14.7 | 38.5 | 14.1 | 38.7 | 15.2 |
| **Matabeleland South** | 51.4 | 9.9 | 53.7 | 10.1 | 44.9 | 10.5 |
| **Midlands** | 64.1 | 10.5 | 64.1 | 10.5 | 65.7 | 10.6 |
| **Zimbabwe** | **56.2** | **4.0** | **56.6** | **4.1** | **54.3** | **4.0** |

**4.4 Policy Suggestion**

School heads should regularly check if teachers are asking parents to sign their children's homework.

## Teachers' experience

Years of teaching experience plays a major role in enriching their professionalism, for example leaners taught by an experienced teacher has a higher chance of performing well especially if they have teachers who are dedicated and committed to their work.

From the table 4.6 below, the national average on teachers' experience is roughly 11 years, in 3 subjects. Bulawayo, Harare and Mashonaland West Provinces have the most

experienced teachers in all the subjects whilst Matabeleland North Province has the least experienced teachers.

*Table 4.6: Average teaching experience (in years) of grade 6 teachers by subject and province*

| Province | English Reading | | Mathematics | | Health/ Life Skills | |
|---|---|---|---|---|---|---|
| | Mean yrs | SE | Mean yrs | SE | Mean yrs | SE |
| **Bulawayo** | 17.2 | 1.9 | 17.5 | 1.8 | 17.1 | 1.8 |
| **Harare** | 14.0 | 1.3 | 13.3 | 1.2 | 13.5 | 1.3 |
| **Manicaland** | 11.0 | 1.1 | 9.5 | 1.0 | 10.5 | 1.7 |
| **Mashonaland Central** | 8.9 | 1.7 | 8.8 | 1.9 | 8.7 | 1.7 |
| **Mashonaland East** | 11.5 | 2.2 | 11.5 | 2.3 | 11.1 | 2.1 |
| **Mashonaland West** | 14.0 | 1.9 | 14.0 | 1.9 | 14.6 | 1.8 |
| **Masvingo** | 11.7 | 1.8 | 13.2 | 2.0 | 11.8 | 1.7 |
| **Matabeleland North** | 5.8 | 1.6 | 5.9 | 1.7 | 5.9 | 1.6 |
| **Matabeleland South** | 8.9 | 1.5 | 9.3 | 1.3 | 9.0 | 1.1 |
| **Midlands** | 10.9 | 1.4 | 10.9 | 1.4 | 11.3 | 1.4 |
| **Zimbabwe** | **11.3** | **0.5** | **11.2** | **0.6** | **11.2** | **0.6** |

## Number of days spent on in-service training

Adequate in-service training is needed to upgrade teacher qualifications and skills. In-service training is a very important part of teacher development. Other in-service courses focus on curricular aspects such as learner centered approaches to teaching or specific subject content and teaching methodologies. In order to explore the quantity of in-service training that grade 6 teachers had, they were asked to indicate number of in-service courses they had taken in the three years prior to the year of the respective SACMEQ studies and to state the number of days that each course had taken.

*Table 4.7: Number of days spent on in-service training of Grade 6 teachers by subject and province*

| Province | Reading | | Mathematics | | Health | |
|---|---|---|---|---|---|---|
| | Mean dys | SE | Mean dys | SE | Mean dys | SE |
| **Bulawayo** | 19.6 | 12.1 | 48.1 | 40.0 | 30.0 | 21.9 |
| **Harare** | 6.1 | 2.6 | 5.2 | 2.1 | 5.7 | 2.1 |
| **Manicaland** | 7.8 | 2.6 | 7.3 | 2.6 | 6.9 | 2.7 |
| **Mashonaland Central** | 13.3 | 9.7 | 14.0 | 9.7 | 18.7 | 10.7 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Mashonaland East** | 6.2 | 3.4 | 6.2 | 3.4 | 6.2 | 3.4 |
| **Mashonaland West** | 6.1 | 2.7 | 6.1 | 2.7 | 5.9 | 2.7 |
| **Masvingo** | 5.3 | 1.4 | 5.1 | 1.4 | 4.9 | 1.4 |
| **Matabeleland North** | 2.4 | 1.0 | 2.4 | 1.0 | 2.4 | 1.0 |
| **Matabeleland South** | 5.5 | 1.5 | 33.2 | 26.9 | 34.0 | 27.2 |
| **Midlands** | 6.4 | 2.8 | 6.4 | 2.8 | 6.7 | 2.7 |
| **Zimbabwe** | **7.4** | **1.4** | **10.5** | **2.9** | **10.2** | **2.5** |

From the table 4.7 above it can be noted that Matabeleland North had the least whereas Bulawayo had the highest number of in-service training days, which are 2 and 48 days respectively. The table also shows nationally that Mathematics and Health and Life Skills had more days of in-service training compared to Reading which had the least number of days.

## Teachers' Academic Qualifications

Teachers' academic qualifications determine a teacher's ability to design appropriate teaching and learning activities through interpretation of curriculum objectives. This is essential in making certain that learners' performance is not compromised.

From the table 4.8, it can be observed that 41% or more of grade 6 teachers teaching Reading in Zimbabwe, had at least an Ordinary Level (O Level) certificate , while 3,3% and 1,3% of teachers only had primary or Zimbabwe Junior Certificate (ZJC) which is junior secondary, in other SACMEQ countries. In tables 4.9 and 4.10, it can also be said that the teachers for both Mathematics and Health and Life Skills have at least an 'O' Level certificate.

*Table 4.8: Percentage of grade 6 teachers Reading teachers by qualification subject, and province*

| Province | Primary % | ZJC[2] % | O Level[3] % | A-level % | Tertiary % |
|---|---|---|---|---|---|
| **Bulawayo** | 12.0 | 0.9 | 42.2 | 22.6 | 22.3 |
| **Harare** | 0.9 | 5.0 | 32.8 | 23.8 | 37.4 |
| **Manicaland** | 0.0 | 0.0 | 48.5 | 19.6 | 31.9 |
| **Mashonaland Central** | 1.7 | 0.0 | 49.1 | 24.6 | 24.6 |
| **Mashonaland East** | 14.2 | 0.0 | 18.1 | 37.2 | 30.4 |
| **Mashonaland West** | 0.0 | 0.0 | 23.6 | 42.3 | 34.1 |
| **Masvingo** | 4.3 | 0.0 | 29.0 | 30.7 | 36.1 |
| **Matabeleland North** | 0.0 | 10.4 | 58.6 | 26.8 | 4.2 |
| **Matabeleland South** | 6.8 | 0.0 | 42.9 | 29.6 | 20.6 |
| **Midlands** | 0.0 | 0.0 | 62.8 | 27.6 | 9.7 |
| **Zimbabwe** | **3.3** | **1.3** | **41.0** | **28.3** | **26.2** |

*Table 4.9: Percentage of grade 6 teachers Mathematics teachers by qualification subject, and province*

| Province | Primary % | ZJC % | O level % | A Level % | Tertiary % |
|---|---|---|---|---|---|
| **Bulawayo** | 7.7 | 0.9 | 47.1 | 18.2 | 26.1 |
| **Harare** | 0.9 | 5.0 | 32.9 | 16.9 | 44.3 |
| **Manicaland** | 0.0 | 0.0 | 47.2 | 19.6 | 33.1 |
| **Mashonaland Central** | 1.7 | 0.0 | 42.7 | 30.9 | 24.8 |
| **Mashonaland East** | 8.5 | 0.0 | 23.9 | 42.9 | 24.7 |
| **Mashonaland West** | 0.0 | 0.0 | 23.6 | 42.3 | 34.1 |
| **Masvingo** | 9.7 | 0.0 | 29.0 | 30.7 | 30.7 |
| **Matabeleland North** | 0.0 | 10.4 | 61.6 | 26.8 | 1.1 |
| **Matabeleland South** | 3.9 | 0.0 | 36.9 | 30.9 | 28.2 |
| **Midlands** | 0.0 | 0.0 | 62.8 | 27.6 | 9.7 |
| **Zimbabwe** | **2.8** | **1.3** | **40.8** | **28.7** | **26.4** |

*Table 4.10: Percentage of grade 6 teachers Health and Life Skills teachers by qualification subject, and province*

| Province | Primary % | ZJC % | O level % | A Level % | Tertiary % |
|---|---|---|---|---|---|
| **Bulawayo** | 7.7 | 0.9 | 45.6 | 22.4 | 23.5 |
| **Harare** | 3.5 | 3.1 | 32.0 | 17.8 | 43.7 |
| **Manicaland** | 0.0 | 0.0 | 53.4 | 16.5 | 30.2 |
| **Mashonaland Central** | 1.7 | 0.0 | 36.8 | 24.6 | 36.9 |
| **Mashonaland East** | 14.5 | 0.0 | 15.6 | 37.2 | 32.7 |
| **Mashonaland West** | 0.0 | 0.0 | 23.6 | 42.3 | 34.1 |
| **Masvingo** | 4.3 | 0.0 | 27.4 | 30.7 | 37.6 |

[2] Zimbabwe Junior Certificate (ZJC) is a certificate that was obtained at the end of form 2 which is Junior secondary in other SACMEQ countries

[3]Ordinary Level (O Level) this is referred to as Senior Secondary in other SACMEQ countries

| | | | | | |
|---|---|---|---|---|---|
| **Matabeleland North** | 0.0 | 10.4 | 50.0 | 32.1 | 7.4 |
| **Matabeleland South** | 4.0 | 0.0 | 36.6 | 30.4 | 29.0 |
| **Midlands** | 0.0 | 0.0 | 68.3 | 26.5 | 5.2 |
| **Zimbabwe** | **3.3** | **1.1** | **39.8** | **27.3** | **28.5** |

## Effectiveness of teachers' in service training

The aim of in-service training is to promote teacher competencies and for this to be effective, teachers need to be monitored and evaluated. Teachers were asked if they received in-service training and if they did, how effective was the training they attended. This is shown in tables 4.11, 4.12 and 4.13. It seems that across the country, teachers in all provinces do not attend in-service training (that is over 50%) for all the subject areas in the period between the last SACMEQ III (2007) and during the survey SACMEQ IV.

*Table 4.11: Percentages of grade 6 Reading teachers' perception on effectiveness of in-service training*

| Province | Did not Attend % | Not effective % | Reasonably effective % | Effective % | Very effective % |
|---|---|---|---|---|---|
| **Bulawayo** | 45.2 | 0.0 | 5.2 | 33.8 | 15.8 |
| **Harare** | 40.4 | 0.0 | 9.7 | 33.4 | 16.5 |
| **Manicaland** | 28.8 | 3.5 | 7.9 | 13.1 | 46.6 |
| **Mashonaland Central** | 51.8 | 0.0 | 3.2 | 26.2 | 18.8 |
| **Mashonaland East** | 74.0 | 3.3 | 4.2 | 12.7 | 5.6 |
| **Mashonaland West** | 64.8 | 0.0 | 2.5 | 8.5 | 24.2 |
| **Masvingo** | 45.8 | 3.1 | 4.3 | 21.3 | 25.5 |
| **Matabeleland North** | 61.1 | 0.0 | 1.2 | 26.2 | 11.5 |
| **Matabeleland South** | 53.9 | 1.6 | 3.8 | 19.8 | 20.9 |
| **Midlands** | 52.8 | 0.0 | 3.4 | 21.4 | 22.5 |
| **Zimbabwe** | **50.7** | **1.4** | **4.9** | **20.3** | **22.8** |

*Table 4.12: Percentages of grade 6 Mathematics teachers' perception on effectiveness of in-service training*

| Province | Did not Attend % | Not effective % | Reasonably effective % | Effective % | Very effective % |
|---|---|---|---|---|---|
| **Bulawayo** | 46.0 | 0.0 | 8.3 | 32.5 | 13.2 |
| **Harare** | 48.4 | 0.0 | 9.6 | 26.5 | 15.4 |
| **Manicaland** | 31.0 | 0.0 | 9.2 | 31.0 | 28.8 |
| **Mashonaland Central** | 51.8 | 0.0 | 14.8 | 13.3 | 20.1 |
| **Mashonaland East** | 74.0 | 3.3 | 4.2 | 12.7 | 5.6 |
| **Mashonaland West** | 64.8 | 0.0 | 2.5 | 8.5 | 24.2 |
| **Masvingo** | 45.8 | 3.1 | 4.3 | 21.3 | 25.5 |
| **Matabeleland North** | 57.8 | 0.0 | 4.5 | 26.2 | 11.5 |
| **Matabeleland South** | 48.9 | 1.6 | 1.1 | 27.5 | 20.9 |
| **Midlands** | 52.8 | 0.0 | 3.4 | 21.4 | 22.5 |
| **Zimbabwe** | **51.4** | **0.8** | **6.5** | **21.4** | **19.9** |

Table 4.13: Percentages of grade 6 Health teachers' perception on effectiveness of in-service training

| Province | Did not Attend % | Not effective % | Reasonably effective % | Effective % | Very effective % |
|---|---|---|---|---|---|
| **Bulawayo** | 44.4 | 0.0 | 5.1 | 37.2 | 13.2 |
| **Harare** | 45.0 | 0.0 | 13.3 | 27.8 | 13.9 |
| **Manicaland** | 33.0 | 0.0 | 9.3 | 39.6 | 18.0 |
| **Mashonaland Central** | 51.8 | 0.0 | 3.2 | 32.1 | 12.9 |
| **Mashonaland East** | 71.4 | 3.3 | 4.2 | 12.7 | 8.2 |
| **Mashonaland West** | 69.4 | 0.0 | 2.5 | 8.5 | 19.6 |
| **Masvingo** | 45.8 | 3.1 | 4.3 | 24.0 | 22.8 |
| **Matabeleland North** | 57.8 | 0.0 | 1.2 | 29.5 | 11.5 |
| **Matabeleland South** | 45.2 | 4.8 | 4.4 | 27.6 | 18.0 |
| **Midlands** | 51.5 | 0.0 | 8.6 | 15.9 | 24.1 |
| **Zimbabwe** | **51.0** | **1.0** | **6.2** | **25.0** | **16.8** |

## 4.5 Policy Suggestion

1. The Ministry needs to review its staffing policy which takes into consideration qualifications, age, and training to ensure equitable distribution of teachers in schools; and come up with ways of retaining experienced teachers and deploying teachers to remote areas.
2. The Ministry needs to encourage teachers who have primary and junior secondary qualifications to go for capacity development.

3. Ministry needs to ensure that teachers get in service training at least once in every 3 - 5 years in order to update and upgrade their knowledge and skills.

## Reasons for teachers to visit Teachers' Resource Centres

A Resource Centre is a place where teachers can meet fellow colleagues to exchange ideas or seek advice, borrow, make or look for teaching materials or where they can attend training courses.

In this study, tables 4.14, 4.15 and 4.16 it can be noted that nationally teachers are utilizing the resource centres for all reasons stated in the questionnaire. In Bulawayo Province utilization of the resource centre is 100% across the board meaning that the centre is fully utilized, however there are certain provinces that need to improve on Resource Centre utilization. It should also be noted that teachers are not borrowing teaching materials as much as possible that is Reading (45%), Mathematics (48.5%) and Health and Life Skills (46.7%).

*Table 4.14: Percentages of Grade 6 Reading teacher's reasons for visiting the resource Centre*

| Province | Looking for materials % | Borrowing materials S % | Making materials % | Attend training courses % | Exchange Ideas % | Seek Advice % |
|---|---|---|---|---|---|---|
| **Bulawayo** | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Harare** | 41.6 | 0.0 | 29.1 | 100.0 | 71.2 | 62.0 |
| **Manicaland** | 100.0 | 100.0 | 85.8 | 100.0 | 90.3 | 100.0 |
| **Mashonaland Central** | 39.3 | 39.3 | 39.3 | 79.0 | 60.2 | 60.2 |
| **Mashonaland East** | 53.2 | 53.2 | 53.2 | 100.0 | 88.3 | 88.3 |
| **Mashonaland West** | 38.9 | 38.9 | 69.1 | 26.9 | 26.9 | 57.8 |
| **Masvingo** | 62.5 | 60.3 | 30.9 | 81.2 | 89.3 | 49.6 |
| **Matabeleland North** | 6.2 | 49.2 | 6.2 | 100.0 | 57.0 | 100.0 |
| **Matabeleland South** | 41.3 | 26.6 | 21.2 | 75.8 | 100.0 | 58.1 |
| **Midlands** | 94.6 | 47.5 | 74.0 | 76.2 | 92.6 | 87.2 |
| **Zimbabwe** | **57.9** | **45.0** | **48.6** | **82.7** | **77.8** | **73.5** |

*Table 4.15: Percentages of Grade 6 Mathematics teacher's reasons for visiting the resource Centre*

| Province | Looking for materials % | Borrowing materials % | Making materials % | Attend training courses % | Exchange Ideas % | Seek Advice % |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| **Bulawayo** | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Harare** | 53.0 | 0.0 | 26.9 | 100.0 | 80.3 | 71.9 |
| **Manicaland** | 100.0 | 59.1 | 91.1 | 100.0 | 56.7 | 100.0 |
| **Mashonaland Central** | 78.4 | 78.4 | 78.4 | 100.0 | 78.4 | 78.4 |
| **Mashonaland East** | 56.0 | 56.0 | 56.0 | 100.0 | 78.9 | 78.9 |
| **Mashonaland West** | 38.9 | 38.9 | 69.1 | 26.9 | 26.9 | 57.8 |
| **Masvingo** | 62.5 | 60.3 | 30.9 | 81.2 | 89.3 | 49.6 |
| **Matabeleland North** | 19.6 | 56.5 | 19.6 | 100.0 | 63.1 | 100.0 |
| **Matabeleland South** | 41.3 | 26.6 | 21.2 | 75.8 | 100.0 | 58.1 |
| **Midlands** | 94.6 | 47.5 | 74.0 | 76.2 | 92.6 | 87.2 |
| **Zimbabwe** | **67.4** | **48.5** | **55.8** | **84.7** | **77.3** | **76.6** |

*Table 4.16: Percentages of Grade 6 Health and Life Skills teacher's reasons for visiting the resource Centre*

| Province | Looking for materials % | Borrowing materials % | Making materials % | Attend training courses % | Exchange Ideas % | Seek Advice % |
|---|---|---|---|---|---|---|
| **Bulawayo** | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| **Harare** | 41.0 | 0.0 | 25.7 | 100.0 | 62.9 | 54.9 |
| **Manicaland** | 83.5 | 100.0 | 83.5 | 90.2 | 72.2 | 83.5 |
| **Mashonaland Central** | 76.8 | 49.7 | 49.7 | 100.0 | 76.8 | 76.8 |
| **Mashonaland East** | 68.5 | 68.5 | 68.5 | 100.0 | 84.9 | 84.9 |
| **Mashonaland West** | 38.9 | 38.9 | 69.1 | 26.9 | 26.9 | 57.8 |
| **Masvingo** | 62.5 | 60.3 | 30.9 | 81.2 | 89.3 | 49.6 |
| **Matabeleland North** | 6.2 | 49.2 | 6.2 | 100.0 | 57.0 | 100.0 |
| **Matabeleland South** | 52.5 | 30.2 | 17.2 | 71.7 | 100.0 | 76.0 |
| **Midlands** | 87.3 | 43.9 | 68.3 | 83.0 | 93.2 | 80.5 |
| **Zimbabwe** | **63.4** | **46.7** | **48.8** | **84.7** | **78.2** | **73.3** |

## 4.6 Policy Suggestion

Teacher resource centres need to raise awareness to teachers on utilizing the available services. The Ministry also needs to investigate the reason why there is less borrowing of teaching materials at the resource centres.

## Conclusion

This chapter focuses on the analysis and description of personal and professional characteristics of grade 6 Reading, Mathematics and Health and Life Skills teachers as well as resources and professional support. In this chapter, it can be observed that generally in 2013, when SACMEQ IV data was collected the pool of Grade 6 teachers was dominated by males and that most of the teachers are left with more than 15 years before retirement. Teacher academic qualifications show that most of the teachers have an O level certificate, followed by 'A' level. Few teachers have primary and junior secondary (ZJC) qualification.

# Chapter 5 School Heads' Characteristics and their views on Educational Infrastructure, the Organization and Operation of Schools

## Introduction

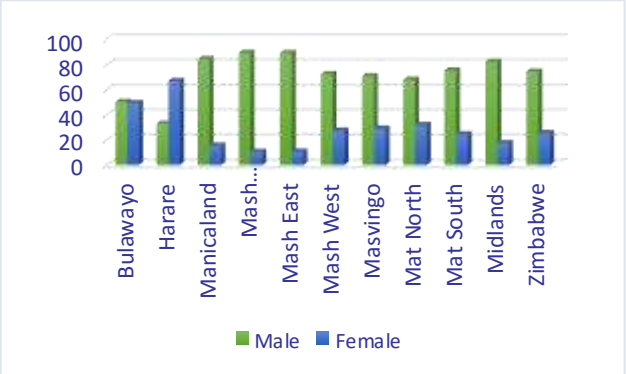
SACMEQ examines Human resources and school management as important aspects of education. This chapter looks at the information from questions posed to school heads about their personal characteristics and those of their schools as well as their views on operations and activities in their schools and behavioral problems with learners and the teaching staff. These factors have a great influence on the provision of quality education which is the objective of all concerned whether it is learners or parents. School physical infrastructure plays a vital role in improving the quality of education. The school head should be actively involved in planning school management activities, making sure that human, financial and material resources are maximised, effectively and efficiently.

## Gender of School Heads

In this study it can be observed from table 5.1, that 74.6% of all school heads who participated in the study are male and only 25.4% were female indicating that there is gender imbalance. Harare is the only province that shows an inverse of the national picture with 67.1% females heads while Bulawayo seems to be the only province that has gender balance 50.5% and 49.5% in favour of males.

*5.1: Percentages of the sex distribution of school heads by province*

| Province | Male % | Female % | SE |
|---|---|---|---|
| **Bulawayo** | 50.5 | 49.5 | 13.6 |
| **Harare** | 32.9 | 67.1 | 11.7 |
| **Manicaland** | 84.6 | 15.4 | 7.1 |
| **Mashonaland Central** | 89.6 | 10.4 | 7.2 |
| **Mashonaland East** | 89.5 | 10.5 | 7.3 |
| **Mashonaland West** | 72.6 | 27.4 | 12.3 |
| **Masvingo** | 71.0 | 29.0 | 10.7 |
| **Matabeleland North** | 68.1 | 31.9 | 15.2 |
| **Matabeleland South** | 75.5 | 24.5 | 11.5 |
| **Midlands** | 82.5 | 17.5 | 9.3 |
| **Zimbabwe** | **74.6** | **25.4** | **3.4** |




## Age of School Heads

Information on the age distribution of head teachers is useful for planning purposes. The Ministry of Primary and Secondary Education requires such information to work out succession plans for the replacement of head teachers who are nearing retirement. From table 5.2 the average age for a school head is 49 years and school heads age for all provinces ranges between 47 and 53 years.

*5.2: Average age of school heads by province*

| Province | Mean yrs | SE |
|---|---|---|
| **Bulawayo** | 53.4 | 1.7 |
| **Harare** | 51.0 | 1.5 |
| **Manicaland** | 47.8 | 1.1 |
| **Mashonaland Central** | 49.6 | 2.1 |
| **Mashonaland East** | 48.7 | 1.8 |
| **Mashonaland West** | 49.7 | 1.5 |
| **Masvingo** | 50.0 | 1.9 |
| **Matabeleland North** | 48.1 | 2.1 |
| **Matabeleland South** | 51.5 | 1.5 |
| **Midlands** | 48.1 | 1.8 |
| **Zimbabwe** | **49.3** | **0.6** |

## Conditions of School Buildings

A good school environment has a positive impact on *learners for a conducive learning environment hence learners tend to perform better under good conditions*. The *school heads* were asked to state the condition of the school on a five-point scale with the following values: 5 = in good condition; 4 = some classrooms need minor repairs; 3 = most or all classrooms need minor repair; 2 = some classrooms need major repairs; and, 1 = the school needs complete rebuilding. *From the study it can be deduced that most of classroom of the schools that participated in the survey are not in good condition.* Midlands and Masvingo Provinces have the highest percentage of demand for rebuilding whereas Matabeleland North Province has no structures that needs rebuilding. 3.5% of the schools (190[4]) said that all their classrooms are in good condition.

*Table 5.3: Percentages of distribution of general school conditions buildings by province SACMEQ IV*

| Province | Needs Complete Rebuilding % | Some classrooms need major repairs % | Most or all classrooms need minor repairs % | Some classrooms need minor repairs % | All classrooms are in good condition % |
|---|---|---|---|---|---|
| **Bulawayo** | 7.3 | 15.3 | 14.5 | 48.2 | 14.7 |
| **Harare** | 7.0 | 12.1 | 16.8 | 58.4 | 5.6 |
| **Manicaland** | 7.2 | 45.1 | 33.2 | 10.0 | 4.5 |
| **Mashonaland Central** | 16.6 | 22.1 | 40.0 | 21.3 | 0.0 |
| **Mashonaland East** | 8.1 | 37.7 | 22.1 | 29.6 | 2.5 |
| **Mashonaland West** | 21.5 | 47.6 | 13.7 | 17.1 | 0.0 |
| **Masvingo** | 12.0 | 40.9 | 21.7 | 17.2 | 8.2 |
| **Matabeleland North** | 21.5 | 39.1 | 19.2 | 16.1 | 4.1 |
| **Matabeleland South** | 0.0 | 55.7 | 8.9 | 35.4 | 0.0 |
| **Midlands** | 17.3 | 38.4 | 15.6 | 28.6 | 0.0 |
| **Zimbabwe** | **12.5** | **35.9** | **21.9** | **26.1** | **3.5** |

[4] From chapter 2 it was established that in SACMEQ IV, 190 schools participated from all the 10 provinces in Zimbabwe.

## Academic Qualification of School Heads

From the table 5.4 it is observed that in Zimbabwe most of the school heads, 63,8%, had a tertiary education, while Manicaland and Mashonaland East provinces had school heads with the least qualifications of Primary and ZJC, whereas Harare Province had heads with the highest tertiary qualifications.

### 5.1 Policy Suggestion

The Ministry needs to look into the training needs of school heads who do not have a tertiary education, especially those with primary and ZJC qualifications. (data gaps)

*Table 5.4: Percentages of School Heads by academic qualification*

| Province | Primary % | ZJC % | O Level % | A Level % | Tertiary % |
|---|---|---|---|---|---|
| **Bulawayo** | 0.0 | 0.0 | 14.4 | 0.0 | 85.6 |
| **Harare** | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| **Manicaland** | 5.8 | 3.5 | 16.3 | 13.9 | 60.6 |
| **Mashonaland Central** | 0.0 | 0.0 | 38.0 | 13.3 | 48.7 |
| **Mashonaland East** | 0.0 | 4.5 | 26.7 | 20.8 | 48.0 |
| **Mashonaland West** | 0.0 | 0.0 | 14.6 | 14.9 | 70.5 |
| **Masvingo** | 0.0 | 0.0 | 4.8 | 24.1 | 71.1 |
| **Matabeleland North** | 0.0 | 0.0 | 34.6 | 14.2 | 51.2 |
| **Matabeleland South** | 0.0 | 0.0 | 43.1 | 6.9 | 50.0 |
| **Midlands** | 0.0 | 0.0 | 31.9 | 6.4 | 61.7 |
| **Zimbabwe** | **1.0** | **1.1** | **21.8** | **12.2** | **63.8** |

## Teaching Experience of School Heads

Experience is vital in management positions. School heads'' teaching experience guides and supports teachers, for example, a school head who has a lot of experience has the ability to know the weaknesses of teachers and what measures or strategies that need to be taken in overcoming or turning them into strengths. In this study, the school heads' teaching experience is 23 years on average, while it is also observed that in Bulawayo, Harare and Matabeleland North provinces, the school heads had teaching experiences that exceeded the national average.

*Table 5.5: Mean teaching experience (in years) of school heads by province*

| Province | Mean % | SE |
|---|---|---|
| **Bulawayo** | 28.1 | 2 |
| **Harare** | 26.4 | 2.1 |
| **Manicaland** | 23 | 1.1 |
| **Mashonaland Central** | 22.4 | 2.4 |
| **Mashonaland East** | 23.5 | 2.2 |
| **Mashonaland West** | 23.6 | 1.7 |
| **Masvingo** | 23.1 | 1.9 |
| **Matabeleland North** | 19.3 | 2.8 |
| **Matabeleland South** | 25.9 | 2.1 |

| | | |
|---|---|---|
| **Midlands** | 23.9 | 1.8 |
| **Zimbabwe** | **23.7** | **0.6** |

## School heads' frequency of dealing with teachers' behavioural problems

Schools heads are also responsible for teacher supervision. Teachers' behaviour has an impact on both the school and learners. From these findings, most heads from the sampled schools, mainly experienced drug abuse, sexual harassment of teachers and leaners, which are 81.1%, 84.8% and 86.5% respectively.

*Table 5.6: Percentages of teachers' behavioural problems SACMEQ IV*

| Teachers behavioural problems | % |
|---|---|
| Late arrivals | 7.0 |
| Absenteeism | 28.2 |
| Skipping class | 66.5 |
| Intimidation of learners | 57.5 |
| Sexual harassment of teachers | 84.8 |
| Sexual harassment of learners | 86.5 |
| Use of abusive language | 55.4 |
| Drug abuse | 81.1 |
| Alcohol abuse or possession | 69.2 |
| Health problems | 6.6 |
| Parents and teachers conflicts | 15.2 |

## School heads' frequency of dealing with learners' behavioral problems

School heads also have to deal with learners' behavioural problems. From the data for learner problems presented in Table 5.7, it can be noted that physical injury to staff (83.1%), sexual harassment of teachers (%) and learners (61.4%) as well as drug abuse (79.3%), alcohol abuse (80.7%) and verbal abuse of teachers (64.9%) are the issues the school heads had to deal with.

*Table 5.7: Percentages of learners' behavioral problems SACMEQ IV*

| Frequency of learner behavior problems | % |
|---|---|
| Late arrival | 0.4 |
| Absenteeism | 0.9 |
| Skipping class | 31.0 |
| School dropout | 5.9 |
| Classroom disturbance | 36.5 |
| Cheating | 8.4 |
| Use of abusive language | 10.7 |
| Vandalism | 36.5 |
| Theft | 10.2 |
| Intimidation or bullying | 5.6 |
| Intimidation or verbal abuse of teachers | 64.9 |
| Physical injury to staff | 83.1 |
| Sexual harassment of learners | 61.4 |
| Sexual harassment of teachers | 87.2 |
| Drug abuse | 79.3 |
| Alcohol Abuse or possession | 80.7 |
| Fighting | 3.2 |
| Pupil health | 2.2 |

## Conclusion

This chapter was dealing with school heads, how they are managing and the conditions of their schools. It was observed that there is need for school heads to have some training which can help them deal with behavioural problems, and the Ministry's Disciplinary and Legal Services department needs to go to the ground and check with the Provincial Education Offices.

# Chapter 6 Equity in the Allocation of Human and Materials Resources in Schools

## Introduction

This chapter aims to look at the distribution of human and material resources in schools. For Human resources we look at school heads by their qualifications and type of training received.

One of the goals of Education for All (EFA) is to ensure equity in access and participation, and equality in terms of human resource distribution, both among provinces and schools within the provinces. This is aimed at ensuring that all children of school going age have an equal opportunity for quality learning.

## Desirable human resources

Appropriate human resources in schools is central to effective and efficient education service delivery. School heads should have appropriate expertise and be found in positions of authority. The research findings of desirable human resources are depicted in the table below 6.1. It can be noted that school heads in this study had teacher training (97.4%), academic qualification (97.9%), management course (93.3%) and HIV/AIDS Course (72.9%).

*Table 6.1: Percentages of school human resources by province*

| Province | Teacher Training % | Academic Qualification % | Management Course % | HIV/AIDS Course % |
|---|---|---|---|---|
| **Bulawayo** | 100.0 | 100.0 | 93.3 | 86.9 |
| **Harare** | 93.0 | 100.0 | 94.5 | 89.6 |
| **Manicaland** | 97.1 | 90.8 | 75.4 | 57.4 |
| **Mashonaland Central** | 94.3 | 100.0 | 95.2 | 85.6 |
| **Mashonaland East** | 100.0 | 95.5 | 100.0 | 72.6 |
| **Mashonaland West** | 100.0 | 100.0 | 100.0 | 55.2 |
| **Masvingo** | 98.0 | 100.0 | 89.0 | 69.9 |
| **Matabeleland North** | 91.1 | 100.0 | 100.0 | 61.5 |
| **Matabeleland South** | 100.0 | 100.0 | 100.0 | 94.1 |
| **Midlands** | 100.0 | 100.0 | 100.0 | 77.8 |

| | | | | |
|---|---|---|---|---|
| **Zimbabwe** | **97.4** | **97.9** | **93.3** | **72.9** |

### 6.1 Policy Suggestion

The Ministry should make it mandatory for all school heads to do a management course, and at school level all teachers including the head should do HIV/AIDS Courses and other emerging educational or cross cutting issues to ensure that schools are up to date with new trends in education.

## Desirable physical resources

For efficient performance in service delivery, there is need for working space, heads' office and building conditions. From the study it can be noted that 29.7% had good building conditions, 19.9% schools had staff rooms and 65.8% had school heads' offices. School fencing is 54.9% of the sampled schools and 51.1% had electricity. Mashonaland Central province buildings are not in a good state whereas Bulawayo and Harare Provinces buildings are in good condition.

*Table 6.2: Percentages of desirable school physical resources by province*

| Province | Good Building Conditions % | Staff Room % | School Head Office % | School Fence % | Electricity % |
|---|---|---|---|---|---|
| **Bulawayo** | 62.9 | 42.5 | 92.7 | 86.0 | 86.2 |
| **Harare** | 64.1 | 66.3 | 82.6 | 93.0 | 83.7 |
| **Manicaland** | 32.1 | 2.4 | 78.6 | 39.3 | 46.2 |
| **Mashonaland Central** | 14.5 | 23.2 | 64.4 | 46.5 | 40.0 |
| **Mashonaland East** | 21.3 | 33.8 | 60.5 | 59.6 | 45.0 |
| **Mashonaland West** | 25.4 | 3.6 | 69.5 | 30.5 | 53.6 |
| **Masvingo** | 17.1 | 13.1 | 62.2 | 49.0 | 40.3 |
| **Matabeleland North** | 35.4 | 0.0 | 34.8 | 59.6 | 36.4 |
| **Matabeleland South** | 28.6 | 16.6 | 48.7 | 79.4 | 69.8 |
| **Midlands** | 20.2 | 15.7 | 55.9 | 49.8 | 41.0 |
| **Zimbabwe** | **29.7** | **19.9** | **65.8** | **54.9** | **51.1** |

## Conclusion

Desirable human and physical resources are vital for service delivery. In this chapter it was noted that all school heads need to do a management course, HIV/AIDS Courses and other emerging educational or cross cutting issues to ensure that schools are up to date with current issues.

# Chapter 7 Achievement Levels of Grade 6 Learners and Teachers

## Introduction

This chapter provides information about levels and trends in the reading and mathematics achievement of Grade 6 learners and teachers in Zimbabwe. Comparisons of results between SACMEQ III and SACMEQ IV will be made to establish whether there has been improvement or not. Tests were administered to learners and their teachers in reading, mathematics and on knowledge about HIV-AIDS, and this chapter focuses on the achievements in reading and mathematics only. The results will be reported in terms of scaled scores and in terms of the percentage of learners and teachers who had reached the various levels of achievement. This chapter is a continuation of chapter 2.

There are eight competency levels that provide a more concrete analysis of what learners and teachers can actually do and also suggest instructional strategies relevant to learners who are learning at each level of competence. Such descriptions are of great assistance for the construction of textbooks, the design of teacher in-service programmes, and development of general classroom teaching strategies. All these activities require a sound knowledge of skills already acquired and higher order skills that should be aimed at in order to transfer to the next stage of learning. These are presented in table 7.1.

*7.1: Competency levels for SACMEQ Reading and Mathematics test description*

**Reading Competency levels**

| | Level | Descriptor | Competency |
|---|---|---|---|
| BASIC READING SKILLS | 1 | Pre-reading | Matches words and pictures involving concrete concepts and everyday objects. |
| | 2 | Emergent Reading | Matches words and pictures involving prepositions and abstract concepts. |
| | 3 | Basic Reading | Interprets meaning (by matching words and phrases, completing sentences). |
| | 4 | Reading for Meaning | Reads to link and interpret information located in various parts of the text. |
| | 5 | Interpretive Reading | Interprets information from various parts of the text in association with external information. |
| ADVANCED | 6 | Inferential | Reads to combine information from various parts of the text so as to |

| | | | |
|---|---|---|---|
| | | Reading | infer the writer's purpose. |
| | 7 | Analytical Reading | Locates information in longer texts (narrative, document or expository) in order to combine information from various parts of the text so as to infer the writer's personal beliefs (value systems, prejudices and biases). |
| | 8 | Critical Reading | Reads from various parts of the text so as to infer and evaluate what the writer has assumed about both the topic and the characteristics of the reader |
| **Mathematics Competency levels** | | | |
| **BASIC MATH SKILLS** | 1 | Pre- Numeracy | Applies single step addition and subtraction. |
| | 2 | Emergent Numeracy | Applies a two-step addition and subtraction involving carrying. |
| | 3 | Basic Numeracy | Translates verbal information into arithmetic operations. |
| | 4 | Beginning Numeracy | Translates verbal or graphic information into simple arithmetic problems. |
| **ADVANCED MATH SKILLS** | 5 | Competent Numeracy | Translates verbal, graphic, or tabular information into an arithmetic form in order to solve a given problem. |
| | 6 | Mathematically Skilled | Solves multiple-operation problems (using the correct order) involving fractions, ratios, and decimals. |
| | 7 | Concrete Problem Solving | Extracts and converts information from tables, charts and other symbolic presentations in order to identify, and then solve multi-step problems |
| | 8 | Abstract Problem Solving | Identifies the nature of an unstated mathematical problem embedded within verbal or graphic information and then translate this into symbolic, algebraic or equation form in order to solve a problem. |

## Reading and Mathematics test scores of learners and teachers

The table below shows the mean for Reading and Mathematics scores of learners in both SACMEQ III and SACMEQ IV. It can be observed that there was improvement in both Reading and Mathematics test scores in SACMEQ III and SACMEQ IV (that is from 507.7 to 527.5 for Reading, and from 519.8 to 565.5 for Mathematics). There are lower scores in Reading in Harare and Midlands from 599.3 to 586.8 and 533.1 to 517.9 respectively.

*7.2 Means for Reading and Mathematics test scores of learners in SACMEQ III and SACMEQ IV*

| | **SACMEQ III** | | | | **SACMEQ IV** | | | |
|---|---|---|---|---|---|---|---|---|
| | **Reading** | | **Mathematics** | | **Reading** | | **Mathematics** | |
| **Province** | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| **Bulawayo** | 589.5 | 13.35 | 577.2 | 12.97 | 589.0 | 15.11 | 634.4 | 16.83 |
| **Harare** | 599.3 | 11.10 | 585.4 | 10.66 | 586.8 | 9.14 | 633.1 | 12.24 |
| **Manicaland** | 481.0 | 7.52 | 500.0 | 6.09 | 515.0 | 14.43 | 555.0 | 13.89 |
| **Mashonaland Central** | 466.7 | 15.09 | 488.3 | 11.65 | 525.7 | 12.78 | 559.0 | 15.52 |
| **Mashonaland East** | 464.5 | 8.13 | 486.1 | 5.49 | 515.5 | 12.81 | 555.3 | 14.96 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Mashonaland West** | 497.2 | 22.30 | 510.5 | 18.52 | 514.9 | 9.34 | 547.8 | 9.66 |
| **Masvingo** | 516.3 | 15.53 | 531.7 | 16.02 | 517.6 | 6.89 | 557.6 | 10.21 |
| **Matabeleland North** | 476.9 | 11.87 | 486.7 | 12.21 | 502.9 | 7.30 | 532.7 | 8.29 |
| **Matabeleland South** | 464.1 | 20.63 | 474.5 | 16.43 | 521.7 | 12.04 | 558.3 | 12.1 |
| **Midlands** | 533.1 | 22.69 | 551.0 | 21.01 | 517.9 | 9.71 | 555.6 | 10.85 |
| **Zimbabwe** | **507.7** | **5.65** | **519.8** | **4.98** | **527.5** | **4.12** | **565.5** | **4.51** |

From the table 7.2 below it can be noted that the teachers Reading and Mathematics test scores have dropped from 794.6 to 700.8 and from 851.9 to 844.0 respectively, for SACMEQ III and SACMEQ IV. Teachers Reading test scores are lower in all 10 provinces, while it is a different scenario for Mathematics where we have improvement in most of the provinces except Mashonaland West, Masvingo, Matabeleland South and Midlands provinces.

*7.3: Means for Reading and Mathematics test scores of teachers in SACMEQ III and SACMEQ IV*

| | **SACMEQ III** | | | | **SACMEQ IV** | | | |
|---|---|---|---|---|---|---|---|---|
| | **Reading** | | **Mathematics** | | **Reading** | | **Mathematics** | |
| **Province** | Mean | SE | Mean | SE | Mean | SE | Mean | SE |
| **Bulawayo** | 775.6 | 11.46 | 806.8 | 13.82 | 719.9 | 15.52 | 865.4 | 14.22 |
| **Harare** | 773.1 | 15.21 | 809.1 | 20.22 | 706.9 | 9.61 | 849.7 | 16.16 |
| **Manicaland** | 787.5 | 22.96 | 831.7 | 19.30 | 725.1 | 11.87 | 843.2 | 18.68 |
| **Mashonaland Central** | 815.5 | 9.65 | 854.3 | 12.38 | 681.5 | 12.34 | 859.8 | 24.16 |
| **Mashonaland East** | 783.5 | 20.14 | 831.3 | 24.30 | 705.2 | 15.43 | 843.2 | 17.83 |
| **Mashonaland West** | 831.3 | 9.25 | 881.5 | 18.07 | 714.6 | 14.17 | 863.7 | 16.36 |
| **Masvingo** | 783.1 | 15.5 | 894.8 | 35.89 | 685.6 | 12.17 | 818.3 | 14.74 |
| **Matabeleland North** | 765.4 | 21.73 | 839.6 | 24.14 | 695.6 | 13.89 | 849.8 | 25.31 |
| **Matabeleland South** | 810.1 | 21.06 | 888.7 | 29.62 | 679.1 | 15.52 | 802.8 | 17.31 |
| **Midlands** | 797.2 | 12.74 | 864.0 | 20.33 | 688.0 | 7.99 | 845.4 | 10.55 |
| **Zimbabwe** | **794.6** | **5.1** | **851.9** | **7.48** | **700.8** | **4.68** | **844.0** | **5.84** |

## Reading competency levels of grade 6 learners

Tables 7.4 and 7.5 show literacy levels of grade 6 learners by province for SACMEQ III and SACMEQ IV respectively, disaggregated by competency levels. There was improvement from SACMEQ IV, grade 6 learners who have achieved level 5 or more were 42.2% from 45.4% in SACMEQ III. It should be noted that there are insignificant changes within the provinces.

*7.4: Percentage of learners reaching various reading competence levels by subgroups SACMEQ III*

| Province | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 1.5 | 0.71 | 3.7 | 1.25 | 3.9 | 1.09 | 13.9 | 3.26 | 16.3 | 2.98 | 19.8 | 3.06 | 28.8 | 4.28 | 12.1 | 3.46 |
| **Harare** | 1.3 | 0.64 | 1.3 | 0.67 | 5.6 | 1.40 | 12.6 | 2.27 | 16.6 | 2.76 | 16.8 | 2.17 | 31.9 | 3.15 | 13.9 | 2.34 |
| **Manicaland** | 4.3 | 1.19 | 16.3 | 3.30 | 20.8 | 2.55 | 28.5 | 2.58 | 17.2 | 2.30 | 8.4 | 1.31 | 4.3 | 1.10 | 0.2 | 0.23 |
| **Mashonaland Central** | 9.6 | 3.36 | 18.0 | 3.52 | 26.1 | 3.49 | 20.3 | 2.87 | 14.5 | 3.15 | 6.1 | 2.40 | 4.0 | 2.40 | 1.3 | 0.96 |
| **Mashonaland East** | 7.5 | 2.05 | 14.7 | 4.03 | 26.9 | 2.70 | 28.6 | 3.11 | 12.2 | 2.61 | 7.9 | 2.38 | 2.3 | 1.15 | 0.0 | 0.00 |
| **Mashonaland West** | 9.4 | 3.04 | 13.0 | 2.80 | 20.6 | 4.67 | 17.7 | 3.12 | 15.7 | 2.09 | 8.7 | 2.58 | 10.5 | 4.32 | 4.4 | 2.37 |
| **Masvingo** | 2.9 | 1.09 | 10.7 | 2.45 | 16.5 | 3.66 | 22.0 | 3.54 | 18.4 | 2.47 | 16.0 | 3.73 | 12.1 | 4.11 | 1.6 | 0.68 |
| **Matabeleland North** | 7.6 | 1.43 | 17.2 | 3.10 | 23.2 | 3.20 | 21.3 | 3.44 | 14.5 | 1.01 | 9.0 | 2.45 | 6.3 | 2.03 | 0.9 | 0.72 |
| **Matabeleland South** | 9.6 | 1.76 | 22.0 | 3.81 | 27.3 | 3.71 | 17.0 | 2.83 | 11.6 | 2.16 | 4.4 | 1.15 | 4.6 | 3.09 | 3.5 | 3.49 |
| **Midlands** | 5.9 | 1.90 | 9.1 | 2.87 | 13.5 | 3.68 | 21.8 | 4.36 | 11.7 | 2.06 | 13.2 | 2.32 | 16.0 | 4.85 | 8.9 | 3.57 |
| **Zimbabwe** | **6.0** | **0.78** | **12.5** | **1.04** | **18.7** | **1.15** | **20.7** | **1.12** | **15.0** | **0.89** | **11.0** | **0.90** | **11.7** | **1.17** | **4.5** | **0.70** |

7.5*: Percentage of learners reaching various Reading competence levels by province (SACMEQ IV)*

| Province | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.6 | 0.52 | 4.0 | 2.55 | 7.0 | 2.88 | 12.4 | 2.46 | 15.8 | 1.85 | 18.8 | 2.44 | 31.5 | 4.43 | 9.9 | 2.96 |
| **Harare** | 0.9 | 0.41 | 3.0 | 1.10 | 5.5 | 1.35 | 13.6 | 2.64 | 16.3 | 2.21 | 24.0 | 1.79 | 27.4 | 3.88 | 9.2 | 2.49 |
| **Manicaland** | 5.6 | 1.78 | 15.8 | 3.30 | 17.4 | 2.34 | 24.4 | 2.54 | 15.7 | 2.58 | 8.6 | 2.04 | 7.6 | 2.09 | 5.0 | 3.64 |
| **Mashonaland Central** | 7.4 | 3.07 | 16.6 | 3.36 | 13.8 | 1.60 | 24.6 | 2.18 | 17.8 | 3.66 | 9.8 | 1.98 | 5.4 | 1.81 | 4.6 | 2.76 |
| **Mashonaland East** | 4.9 | 1.08 | 12.4 | 2.44 | 14.4 | 2.19 | 23.2 | 2.74 | 19.2 | 2.98 | 10.5 | 2.05 | 13.0 | 4.76 | 2.4 | 1.33 |
| **Mashonaland West** | 3.4 | 1.56 | 8.9 | 2.06 | 15.5 | 2.20 | 30.9 | 2.96 | 23.1 | 2.83 | 12.5 | 2.31 | 4.2 | 1.76 | 1.5 | 1.01 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Masvingo** | 5.5 | 1.46 | 12.1 | 1.99 | 18.9 | 2.24 | 26.5 | 1.83 | 15.6 | 1.45 | 12.7 | 2.01 | 7.8 | 3.03 | 0.9 | 0.50 |
| **Matabeleland North** | 4.0 | 1.06 | 13.6 | 3.68 | 16.4 | 2.73 | 24.0 | 4.30 | 18.5 | 1.77 | 15.8 | 3.33 | 6.9 | 3.83 | 0.7 | 0.58 |
| **Matabeleland South** | 5.3 | 1.14 | 12.4 | 2.83 | 16.2 | 2.58 | 22.6 | 2.58 | 22.7 | 3.22 | 10.4 | 2.12 | 7.9 | 2.51 | 2.5 | 1.20 |
| **Midlands** | 4.9 | 1.03 | 15.7 | 3.13 | 16.2 | 2.29 | 28.2 | 3.17 | 23.2 | 4.13 | 9.6 | 1.99 | 2.1 | 1.00 | 0.0 | 0.00 |
| **Zimbabwe** | **4.7** | **0.69** | **12.0** | **1.03** | **14.5** | **0.74** | **23.4** | **0.87** | **18.8** | **1.00** | **12.6** | **0.74** | **10.4** | **1.03** | **3.6** | **0.72** |

## Reading competency levels of grade 6 learners by sub-groups

Tables 7.6 and 7.7 show the Reading competency levels of grade 6 learners by sub-groups. There has been an improvement in SACMEQ IV. It can be noted that for both SACMEQ III and SACMEQ IV girls keep performing better than boys. For levels 5 and above, performance for boys was from 39.9% to 40.9% (slight change) and girls from 43.8% to 50.0%. Grade 6 learners in rural areas perform better than those in urban areas in both projects III and IV. There was a slight decline in urban 77.1% to 73.9%. Low socio economic status (SES) level, has increased by 12.1%, while there was a decline of 18.6% for the high SES.

*7.6: Percentage of learners reaching various reading competence levels by subgroups SACMEQ III*

| **Learner sub-group** | **Level 1** | | **Level 2** | | **Level 3** | | **Level 4** | | **Level 5** | | **Level 6** | | **Level 7** | | **Level 8** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| ***Learners gender*** | | | | | | | | | | | | | | | | |
| **Boys** | 7.5 | 1.14 | 14.9 | 1.38 | 18.6 | 1.4 | 19.2 | 1.4 | 13.7 | 1.16 | 10.4 | 0.96 | 11.3 | 1.3 | 4.5 | 0.85 |
| **Girls** | 4.8 | 0.75 | 10.7 | 1.27 | 18.8 | 1.37 | 21.9 | 1.45 | 15.9 | 1.19 | 11.4 | 1.11 | 12.1 | 1.33 | 4.4 | 0.71 |
| ***School location*** | | | | | | | | | | | | | | | | |
| **Rural** | 7.8 | 1.03 | 16.3 | 1.30 | 23.9 | 1.30 | 23.7 | 1.32 | 15.0 | 1.11 | 8.3 | 0.93 | 4.6 | 0.93 | 0.5 | 0.17 |
| **Urban** | 1.3 | 0.42 | 3.0 | 0.55 | 5.6 | 0.74 | 13.0 | 1.42 | 15.0 | 1.32 | 17.7 | 1.13 | 29.8 | 1.89 | 14.6 | 1.35 |
| ***Socioeconomic level*** | | | | | | | | | | | | | | | | |
| **Low SES (Bottom 25%)** | 8.4 | 1.04 | 17.3 | 1.81 | 23.9 | 1.83 | 23.2 | 1.68 | 15.0 | 1.53 | 7.8 | 1.23 | 3.6 | 0.94 | 0.7 | 0.3 |
| **High SES (Top 25%)** | 2.4 | 0.87 | 2.9 | 0.87 | 6.3 | 1.05 | 10.9 | 1.66 | 15.2 | 1.7 | 18.0 | 1.72 | 29.1 | 1.95 | 15.2 | 1.76 |

7.7*: Percentage of learners reaching various reading competence levels by subgroups SACMEQ IV*

| Learner sub group | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| ***Learner gender*** | | | | | | | | | | | | | | | | |
| **Boy** | 5.4 | 0.63 | 14.4 | 1.30 | 16.7 | 1.20 | 22.6 | 1.09 | 16.2 | 1.06 | 11.5 | 0.96 | 9.6 | 1.01 | 3.6 | 0.74 |
| **Girl** | 4.0 | 1.05 | 9.4 | 1.08 | 12.2 | 1.10 | 24.4 | 1.39 | 21.4 | 1.42 | 13.8 | 0.89 | 11.2 | 1.27 | 3.6 | 0.79 |
| ***School location*** | | | | | | | | | | | | | | | | |
| **Rural** | 5.9 | 0.89 | 15.4 | 1.24 | 17.3 | 0.89 | 26.9 | 0.96 | 19.8 | 1.35 | 9.4 | 0.79 | 4.6 | 0.95 | 0.5 | 0.23 |
| **Urban** | 1.4 | 0.44 | 3.2 | 0.62 | 7.1 | 1.23 | 14.4 | 1.67 | 16.0 | 1.14 | 21.0 | 1.24 | 25.3 | 2.25 | 11.6 | 2.24 |
| ***Socioeconomic level*** | | | | | | | | | | | | | | | | |
| **Low SES (Bottom 25%)** | 4.4 | 0.59 | 14.0 | 1.30 | 16.1 | 1.01 | 26.1 | 1.08 | 20.3 | 1.33 | 11.0 | 0.91 | 6.0 | 0.76 | 1.9 | 0.74 |
| **High SES (Top 25%)** | 2.2 | 0.45 | 6.6 | 0.88 | 11.7 | 1.07 | 20.7 | 1.32 | 18.9 | 1.13 | 16.3 | 1.07 | 17.3 | 1.61 | 6.4 | 1.21 |

## Mathematics competency levels of grade 6

Tables 7.8 and 7.9 show that numeracy competency of learners in SACMEQ III and IV was better, that is, from 20.1% to 24.4%. It can be noted that Bulawayo and Harare performed better than other provinces, with over 70% for both SACMEQ III and SACMEQ IV.

*7.8: Percentage of learners reaching various Mathematics competence levels by province (SACMEQ III)*

| Province | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.4 | 0.37 | 6.4 | 1.81 | 22.8 | 2.95 | 33.9 | 3.52 | 16.4 | 3.09 | 12.8 | 2.81 | 5.3 | 2.14 | 2.1 | 0.91 |
| **Harare** | 0.3 | 0.29 | 7.5 | 2.38 | 19.6 | 3.31 | 28.0 | 2.75 | 21.3 | 2.31 | 14.8 | 3.09 | 6.2 | 1.54 | 2.2 | 1.26 |
| **Manicaland** | 4.7 | 1.60 | 19.8 | 2.94 | 41.9 | 3.02 | 20.9 | 1.91 | 11.0 | 2.01 | 1.7 | 0.90 | 0.0 | 0.00 | 0.0 | 0.00 |
| **Mashonaland Central** | 4.9 | 1.57 | 31.0 | 4.14 | 33.8 | 3.29 | 19.6 | 2.41 | 7.1 | 2.38 | 2.6 | 1.17 | 1.0 | 0.56 | 0.0 | 0.00 |
| **Mashonaland East** | 5.8 | 1.63 | 27.6 | 4.49 | 40.3 | 1.93 | 20.5 | 2.71 | 5.0 | 1.74 | 0.7 | 0.57 | 0.0 | 0.00 | 0.0 | 0.00 |
| **Mashonaland West** | 5.0 | 1.53 | 29.0 | 5.05 | 28.3 | 4.06 | 16.9 | 2.80 | 8.5 | 2.22 | 8.2 | 2.98 | 3.2 | 2.02 | 0.8 | 0.62 |
| **Masvingo** | 2.2 | 1.23 | 18.1 | 3.49 | 30.3 | 3.74 | 28.5 | 3.32 | 9.0 | 1.55 | 7.8 | 2.88 | 3.4 | 3.01 | 0.7 | 0.49 |
| **Matabeleland North** | 4.5 | 1.37 | 33.1 | 3.96 | 36.2 | 3.35 | 17.3 | 3.91 | 4.0 | 1.30 | 4.2 | 2.82 | 0.8 | 0.71 | 0.0 | 0.00 |
| **Matabeleland South** | 8.4 | 2.14 | 35.6 | 5.92 | 31.4 | 4.87 | 16.8 | 2.49 | 5.0 | 3.50 | 2.4 | 2.35 | 0.4 | 0.39 | 0.0 | 0.00 |
| **Midlands** | 1.4 | 0.81 | 22.1 | 6.14 | 23.4 | 3.53 | 22.5 | 3.00 | 9.6 | 1.54 | 13.0 | 3.45 | 4.1 | 1.97 | 4.0 | 1.89 |
| **Zimbabwe** | **3.6** | **0.46** | **23.0** | **1.49** | **30.7** | **1.21** | **22.6** | **0.94** | **9.8** | **0.74** | **6.8** | **0.85** | **2.5** | **0.56** | **1.0** | **0.30** |

7.9*: Percentage of learners reaching various Mathematics competence levels by province (SACMEQ IV)*

| Province | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** | **%** | **SE** |
| **Bulawayo** | 1.6 | 1.05 | 8.4 | 2.43 | 15.8 | 3.53 | 19.6 | 2.02 | 22.4 | 2.77 | 18.1 | 2.81 | 9.6 | 1.88 | 4.4 | 1.27 |
| **Harare** | 1.5 | 0.62 | 9.4 | 1.81 | 12.8 | 2.11 | 23.1 | 2.38 | 20.2 | 1.34 | 19.2 | 2.89 | 8.0 | 1.93 | 5.7 | 1.83 |
| **Manicaland** | 7.4 | 1.73 | 29.2 | 3.53 | 26.8 | 2.28 | 17.1 | 2.56 | 8.4 | 1.63 | 5.7 | 1.89 | 3.7 | 2.16 | 1.7 | 1.27 |
| **Mashonaland Central** | 3.3 | 0.62 | 32.6 | 6.04 | 28.3 | 3.41 | 16.0 | 2.25 | 9.5 | 1.24 | 6.7 | 1.47 | 1.6 | 0.88 | 2.0 | 1.29 |
| **Mashonaland East** | 6.2 | 1.67 | 28.3 | 4.30 | 24.8 | 2.73 | 18.2 | 2.42 | 11.9 | 2.69 | 6.4 | 2.55 | 3.0 | 1.33 | 1.3 | 0.59 |
| **Mashonaland West** | 3.0 | 1.21 | 25.2 | 3.15 | 31.2 | 2.52 | 23.3 | 2.05 | 11.1 | 2.17 | 4.4 | 1.17 | 1.0 | 0.62 | 0.7 | 0.59 |
| **Masvingo** | 3.3 | 1.36 | 33.1 | 4.00 | 29.7 | 3.32 | 18.7 | 1.80 | 8.0 | 1.55 | 5.3 | 1.67 | 1.7 | 1.25 | 0.3 | 0.22 |
| **Matabeleland North** | 2.8 | 1.09 | 26.4 | 4.05 | 34.1 | 3.35 | 17.8 | 2.60 | 9.9 | 2.48 | 8.4 | 3.90 | 0.7 | 0.58 | 0.0 | 0.00 |
| **Matabeleland South** | 3.2 | 0.94 | 29.2 | 3.89 | 30.1 | 3.17 | 19.5 | 2.16 | 9.1 | 2.47 | 5.4 | 1.67 | 2.4 | 1.11 | 1.1 | 0.71 |
| **Midlands** | 4.8 | 1.56 | 34.6 | 5.06 | 31.1 | 3.43 | 21.2 | 3.84 | 6.1 | 1.71 | 1.7 | 0.89 | 0.5 | 0.45 | 0.0 | 0.00 |
| **Zimbabwe** | **3.8** | **0.40** | **26.9** | **1.62** | **26.8** | **0.98** | **19.1** | **0.84** | **11.1** | **0.66** | **7.6** | **0.68** | **3.0** | **0.46** | **1.7** | **0.35** |

## Mathematics competency levels of grade 6 learners by sub-groups

The results in 7.10 and 7.11 reveal that there was an improvement in mathematics competency levels by sub-groups. The performance for both gender and school location shows that there was improvement, with girls performing better than boys in SACMEQ IV (22.5% and 24.3% respectively). It can also be observed that in SACMEQ III boys out performed girls (21.7% and 19.1% respectively). There is also a positive change in performance based on school location in favour of urban learners with a 4.2% increase.

*7.10: Percentage of learners reaching various mathematics competence levels by subgroups SACMEQ III*

| Learner sub group | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Learner gender** | | | | | | | | | | | | | | | | |
| **Boys** | 3.6 | 0.63 | 24.6 | 2.17 | 28 | 1.60 | 22.1 | 1.35 | 10.9 | 1.06 | 6.6 | 0.93 | 2.9 | 0.84 | 1.3 | 0.43 |
| **Girls** | 3.6 | 0.69 | 21.7 | 1.58 | 32.8 | 1.67 | 23.0 | 1.32 | 9.0 | 0.97 | 7.1 | 1.05 | 2.2 | 0.52 | 0.8 | 0.28 |
| **School location** | | | | | | | | | | | | | | | | |
| **Rural** | 4.8 | 0.62 | 29.3 | 1.68 | 34.8 | 1.39 | 20.7 | 1.17 | 6.4 | 0.64 | 2.9 | 0.6 | 1.0 | 0.59 | 0.1 | 0.05 |
| **Urban** | 0.5 | 0.20 | 7.0 | 1.20 | 20.3 | 1.88 | 27.3 | 1.45 | 18.3 | 1.36 | 16.7 | 1.66 | 6.3 | 1.05 | 3.6 | 0.78 |
| **Socioeconomic level** | | | | | | | | | | | | | | | | |
| **Low SES (Bottom 25%)** | 5.9 | 1.02 | 31.6 | 2.41 | 32.9 | 2.26 | 19.8 | 1.68 | 5.5 | 0.95 | 3.1 | 0.93 | 1.2 | 0.86 | 0.0 | 0.00 |
| **High SES (Top 25%)** | 0.4 | 0.25 | 8.7 | 1.35 | 18.6 | 1.94 | 26.8 | 1.83 | 19.2 | 1.63 | 16.2 | 1.73 | 6.9 | 1.16 | 3.2 | 0.93 |

*7.11: Percentage of learners reaching various mathematics competence levels by subgroups SACMEQ IV*

| Learner sub group | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| ***learner gender*** | | | | | | | | | | | | | | | | |
| **Boy** | 4.4 | 0.53 | 28.7 | 1.67 | 27.2 | 1.33 | 17.3 | 0.92 | 11.5 | 0.83 | 6.5 | 0.78 | 2.6 | 0.49 | 1.9 | 0.39 |
| **Girl** | 3.3 | 0.52 | 25.0 | 1.98 | 26.4 | 1.16 | 21.0 | 1.08 | 10.7 | 0.95 | 8.7 | 0.79 | 3.4 | 0.55 | 1.5 | 0.39 |
| ***school location*** | | | | | | | | | | | | | | | | |
| **Rural** | 4.9 | 0.49 | 32.4 | 1.87 | 30.4 | 1.28 | 18.8 | 1.03 | 8.5 | 0.79 | 4.0 | 0.61 | 0.8 | 0.26 | 0.2 | 0.10 |
| **Urban** | 1.1 | 0.53 | 12.4 | 1.78 | 17.5 | 1.82 | 20.0 | 1.34 | 18.0 | 1.15 | 16.9 | 1.61 | 8.6 | 1.34 | 5.6 | 1.12 |
| ***Socioeconomic level*** | | | | | | | | | | | | | | | | |
| **Low SES (Bottom 25%)** | 4.3 | 0.64 | 29.4 | 1.77 | 28.6 | 1.43 | 21.0 | 1.11 | 9.2 | 0.79 | 5.2 | 0.67 | 1.4 | 0.42 | 0.8 | 0.25 |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **High SES (Top 25%)** | 2.4 | 0.46 | 18.2 | 1.33 | 25.3 | 1.58 | 19.2 | 1.14 | 15.1 | 0.88 | 11.6 | 1.13 | 5.2 | 0.72 | 3.0 | 0.66 |

## Reading competency levels of teachers

Tables 7.12 and 7.13 reveal percentages of teachers reaching different competency levels in Reading for SACMEQ III and IV. It can be observed that in both III and IV, all teachers had achieved 100% in reading, though there was an insignificant drop in SACMEQ IV results as there are teachers' levels which start at 5 while in SACMEQ III they started at level 6.

*7.12: Percentage of teachers reaching various Reading competence levels SACMEQ III*

| Province | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 12.9 | 6.92 | 87.1 | 6.92 |
| **Harare** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 5.1 | 4.91 | 10.1 | 5.42 | 84.9 | 6.59 |
| **Manicaland** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 13.6 | 7.39 | 86.4 | 7.39 |
| **Mashonaland Central** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 |
| **Mashonaland East** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 23.2 | 12.12 | 76.8 | 12.12 |
| **Mashonaland West** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 |
| **Masvingo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 4.3 | 4.23 | 3.9 | 3.86 | 91.8 | 5.40 |
| **Matabeleland North** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 18.0 | 11.80 | 82.0 | 11.80 |
| **Matabeleland South** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 9.9 | 9.78 | 90.1 | 9.78 |
| **Midlands** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 6.7 | 6.70 | 93.3 | 6.70 |
| **Zimbabwe** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **1.1** | **0.80** | **8.4** | **2.06** | **90.5** | **2.16** |

7.13*: Percentage of teachers reaching various mathematics competence levels by subgroups SACMEQ IV*

| Province | Level 1 | | Level 2 | | Level 3 | | Level 4 | | Level 5 | | Level 6 | | Level 7 | | Level 8 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 10.0 | 5.54 | 90.0 | 5.54 |
| **Harare** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 9.5 | 5.06 | 90.5 | 5.06 |
| **Manicaland** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 22.4 | 9.15 | 77.6 | 9.15 |
| **Mashonaland Central** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 1.8 | 1.89 | 0.0 | 0.00 | 3.0 | 2.31 | 95.2 | 4.03 |
| **Mashonaland East** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 17.5 | 7.01 | 82.5 | 7.01 |
| **Mashonaland West** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 4.1 | 4.07 | 18.4 | 8.15 | 77.5 | 8.41 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Masvingo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 13.6 | 5.86 | 86.4 | 5.86 |
| **Matabeleland North** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 18.8 | 11.13 | 81.2 | 11.13 |
| **Matabeleland South** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 10.2 | 6.97 | 89.8 | 6.97 |
| **Midlands** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 10.1 | 9.86 | 89.9 | 9.86 |
| **Zimbabwe** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.3** | **0.30** | **0.4** | **0.41** | **13.0** | **2.36** | **86.3** | **2.44** |

## Numeracy levels of teachers by provinces

SACMEQ results show that there was an improvement in the performance of teachers from 99.4% to 100%, for III and IV respectively. It can be observed that Harare and Mashonaland East have improved from 2007.

*7.14: Percentage of teachers reaching various mathematics competence levels by subgroups SACMEQ III*

| | **Level 1** | | **Level 2** | | **Level 3** | | **Level 4** | | **Level 5** | | **Level 6** | | **Level 7** | | **Level 8** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Province** | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 1.6 | 1.64 | 16.5 | 7.83 | 31.1 | 8.96 | 50.8 | 9.62 |
| **Harare** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 3.0 | 3.01 | 6.1 | 3.97 | 9.3 | 4.52 | 28.4 | 6.81 | 53.2 | 7.69 |
| **Manicaland** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 2.1 | 2.18 | 34.2 | 13.03 | 63.7 | 13.35 |
| **Mashonaland Central** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 30.8 | 9.92 | 69.2 | 9.92 |
| **Mashonaland East** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 2.8 | 2.78 | 0.0 | 0.00 | 0.0 | 0.00 | 40.8 | 11.56 | 56.4 | 11.87 |
| **Mashonaland West** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 24.4 | 11.90 | 75.6 | 11.90 |
| **Masvingo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 9.0 | 8.83 | 0.0 | 0.00 | 11.9 | 9.23 | 79.2 | 12.02 |
| **Matabeleland North** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 13.5 | 10.17 | 5.1 | 5.05 | 81.3 | 10.67 |
| **Matabeleland South** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 33.4 | 11.06 | 66.6 | 11.06 |
| **Midlands** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 3.5 | 3.46 | 22.6 | 9.50 | 73.9 | 11.05 |
| **Zimbabwe** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.6** | **0.45** | **1.3** | **0.68** | **3.5** | **1.07** | **27.9** | **3.45** | **66.7** | **3.62** |

*7.15: Percentage of teachers reaching various mathematics competence levels by subgroups SACMEQ IV*

| **Province** | **Level 1** | | **Level 2** | | **Level 3** | | **Level 4** | | **Level 5** | | **Level 6** | | **Level 7** | | **Level 8** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 10.9 | 6.93 | 89.1 | 6.93 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Harare** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 16.9 | 7.19 | 83.1 | 7.19 |
| **Manicaland** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 2.1 | 2.02 | 21.8 | 8.28 | 76.2 | 8.09 |
| **Mashonaland Central** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 4.1 | 4.07 | 19.9 | 8.70 | 76.0 | 9.22 |
| **Mashonaland East** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 1.9 | 1.94 | 10.1 | 5.81 | 88.0 | 6.03 |
| **Mashonaland West** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.7 | 0.75 | 2.9 | 2.92 | 26.3 | 10.07 | 70.1 | 9.92 |
| **Masvingo** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 2.8 | 2.77 | 19.8 | 7.31 | 77.4 | 7.46 |
| **Matabeleland North** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.6 | 0.66 | 0.0 | 0.00 | 24.6 | 11.36 | 74.7 | 11.39 |
| **Matabeleland South** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 1.3 | 0.89 | 16.4 | 5.32 | 82.3 | 5.40 |
| **Midlands** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 20.7 | 12.85 | 79.3 | 12.85 |
| **Zimbabwe** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.0** | **0.00** | **0.1** | **0.09** | **1.8** | **0.75** | **18.9** | **2.65** | **79.2** | **2.68** |

## Reading and Mathematics competency levels of teachers by subgroups SACMEQ IV

Competency levels for both Reading and Mathematics, in tables 7.16 and 7.17 are impressive and it can be observed that the teachers have all (100%) in 2013 had achieved level 5 or above, despite their gender or location. The male teachers performed better in both Reading and Mathematics, while teachers in urban performed better than those in the rural areas.

*7.16: Percentage of teachers reaching various reading competence levels by subgroups*

| **Learner sub group** | **Level 1** | | **Level 2** | | **Level 3** | | **Level 4** | | **Level 5** | | **Level 6** | | **Level 7** | | **Level 8** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| ***Teacher gender*** | | | | | | | | | | | | | | | | |
| **Male** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.4 | 0.42 | 0.6 | 0.57 | 11.0 | 2.59 | 88.0 | 2.74 |
| **Female** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 17.8 | 4.92 | 82.2 | 4.92 |
| ***School location*** | | | | | | | | | | | | | | | | |
| **Rural** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.4 | 0.40 | 0.5 | 0.54 | 13.6 | 2.86 | 85.5 | 2.98 |
| **Urban** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 11.1 | 3.77 | 88.9 | 3.77 |

*7.17: Percentage of teachers reaching various mathematics competence levels by subgroups*

| **Learner sub group** | **Level 1** | | **Level 2** | | **Level 3** | | **Level 4** | | **Level 5** | | **Level 6** | | **Level 7** | | **Level 8** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| ***Teacher gender*** | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Male** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.1 | 0.07 | 2.3 | 1.03 | 14.6 | 2.70 | 83.1 | 2.78 |
| **Female** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.3 | 0.27 | 0.7 | 0.74 | 29.0 | 5.36 | 70.0 | 5.41 |
| ***School location*** | | | | | | | | | | | | | | | | |
| **Rural** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.2 | 0.12 | 2.3 | 1.00 | 20.6 | 3.26 | 77.0 | 3.29 |
| **Urban** | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 0.4 | 0.43 | 14.1 | 3.93 | 85.5 | 3.95 |

## Conclusion

This chapter was presenting achievement levels of grade 6 learners and their teachers in Reading and Mathematics across the 10 provinces in Zimbabwe. Zimbabwe has made s significant improvement in SACMEQ IV compared to SACMEQ III. There is need for the Ministry to ensure that learners and teachers continue to the work, by in service training and strengthening schools inspection, hence ensuring quality education.

# Chapter 8 Learner and Teacher Knowledge, Views and Attitudes on HIV and AIDS issues

## Introduction

In 2007, the 15 SACMEQ Ministries of Education were concerned with lack of well-designed objective indicators that could be used to guide on the effectiveness of HIV and AIDS prevention education programmes. Hence, the HIV-AIDS Knowledge Test (HAKT) was developed. The HAKT was administered to grade 6 learners and their teachers across the sampled schools and this was then placed on a common scale of knowledge about HIV-AIDS. The performance is summarized in the form of three scores:

- ***Transformed Scores*** **-** scaled HAKT scores that were transformed to an overall SACMEQ mean of 500 and standard deviation of 100;
- ***Minimal Knowledge Scores*** – dichotomous scores that indicated whether or not respondents had mastered at least 50% of the officially-designated curriculum that was assessed by the HAKT; and
- ***Desirable Knowledge Scores*** – dichotomous scores that indicated whether or not respondents had mastered at least 75% of the officially-designated curriculum that was assessed by the HAKT.

The data in this chapter is derived from the course content of the HIV and AIDS official curricula across the SACMEQ countries. A comprehensive review and evaluation was done of all aspects of the delivery of HIV-AIDS prevention education programmes in African schools. The goal for such programmes must be to ensure that **all** children leave primary school with the basic knowledge that is required to guide their decisions about health protection and promotion behaviours related to HIV-AIDS.

In 2012, the HIV prevalence rate in Zimbabwe for young people aged 15 to 24 years was 14.9%. The Primary & Secondary Education Policy on Life Skills states that all schools should provide Life Skills-based HIV&AIDS education. In addition, pre-service health and

life skills education are standardized and compulsory for all teacher education colleges. Children are taught life skills-based HIV education from Grade 4 but there are differences in classroom delivery depending on resources, the number of trained teachers, school management, leadership and commitment. Some teachers find it difficult to discuss HIV&AIDS with learners.

## Knowledge levels on HIV and AIDS

Table 8.1 is for grade 6 learners by gender and provinces. In general the performance of both boys and girls are low with 474.7 and 478.7 respectively. The same can be said with a 0.5% higher in minimum levels in favour of girls.

*8.1: Mean performance on the HAKT of learners by gender and provinces*

| | **Learners** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Transformed Scores** | | | | **Reaching Minimum Level** | | | | **Reaching Desired Level** | | | |
| | Boys | | Girls | | Boys | | Girls | | Boys | | Girls | |
| **Province** | Mean | SE | Mean | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 527.1 | 7.33 | 537.8 | 8.23 | 42.5 | 3.65 | 50.5 | 4.84 | 6.2 | 1.60 | 8.8 | 3.09 |
| **Harare** | 512.7 | 9.31 | 510.8 | 8.31 | 37.8 | 3.82 | 32.7 | 4.60 | 5.5 | 2.01 | 5.9 | 2.05 |
| **Manicaland** | 464.3 | 17.80 | 464.9 | 15.55 | 23.2 | 6.66 | 20.7 | 6.77 | 3.3 | 1.65 | 1.8 | 1.02 |
| **Mashonaland Central** | 478.8 | 14.64 | 473.7 | 15.71 | 19.9 | 7.01 | 23.7 | 6.72 | 3.6 | 2.34 | 4.6 | 1.95 |
| **Mashonaland East** | 459.6 | 12.33 | 484.1 | 10.10 | 22.3 | 5.47 | 22.5 | 4.77 | 1.6 | 0.96 | 1.8 | 1.05 |
| **Mashonaland West** | 478.1 | 11.08 | 477.6 | 10.65 | 23.3 | 6.17 | 23.6 | 3.93 | 2.3 | 1.30 | 1.7 | 0.98 |
| **Masvingo** | 489.0 | 12.60 | 485.7 | 13.15 | 29.4 | 4.92 | 27.6 | 4.59 | 4.0 | 1.72 | 3.8 | 1.42 |
| **Matabeleland North** | 429.4 | 14.88 | 455.5 | 18.19 | 8.6 | 4.76 | 16.4 | 8.90 | 1.2 | 1.12 | 0.7 | 0.72 |
| **Matabeleland South** | 460.5 | 14.84 | 466.5 | 20.25 | 18.7 | 5.01 | 25.0 | 8.71 | 0.4 | 0.44 | 1.4 | 1.22 |
| **Midlands** | 463.3 | 9.39 | 460.4 | 10.09 | 19.4 | 3.31 | 17.2 | 3.16 | 1.3 | 0.64 | 2.6 | 1.29 |
| **Zimbabwe** | **474.7** | **4.80** | **478.7** | **4.84** | **24.0** | **1.90** | **24.5** | **2.03** | **2.9** | **0.53** | **3.1** | **0.50** |

Table 8.2 shows the mean performance on HAKT of learners by location, and it can be observed that learners in urban areas have the knowledge about HIV/ A.I.D.S. which could be due to the fact that they have exposure to television programmes to do with HIV/AIDS. They also have access to the print media as opposed to their rural counterparts.

*8.2: Mean performance on the HAKT of learners by location and provinces*

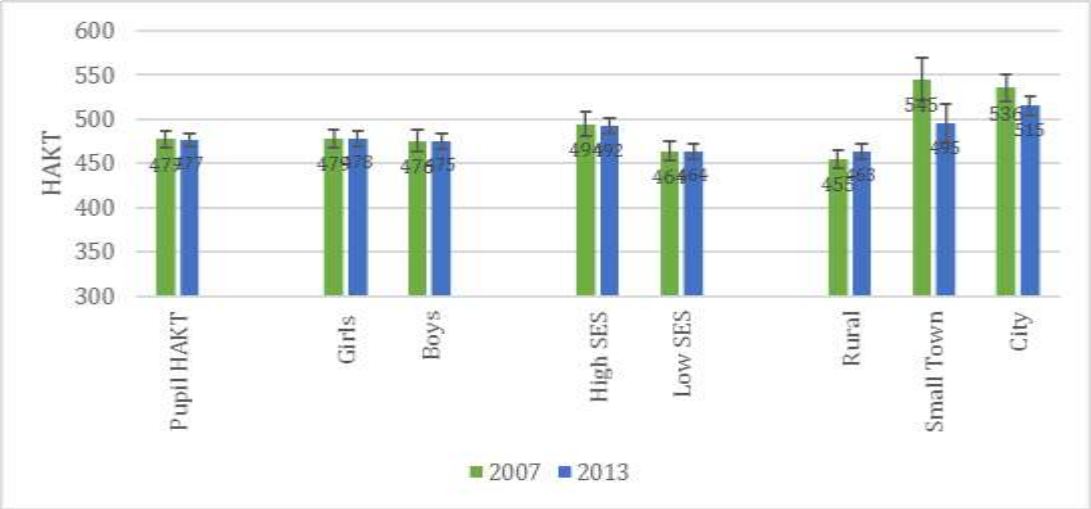
| Province | Learners | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Transformed Scores | | | | Reaching Minimum Level | | | | Reaching Desired Level | | | |
| | Rural | | Urban | | Rural | | Urban | | Rural | | Urban | |
| | Mean | SE | Mean | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 514.6 | 0.25 | 536.2 | 7.14 | 42.4 | 2.57 | 47.7 | 4.20 | 0.0 | 0.00 | 9.0 | 2.16 |
| **Harare** | 497.5 | 0.00 | 512.8 | 8.80 | 36.4 | 0.00 | 35.3 | 3.94 | 0.0 | 0.00 | 6.1 | 1.96 |
| **Manicaland** | 474.6 | 14.92 | 515.9 | 0.00 | 21.4 | 6.96 | 28.0 | 0.00 | 3.9 | 2.19 | 8.0 | 0.00 |
| **Mashonaland Central** | 466.2 | 11.84 | 512.1 | 15.44 | 20.1 | 5.38 | 38.8 | 8.59 | 1.2 | 0.61 | 5.0 | 2.83 |
| **Mashonaland East** | 451.9 | 14.72 | 531.7 | 20.66 | 16.2 | 5.66 | 51.7 | 9.46 | 0.9 | 0.46 | 11.0 | 5.07 |
| **Mashonaland West** | 482.2 | 11.86 | 556.2 | 30.95 | 26.8 | 4.25 | 51.5 | 26.67 | 3.4 | 1.21 | 10.8 | 8.31 |
| **Masvingo** | 477.0 | 12.01 | 479.2 | 16.27 | 25.4 | 5.84 | 20.4 | 6.98 | 1.2 | 0.80 | 3.2 | 2.16 |
| **Matabeleland North** | 453.6 | 9.91 | 505.1 | 13.62 | 14.5 | 2.72 | 38.2 | 5.30 | 1.1 | 0.56 | 6.0 | 3.80 |
| **Matabeleland South** | 428.3 | 10.90 | 531.0 | 0.00 | 5.8 | 2.58 | 54.2 | 0.00 | 0.4 | 0.42 | 4.2 | 0.00 |
| **Midlands** | 437.7 | 5.82 | 544.9 | 0.17 | 12.2 | 2.02 | 52.0 | 2.10 | 0.3 | 0.28 | 2.8 | 1.29 |
| **Zimbabwe** | **462.0** | **5.15** | **515.4** | **5.60** | **18.9** | **2.02** | **38.4** | **2.70** | **1.7** | **0.43** | **6.4** | **1.09** |

*8.3: Mean performance on the HAKT of learners by socio-economic status and provinces*

| Province | Transformed Scores | | | | Reaching Minimum Level | | | | Reaching Desired Level | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Low SES | | High SES | | Low SES | | High SES | | Low SES | | High SES | |
| | Mean | SE | Mean | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 530.0 | 10.43 | 538.1 | 6.57 | 48.1 | 6.32 | 47.6 | 3.60 | 8.3 | 3.66 | 7.5 | 2.60 |
| **Harare** | 502.5 | 10.33 | 518.4 | 9.20 | 32.2 | 6.04 | 38.2 | 4.28 | 2.9 | 1.61 | 6.8 | 2.23 |
| **Manicaland** | 467.7 | 13.26 | 487.9 | 17.45 | 18.3 | 5.26 | 33.7 | 8.62 | 1.7 | 0.88 | 4.8 | 2.31 |
| **Mashonaland Central** | 473.6 | 12.76 | 504.9 | 18.67 | 19.5 | 6.18 | 31.2 | 9.66 | 3.4 | 2.18 | 6.2 | 2.67 |
| **Mashonaland East** | 463.6 | 13.75 | 489.2 | 11.23 | 19.8 | 5.67 | 29.0 | 6.37 | 1.2 | 0.68 | 2.2 | 1.24 |
| **Mashonaland West** | 481.5 | 11.48 | 489.7 | 10.59 | 23.8 | 5.65 | 25.8 | 5.44 | 2.1 | 1.18 | 2.6 | 1.45 |
| **Masvingo** | 484.6 | 12.55 | 502.1 | 16.36 | 28.9 | 4.24 | 32.2 | 7.02 | 2.6 | 1.08 | 6.3 | 2.63 |
| **Matabeleland North** | 438.7 | 13.48 | 462.0 | 24.66 | 9.6 | 4.96 | 23.0 | 10.54 | 0.0 | 0.00 | 4.0 | 2.28 |
| **Matabeleland South** | 450.6 | 12.18 | 486.0 | 20.20 | 16.3 | 3.41 | 29.2 | 10.37 | 0.5 | 0.52 | 1.5 | 1.18 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Midlands** | 451.2 | 9.37 | 483.9 | 9.76 | 14.1 | 2.69 | 25.5 | 4.31 | 1.0 | 0.73 | 3.9 | 2.09 |
| **Zimbabwe** | **468.5** | **4.38** | **498.7** | **4.69** | **20.4** | **1.81** | **32.1** | **2.31** | **1.9** | **0.38** | **4.7** | **0.75** |

**Comparison of mean learner HAKT scores in 2007 and 2013 and by sub-groups**

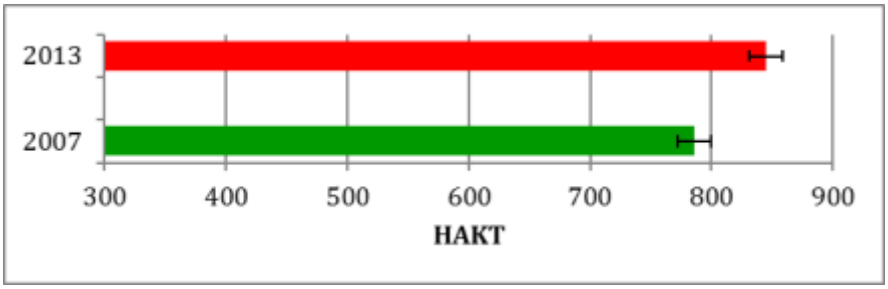



*Note: Error bars denote the 95% Confidence Interval for the sample*

Results of the SACMEQ HIV and AIDS Knowledge Test (HAKT) revealed that Grade 6 learners achieved virtually identical results in 2013 and 2007. Learners in rural areas achieved lower average scores than those in cities and small towns. Higher socio economic status was correlated with higher HAKT scores in both years, but gender was not.

**Comparison of mean teacher HAKT scores in 2007 and 2013**

In 2013, teachers improved on their already high scores from 2007 as can be illustrated by the diagram below.




*Note: Error bars denote the 95% Confidence Interval for the sample*

## Attitudes about HIV and AIDS

*8.4: Percentage response of learners, teachers and school heads on the possibility of a Learner infected with HIV to continue attending school.*

| | Learner | | | | | | Teachers | | | | | | School heads | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No | | Not Sure | | Yes | | No | | Not Sure | | Yes | | No | | Not Sure | | Ye | |
| **Province** | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 17.2 | 3.67 | 28.9 | 4.94 | 54.0 | 6.51 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Harare** | 21.1 | 2.37 | 23.4 | 3.24 | 55.5 | 3.79 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Manicaland** | 24.2 | 3.11 | 19.3 | 2.63 | 56.5 | 3.30 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Mashonaland Central** | 25.4 | 3.47 | 16.4 | 2.40 | 58.2 | 4.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Mashonaland East** | 29.3 | 4.09 | 19.8 | 3.08 | 50.9 | 3.98 | 4.4 | 4.33 | 0.0 | 0.00 | 95.6 | 4.33 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Mashonaland West** | 22.9 | 2.97 | 23.1 | 2.69 | 54.0 | 4.68 | 0.0 | 0.00 | 2.4 | 2.39 | 97.6 | 2.39 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Masvingo** | 35.2 | 3.91 | 14.7 | 2.50 | 50.2 | 3.64 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Matabeleland North** | 31.2 | 3.27 | 15.0 | 2.41 | 53.9 | 3.58 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 5.9 | 5.74 | 94.1 | 5. |
| **Matabeleland South** | 41.1 | 5.42 | 23.5 | 3.26 | 35.4 | 4.86 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Midlands** | 33.2 | 3.86 | 19.8 | 3.26 | 47.0 | 4.45 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0. |
| **Zimbabwe** | **27.8** | **1.22** | **20.0** | **0.97** | **52.2** | **1.36** | **0.5** | **0.50** | **0.3** | **0.27** | **99.2** | **0.57** | **0.0** | **0.00** | **0.3** | **0.33** | **99.7** | **0.** |

In Zimbabwe HIV and AIDS is still a controversial issue however most school heads and teachers are more aware of how to handle the affected guided by the HIV and AIDS policy.

*8.5: Percentage response of learners, teachers and school heads on the possibility of a teacher infected with HIV to continue teaching at the school.*

| Province | LEARNER | | | | | | TEACHERS | | | | | | SCHOOL HEADS | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No | | Not Sure | | Yes | | No | | Not Sure | | Yes | | No | | Not Sure | | Yes | |
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE | % | S |
| **Bulawayo** | 19.9 | 2.91 | 33.9 | 5.04 | 46.2 | 6.44 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Harare** | 24.9 | 3.22 | 27.4 | 3.61 | 47.7 | 3.83 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Manicaland** | 30.7 | 3.79 | 15.3 | 3.17 | 54.0 | 3.05 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Mashonaland Central** | 22.4 | 3.27 | 20.4 | 2.79 | 57.2 | 4.60 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Mashonaland East** | 27.9 | 4.31 | 24.9 | 3.20 | 47.2 | 3.59 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Mashonaland West** | 28.8 | 3.48 | 24.8 | 2.52 | 46.4 | 3.65 | 0.0 | 0.00 | 5.7 | 5.27 | 94.3 | 5.27 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Masvingo** | 30.0 | 4.60 | 18.2 | 2.65 | 51.8 | 4.98 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Matabeleland North** | 28.9 | 2.94 | 20.2 | 3.84 | 50.9 | 5.23 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Matabeleland South** | 39.6 | 4.09 | 26.6 | 3.51 | 33.8 | 3.98 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Midlands** | 29.9 | 3.07 | 24.1 | 3.71 | 46.1 | 4.47 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.00 | 0.0 | 0.00 | 0.0 | 0.00 | 100.0 | 0.0 |
| **Zimbabwe** | **28.4** | **1.27** | **22.6** | **1.24** | **49.0** | **1.40** | **0.0** | **0.00** | **0.7** | **0.65** | **99.3** | **0.65** | **0.0** | **0.00** | **0.0** | **0.00** | **100.0** | **0.0** |

According to the HIV policy the teacher will continue teaching up to a time they are assessed by the Medical board. The policy is also against discrimination on medical grounds.

*8.6: Percentages of learners refusing contact with a person living with HIV or AIDS (Discrimination)*

| Province | Learner behaviour with a friend infected with HIV | | | | | | Learner willing to care for a relative ill with HIV | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Avoid/ shun him or her | | Not sure | | Positive attitude | | No | | Not sure | | Yes | |
| | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Bulawayo** | 8.5 | 1.30 | 34.2 | 4.86 | 57.3 | 4.86 | 17.9 | 3.11 | 22.6 | 3.16 | 59.5 | 5.47 |
| **Harare** | 13.8 | 1.81 | 32.2 | 3.14 | 54.0 | 3.88 | 19.9 | 3.13 | 22.4 | 2.64 | 57.7 | 3.60 |
| **Manicaland** | 30.9 | 5.23 | 28.6 | 2.12 | 40.5 | 4.81 | 31.6 | 6.62 | 15.8 | 2.40 | 52.6 | 8.49 |
| **Mashonaland Central** | 18.9 | 1.80 | 28.4 | 3.27 | 52.7 | 3.63 | 21.4 | 3.53 | 10.5 | 1.36 | 68.0 | 3.74 |
| **Mashonaland East** | 23.9 | 3.30 | 28.9 | 2.97 | 47.2 | 3.99 | 24.1 | 3.71 | 16.5 | 2.39 | 59.4 | 3.65 |
| **Mashonaland West** | 17.7 | 3.12 | 25.2 | 2.64 | 57.1 | 2.82 | 15.0 | 2.74 | 13.4 | 1.94 | 71.5 | 2.92 |
| **Masvingo** | 24.3 | 3.06 | 24.7 | 3.19 | 51.0 | 3.89 | 28.2 | 4.31 | 11.3 | 2.34 | 60.5 | 4.63 |
| **Matabeleland North** | 12.9 | 1.83 | 29.3 | 5.20 | 57.8 | 6.24 | 21.0 | 5.56 | 14.3 | 4.24 | 64.7 | 6.85 |
| **Matabeleland South** | 18.9 | 2.73 | 36.6 | 3.28 | 44.5 | 3.30 | 20.4 | 5.24 | 17.8 | 2.84 | 61.8 | 5.85 |
| **Midlands** | 22.6 | 2.73 | 26.6 | 4.36 | 50.9 | 4.55 | 27.0 | 4.23 | 18.1 | 3.25 | 54.9 | 4.90 |
| **Zimbabwe** | **21.0** | **1.41** | **28.7** | **1.10** | **50.3** | **1.61** | **23.6** | **1.78** | **16.0** | **0.86** | **60.4** | **2.11** |

According to the responses that we have above pertaining to friendship it is evident that the majority of learners have knowledge on HIV and AIDS. The majority of learners are willing to take care of relatives infected with HIV.

## Teachers' and School Heads' Perception on HIV/AIDS Risk Exposure

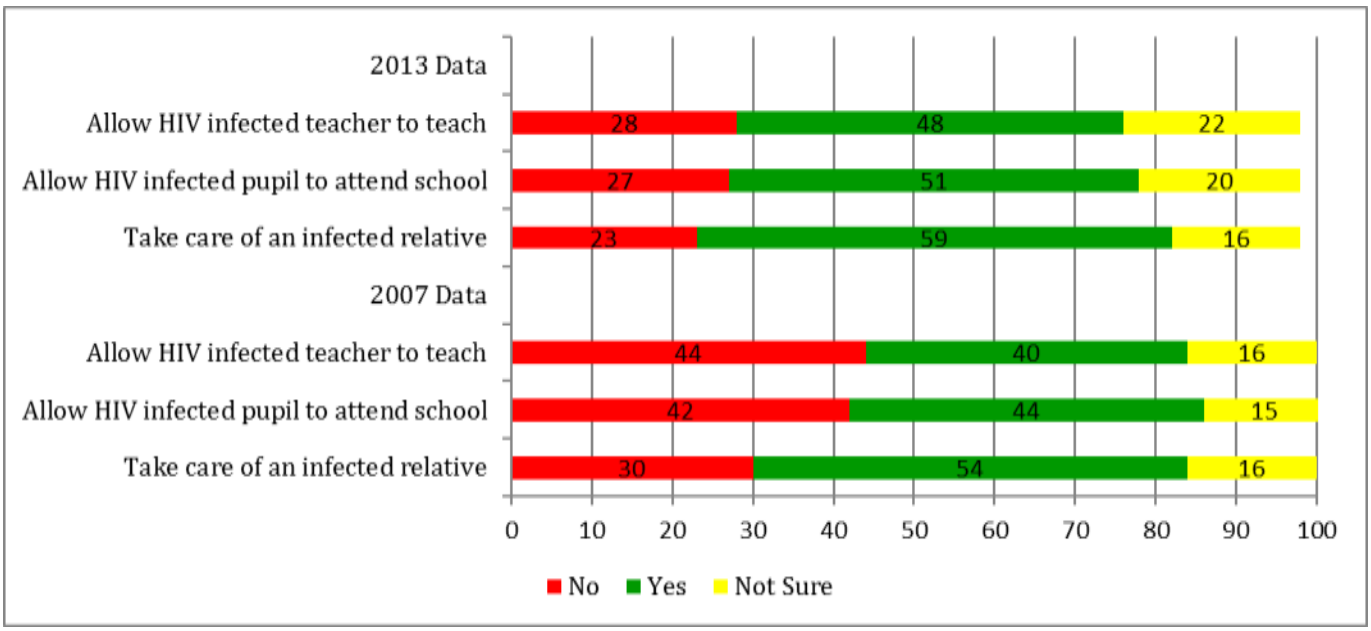
*8.7: Responses on perceived level of exposure to HIV/AIDS risk by teachers and school heads*

| | Teachers | | | | | | School heads | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | No or Low Risk | | Medium Risk | | High or Very High Risk | | No or Low Risk | | Medium Risk | | High or Very High Risk | |
| **Provinces** | % | SE | % | SE | % | SE | % | SE | % | SE | % | SE |
| **Bulawayo** | 31.1 | 11.38 | 20.1 | 9.35 | 48.9 | 12.76 | 72.5 | 12.04 | 16.3 | 10.47 | 11.1 | 7.81 |
| **Harare** | 64.9 | 8.34 | 22.2 | 8.68 | 12.9 | 4.80 | 45.8 | 12.43 | 23.4 | 10.33 | 30.8 | 11.73 |
| **Manicaland** | 50.5 | 16.63 | 38.3 | 19.31 | 11.2 | 5.57 | 67.5 | 11.52 | 3.6 | 3.72 | 28.9 | 10.67 |
| **Mashonaland Central** | 61.8 | 10.56 | 22.5 | 8.72 | 15.8 | 7.44 | 47.2 | 12.13 | 21.5 | 10.01 | 31.2 | 11.16 |
| **Mashonaland East** | 64.8 | 9.34 | 15.9 | 7.65 | 19.3 | 6.91 | 54.5 | 12.06 | 15.9 | 9.02 | 29.6 | 11.29 |
| **Mashonaland West** | 62.3 | 7.62 | 8.6 | 4.91 | 29.1 | 7.79 | 75.3 | 11.22 | 6.0 | 5.34 | 18.6 | 10.71 |
| **Masvingo** | 40.3 | 10.53 | 23.8 | 8.39 | 35.9 | 10.99 | 40.1 | 11.30 | 5.1 | 4.53 | 54.8 | 11.51 |
| **Matabeleland North** | 21.1 | 11.34 | 21.6 | 12.75 | 57.2 | 14.75 | 41.8 | 15.77 | 35.2 | 15.84 | 23.0 | 12.07 |
| **Matabeleland South** | 57.3 | 14.33 | 8.6 | 5.69 | 34.1 | 14.71 | 56.2 | 15.29 | 15.5 | 10.33 | 28.3 | 14.45 |
| **Midlands** | 45.7 | 9.43 | 24.1 | 7.54 | 30.2 | 8.65 | 66.4 | 9.89 | 12.2 | 6.95 | 21.5 | 8.34 |
| **Zimbabwe** | **52.3** | **4.05** | **22.0** | **4.45** | **25.7** | **3.11** | **57.9** | **4.06** | **13.6** | **2.66** | **28.5** | **3.59** |

The national average of 52.3% and 57.9% of teachers and school heads respectively perceive that they are at low or no risk whereas 25.7% and 28.5% of teachers and school heads respectively perceive that they are at high or very high risk.

### Comparison of learner attitudes towards HIV infected individuals SACMEQ III and SACMEQ IV

Learner attitudes towards HIV infected individuals showed some improvement. In SACMECQ III (2007), 44% of learners said that an HIV infected Learner should be allowed to attend school. The percentage of learners who agreed that an HIV infected teacher should be allowed to teach increased by 8 percentage points in SACMEQ IV (2013).




## Conclusion

This is the second time that SACMEQ has included HIV and AIDS tests. The performance of grade 6 learners and teachers' knowledge and attitudes on HIV and AIDS is presented in this chapter. Comparisons of the data have been done by provinces and subgroups based on gender, location and social economic status.

# Chapter 9 Conclusion and Agenda

## Introduction

This report is on the condition of schooling and quality of primary education in Zimbabwe. The aim of this study was to assess the level of performance of the education system in response to Education for All, and this performance is being measured against SACMEQ III (2013). The report has 8 chapters which have some policy suggestion based on the data presented. In this chapter these policy suggestions have been presented in a matrix to show coordination, level of implementation and cost implementation.

## Summary of Policy Suggestions

| Policy Suggestions | Relevant Departments | Time | Cost |
|---|---|---|---|
| **4.1** There is need for the Ministry to have an in depth analysis through Education Management Information System (EMIS) on where there is need for teacher replacement for those that are reaching retirement age, since through this analysis the outliers are obscured. | Human Resources (HR) and Planning, Research and Statistics (PRS) | Short | Low |
| 4.2 School Inspection should be strengthened to ensure that lesson planning done by teachers and marking of learners work is done on time | Inspectorate and Primary, Secondary and Non Formal Education Department (PSNE) | | Low |
| 4.3 The Ministry needs to make sure that the period allocation per subject per week is implemented | CDTS, PSNE and DSI | Short | Low |
| 4.4 School heads should regularly check if teachers | Inspectorate, PSNE, DSI | Short | Low |

| Policy Suggestions | Relevant Departments | Time | Cost |
|---|---|---|---|
| are asking parents to sign their children's homework. | | | |
| 4.5.1The Ministry needs to review its staffing policy which takes into consideration qualifications, age, and training to ensure equitable distribution of teachers in schools; and come up with ways of retaining experienced teachers and deploying teachers to remote areas. | HR, Training and PSC | Medium | Moderate |
| 4.5.2The Ministry needs to encourage teachers who have primary and junior secondary qualifications to go for capacity development. | HR and Training | Medium | High |
| 4.5.3Ministry needs to ensure that teachers get in service training at least once in every 3 - 5 years in order to update and upgrade their knowledge and skills. | HR and Training | Medium | Moderate |
| 4.5 Teacher resource centres need to raise awareness to teachers on utilizing the available services. The Ministry also needs to investigate the reason why there is less borrowing of teaching materials at the resource centres. | HR and CDTS | Medium | High |
| 5.1 The Ministry needs to look into the training needs of school heads who do not have tertiary education, especially those with primary and ZJC qualifications. | HR, Training and MHTESTD | Long | High |

| Policy Suggestions | Relevant Departments | Time | Cost |
|---|---|---|---|
| (data gaps). | | | |
| 6.1 The Ministry should make it mandatory for all school heads to do a management course, and at school level all teachers including the head should do HIV/AIDS Courses and other emerging educational or cross cutting issues to ensure that schools are up to date with new trends in education. | Training | Short | Moderate |

# References

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United Nations.(2006).*The Millennium Development Goals Report 2006*. New York: United Nations. Walberg H.J. and Paik, S.J.(2000).Parent Involvement. Walberg H.J. and Paik, S.J.(eds), *Educational Practices Series 3*. Brussels and Geneva: International Academy of Education(IAE) International Bureau of Education(IBE).(online) Available http://www.ibe.unesco.org