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THE PROVISION OF THE BASIC CLASSROOM TEACHING AND LEARNING RESOURCES IN ZIMBABWE PRIMARY SCHOOLS AND THEIR RELATIONSHIP WITH THE GRADE 6 PUPILS' ACHIEVEMENTS IN THE SACMEQ III PROJECT

by

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Abstract

Title of Memoir:

The provision of the basic classroom teaching and learning resources in Zimbabwe primary schools and their relationship with the Grade 6 pupil's achievements in the SACMEQ III project.

The objective of the study was to assess the changes in the availability of the basic teaching and learning provisions in Zimbabwe Primary schools and establish how these resources were related to the pupil's achievements in the SACMEQ III Project. The following major research questions were explored in this study;

- How are the educational provisions funded in Zimbabwean schools? What roles are played by the state and the communities?
- What are the Ministry's benchmarks for resource provisions?
- What is the percentage of the Grade 6 pupils who go to schools that meet the Ministry's benchmark provisions?
- Have the provision of teaching and learning resources improved since SACMEQ I in 1995 and SACMEQ III in 2007?
- What are the variations between provinces and within provinces in 2007 on teaching and learning resources?
- Have Zimbabwe schools' achievements improved from SACMEQ I (1995) to SACMEQ III in 2007.
- How did the Zimbabwean Grade 6 pupils perform in Reading and Mathematics when compared to the other SACMEQ Ministries in 2007?
- Was there any relationship between the pupils' achievement outcomes on Reading and Mathematics in the SACMEQ tests and the provision of these basic teaching and learning resources in 2007?

The results of this study indicated that there were problems in the provision of teaching and learning resources in the Zimbabwe primary schools. The resource levels had decreased since SACMEQ I survey in 1995. The Ministry's set benchmark standards in the provision of the resources were not being achieved. The resources were also not equitably distributed among and within the Provinces. The pupils' Reading and Mathematics achievements were found to vary in relationship to the materials provided among the provinces. Provinces with more resources had higher achievement scores than those with fewer resources. The national Reading test achievement had slightly improved since SACMEQ I but was lower than the SACMEQ III Reading mean. The Zimbabwe's performance in Mathematics was satisfactory as it was above the SACMEQ III mean. Finally, the study gives some suggestions for the Ministry Policy Maker's considerations for their interventions in the provision and distributions of the resources into the Provinces.

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List of Acronyms

CPL	Consumption Poverty Line
CFI	Child Friendly Schools
ETF	Education Transition Fund
FTI	Fast Track Initiative
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
IIEP	International Institute for Educational Planning
MOE	Ministry of Education (when shortened).
MOESAC	Ministry of Education, Sport, Arts and Culture
NRC	National Research Co-ordinator
NE	National Examinations
OECD	Organisation for Economic Co-operation and Development
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SDC	School Development Committee
SDA	School Development Association
UNESCO	United Nations Educational Scientific and Cultural Organisation
UNICEF	United Nations International Children's Education Fund
ZIMSEC	Zimbabwe Schools Examination Council
ZIPAM	Zimbabwe Institute of Public Administration and Management

Chapter 1: BACKGROUND TO THE STUDY

1.1 Introduction and background of the study

The study sought to investigate the provision of basic classroom teaching and learning resources in the Zimbabwe's Primary schools and establish whether these resources have some relationship with the achievements of the Grade 6 pupils in the 2007 SACMEQ III project. The chapter gives the background to the study, rationale for the choice of the topic, the research problematic, and research questions, objectives, scope and limitations of the study.

Zimbabwe is a country in Southern Africa with an area of 390 757 square kilometres. At the last national census in 2002 the country's population was around 11.63 million people of whom 48 percent were male and 52 percent were female. The population growth rate between 1992 and 2002 was 1.3 percent and the population density was 20.76 people per square kilometre (Zimbabwe Census, 2002).

Administratively, Zimbabwe's provinces were restructured in 2000 to ten provinces from the previous nine. Two of the provinces, Bulawayo and Harare are mainly urban while the other eight, Mashonaland Central, Mashonaland East, Mashonaland West, Manicaland, Masvingo, Midlands, Matabeleland North and Matabeleland South are predominantly rural. Each Education Province is headed by a Provincial Education Director and is subdivided into districts which are run by District Education Officers and School Inspectors. Since the attainment of its political independence in 1980, Zimbabwe has made great successes in its massive expansion of the education system. The number of Primary schools have risen from 3 116 before independence to 4 633 in 1995 and to 5 560 in 2007 largely due to the impressive community mobilisation strategies which resulted in the building of 2 444 new schools mostly in the rural communities using limited government contributions, (World Bank, 1994.)

The primary school enrolments nearly doubled from 1 235 815 in 1980 to 2 470 002 by 1995 and started to stabilise at around 2 447 342 in 2007. The challenge of providing basic education to the people has not only been a challenge of bringing in quantity education to the people, but one of bringing equal opportunities to learn and to achieve to all the learners. The number of teachers has also been increasing gradually and proportionally to the increases in pupils' enrolments. While the Government is responsible for paying all teachers' salaries, it is also responsible for providing per capita grants to all the schools for purchasing learning and teaching materials. The amount of money paid per pupil is not adequate to cover all of the basic teaching and learning requirements, so that schools have to supplement this grant through levying the parents. From the levies paid, schools or their Local/ Responsible Authorities provide the rest of the required equipment, teaching and learning materials. The resources at each school vary according to each school or Local/Responsible Authority's capacity to provide the requirements.

Zimbabwe is a signatory to the World Conference on Education for All (EFA) has shown its commitment to the provision of Universal primary education through the massive expansion of its education system. But as with most education provisions, it is the quality of the Universal primary Education being provided that has become a **problematic.** According to UNESCO (2008) quality education largely depends on the teaching and learning process, the relevance of the curriculum, as well as the availability of materials and enabling learning environments. A good combination of these attributes promotes the attainment of quality education for the learners.

Since 1988, the Ministry has been committed to upgrading the quality and relevance of its education system. Efforts have been made to revise the primary school curriculum in order to enhance its relevance and to set teaching and learning benchmarks to enable monitoring and evaluation of the quality of its education at the primary school level.

1.1.1 Formation of the SACMEQ project

The Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) project was initiated in Zimbabwe by the Ministry of Education Officials in collaboration with the International Institute for Educational Planning (IIEP). The indicators of quality provisions were drawn in 1989. Baseline data on reading achievement and selected conditions of schooling were collected from the schools and the data were analysed and policy suggestions were drawn up. The project resulted in the production of a research report by Ross and Postlethwaite (1992) that was used to review a wide range of important education policy issues and provided baseline information for comparison with future studies on the quality of education in Zimbabwe. The report was also used as the central theme for a series of IIEP follow up training workshops for the Educational Planners and Researchers from Zimbabwe and its neighbouring countries.

During 1992 these regional educational researchers and planners commenced dialogue within their own Ministries of Education and with support from IIEP, and identified training needs required to expand and strengthen the capacity of their education planning units. The dialogues eventually resulted in the preparation of a proposal by Moyo et al (1993) that addressed these important research and training challenges. These developments led to the establishment of the association of Ministries of Education known as SACMEQ. The fifteen SACMEQ member education Ministries are Botswana, Kenya, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania (Mainland,) Tanzania (Zanzibar,) Uganda, Zambia and Zimbabwe.

1.1.2 The goals of the SACMEQ project

The SACMEQ project has been undertaking to integrate research and training activities for educational planners and researchers, according to Makuwa (2010) through;

a) Training the Planners in the technical skills required for monitoring and comparing the general conditions of schooling and the quality of basic education and;
b) Generation of information for use by decision- makers when planning the quality of education in their own countries.

Neighbouring countries were motivated by the initial Quality Research activities that were successfully carried out in Zimbabwe by the Planners and IIEP staff in 1992 and decided to undertake similar research studies in their own countries, (Murimba et al, 1994). The initial research in Zimbabwe formed the basis for the good collaboration among the Southern and Eastern countries and resulted in the formation of SACMEQ Project which was officially launched in 1995. The first SACMEQ Research project was carried in seven Ministries of Education's primary schools during the same year.

SACMEQ I (1995) covered and assessed performance of Reading competences of the Grade 6 pupils in the primary schools. In the second round, SACMEQ II (2000), 14 Ministries took part (excluding Zimbabwe), and the assessment was expanded to cover both Reading and Mathematics competences. Zimbabwe however, re-joined the team and took part in the SACMEQ III project, in 2007 by then the assessment had been expanded to cover Reading, Mathematics and HIV and AIDS Knowledge.

To achieve quality education in the SACMEQ Ministries primary schools, lists of benchmark resources were drawn up and these lists became the basis for monitoring the achievement of quality education in the schools. The benchmark standards included the physical facilities at the schools, the leadership and teacher qualities, home support and the provision of the general teaching and learning materials. For this study, the researcher is going to consider the provision of the basic classroom resources for both the teachers and pupils; i.e. teacher tables, chairs, chalkboards, pupils' text books, teacher's guides, pupil's stationery and library materials.

Generally the quality of education is increasingly judged by focussing on pupil's achievements in the international tests and in the local public examinations. The SACMEQ project provides an international assessment that compares Zimbabwe schools' performance with other SACMEQ participating Ministries, while the national Zimbabwe Grade 7 public examinations provide the country with a local instrument for assessing the quality and output of its education system at the end of the seven year primary school cycle.

1.2 The rationale for the choice of the topic

Zimbabwe SACMEQ III data were collected in 2007. The author of the current research study took part in the data collection exercise as the Provincial Education Officer Planning/Provincial Research Co-ordinator for Masvingo Province. During the data collection the Researcher found out that the teachers and Heads at the selected schools had little knowledge of the SACMEQ Project and were questioning why the tests administered to their pupils alone. The lack of information by the school

authorities showed that there was a need for the Ministry Officials to sensitise their School Heads on what the SACMEQ studies are all about. However the data were captured during 2008, cleaned during 2009 and became ready for use towards the end of 2010. Besides the assessment of the Grade 6 pupils' achievements, the SACMEQ data also focussed on the provision of the benchmark resources that should be provided to all the schools for them to perform to the expected standards. The purpose of collecting data on the pupil's achievements and the provision of the school resources is definitely a good way of doing some Education Schools' diagnosis, but there is need to provide timeous feedback of the findings to the main stakeholders who are the school Heads and Education Officials. According to Mc Mahon, (1993) for sound decisions to be made rationally in the administration of any education systems, there is need to collect relevant diagnostic data periodically. There is also need to speed up the publication of the findings so as to assist the schools to implement development plans in line with the set standards as way to improve the delivery of quality education in the schools.

The focus of this study is to assess and establish whether the learning provisions /conditions have been improved since SACMEQ I in 1995 and whether the availability of the resources have some relationship with the pupils' achievements. This research should enable Education Officials to plan programmes that should focus on enhancing the quality of education in their schools. This study should identify shortfalls to the benchmark provisions and recommend possible policy suggestions to the Zimbabwean Education system and to the school Heads on how to improve on the supply of the schools' resource provisions and probably manage them effectively for the improvement of their schools performance in the next SACMEQ Project tests.

1.3 The research problematic

For the education management information system to contribute to the improvement of the quality of education, decisions on what information should be collected and how this information should be communicated to the various decision levels of the education system should be made, (Ross and Mahlck, 1990). Some researchers have shown that at times some schools have performed differently in international and public examinations because of the differences in the availability and utilization of the resources at their disposals. Therefore the availability of the data from this research should enable the Ministry officials to decide on what action to take to improve the levels of the provisions and ultimately the quality of learning in their schools.

The government of Zimbabwe has clearly indicated its intention to effect curricular reforms designed to upgrade the quality and relevance of its education system and has plans to achieve equity in the provision of its educational services. While the broad educational context is fairly well understood, little information is available about the conditions of schooling out there in the field especially in the remote provinces. This death of information limits the government's ability to:

a) Make informed decisions on inputs to be provided,

b) Determine the process that should be taken,
c) Determine the outcomes which should be targeted.

This study, through the SACMEQ data, is set to contribute to the Ministry's information base by generating indicators which will provide accurate and timely information about what is available and happening at the school levels and aggregating the information to get the picture at the national and provincial levels. Such information will be of enormous value in guiding strategic decisions relating to the achievement of national the objective of improving the quality of the education system.

For schools to improve on their performances, feedback and suggestions based on the previous SACMEQ I report should be given back to the schools for use before the next survey can be conducted. The Zimbabwean officials need to know whether schools have acquired more benchmark resources for teaching and learning in an effort to prepare pupils effectively for achieving quality education standards as expected through the SACMEQ project. SACMEQ's major goal is to support participating nations to improve on their education delivery, and this can only be done through regular assessment and timeous feedback and advice on schools provisions performances levels. Therefore this research should contribute significantly as a key guideline and support document on resource provisions for Education Officials and school Heads. The report should become a resource monitoring guide for use by all primary schools officials and authorities.

1.4 Research questions

a) How are the educational provisions funded in Zimbabwean schools? What roles are played by the state and the communities?

b) What are the Ministry's benchmarks for resource provisions?

c) What is the percentage of the Grade 6 pupils who go to schools that meet the Ministry's benchmark provisions?

d) Have the provision of teaching and learning resources improved since SACMEQ I in 1995 and SACMEQ III in 2007?

e) What are the variations between provinces and within provinces in 2007 on teaching and learning resources?

f) Have Zimbabwe schools' achievements improved from SACMEQ I (1995) to SACMEQ III in 2007?

g) How did the Zimbabwean Grade 6 pupils perform in Reading and Mathematics when compared to the other SACMEQ Ministries in 2007?

h) Is there any relationship between the pupils' achievement outcomes on Reading and Mathematics in the SACMEQ tests and the provision of these basic teaching and learning resources?

1.5 Objectives of the study

This study sought to:

a) Determine the baseline benchmark data for selected inputs to primary education.
b) Examine the extent to which teaching and learning conditions in primary schools meet the Ministry's benchmark standards.
c) Determine the extent to which educational inputs to primary schools have been allocated equitably among and within provinces so to identify the source of the variations.
d) Assess the level of reading literacy and numeracy competences at the Grade 6 level.
e) Identify the educational inputs to primary schools that are associated with school achievements in the SACMEQ tests.
f) Draw conclusions and make suggestions for advice to school Heads and Education Officials at Provincial and National level.

1.6 Delimitation and limitations of the study

During SACMEQ I in 1995, 150 primary schools 150 teachers and 3 000 Grade 6 pupils were covered in the then nine provinces of the country. During SACMEQ III in 2007, the study was conducted in the new set-up of ten Provinces. Totals of 155 primary schools, 155 school Heads, 274 teachers and 3 021 Grade 6 pupils were covered across the country.

Since SACMEQ I research was done in 1995 and that Zimbabwe did not take part in SACMEQ II of 2000, it therefore meant that the comparison for the Zimbabwe Grade 6 pupils' achievements were going to be made between the 1995 and the 2007 data. Instead of comparing the results after a five year period, the 2007 results brought the comparison in the schools' performance over twelve years.

One of the limitations of this secondary study is the fact that data were collected in 2007 and were being analysed in 2011, many features in the schools systems might have changed within the four years. It is also noted that the 1995 SACMEQ I survey included Reading skills only, while the 2007 SACMEQ III project included both the Reading and Mathematics skills. This means that there is a base for comparing the Reading achievements and there is no base for comparing the Mathematics achievements.

The SACMEQ project collected data on various aspects related to the schooling conditions and availability resources in the primary schools. The current research is focused on the provision of classroom teaching and learning resources in the classroom and intends to establish how these are related to the pupils' achievements

on a purely descriptive basis. The research could therefore not focus on all the benchmark standards as these would have made the research too long and unmanageable. Family influences and school factors were not used to control the data.

1.7 The structure of the study

Chapter one has outlined the background to the study and the context of the Zimbabwean education system. The remainder of the report is organised in the following six chapters.

In Chapter two, literature reviews on the concepts of providing quality education are discussed and some relationship between the provision of the general teaching and learning resources and pupil's academic achievements are drawn.

The research instruments and the sampling methodology that were used in SACMEQ studies are discussed in chapter three.

Chapter four gives a broader picture of the provisions of the education teaching and learning materials in Zimbabwe.

The research findings of the benchmark resources in the schools are examined in Chapter five.

The relationships between the teaching and learning resources and pupils' achievements are drawn in Chapter six, and lastly, Chapter seven offers a brief summary, makes recommendations and conclusions of the study.

Chapter 2: LITERATURE REVIEW

This chapter is devoted to the review of literature sources that are related to issues of providing quality education in schools. The study is focusing on the provision of teaching and learning resources, and intends to establish whether the resources have some relationship with the achievements of Grade 6 pupils in the SACMEQ III Project. The chapter gives a broader view of quality education and how it can be achieved in various education situations. By reviewing literature studies carried out by some researchers on indicators of quality education, broader views on specific conditions that can promote the achievement of quality education in the schools are identified.

2.1 What is Quality Education?

Quality education can be viewed as one that prepares learners to participate meaningfully and effectively in the development of their lives and their nation. In schools, quality education can be determined by a number of factors such as the teaching and learning processes, the infrastructure, equipment, teaching and learning materials, and the availability of suitably qualified and competent teaching personnel. For most ordinary people, quality is determined through learning achievements and usually these are measured through examination results. If an education system leads its people to unemployment and alienation after going through the school cycle and some examinations then it would be termed a poor quality or irrelevant education. According schooling should focus should on learning that develops in children the capacities to act independently and progressively on their own through the acquisition of relevant knowledge, useful skills and appropriate attitudes, (Bernard, 1999). However such quality learning attributes can only be achieved in learning situations that would have the necessary teaching and learning facilities as well as well as the services from well qualified personnel.

Different stake holders such as parents, employers and education officials often hold different meanings of what they term quality education. Judgement of the school quality is often perceived on the basis of the expectations and the final goals people wish their children to achieve, (Beeby 1966). Continuous assessment in schools and targeted improvements are also sometimes seen as ways that can assist in the achievement of quality in schools. In other words some stake holders may be of the opinion that quality education may be achieved through regular assessments that are aimed at bringing out the expected results while others may think that quality may be achieved through the provision of enabling or conducive learning environments.

The Dakar Framework for action adopted at the world education forum on EFA (2000) emphasised the need for countries to increase access to and improve the quality of their education as one of its important goals. According to UNESCO (2008), ‘‘quality implies improving all aspects of education and ensuring the attainment of

excellence of all so that recognised and measurable learning outcomes are achieved by all especially in literacy, numeracy and essential skills.''

In this respect all citizens should be assisted to have equal access to educational resources and opportunities. The public expenditure should be used for the benefit of all and shared equitably among all the citizens. Equity in education can be analysed at various levels such as between provinces, schools and within schools. In many countries, including in Zimbabwe certain provinces are educationally more advanced than others. For example urban areas are more favourably placed in terms of educational development than the rural ones. The schools in disadvantaged areas obviously find it hard to provide quality education to the expectations of their stakeholders.

Regular attendance at schools and learning situations

Learning opportunities can be enhanced through regular attendance of lessons in schools. Exposure to the curriculum gives children the opportunity to learn and this significantly influences their learning achievements. Research findings by Miske, Dowd et al, (1998) indicate that higher rates of attendance tend to give greater learning gains and may reduce repetition rates while the irregular attendance may lead to low achievements in school work. It is therefore important for parents to ensure that children are supported and encouraged to attend their schooling regularly. Good parental education was also found to influence parent-child interactions that are related to learning as the parents would be familiar with what their children would be learning in school. Parents with little formal education are likely to be less familiar with the language used in the school, and this obviously limits their ability to support their children's learning and participate meaningfully in school-related activities Fuller, et al., (1999) observe that although many difficulties exist in engaging parents to support their children's learning, schools can help parents to enhance their involvements through partnering them with organisation that may be engaged in some Education Development projects in their communities. This situation makes them feel the importance of their contribution to the education in their community and ultimately the education of their own children. Some schools are also involving parents in their children's education by inviting them to participate in the assessment of their children work through the provision visiting open days when parents are allowed to meet with the teachers and discuss their children's work. This situation makes them more involved in the learning of their children and in a way help schools to prepare quality learners. Even in poor communities it is noticed that children who are supported in their early learning experiences through strong parents' participation are most likely to succeed in school. Therefore if children are to do well there is a strong need for their parents to be fully involved in their learning.

Learning can occur in different types of learning environments especially in developing country schools. But perhaps quality learning can take place in relatively modern and well-equipped buildings that have the necessary teaching and learning provisions. However, the quality of school facilities seems to have an indirect effect

on learning, (Fuller, 1999). This point is reinforced by Carron & Chau, (1996) when they observed that student without the basic resources in their environments and in schools are most likely to perform poorly as a result of the learning difficulties they experience within their classrooms. They are likely to get lower test scores than those learning in environments with the required resources. With the school buildings and other related environmental school quality issues, the lack of adequate instructional materials and textbooks, working conditions for pupils and teachers may definitely affect the achievement of quality learning. But also situations where pupils may have to walk long distances to school definitely affect their concentrations on learning issues and obviously learning time is lost during such periods and ultimately quality learning is compromised.

2.2 The teaching and learning processes

According to Darling-Hammond, (1997), good teachers, are those who are capable of helping their students to learn, usually such good teachers have deep mastery of both their subject matter and pedagogy. The preparation that teachers receive before beginning their work in the classroom, vary significantly from one country to another. Postlethwaite, (1998) expresses the view that perhaps too little preparation before entering the profession, affect educational quality since student achievement, especially beyond basic skills, depends largely on teachers' command of subject matter. However the situation in Zimbabwe up to 2007 was slightly favourable in terms of qualified primary school teachers. The country's primary teaching force had around 86 percent trained and qualified teachers and these teachers were adequately trained before entering the teaching profession. Most Grade 6 classes were taught by qualified and experienced teachers. (Ministry of Education, Human Resources, 2009.)

However, professional development for the teachers can help overcome shortcomings that may have been part of teachers' pre-service education and keep teachers abreast of new knowledge and practices in the field. Serving teachers should be in serviced to keep them abreast of changing situations in the schools. The in - service training can have some direct impact on student achievement. The development of teaching methods and new skills should take new understandings of how children can learn more on their own. The instructional methods should be child-centred and relevant as the curriculum The old limited view of teaching as a presentation of knowledge no longer fit into the current understandings of how and what students should learn, (Carron & Chau, 1996). Instead, the modern teaching instruction methods should stimulate and help students to build on prior knowledge and develop positive attitudes, and expand their knowledge bases. It is common that teaching styles especially among old teachers have in most cases, remained traditional and rigidly teacher-centred.

The systems should employ teaching methods that facilitate active student learning rather than promote passive and rote memorization. Good learning processes should provide support and empower both teachers and pupils towards the prospects of

achieving quality education in schools through active student participation. An example of how schools might organize learning activities around these principles comes from Zimbabwe (Un-published, 2008) with help from Save the Children Norway – Zimbabwe Improving Educational Quality project; researchers collaborated with teachers, parents and students in primary schools in Zimbabwe to develop action research opportunities for improving student achievement in Bikita District schools. Action research workshops were mounted for both teachers and parents on how to participate actively in their children's education. The positive result was that parents are now more involved in the issues of their children's learning. The project empowered the teachers, the parents and students themselves to collaborate towards the improvement of teaching and learning in the schools. Among other things, this type of learning activity promotes critical thinking, towards solving given or emerging community problems by solving the problems collectively. Such activities can build the attitudes and values in children that contribute towards the attainment of quality education. However this study does not dwell much on this aspect but helps to reinforce the importance of collaboration between teacher's parents and the donor community in attempting to provide the best possible education support to the learners.

Good teachers are skilled not only in instructional methods, but also in evaluation and assessment of their children work. They are able to determine individual student learning and can adapt activities according to individual student needs. Schools that are committed to student learning communicate their expectations clearly to both the students and the parents. They give frequent and challenging assignments that are well supervised and help to monitor the students' performance regularly. The students are given chances to participate in and take responsibility positions in their schools activities.

Teachers' working conditions affect their ability to provide quality education. However at times critical shortage of the basic classroom resources hinders their capacity to provide good quality education to the pupils. The usual classroom resources such as the availability and condition of infrastructure, textbooks, teacher's guides and learning materials and class sizes affect the performance even of good teachers. Good school leadership should strive to provide enabling working conditions for their teachers. This research therefore is assessing the availability of the provisions of the basic classroom resources for both the teacher and the pupils as part of the conditions under which the teachers find themselves working under.

2.3 Supervision of the learning processes.

The achievement of quality education is an issue of concern for most Education systems. For example in a situation where education is expanding as is the case in Zimbabwe. New schools are being built and new Heads and new teachers are coming into the system. There is also need to also expand the school supervision capacity to

match the enlarging system. However schools in a country like Zimbabwe rarely get the support they need from the school Inspectors. Most of the teacher supervision at the school level is done by the school Heads. In most cases many people tend to judge the quality of education by focussing on what pupils actually learn, and how well they learn it and in most cases this judgement is made after some examinations. Sometimes providing textbooks alone may be seen as way of improving quality in the schools but having the books without the involvement of good teachers and effective school leadership may not bring the intended quality. Although teacher competence may sometimes play a very pivotal role in the delivery of quality education, some schools with very limited resources have been found to produce some good results. These learning situations take place in schools on daily basis before the watchful eyes of school Heads. Therefore the school Heads need to be equipped with relevant skills to enable them give their teachers the professional guidance and assistance they might need.

The quality of administrative support and leadership in a school is very essential for effective teaching and learning for both the teachers and the pupils. Good teacher support has a positive impact on the learning achievements at the schools. Unfortunately, in developing countries, few Head teachers and administrators have some formal training in the school leadership functions. More often promotions are not based on leadership or management capabilities. Further, many Heads of schools in Zimbabwe (and in other countries also) continue to have extensive pedagogical responsibilities in addition to the administrative ones. This leaves them with little time for supervision and giving the necessary support to their staff. The environment, content and processes that learners encounter in school lead to some intended and unintended results. Good school leadership should be ready to identify and correct situations that may lead to poor achievement of quality in their schools and poor student achievements in learning tasks.. The schools need to have good and competent Heads so as to ensure the smooth running of the day to day activities at the institutions. Both teachers and pupils can work and learn better if the schools have good leadership. Efforts should be made to develop leadership skills of all Heads running the schools if the dream to provide quality supervision and quality education may be realised at all education levels.

2.4 Related studies on provision of teaching and learning resources

In order to understand whether the provision of basic classroom resources have an effect on pupils performance, the review of the following studies on the provision of basic classroom materials assisted by providing a clearer picture of this study area. The focus of this study was on the provision of basic classroom teaching and learning resources with a view to assessing how they are related to the pupil's achievements. But there is need to emphasize that the resources alone may not lead to the intended achievement of results without the participation of other key partners in the delivery of the teaching and learning processes. The studies described below bring in some

situations that were found to have some relationships with particular teaching and learning scenarios;

Coleman (1966) looked at the equality of education opportunities in public schools of the Black and White communities in the United States of America. The schools had varied resource provisions with the schools for the white students having better resources at their disposal. He established that the achievements of 20 percent of the black students were associated with the schools they went to while only 10 per cent of the white were affected by this situation. Similarly the average achievement of the average minority (Black) suffered more in a school of low quality than would the average white pupils. In other words, the study emphasizes that it is for the most disadvantaged children that improvements in school quality will make the most difference. The quality of the teachers showed a stronger relationship to pupils' achievements. This impact was progressively greater at higher level grades indicating that a cumulative low /high quality of the teachers in a school impacted more on the pupils' achievement at the later levels.

In another study, by Fuller (1985) on Raising School Quality in developing countries, one of its findings was that there was clear evidence that low schools quality largely accounted for low level of literacy and achievement among the third world children. He pointed out that the major inputs that are strongly linked to the improvement of school quality are text-books, writing materials, teacher quality, teaching practices, classroom organisation and school management structures. He defined school quality simply as the level of material inputs allocated to schools per pupil (resource concentration) and as the level of efficiency with which the material inputs are organised and managed to raise the pupil's achievement. His study further showed that, pupil with limited resources in developing nations learn much less than their counterparts in developed nations even if they spent the same amount of time in a learning cycle as he resource limitations affect their achievements. This situation is very prevalent in most of the poor countries as pupils often go to schools that have poor classroom environments and often do not have the basic text books for the subjects they are expected to learn. Therefore the learning environment should be enriched with the necessary resources so that the learner can be guided to exploit utilize them for the achievement of quality learning.

Another researcher, Hanusek, (1997) in his study on assessing the effects of School Resources on student's performance, observes that close to 400 studies that had been done on student achievement had shown that there is no strong or consistent relationship between student performance and school resources. In other words the researcher has little reason to support that simply adding more resources to schools will yield performance gains among students. He however agrees that while resources alone may not be sufficient to guarantee achievement, adequate resources are surely necessary. This opposite view is simply expressing the need to have the resources even if they may not be well used and contribute to more educational gains.

Undoubtedly this is an accurate statement at some level because poor schools with no funds may not add much towards the child's attainment of quality learning the student.

In another study on Construction and Application of SACMEQ School resources, Saito, (2007) made a comparison of the provision of school resources between the two SACMEQ I of 1995 and SACMEQ II of 2000, The researcher found that the index created by the Rasch scaling technique provided a stronger positive correlation between the school resources and the pupil' achievement in the two projects than what was found previously. The earlier study had compared the resources using the initial variable that contained the summation of school resources. The researcher's SACMEQ School Resources Index (SRI) provided a more reliable instrument for comparing the resource levels among different school systems with varied levels of economic development. It also enabled the changes in the school resources between two different points in time to be examined. Due to the economic difficulties of the 1980-1990s policy makers were pressurised to look at the education activities that promoted the efficient use of educational resources. They were specifically more concerned with the identification of school investment that would improve the educational quality, which resources were effective to education and establishing the minimum levels of the school resources.

The findings indicated the Reading and Mathematics scores for each country were positively related to the availability of the resources between the two SACMEQ periods. In other words the study showed that schools pupils in countries that had **better resources** produced **better scores** and vice visa in Reading and Mathematics. Therefore, this study reinforces the need to provide the necessary learning resources for the better pupil's achievements in the Reading and Mathematics scores.

Summary of the chapter

The chapter has described how quality teaching and learning can be achieved in schools. From the literature reviewed, quality in education revolves around the following elements;

- Providing sufficient resources and support to the system
- Improving the standards of teaching and teachers performances
- Improving the standards of learning and learner's performances.

Adequate resources and relevant curriculum need to be provided to all the schools. Qualified teachers need to be supported through staff development courses and should receive regular internal and external supervision support from school Heads and school Inspectors. The learners themselves need to be guided in their learning both from home and most importantly and particularly at the schools level. The background given by this literature has shaped the way into the discussion of the research methodology.

Chapter 3 THE RESEARCH METHODOLOGY

This Chapter discusses the research method that was used during the data collection, processing and data analysis. It describes how SACMEQ III was conducted in 2007. The research design, the chosen population, sampling techniques and procedures, research instruments, data collection, capturing and cleaning up of the data, data presentation and analysis methods are outlined and discussed.

3.1 The Research design

The design indicates how the research is set up. Leedy, (1993) further observes that 'Nothing helps a research effort to be successful so much as planning the overall design carefully.' Therefore a research design refers to the manner in which the research is organised so as to address the research questions. For this particular study concerning the provision of basic teaching and learning materials in primary schools and their relationship to the pupil's achievement in the SACMEQ project, a descriptive analysis of the secondary data as well as the relational analysis to examine the association between the level of learning materials and learning achievements were used.

The term survey according to Gosh (1984) means to see a particular thing from a high place. Sharing the same view, Leedy (1993) adds that 'looking or seeing in many survey studies has been made possible through the use of the questionnaire and tests' which were adopted in this research study. A survey research study is designed so that information about a large population can be inferred from the responses obtained from a smaller group of subjects. This implies that a survey in broad sense provides the basis for theory construction and the implications for social planning and reforms.

3.2 The research instruments of the SACMEQ project

The following 12 research instruments were developed by the SACMEQ National Research Co-ordinators (NRCs) for administration to pupils, teachers and Heads at the selected schools:

- For the Pupils - Reading test
  - Mathematics test
  - HIV & AIDS Knowledge test
  - Questionnaire
- For the teachers - Reading test
  - Mathematics test
  - Health and Knowledge Questionnaire test
- For School Heads - School Head Booklet (Questionnaire)
  - School information Booklet (Questionnaire)

- School form
- Pupil name form

Pupil tests of basic Reading literacy

For the purpose of SACMEQ's initial study, reading literacy was defined as; the ability to understand and use those written language forms required by society and / or valued by the individual. This definition was found to be sufficiently general to accommodate the diversity of traditions and languages represented in the participating SACMEQ countries, but specific enough to provide guidance for testing. Writing ability was deliberately excluded from the definition, and only a minimal amount of writing was required of students throughout the testing process.

The domains or type of **reading literacy** materials included in the pupil test were concentrated on the following three dimensions and these are described in the SACMEQ II (2000) document as follows;

a) Narrative prose: Continuous text in which the writer aimed to tell a story-whether fact or fiction
b) Expository prose: continuous text, in which the writer aimed to describe, explain, or otherwise convey factual information or opinion to the reader.
c) Documents: Structured information organised in such a way that pupils were required to search, locate, and process selected facts rather than to read every word of a continuous text.

For the SACMEQ III Reading items, a sub set of the items from SACMEQ II was used, (Saito et al, in press).

Pupil tests of basic Mathematics skills

A test development exercise similar to the one for English reading was undertaken for the development of the Mathematics test. There was no Mathematics test in SACMEQ I and therefore Zimbabwe participated in the development of the Mathematics test for SACMEQ III. The SACMEQ II (2000) resultant domains for Mathematics were;

a) Number: Operational and number line square roots, rounding and place value, significant figures, fractions, percentages and ratios.
b) Measurement: Measurements related to distance, length, area, capacity, money, and time.
c) Space Data: Geometric shapes, charts,(bar, pie, and line) and tables of data

For the SACMEQ III Mathematics tests items, a subset of items from SACMEQ II items was used. (Saito et al, in Press).

Teacher tests on Reading and Mathematics

Tests were constructed in Reading and Mathematics both for pupils and for teachers. The two sets of tests (for pupils and teachers) had to be calibrated so as to be on the same scale. Most importantly, the structure of the pupil tests was congruent with the content (domains) and behaviours (skills) derived from detailed analyses of the curricula, syllabi, examinations and textbooks used in the SACMEQ countries. The selection of teacher test items covered the full range of pupil item difficulties but did not of course contain too many easy pupil test items. In addition, in order not to antagonize teachers with an extended testing session, the teacher tests had a much smaller number of test items than the pupil tests (Ross et al, 2004).

Other data in the Teacher's questionnaires

The data required for the assessment of the availability of the basic teaching and learning resources were obtained from the answers given by the pupils and the teachers from their questionnaires.

The School Head's questionnaire

The Heads questionnaire set to get information about the Heads personal details, qualifications, experience and general information about the schools location. It also required the Heads to give information about his teachers' levels of training and experiences, the school's enrolment statistics and the involvement of the community in the affairs and development of the school facilities.

3.3 The Population of the study

The population of study for both SACMEQ I in 1995 and SACMEQ III in 2007 was ;

- all the pupils at the Grade 6 level at the tenth month of the school year who were attending registered government or non-government schools in Zimbabwe and;
- Primary school Heads and Grade 6 teachers.

It is important to mention that the target population for the SACMEQ Project was the Grade 6 pupils.

The desired population was the total number of registered primary schools and the number of Grade 6 pupils in the schools by provinces For SACMEQ I Zimbabwe had a total of 4 557 registered primary schools and 318 231 Grade 6 pupils. In SACMEQ III, the number of registered primary schools had increased to 4 741 while the Grade 6 pupils enrolment had slightly decreased to 317 090. It is important to mention that when SACMEQ I was conducted in 1995, Bulawayo was part of Matabeleland North Province, however by 2007; Bulawayo had been established as the tenth province, having been separated from Matabeleland North. Table 3.1 below shows details of the desired population for SACMEQ III.

Table 3.1: Desired, Defined, and Excluded Population

Provinces	Desired Population		Excluded Population		Defined Population	
	School	G6 Pupils	School	G6 Pupils	School	Pupils
Bulawayo	126	15108	13	191	113	14917
Harare	204	31587	9	108	195	31479
Mash Central	374	25506	30	528	344	24978
Mash East	583	35778	88	1340	495	34438
Mash West	464	32546	46	784	418	31762
Midlands	658	43600	51	824	607	42776
Manicaland	776	50317	63	979	713	49338
Mat North	435	21019	73	1230	362	19789
Mat South	438	20267	67	1113	371	19154
Masvingo	683	41362	58	861	625	40501
ZIMBABWE	4741	317090	498	7958	4243	309132

Source : Ross and Saito, 2011 (in press).

The excluded population

All the schools which had Grade 6 enrolments of fewer than 20 pupils were excluded. Table 3.1 above indicates that Harare had the lowest number of excluded schools (9) and pupils (108) on the other hand Mashonaland East had the highest number of schools (88) pupils (1340). The 498 excluded schools covered 10.5 percent of the desired target population of schools, but this represented only 7958 pupils which were just 2.5 percent of the pupils in the desired target population. Sampling weights were applied to adjust for missing data and also to ensure that the relative size of the defined target population across provinces was accurately represented in the relative sizes of the weighted sample data across provinces.

3.4 Sampling

For this research, the sample consisted of a total of 3021 Grade 6 pupils who were selected from 309 132 pupils in the country from 155 primary schools that were selected from the country's 4741 primary schools. A total of 155 school Heads and 274 teachers were also the selected. The random sampling covered both urban and rural schools.

The application of Probability Proportional to Sizes (PPS) Sampling

The two stage cluster sampling approach in which (a) schools were selected using the probability proportional to size (PPS) and (b) a simple random sample of fixed number of pupils were selected at the second stage within each school.

Sixteen schools were sampled from each of the ten provinces making a total of 160 planned schools in the country. At the intra – class correlation coefficient of 0.3 and the effective sample size of 400, at least 130 schools and 3 900 pupils were required in order to meet the international sampling accuracy standards. For the SACMEQ III project, 160 schools instead of 130 schools were selected thus increasing the probability for more schools being selected. Sixteen (16) schools per province were selected despite the variations in the number of schools in each province. To get the winning 16 schools the Lottery Method was used for the application if probability proportional to size. This begins by allocating lottery tickets numbers (based on pupils enrolments) to each school, calculating the sampling intervals within each provinces applying the intervals, deciding on the winning tickets and selecting the schools. However, within the selected 160 schools a simple random sample of 25 pupils from all the Grade 6 pupils at each school was drawn. In this respect, the total sample of 4 000 pupils was planned.

Sampling of pupils within selected classrooms

The selection of pupils at the schools was carried out according to laid out probability sampling procedure. Heads of schools were not allowed to select the pupils for the data collectors. The data collectors were trained to select the sample of pupils by using two documents (a) Procedures for the selections of 25 Grade 6 pupils in each selected school and (b) The Random Number tables for the selection of 25 grade 6 pupils within each school. The figure of 25 pupils was chosen and was above 20 pupils per school who were used in earlier studies as a way of cutting down on cost although this was a compromise on sampling accuracy.

Table 3.2 shows the planned and achieved sample of the schools, and Grade 6 pupils for the Zimbabwe SACMEQ III project.

Table 3.2 Planned and achieved Sample

	Planned Sample		Achieved Sample		%
Provinces	School	G6 Pupils	School	G6 Pupils	**Response rate**
Bulawayo	16	400	16	256	64.0
Harare	16	400	16	294	73.5
Mash Central	16	400	16	349	59.8
Mash East	16	400	16	260	65.0
Mash West	16	400	16	337	84.3
Midlands	16	400	16	289	72.3
Manicaland	16	400	16	308	77.0
Mat North	16	400	15	304	76.0
Mat South	16	400	12	239	59.8
Masvingo	16	400	16	385	96.3
ZIMBABWE	160	4000	155	3021	75.5

Source: Ross and Saito 2011 (in press).

The planned sample for each province was 16 schools and 400 pupils. Eight provinces achieved the targets of 16 schools each except Matabeleland North and Matabeleland South that did 15 schools and 12 schools each due to some administration problems within these provinces.

The response rate

The response rate for the sample as recorded in Table 3.2 shows that Matabeleland South achieved the lowest response with of 59.75 percent, while Masvingo had the highest rate of 96.25 percent. Nationally the response rate for schools was 96.88 percent while that for pupils was 75.52 percent.

3.5 The data collection

The training of the Education Planning Officers who acted as the Provincial Research Co-ordinators (PRCs) and the rest of the data collectors was done at the Zimbabwe Institute of Public Administration and Management (ZIPAM) National Centre near Norton in September 2007. This national training exercise was a great success as all the invited Provincial teams of Education Officers came and left the venue fully informed and aware of the procedures for carrying out the whole exercise.

The field work was guided by two detailed manuals, i.e. the National Research Coordination Manual and the Data Collectors Manuals which had been developed by the SACMEQ National Research Coordinators (NRCs). The manual listed precisely what had to be done at every step in the conduct of the study. They guided Collectors with details of every step that had to be taken from the minute the data collection instruments were received to the minute they were returned to the Ministry. The same manuals for the data collectors were used by the NRCs to conduct the training sessions for the data collectors.

The success of the project was hinged on the extent to which the data collection exercise would be a success. Therefore all the District Education Officers and the schools to be visited were informed through written communications of the purpose and dates of the data collections. However two provinces, Matabeleland North and Matabeleland South could not cover the required 16 schools each after they had started their field work a bit late and there were heavy floods in some areas which made some roads inaccessible and hence could not get to the last schools before the closing of the term for the December 2007 holidays. They could not complete the data collection in January 2008 as the pupils were no more in the Grade 6 required population grade level.

3.6 Capturing of the research data

All the provincial SACMEQ III data were returned to the National Education Offices in Harare during the month of January 2008.

The data capturing started in February 2008 and ended in October 2008.

The cleaning of the data commenced in November 2008 and was completed in July 2010.

Writing of the Country report started in 2010. Several meetings and workshops were organised for the SACMEQ countries as way of monitoring and facilitating the writing of the country reports.

3.7 The data analysis for this research study

The data for this study have been availed from the SACMEQ team at the IIEP and permission to use the data for this research was obtained from the Zimbabwean Education Authorities in Harare- Zimbabwe.

Summary of the chapter

In this chapter the procedures undertaken to conduct the Zimbabwe component of the second Educational Policy Research project of SACMEQ III have been described. Explanations have been given on the development of data collection instruments, population, sampling methods and fields work operations. The measures taken at every stage of the process ensured that the highest possible quality for the research was reached, and that international standards of good large scale survey research were attained.

Chapter 4 ZIMBABWE EDUCATION CONTEXT, FUNDING AND THE PRIMARY EDUCATION SYSTEM.

This chapter describes the context and sources of funding for the Zimbabwe Education System. It describes how the education system's expansion was achieved, how the funding was/is done and who was/is responsible for providing the basic teaching and learning resources at the different schools. The general Primary schools performance is described and the benchmark standards are outlined. The chapter therefore answers the following research questions;

a) How are the educational provisions funded in Zimbabwean schools? What roles are played by the state and the communities?
b) What are the Ministry's benchmarks for resource provisions?

4.1 Context and funding of the Zimbabwe Education system

The quantitative achievements that were made in expanding the whole education system were spectacular by developing world standards and through this expansion process the country felt that it was moving closer to the achievement of Universal Primary Education as from 1990. The big increase in the number of Primary schools from 3 116 in 1980 to 5 560 in 2007 was largely due to the impressive community mobilisation strategies which resulted in the building of most of the new schools mostly in the rural communities,(World Bank, 1994). Capital development at the primary schools level has largely been the responsibility of parents and various non-governmental authorities while the government was mainly involved in the provision of secondary school capital development in both urban and rural areas. However up to 2007 only eight per cent (8%) of the 5 560 schools were Government while the rest (92%) belonged to different authorities such as Churches, Trust, Mine/Farm schools, Rural District Councils and Urban Councils.
The distribution of primary schools by ownership (responsible authority) in 2010 is presented in Table 4.1below showing;

Table 4.1 Distribution of Primary schools by Responsible Authorities in 2007.

Responsible Authority	Number of schools	Percentage (%)
Government	445	8%
Non-Government	5015	92%
TOTALS	5 560	100%

Source: Ministry of Education, - Facts and Information,(2007).

The challenge of providing basic education has not only been a challenge of bringing in quantity education to the people, but one of quality with equal opportunities to learn and to achieve. However it is pleasing to note that the Government is paying all teachers' salaries and providing per capita grants to all registered primary schools in the country.

4.1.1 Supply of provisions at the schools

In the 1980s Zimbabwe made primary education tuition free, but parents were encouraged to assist their schools in terms of providing money for school levies, materials and labour mainly for the construction of the school facilities, and also for other purposes decided by the school parents. Parents constructed most of the schools using own local materials and assistance from state grants. The Ministry's other key role was to provide construction plans and supervision of the buildings' safety standards.

When Structural adjustment was introduced in 1992, the government decided that only pupils in urban were to start paying tuition fees education while the rural schools continued to be tuition free. In the building of the schools, parents had to complement the state provisions through payment of levis and at times through offering labour support. Statutory Instruments, (SI) SI 87 of 1992 School Development Committees (SDC's) for non-government schools and SI 379 of 1998- School Development Associations (SDA's) for government schools were developed to enable parents to run and participate in the school affairs with the legal backing and guidance from the Government.

Parents are allowed to decide the appropriate school levies at their school level and are approved by the Ministry of Education at the Provincial levels. In addition, the state provided a per capita grant for every pupil in non-state primary and secondary schools. These have been averaging between US$4 and US$6 per pupil per annum since 2007. The per capita grants were used for schools' administrations and for the purchase of teaching and learning materials. The amount of money paid per pupil has always never been adequate to cover all of the basic teaching and learning requirements, so that schools have had to supplement these grant allocations through levying parents. From the levies paid, schools or the Responsible Authorities have provided the rest of the required equipment, teaching and learning materials. Because of this situation, the resource provisions at each school vary according to each school or Responsible Authority's capacity to provide the requirements.

4.1.2 The supply of teaching and learning resources from 1995 up to 2007

The performance of the Zimbabwe education system looked stable from 1995 up to 2000. However, the situation started to deteriorate from 2000 when the Land Reform Programme was implemented. This political programme was about reallocating the former commercial farms owned by White Farmers to the local nationals. Some developed nations were not happy with this political position and applied some economic sanctions against Zimbabwe as measure to limit its trading linkages with those developed nations. The country's inflation started to rise uncontrollably rendering the Zimbabwean dollar valueless. The economic sanctions affected the performance of the country's economy and particularly the education system in the following areas:

- The per capita grants allocations to schools started to deteriorate in value as the Zimbabwe dollar could no longer buy the needed school resources. School levies paid by parents were rendered worthless and hence most schools could not buy the resources.
- Some qualified teachers started leaving the profession for neighbouring countries and abroad as their earnings were losing value due to the rising inflation. The education system lost some of its best teachers during that period.
- School supervision almost became the responsibility of school Heads alone. Most school Education Officers who had retired were not being replaced and the few who had remained had limited resources for school supervision purposes.

The coming of SACMEQ III project in 2007 found the Zimbabwean education facing its most difficult period since 1980. The provision of the materials resources were decreasing in nearly all the schools in the country.

4.2 What fees should be charged and who should pay?

According to the 2002 national census about 39.1 percent of the Zimbabwean population of 11.63 million people were children in the age range of 5 to 19 years. This means that there are 4.55 million potential school students. The majority of the students, who make up the 65 percent of the school age group live in the rural areas, while 35 percent live in the urban cities. The potential for primary enrolment is 3.144 million i.e. children aged 5 to 14 years. As of 2007, 2 405 072 children were in primary school a figure which is 76.49 percent of the age group. According to the (2009) Rapid Results Survey the potential for households to pay school levies were below the total Consumption Poverty Line (CPL) as 53 percent of urban households were below the CPL. This meant that the majority of the parents were not able to pay levies for their children's education. The fees that were charged from 2007 to 2009 were ranging from US$2 to US$5 in rural primary schools, US$5 to US$25 in urban high density schools and US$30 to US$50 in low density schools. These levies were too high for most families during that time and hence most families could not afford to pay for their children's education. In other words poorer schools went on without getting the support from parents to buy the basic teaching and learning provisions.

4.3 The Primary schools education cycle and the Grade 7 examinations

The legal age of entry into primary schools in Zimbabwe is six years. The primary education is a seven year cycle that is corresponding largely to the 6 to 12 year old age group. There is automatic promotion from one grade to another. Repeating a class can only be considered on request from the parents or under very special circumstances. The gross enrolment was estimated at about 109 percent in 2009 while the net enrolment was estimated at 85.6 percent. The primary completion rates have been decreasing from 72.1 percent in 2000 to 68.2 percent in 2006 and further down to 59

percent in 2008. The decreases could have been attributed to the economic hardships the country was experiencing.

The national transition rate from grade seven to form one has been ranging between 67percent and 72 percent from 1995 up to 2009.

At the end of the seven year primary education, the Grade 7 pupils take the national public examination in four major subjects namely; English, Mathematics, Shona/Ndebele and General paper. The subject scores are graded on a scale that stretches from Grade 1 (the best) to Grade 9 (the lowest). A candidate is expected to obtain a grade of between 1 and 6 to be regarded as having passed the subject with a percentage of no less than 50 percent.

The concept of passing or failing does not apply to the Grade 7 examination as all the learners are expected to transit to secondary education. However secondary schools and even parents regard the number of units a candidate accumulates from all the four subjects as indicative of the level of performance- those with fewer units being regarded as better performers than those with more units. An aggregate of up to 24 units from all the four subjects is generally regarded as qualitative performance.

The performance of the candidates in the Grade 7 examination has maintained an upward trend from 2005 to 2007. The Ministry is however concerned with the quality of passes as reflected in the national performance as shown in Table 4.2 below showing percentages of subjects passed in 2006.

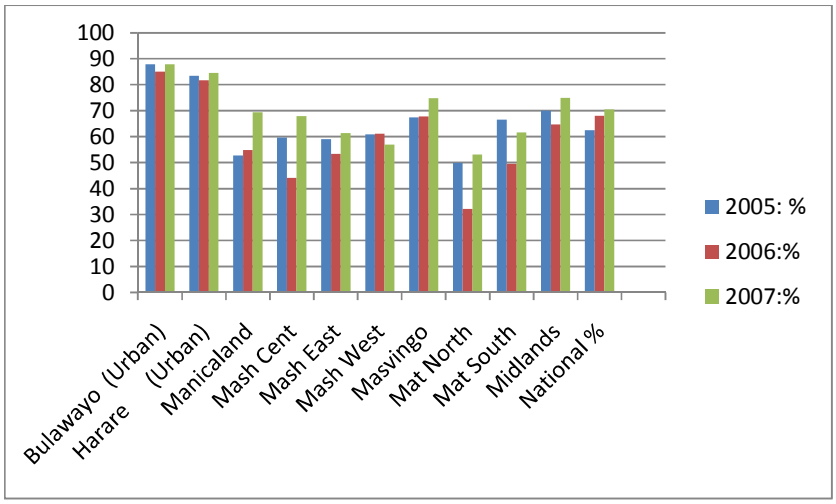
Table 4.2 Percentage of candidates by number of Subjects Passed in 2006

Number of Subjects Passed	0	1	2	3	4 (All)	Totals
Number of Candidates	24030	74005	32176	37798	105174	273 183
Percentage	8.80	27.09	11.78	13.84	38.50	99.9

Source; Ministry of Education statistics, (2007).

Table 4.2 shows that 8.8 percent of the candidates who wrote the Grade 7 examinations in 2007 passed none of the four subjects. The percentage who passed all the four subjects of was 38.5 percent. The rest of the candidates (52.71 percent) passed one to three subjects. However for a candidate to be considered as having passed the examination, one needs to score at least an aggregate of 24 points from the four subjects. The table 4.2 below shows the percentage of candidates who obtained 24 points by provinces from 2005 up to 2007

Figure 4.1- **Grade 7 Provincial Examinations Performance from 2005 to 2007.**



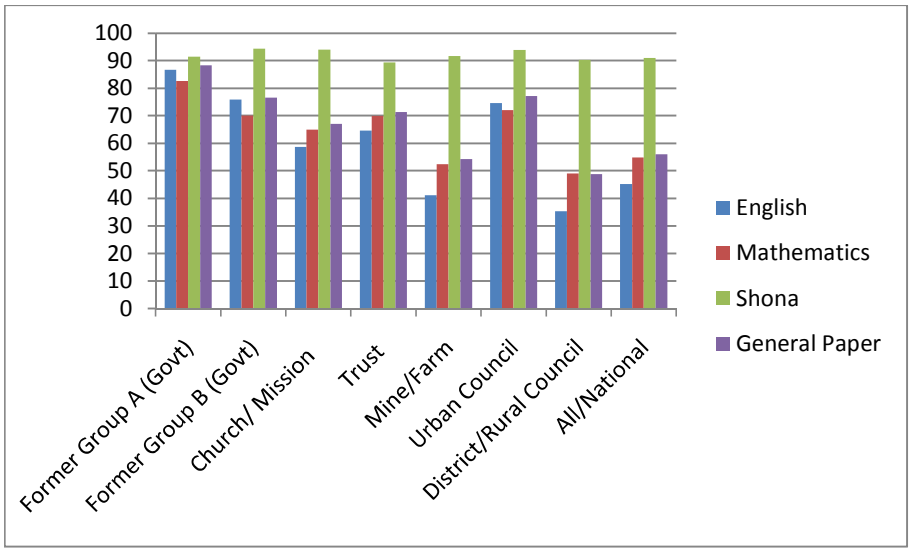
Source; Ministry of Education statistics, (2008)

Bulawayo Province has been performing better than all the other provinces from 2005 to 2007 and has always been followed by Harare province. These two provinces are the only wholly urban provinces whose schools have better resources and more experienced teachers than the other eight provinces which are largely rural with very few schools in their small urban centres (Chakanyuka, et al, 2009).

The schools choices by most parents seem to be influenced by their knowledge of the Responsible Authority's capacity to provide good and quality education. Good pupils performances in the Grade 7 examinations is mostly witnessed at schools that are known to have good and above average teaching and learning resources. Most parents' choices of places for their children's schooling tend to be influenced by their knowledge of the schools performance in the Grade 7 examinations. The table below shows the performance by school types.

Figure 4.2 shows the percentages of Grade 7 candidates with minimum pass of Grade 6 and above by **School Type and Subject** in the 2006 examinations.

Figure 4.2 Grade 7 passes by School type and Subjects in 2006



Source; Ministry of Education statistics (2008)

From Figure 4.2 above, it appears that the results have some relationship with the school type. The two types of Government schools which in most cases have reasonably adequate resources are performing very well followed by Urban Council schools which are equally well supported by their Authorities have the next good results. Rural District Council schools which have the poorest schools are the lowest performers in all the subjects, as the Rapid Assessment Survey (Chakanyuka, et al, 2009) observed the following situations were some of the causes of the poor performance in the examinations.

1. The rapid expansion of the education system, which overstretched the Ministry's resources and capacity to service the school system effectively.
2. The increase in pupil/teacher ratios, decreased pupil expenditure and the increase in the number of untrained teachers especially in the rural schools.
3. The low book to pupil ratio being experienced in most rural districts affected the pupil's performance in the examinations. Most of the poor performing schools did not have textbooks.
4. Rural schools have also the big challenge of high staff turnover which at times leave some pupils without qualified teachers for long periods.
5. Lack of supervision of the schools by the Education Officers (inspectors).

The survey concluded that the school results are very much influenced by the school type, with urban schools doing much better than rural schools. Rural schools were competitive only in African languages. The varied performances show that they are influenced by the unequal distribution of resources in the differently owned primary schools in the Provinces and therefore the Ministry needs to monitor and control the situations.

4.4 The Primary Schools Benchmark Resources 1995 -2007

When the SACMEQ I project was launched in 1995, the Ministry of Education had to avail to the SACMEQ researchers the benchmark resources that were expected at each primary school in the country. The systems assumed this document was in place and yet on getting to the ground very few schools had seen or even up to now few schools are aware of this Schools Resources Benchmark document. In consultation with the Ministry Officials the document outlined below was drawn in 1995 and its contents are the same since then. From field experiences in the schools in Masvingo Province, Heads of schools have not yet been issued with this document on the Ministry Benchmark Resource provisions. It would appear that no action has been taken by the Ministry since the recommendation to develop and circulate the document was made in the SACMEQ I report.

The Ministry' Benchmark standards are shown in Table 4.3;

Table 4 .3 - Zimbabwe (Grade 6) Primary Schools Benchmark Resources;

Benchmarks	Benchmark statements
Pupil/school ratio	Number of pupils should not exceed **1120** per school.
Pupil/class ratio	Number pupils should not exceed 40 per class.
Area/pupil ratio	Each pupil should have at least 1.50 m^2 of classroom space.
Pupil/teacher ratio	Number of pupils should not exceed 40 per teacher in each school.
Sitting place	Every pupil should have his/her own sitting place (bench to share or separate chair).
Writing place	Every pupil should have his/her own writing place (desk or table).
Chalkboard	Every classroom should have at least 1 chalkboard.
Text books	Every grade 6 pupil should have a text book each for English and Mathematics.
Teachers guides	Each subject must have its own teachers guides
Exercise book	Every Grade 6 pupil should have at least 4 exercise book(s).
Notebook	Every Grade 6 pupil should have at least 4 notebook(s).
Pencil	Every Grade 6 pupil should have at least 1 pencil(s).

Benchmarks	Benchmark statements
Ruler	Every Grade 6 pupil should have at least 1 ruler(s).
Eraser	Every Grade 6 pupil should have at least 1 eraser(s).
Ball-point pen	Every Grade 6 pupil should have at least 1 ball-point pen.
Teachers table	Every teacher must have **1 writing table**
Teachers chair	Every teacher must have **1 sitting table**
Teaching atlases	Each school must have at least **some atlases** for use during content lessons.
Dictionary	Each school must have **some dictionaries** for use by teachers and pupils during lessons.
Class library	Each child in a class must have at least **one library book** for use.
Geometrical instruments	Each class must at least have **one set of geometrical** instruments for use by both the teacher and the pupils.

Source;.SACMEQ (1995).

Table 4.3 above outlines the provisions that are pegged as benchmark standards and are accepted for use in the primary schools in Zimbabwe. The analysis of the school resources enables assessments to be made about the educational environment in relation to the minimal levels of provisions that the Ministry acknowledged as forming the essential preconditions for successful learning in the primary schools. The benchmarks were drawn up when the first SACMEQ project was launched in 1995, and they have been maintained as such to this date. The Ministry should print and make this benchmark list available to all schools and Responsible Authorities.

The school enrolment - sizes and class size

The benchmark for the maximum size of a school in Zimbabwe is a four stream entry School with 40 pupils per class for seven grades, making a total of 1,120 pupils in the biggest authorised schools. This decision was made on the assumption that any school that was bigger than this would be difficult to manage for a school Head. Usually large schools above this maximum size are found in cities like Bulawayo, Harare and in a few other large towns.

The ratio of enrolled pupils to teachers, a rough indicator of average class size is rigidly enforced in the Zimbabwean school system. The recommended class size for primary schools is 40 pupils per class per teacher. Standard classrooms are built from the same measurements supplied by the Ministry such that if the recommended class sizes of 40 pupils are maintained at all the schools then pupils would each have the recommended space area as stipulated in the Ministry's benchmark guideline of 1.5 square metres per pupil. However there are many old schools that have old substandard building that might need to be modernised or pulled down so as to construct new one. The Ministry needs to find funds to support the construction of new standard classrooms.

Conclusion

This chapter briefly outlined how the basic education system is funded in Zimbabwe. The Government owns about 8 percent of the primary schools while the rest, 92 percent of the schools belong to various authorities. The government of Zimbabwe has made primary education tuition free for all the rural primary schools but has allowed all the schools to charge levies for supporting structural development activities and for the purchase of teaching and learning materials. The grants paid by the government are inadequate to cover schools' requirements for meeting the teaching and learning benchmark resources. As a result of this situation the levels of resource provisions vary from school to school and from province to province and are largely dependent on the capacities of the Local Authorities. However all the schools should be guided on what provisions to buy and hence there is need for the Ministry to publish and circulate the benchmark provision list to all its schools and enforce that the conditions be met at all levels of system.

The section on the Zimbabwean Grade 7 examination reinforced the various research studies' that point out that without adequate resources no meaningful teaching and learning can take place. Most of the schools are not producing good results because of the poor teaching and learning conditions they have., The results showed that the **two urban** provinces (Harare and Bulawayo) which have more teaching and learning resources, and better qualified and experienced teachers were producing better results than the other eight rural province's schools with limited resources and less experienced teachers.

Chapter 5: THE RESEARCH FINDINGS/ANALYSIS ON THE PROVISIONS OF TEACHING AND LEARNING RESOURCES.

This chapter describes the teaching and learning provisions in Zimbabwe Grade 6 classrooms during 1995 and 2007 SACMEQ surveys. The data are in the form of descriptive information and tables showing the levels of teaching and learning provisions for both the teachers and pupils. The results of, SACMEQ III study in 2007 study are compared with those from SACMEQ I, 1995 study so as to assess changes in the Zimbabwean primary schools' provisions between the years. The chapter provides answers to the following research questions;

a) What is the percentage of the Grade 6 pupils who go to schools that meet the Ministry's benchmark provisions?
b) Have the provision of teaching and learning resources improved since SACMEQ I in 1995 and SACMEQ III in 2007?
c) What are the variations between provinces and within provinces in 2007 on teaching and learning resources?

The structure of the presentation was guided by assessing the level of access the pupils and the teachers had to learning facilities text books and stationery. The findings should enable the study to establish whether schools met the national benchmark standards in their efforts to provide quality education to the pupils.

5.1 Provision of basic classroom furniture for pupils

The benchmark for classroom furniture for pupils was one sitting and one writing place for each pupil. The Grade 6 pupils were asked 'on what do you sit / write in your classroom.' The questions sought to establish whether each pupil had a sitting and a writing place in the classroom. The results are shown in Table 5.1 next page.

Table 5.1 Percentages and sampling errors for pupils having sitting and writing places (SACMEQ I and SACMEQ III)

Region	SACMEQ I				SACMEQ III			
	% having sitting place		% having writing place		% having sitting place		% having writing place	
	%	SE	%	SE	%	SE	%	SE
Bulawayo	100.0	0.00	90.6	2.86	97.5	1.09	97.2	I.06
Harare	99.7	0.33	92.7	2.09	93.6	3.10	90.0	2.92
Mash Central	94.8	3.67	85.5	6.09	95.9	1.55	91.8	3.12
Mash East	97.9	0.81	88.5	4.66	**79.9**	6.89	**72.9**	8.45
Mash West	98.9	0.81	85.1	4.19	**85.3**	6.70	79.6	5.96
Midlands	98.4	0.57	87.2	3.29	97.9	0.87	95.9	1.54
Manicaland	97.9	0.95	88.3	2.96	**83.8**	7.35	81.8	5.29
Mat North	96.4	1.25	67.4	6.04	89.5	3.09	**81.8**	4.03
Mat South	88.9	6.05	65.8	6.63	84.9	4.63	**83.8**	3.79
Masvingo	99.7	0.30	81.4	3.35	93.7	1.78	90.9	2.06
ZIMBABWE	97.7	0.53	84.3	1.35	**90.0**	1.72	86.6	1.57

SOURCE: SACMEQ (2007)

The levels of provision for both the sitting and writing places were generally satisfactory in SACMEQ I (1995) with 97.7 percent of the Grade 6 pupils having one sitting place each, and 84.4 percent having one writing place each. In SACMEQ III (2007) the situation of sitting places in the country had signicantily decreased to 90.0 percent, while the writing places had slightly inceased to 86.6 percent .

To test whether an incresase or a decrease is significant or not, the samplimg errors of the two periods are used as follows:

For example, the Zimbabwe difference in sitting provisions for SACMEQ I & SACMEQ III is 97.7% -90.0% = 7.7. The 97.7 SE for SACMEQ I is 0.53 while for SACMEQ III is 1.72.

The SE of differences $= \sqrt{0.53^2 + 1.72^2} = 1.80$

Therefore 2(SE) is =3.6

If the absolute numbers 7.7 is greater than 2(SE) in this greater than 3.6 then the decrease (or increase) is significant.

All the ten provinces recorded decreases in sitting places from where they were in 1995. Midlands and Bulawayo provinces recorded the smallest decreases of 0.5 percent and 2.5 percent respectively while the largest decreases were recorded in Mashonalnd East with 18.6 percent and Mashonaland West with 13.6 percent . With 90 percent as national percentage of pupils having sitting places in 2007, five provinces Masvingo, Midlands , Manicaland, Harare and Bulawayo had sitting places between 90 percent and the national benchmark of 100 percent. In other words none of the ten provinces had the Ministrys benchmark of one sitting place for each pupil.

As for the writing places, six provinces experienced increases while four had decreases between SACMEQ I and SACMEQ III. Taking into consideration the sizes of the sampling errors, significant increases of were recorded in Bulawayo, Midlands, Matebeleland North and South Provinces. Mashonaland East had a significant and highest decrease of 16 percent while the other provinces had decreases that were not significant. Harare the capital province experienced a drop of 2.7 percent. It is very important to mention that the decreases in furniture provision did not necessarily mean that furniture were removed/stolen or vandalised at the schools. The drop in the supplies could have been caused by the increase in enrolments when most schools were witnessing the rise in enrolments without necessarily providing the additional furniture for the pupils. In cases of newly built schools, may be the furniture had not been supplied by the time of the survey. However the two urban provinces -Harare and Bulawayo had better provisions of both sitting and writing spaces. Rural provinces except Midlands had lower levels of sitting and writing facilities. The most worrying Province was Mashonaland East that had the least provisions for both sitting and writing spaces.

The Ministry should enforce the meeting of benchmark standards of provisions by all the Responsible Authorities and schools to make sure that efforts towards meeting quality education are being made. The Provincial Offices should identify all the schools lacking furniture and advise the Responsible Authorities and the National Office for consideration when allocating funds to the schools. All the schools Heads should ensure that all the pupils in their schools are provided with both the sitting and writing spaces on a one to one situation at all learning levels. Otherwise, the decline in the country's ecnomic performance between 2000 and 2007 could have contributed to drop in the provision of these resources in the schools.

5.2 Provision of basic textbooks and reading materials for the pupils

The benchmark requirement is that each pupil should have one text book for each subject and at least one library book per child at each school.

5.2.1 Provision of English and Mathematics textbooks

The capacity to read well is not only an essential life skill but it also represents a gateway to further learning in all other subjects. The Grade 6 pupils were asked whether (a) they used a reading textbook by themselves, (b) they shared a reading textbook with one other pupil, (c) they shared a reading textbook with two or more pupils, or (d) no pupils had a reading textbook. Table 5.2 below shows the percentage of the pupils who had Reading and Mathematics textbooks for use by themselves.

Table 5.2 Percentages and sampling errors for pupils having own reading and mathematics textbooks (SACMEQ I and SACMEQ III).

Provinces	SACMEQ I		SACMEQ III			
	Own Reading textbook		Own Reading/ textbook		Own Mathematics textbook	
	%	SE	%	SE	%	SE
Bulawayo	28.0	12.61	**18.3**	7.65	16.2	7.62
Harare	34.6	9.45	**19.2**	6.60	19.8	8.27
Mash Central	13.9	3.69	14.6	4.18	10.8	3.97
Mash East	34.6	9.12	**21.1**	6.31	8.4	2.84
Mash West	17.9	4.99	9.0	4.16	10.6	3.97
Midlands	15.4	5.13	15.5	5.68	16.2	6.22
Manicaland	17.7	5.51	11.4	2.86	7.9	2.29
Mat North	12.9	2.68	9.1	3.42	6.0	1.65
Mat South	11.7	3.67	17.8	7.56	16.9	9.06
Masvingo	17.3	5.23	13.1	4.35	10.4	4.00
ZIMBABWE	20.4	2.12	14.8	1.66	12.1	1.67

SOURCE: SACMEQ (2007)

From the results in Table 5.2, it was evident that during SACMEQ I only 20.4 percent of the Grade 6 pupils had their own English readers or text books. In the SACMEQ III project, the level of textbooks provision in the nation had dropped to 14.8 percent. This was statistically significant taking into consideration the size of the sampling errors. Harare and Mashonaland East provinces that had the highest percentages during SACMEQ I also went down to 19.2 percent and 21.1 percent respectively.

Only two provinces, Mashonaland Central and Matabeleland South had some improvements in the supply of the English readers or text books during SACMEQ III however these changes were not statistically significant. The national low average of 14.8 percent of the text books is a very worrying one as the country is very far away from meeting its own benchmark of each pupil per text book.

The provision of Mathematics text books showed that the national average position was only 12.1 percent. This meant that 87.9 percent of the pupils did not have the Mathematics text books or they shared them with other pupils or with their teachers. Harare province had the highest provision with 19.8 percent followed by Matabeleland South with 16.9 percent. The problem was most acute in Mashonaland East, Mashonaland Central, and Matabeleland North that had average provisions of 8.4 percent 7.9 percent and 6.0 percent respectively.

In Zimbabwe the shortage of textbooks in schools was a common problem and the results in Table 5.2 above show that there was little variation in the provisions of English textbooks among provinces. The shortage of the readers was highlighted in SACMEQ I but in SACMEQ III the problem had got worse with the national average going down to 14.8 from 20.4 percent. Mathematics textbooks came into SACMEQ III Project on a national low average of 12.1 percent.

There is need for everyone concerned with education services to strive towards the provision of basic subject textbooks such as for Mathematics on a one to one basis for every child as stated in the national benchmark guidelines for primary schools. However findings from both SACMEQ I and SACMEQ III indicate that almost half of the Grade 6 pupils shared textbooks for both Reading and Mathematics with two or more pupils. The same finding is shown on textbook information in Annex I. This finding might need the Policy makers to review the benchmark policy of one pupil per text book as it is not very feasible as has been shown during the twelve years between the two SACMEQ studies. As the writing of this report was progressing, all the Zimbabwe primary schools were receiving Mathematics and Reading text books on one pupil per textbook basis from UNICEF (see Annex 3 report). Therefore the dream of having each child with a textbook for each subject was being realised through UNICEF and its mobilisation of the International Donor support.

5.2.2 Provision of Classroom library books

Schools in Zimbabwe are allocated per capita grants by the Government based on the enrolment of the pupils for purchasing textbooks and stationery. Heads of schools plan and utilize the funds as situations at their schools would demand in a given year. Non-government schools are further allocated funds by their Responsible Authorities for purchasing more provisions. Big schools have good library facilities that can support their entire library needs, while small schools may choose to have individual small class libraries. The school Heads and their finance committees are responsible for the equitable allocation of the classroom library books to the individual class teachers.

One of the best predictors of reading ability and comprehension is the number of books that pupils have read. Studies of reading literacy (Elley, 1992) involving 32 systems of education, showed that high levels of reading literacy were associated with the availability of classroom libraries from which pupils could borrow books. In both SACMEQ I and SACMEQ III the Grade 6 teachers were asked about the availability of classroom library or book corner and the arrangement for allowing pupils to borrow books from these libraries. The teachers were asked to indicate the number of books in the classroom library. If there was no classroom library the teacher was directed to write zero.

Table 5.3 Means and sampling errors of class library books per pupil (SACMEQ I and SACMEQ III)

Provinces	Class library books per pupil			
	SACMEQ I		SACMEQ III	
	Mean	SE	Mean	SE
Bulawayo	0.6	0.21	0.6	0.23
Harare	0.6	0.24	0.8	0.39
Mash Central	0.4	0.17	0.2	0.14
Mash East	0.7	0.34	0.7	0.30
Mash West	0.1	0.07	**0.5**	0.27
Midlands	1.5	0.85	**0.3**	0.15
Manicaland	0.4	0.17	0.4	0.11
Mat North	0.1	0.10	**1.3**	0.62
Mat South	1.2	0.92	**0.6**	0.33
Masvingo	1.1	0.51	1.9	0.85
ZIMBABWE	0.7	0.16	0.7	0.13

SOURCE: SACMEQ (2007).

In Table 5.3, the numbers of classroom library books per pupil have been shown. Three provinces, Midlands, Matabeleland South and Masvingo had at least one library book per pupil during SACMEQ I in their schools. The national mean remained the same at 0.7 for both SACMEQ I and in SACMEQ III. The supplies of the library books increased in four provinces, remained the same in three and decreased in the last three provinces. A significant increase was made in Matabeleland North that rose from 0.1 in 1995 to 1.3 in 2007, and Masvingo that rose from 1.2 to 1.9. A big drop

was recorded in Midlands that had 1.5 under SACMEQ I and got down to a mean of 0.3 in SACMEQ III. There is need for the Ministry Officials to sensitize all the Responsible Authorities on the need to provide abundant reading materials to all the schools. The two urban provinces, Bulawayo and Harare had stable library book supplies with mean averages of 0.6 and 0.8 respectively.

5.3 Provision of basic classroom facilities for the teacher

The schools benchmark list has that each classroom should have a chalkboard, a teacher's table and a teacher's chair.

5.3.1 Provision of a chalkboard.

The grade 6 teachers were asked to indicate if they had chalk boards, tables and chairs for use in their classrooms. Tables **5.4, 5.5 and 5.6** show the findings.

Table 5.4 Percentages and sampling errors of Grade 6 pupils in classrooms with chalk board (SACMEQ I and SACMEQ III)

Provinces	**Chalk board**			
	SACMEQ I		**SACMEQ III**	
	%	SE	%	SE
Bulawayo	100.0	0.00	**82.9**	7.44
Harare	93.1	3.89	**80.5**	7.75
Mash Central	84.9	9.07	86.0	7.05
Mash East	89.7	7.38	93.9	6.22
Mash West	78.0	10.61	83.4	9.80
Midlands	100.0	0.00	**78.8**	9.66
Manicaland	93.3	5.21	**49.8**	13.31
Mat North	100.0	0.00	**82.0**	12.10
Mat South	100.0	0.00	**79.5**	11.64
Masvingo	95.0	5.00	87.5	12.47
ZIMBABWE	93.0	1.92	**77.8**	3.51

SOURCE: SACMEQ (2007)

Under SACMEQ I, 93.0 percent of the Grade 6 pupils were learning in classrooms with chalkboards. The situation had decreased to 77.8 percent during SACMEQ III. This meant that 22.2 percent of the pupils were learning in classrooms where the teachers were not having a chalkboards or where lessons were taught outside the normal classrooms or in most cases under some shade shelter. Manicaland had the

most worrying situation with a drop from 93.3 percent in 1995 down to 49.8 percent in 2007, and this was followed by Midlands with 21.2 percent point drop and Matabeleland South that had a drop of 20.5 percent from 100 percent in 1995. These situations are statistically significant and are very worrying and hence they needed the necessary national support and attention.

5.3.2 Provision of a teacher's table

Table 5.5 Percentages and sampling errors of Grade 6 in classrooms with Teacher Table (SACMEQ I and SACMEQ III)

Provinces	Teacher chair			
	SACMEQ I		SACMEQ III	
	%	SE	%	SE
Bulawayo	100.0	0.00	**79.6**	7.71
Harare	94.6	3.25	**78.2**	7.87
Mash Central	67.1	11.58	**86.1**	8.32
Mash East	81.3	10.04	85.5	8.40
Mash West	78.0	10.61	**67.2**	13.25
Midlands	74.7	9.06	65.3	11.66
Manicaland	83.2	8.21	**49.8**	13.31
Mat North	50.0	19.52	61.2	14.95
Mat South	90.0	7.24	79.5	11.64
Masvingo	81.3	8.23	69.3	14.16
ZIMBABWE	*80.1*	*3.16*	*70.1*	*3.94*

SOURCE: SACMEQ (2007)

Table 5.5 shows that 80.1 percent of the Zimbabwe Grade 6 pupils were learning in classroom where teachers had a table each during SACMEQ I and this position had dropped to 70.1 percent in 2007. Seven provinces recorded decreases in the provision of the teacher's tables during this period. These data imply that in 2007, 29.9 percent of the Grade 6 pupils were in classrooms without teachers tables. Manicaland had a significant decrease from 83.2 percent to 69.8 percent (33.4), a situation which could have been caused by the sudden mushrooming of new schools and increasing enrolments in urban schools from 2000 up to 2007. Bulawayo also had a significant drop of 20.0 percent point and this was significant. The other six provinces had

decreases that ranged between 10 and 20 percent. This situation needs to be looked into seriously as no teacher can operate effectively without some table to use during his teaching operations in the classroom.

5.3.3 Provision of a teacher's chair

Table 5.6 Percentages and sampling errors of Teacher Chair (SACMEQ I and SACMEQ III)

	Teacher Chair			
Province	**SACMEQ I**		**SACMEQ III**	
	%	SE	%	SE
Bulawayo	100.0	0.00	**74.9**	8.45
Harare	94.6	3.25	78.7	7.84
Mash Central	63.3	11.43	**82.0**	9.25
Mash East	83.0	9.43	77.5	9.89
Mash West	72.5	10.55	**53.8**	13.96
Midlands	78.9	9.12	69.4	10.69
Manicaland	78.2	9.14	**49.8**	13.31
Mat North	43.7	18.09	61.2	14.95
Mat South	79.0	9.76	79.5	11.64
Masvingo	92.8	5.26	**66.6**	14.26
ZIMBABWE	79.8	3.09	67.8	3.97

SOURCE: SACMEQ (2007)

Table 5.6 shows that during SACMEQ I, 79.8 percent of the Grade 6 pupils were in classroom without teachers chairs and that position had dropped to 67.8 percent during SACMEQ III. Manicaland had the largest and most significant decrease of 28.4 percent and was followed by Masvingo with 26.2 percent and Bulawayo with 25.1 percent decrease. Four other provinces had marginal decreases while the remaining three provinces had some increases that ranged between 10 and 19 percent. These data show that no province was meeting the benchmark standard of one chair per teacher per class. There is need for each teacher to be provided with a chair for his/her personal use during lesson planning and marking of pupils' exercise books.

5.4 Provision of basic writing supplies for the pupils

The Ministry benchmark resource list states that each Grade 6 pupil should have four exercise books for the four main subjects, four exercise books for writing notes, a ball point pen, a pencil, a ruler and a pencil eraser.

Children learn most effectively when there is an adequate supply of learning resources in the classroom. Where resources are in short supply, or where children share among themselves, learning becomes difficult. It was therefore important to make an assessment of the levels of provision of basic classroom learning materials such as exercise books, notebooks, erasers, pens, and rulers. The Grade 6 pupils were asked to indicate whether they each had four exercise books for the four main subjects, four exercise books for writing notes, a ball point pen, a pencil, a ruler and a pencil eraser.

The percentages of pupil in 1995 and 2007 not possessing a selected set of the above classroom materials have been presented in tables **5.7 and 5.8** below;

Table 5.7 Percentages and sampling errors for **shortages** of basic classroom materials: Those who **DO NOT HAVE** Exercise books, notebook, and/or pencil. (SACMEQ I and SACMEQ III)

Provinces	**SACMEQ I**						**SACMEQ III**					
	Exercise books		**Notebook**		**Pencil**		**Exercise books**		**Notebook**		**Pencil**	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Bulawayo	3.4	1.77	18.0	7.72	8.1	2.57	**15.7**	3.18	23.3	3.79	16.3	3.13
Harare	2.7	1.59	20.4	7.53	9.6	2.74	**18.7**	5.53	31.3	6.50	17.1	5.18
Mash Central	7.0	4.86	32.7	9.40	44.2	11.43	9.6	3.43	20.5	5.03	**14.3**	4.17
Mash East	0.8	0.58	37.3	6.64	19.9	4.95	**39.8**	15.17	52.3	11.65	**49.6**	12.24
Mash West	3.1	1.96	49.4	6.82	30.6	8.20	**25.9**	9.82	36.4	9.45	30.0	8.91
Midlands	2.2	0.84	52.9	6.26	36.0	7.30	14.1	4.14	**19.5**	4.53	**12.6**	3.51
Manicaland	15.6	8.04	48.4	9.58	27.8	9.54	10.1	4.01	**23.2**	6.14	20.5	4.31
Mat North	7.5	3.44	48.2	9.72	28.1	5.28	**32.5**	10.46	62.0	7.95	45.5	9.02
Mat South	1.5	0.69	37.4	6.97	19.53	4.70	**20.8**	8.16	37.4	8.60	29.5	8.40
Masvingo	2.3	1.17	38.1	5.48	22.58	5.65	6.5	2.59	**25.6**	5.40	17.6	5.27
ZIMBABWE	4.9	1.33	40.4	2.54	25.68	2.40	17.4	2.24	30.6	2.36	23.4	2.16

SOURCE: SACMEQ (2007)

Table 5.7 above shows the levels of shortages of basic classroom materials among the Grade 6 pupils by provinces during SACMEQ I in 1995 and SACMEQ III in 2007. An exercise book is defined as a book for writing that is marked by the teacher. Each pupil is/was expected to have a set of four exercise books for the four subjects being taught. Nationally, 4.9 percent of the Grade 6 pupils did not have writing exercise books during SACMEQ I, and this average had risen to 17.4 percent during SACMEQ III. Manicaland had the worst situation of 15.6 percent of its pupils without the exercise books in 1995. Nine provinces, except Manicaland experienced reduction in the provision of the exercise books in 2007. Mashonaland East, Matabeleland North and Mashonaland West recorded some high shortages of 39.8 percent, 32.5 percent and 25.9 percent respectively by 2007.

A notebook is defined as an exercise book for writing notes that are not marked by the teacher. Each pupil is expected to have a set of four exercise books for making notes for the four main subjects' areas of English, Mathematics, Shona/ Ndebele and General paper. On average, 40.4 percent of the Grade 6 pupils in Zimbabwe did not have the notebooks during SACMEQ I and this figure had dropped down to 30.6 percent in 2007. The provision of the notebooks was poor in all the provinces. This situation needs improvement as it is very necessary for each pupil to have the required set of notebooks for writing notes for each subject.

Each Grade 6 pupil needed a pencil for making drawings and sketches during lessons. SACMEQ I showed that 25.7 percent of the Grade 6 pupils did not have pencils while this figure had dropped down to 23.4percent in 2007. Mashonaland Central had the highest shortages of 44.18 percent during SACMEQ I in 1995 while Mashonaland East had 49.59 percent of its pupils without pencils in 2007.

Table 5.8 Percentages and sampling errors for **shortages** of basic classroom materials: Those who **DO NOT HAVE** eraser, pen, and/or ruler. (SACMEQ I and SACMEQ III)

Provinces	SACMEQ I						SACMEQ III					
	Eraser		Pen		Ruler		Eraser		Pen		Ruler	
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE
Bulawayo	47.2	3.98	3.7	1.22	21.0	5.80	28.6	3.87	**18.6**	4.01	25.4	5.60
Harare	43.0	3.97	5.4	3.18	14.6	3.44	32.3	6.52	**17.2**	5.46	17.6	5.04
Mash Central	64.3	7.32	23.6	10.46	46.0	9.08	**37.6**	8.05	13.2	3.67	**19.4**	3.86
Mash East	51.1	8.07	4.4	2.54	38.0	6.35	71.7	8.67	**45.**3	13.24	54.5	11.83
Mash West	65.9	6.00	12.8	6.71	44.9	7.50	49.6	9.16	**27.5**	9.60	33.7	9.48
Midlands	74.9	3.67	17.8	7.98	44.6	7.37	**35.0**	6.32	11.8	3.58	**19.3**	3.58
Manicaland	62.1	6.08	23.6	9.33	39.5	7.47	40.6	6.71	15.7	3.92	28.6	4.70
Mat North	63.9	11.05	7.6	2.66	42.0	9.11	69.7	7.17	**34.6**	10.26	56.8	8.95
Mat South	51.7	7.29	5.8	2.30	33.8	5.44	44.8	8.81	28.4	8.37	32.0	8.67
Masvingo	58.8	6.74	5.1	1.23	40.9	6.29	34.2	6.35	12.1	3.02	24.2	5.58
ZIMBABWE	59.6	2.10	11.9	2.13	37.7	2.33	42.7	2.44	20.5	2.13	29.2	2.16

SOURCE: SACMEQ (2007)

Table 5.8 shows that 59.6 percent of the Grade 6 pupils in Zimbabwe did not have erasers during SACMEQ I and this position had dropped to 42.7 percent during SACMEQ III showing an improvement in the provision. Eight provinces had increases in the provions of the eraser in SACMEQ III. Perhaps the schools had realized the importance the erasers for use by the pupils. Two provinces, Mashonaland East and Matabeleland North experienced further slight improvement in 2007 to 71.7 percent and 69.7 percent respectively.

Of the Grade 6 pupils in 1995, 11.9 percent did not have writing pens for use during lessons and this situation had deteriorated to 20.5 percent in 2007. Seven provinces had more pupils failing to have writing pens in 2007 than in 1995. Maybe this deterioration was caused by the parent's failure to get the basic materials due to the country's economic hardships that were tightening on everybody.

The percentage of pupils without rulers for use was 37.7 percent during SACMEQ I and had increased to 29.16 percent during SACMEQ III. Six provinces experienced some reduction in the number of pupils without rulers while four provinces had more pupils failing to access them. All the School Heads should be made aware of the need to ensure that the basic writing provision are bought and availed for use by all the pupils in the school.

5.5 Provision of basic teaching aids for the teacher

The Grade 6 teachers were asked to indicate whether they had access to the use of Geographical maps, English and Mathematics teaching aids in the school, Table 5.9 gives the findings to these situations.

Table 5.9 Percentages and sampling errors of Grade 6 pupils taught teachers with access to teaching aids in the school (SACMEQ III)

	Teaching aids									
	For teaching Reading						**For teaching Mathematics**			
Provinces	**Map**		**English dictionary**		**Teacher's guide**		**Geometrical instruments**		**Teacher's guide**	
	%	SE	%	SE	%	SE	%	SE	%	SE
Bulawayo	66.6	9.12	62.9	9.41	66.3	8.27	14.7	6.69	69.9	8.36
Harare	69.2	8.37	64.9	7.72	68.7	8.72	18.4	9.05	69.5	8.82
Mash Central	51.7	13.68	40.9	9.66	55.9	13.26	2.5	2.51	51.4	14.98
Mash East	60.4	16.01	42.9	15.34	75.6	11.40	0.3	0.33	52.8	12.05
Mash West	53.8	13.60	49.6	13.61	35.6	12.56	9.1	5.18	41.5	13.20
Midlands	57.7	11.49	56.9	11.13	57.8	10.71	8.3	4.67	53.3	10.13
Manicaland	23.5	9.24	29.5	13.11	30.8	9.60	2.4	2.40	37.1	13.30
Mat North	61.2	14.95	50.0	15.26	91.0	9.05	2.9	2.92	88.1	9.41
Mat South	61.9	12.40	60.4	14.59	45.3	14.33	15.0	10.80	50.8	14.58
Masvingo	43.4	12.49	61.7	13.00	47.1	13.23	0.0	0.00	55.7	13.59
Zimbabwe	51.3	3.84	50.1	3.95	54.0	3.79	6.5	1.61	53.9	4.02

SOURCE: SACMEQ (2007)

Table 5.9 above shows that during SACMEQ III only 51.3 percent of the Grade 6 pupils were taught by teacher with access to school a map within their schools. Two urban provinces Bulawayo and Harare had the highest supplies with 66.6 percent and 69.25 percent respectively. Two provinces Manicaland and Masvingo had the lowest supply of the maps with 23.5 percent and 43.4 percent respectively. This situation meant that in Zimbabwe, 48.1 percent of the Grade 6 pupils were taught by teachers who did not have access to maps in the school.

The provision of school dictionaries stood at 50.1 percent. Once again the two urban provinces Bulawayo and Harare topped the list with 62.9 percent and 64.9 percent respectively. Masvingo and Matabeleland South followed with satisfactory provisions of 61.7 percent and 60.4 percent each. Mashonaland Central had the lowest level with 29.5 percent. Dictionaries are very essential for the development and more understanding of the language by the teacher and young learners. The education officials need to check that all schools provide this useful book for all the teachers and the learners at all the schools.

The data showed that only 54.0 percent of the Grade 6 pupils were taught by teachers who did not have teachers' guides. Surprisingly Matabeleland North had 91 percent of its schools that had English Teachers guides, and was followed by Mashonaland East that had 75.6 percent. Six other provinces were above 50 percent level and only two provinces were below these were Mashonaland Central with 30.8 percent and Mashonaland West had 35.6 percent.

The provision of Mathematical instruments was not taken seriously by the school authorities. The national average was only 6.5 percent. Only three provinces Bulawayo, Harare and Matabeleland South had schools with some Mathematical instruments for use by the teachers. The lack of these Mathematical instruments deprives the teachers the need to demonstrate the construction of chalk board drawings using the correct tools.

On average, 53.9 percent of the Grade 6 pupils were taught by teachers who did not have or could not access Mathematics teachers' guides. Matabeleland North had the highest provincial percentage of 88.1 percent and was followed by the two urban provinces of Harare and Bulawayo with 69.5 percent and 69.9 percent respectively. Five provinces were in the 50 percent range, and only two provinces Mashonaland West and Manicaland were below 50 percent. This situation was satisfactory but needed the support and attention of the School Inspectors.

5.5 Issue of equity in allocation of resources among and within Provinces

The provision of equal opportunities for children to learn is an issue of concern for most Government in Developing countries. There is no equal provisions and distribution of teaching and learning resources among all the schools. If schools had the same levels of teaching and learning resources then parents would not become worried about which school to send their children to. Schools in Zimbabwe are largely

left to decide the materials they can afford for their schools and hence wide variations in the supply of the materials.

From what has been observed on the material provision by type and by provinces, in Tables 5.1 up to Table 5.9, the results have shown that the general levels of the inputs with a few exceptions were mostly inadequate in almost all the provinces. The tables show that there are wide variations among and within provinces.

5.6 1 **Variation among schools within Provinces**

The values presented as variations among schools within provinces are percentages of the size of Standard Deviations (SD) for the provinces out of the total for Zimbabwe when aggregated at the school level. If the SD in one province is the same as that for Zimbabwe, the value would be 100. If it is smaller the value would be smaller than 100, if it is larger the value would be larger than 100. For example, in Bulawayo the value was 31.6 which indicate that there was not much variation between schools within the Bulawayo Province. However in Mashonaland East with an SD of 132.4 it means that there were wide variations among the schools in the province. More details are shown in Table 5.9 below.

5.6.2 **Variation among provinces**

Table 5.9 shows material resource distribution to schools as assessed by variation among schools within provinces and variation among provinces

Table 5.9 **Variations among schools within Provinces** - SACMEQ III.

Material Resources	BUL	HAR	MAC	MAE	MAW	MID	MNC	MTN	MTS	MVO	Variation among Provinces
Sitting places	31.6	93.3	37.9	132.4	155.2	26.1	135	96.8	100.4	68.6	4.7
Writing places	25.2	72.4	57.6	137.1	124.6	32.3	126.4	153.2	71.3	56.9	8.2
Reading textbook	164.7	100.7	73.8	84.8	88.4	121.2	68.3	70.6	118.9	86	0
Mathematics textbook	162.1	126.5	72.7	68	79.4	129.6	56.9	57.8	137	60.2	0
Class library book/pupil	15.3	18.5	3.3	296.5	9.8	10.6	8.3	28.7	17.7	82.7	0
Chalk board	84.8	78.4	87.5	71.7	101.4	106.2	144.4	100.9	92.2	74.1	7.6
Tr table	75.3	69.9	90	85.7	117.6	108.9	123.6	119.9	79	101	1.8
Tr chair	82,0	69.1	93.1	98.2	114.1	99.5	122.9	119.2	78.5	104.4	0.2
Ex- books	51,0	85.5	42.6	163.2	113.6	64.3	61.9	146.8	104.3	77.6	3.8
Notebook	56.1	87.7	52.1	130.7	110	64.8	88.8	102.6	111.1	92.9	17
Pencil	50.1	80.5	57.9	146.8	103.5	49.6	67.7	127	114.4	98.6	12
Eraser	55.3	87.3	64.8	114.4	96.9	94	99.9	86.9	107.6	97.9	17.2
Pen	66.6	85.9	42	155.7	113.9	49.7	62.8	140.3	113.2	83.1	5.4
Ruler	90.8	74.8	60.2	130.3	99.8	52.3	74.6	112.8	110.6	94.2	16
Map	80.9	78.6	105.6	109	105.3	105.2	88.9	110.2	86.8	100.2	4.5
English Dictionary	85.1	66.0	92.6	114.3	108.7	98.7	93.9	117.1	100.6	97.4	3.8
Tr's guide - Reading	76.9	80.1	106.9	101.6	109.4	100.3	94.4	59	109	105.3	9.9
Geometrical instruments	120	132.2	35.4	110.6	125	72	65.1	114.3	136.6	0	0
Tr's guide - Mathematics	77.1	75.4	105.4	107.6	109.3	95.6	103.1	79.6	106.1	101	7.1

SOURCE: SACMEQ (2007)

Table 5.9 shows the resources distributions among schools and within provinces. The values represent the intra class correlation coefficient at the school level data. For example the value of 4.7 for sitting place is a percentage of the total variation explained by the differences among the provinces and the (100 -4.7%), 95.3 percent as the variation within provinces. The items that showed the largest variations among

provinces were the eraser with 17.2 followed by notebook 17.0 and ruler 16.0 this means that some 83 to 84 percent of the variations were explained by the differences within the provinces.

In Bulawayo province there are schools that have such wide variations in the provision of Reading text-books to a level of 164.7 and Mathematics to a level of 162.1 while provinces such as Manicaland and Matabeleland have levels in these materials in the range of 60 to 70 levels. High figures show that they are wide disparities while low figures are indicating that schools are on the same levels of the materials provision. These situations show that there are wide disparities in the provision of both Reading and Mathematics textbooks in both Bulawayo and Manicaland provinces.. Harare province also had high supplies of the two text books in some of its schools as it had provisions of over 100 points in the two textbook areas.

Generally the two urban provinces have high level of provisions on nearly all the materials while disparities are very significant among the rural provinces**.** The two urban provinces have parents who are at least able to make some meaningful contributions to their schools through the payments of school levies. These levies are used by school Heads to purchase the necessary teaching and learning materials. This situation is different at most rural schools where most parents are not able to pay the needed levies for the schools developmental needs. As a result of this inability to pay the rural schools are having the least supplies of the teaching and learning materials. Limited or no materials situations lead to below minimum level performances in the study tests.

The wide variations between the provisions among the provinces range from 82 percent to 98 percent on various materials. The variations should help the Ministry needs to establish reasonable levels of material inputs to schools and also to ensure a more equitable distribution of the items in the schools distribution index among provinces. Using the data given in Table 5.9 the Government should be able to put measures in place to address the differences or variations in resources allocations or distributions among provinces.

Policy Suggestion- the Ministry should undertake an immediate review of the inequitable allocation of school resources across provinces and should give particular attention to the needs of schools in the Rural Provinces, in particular, Mashonaland East and Matabeleland South. The Provincial Directors of Matabeleland South and Mashonaland East should identify schools in their Provinces that lack most resources and advice Head Office for consideration when resources are distributed.

Conclusion

The chapter has shown that provinces have different levels of resources provisions. The two urban provinces, Bulawayo and Harare have been found to have better resources than the other eight provinces which are largely rural. Schools in the rural areas often have limited funding and hence the required resources are rarely provided

for the teachers and the pupils. What can the Ministry do to address the disparities in the resource provisions between the provinces? In view of these disparities in the provision of the resources between provinces, the next chapter looks at how the pupil's performances in the SACMEQ Reading and Mathematics tests may have been affected or influenced by the levels of the resources provisions.

Chapter 6 REASEARCH FINDINGS ON RELATIONSHIPS BETWEEN RESOURCE PROVISIONS AND PUPILS ACHIEVEMENTS

Chapter five looked at the materials provisions in the ten provinces with a view to establish whether they were equitably distributed among the provinces and among schools within the provinces. The current chapter analyses the performance of the Zimbabwe's ten provinces in both the SACMEQ III Reading and Mathematics tests. The Provincial achievements are also compared with those of the SACMEQ III countries. Relations between the material and the provincial achievements are drawn between the Zimbabwe provinces using the SACMEQ III data. Therefore this chapter answers the following research questions;

a) Have Zimbabwe schools' achievements improved from SACMEQ I (1995) to SACMEQ III in 2007?
b) How did the Zimbabwean Grade 6 pupils perform in Reading and Mathematics when compared to the other SACMEQ Ministries in 2007?
c) Is there any relationship between the pupils' achievement outcomes on Reading and Mathematics in the SACMEQ tests and the provision of these basic teaching and learning resources?

6.1 The performance of the Zimbabwe Provinces in the SACMEQ III Reading and Mathematics tests.

The Reading items used during SACMEQ I and SACMEQ II (for both the Pupil test and Teacher test) were the basis for (i) item calibration; (ii) test equating, (iii) and standardization of scores at 500 as the mean and 100 as the standard deviation. SACMEQ I scores were therefore established based on these processes. Since a subset of SACMEQ II items were used in the SACMEQ III study for both tests, the already calibrated scale was used for scoring. Therefore it was possible to make direct comparisons between times. The Zimbabwe mean for the pupil's reading test for SACMEQ I which was 504.7 had slightly improved to **507.7** during SACMEQ III but this performance was below the SACMEQ III mean of **511.8**. The Zimbabwean mean for Mathematics SACMEQ III was **519.8** and was above the SACMEQ III Mathematics mean of **509.5**. However this means that Zimbabwe's achievements were above the SACMEQ countries' mean of 500 in both the Reading and Mathematics achievements, but below the SACMEQ III mean for Reading and above the SACMEQ III MEAN for Mathematics.

Table 6.1 Means and sampling errors for the Reading and Mathematics test scores of pupils- (SACMEQ I and SACMEQ III) by Provinces - **Pupil performance on all items.**

	SACMEQ I 1995		SACMEQ III 2007			
	Reading		Reading		Mathematics	
Province	Mean	SE	Mean	SE	Mean	SE
Bulawayo (u)	549.6	6.6	589.5	13.3	577.2	13.0
Harare (u)	559.2	13.5	599.3	11.2	585.4	10.7
Mash Central	501.1	9.9	481.0	7.7	500.0	6.1
Mash East	492.3	9.6	464.5	8.4	486.1	5.7
Mash West	508.0	12.1	497.2	22.9	510.5	19.0
Midlands	500.4	9.2	533.1	22.8	551.0	21.2
Manicaland	498.0	8.7	466.7	15.2	488.3	11.7
Mat North	466.5	7.2	476.9	12.2	486.7	12.5
Mat South	484.2	8.1	464.1	21.0	474.5	16.7
Masvingo	502.8	11.4	516.3	15.8	531.7	16.3
Zimbabwe	504.7	3.6	507.7	5.7	519.8	5.0

SOURCE: SACMEQ (2007)

Three provinces, Bulawayo, Harare and Mashonaland West were above the national mean average of 504.7 during SACMEQ I in 1995. This national mean rose to 507.7 during SACMEQ III in 2007 and this was not statistically significant regardless of the decrease in school resources. The following four provinces Bulawayo, Harare, Midlands and Masvingo achieved mean averages above the national mean level. Bulawayo's mean increased from 549.6 to 589.5 while Harare increased from 559.2 to 599.3 Midlands rose from a level below the national performance of SACMEQ I to a pleasing level of 533.1 in SACMEQ III. Masvingo Province's mean rose from 202.8 to 516.3. The general situation shows that there was a general improvement in the Reading SACMEQ III competences in the Zimbabwe schools from the level they were during SACMEQ I. However, Matabeleland South and Mashonaland East had the lowest SACMEQ III reading levels of 464.1 each. The data show that there are wide variations between the high achieving (urban) provinces (599.3 and 464.1) and the lowest (rural) provinces.

As for Mathematics scores, the national average stood at 519.8 and four provinces, Bulawayo, Harare, Midlands and Masvingo were above this mean. Six provinces were below this national mean with Matabeleland South having the lowest mean of 474.5. From the data on provisions for the teaching of Mathematics, Matabeleland South had the lowest supplies of Mathematics text books, Mathematics teachers guide and use of Geometrical instruments. This shows that this province's poor performance was result of the low provisions of the required teaching and learning provisions. Harare and

Bulawayo provinces had the highest supplies of teaching and learning materials for Mathematics and rightly obtained the best national scores in the subject. In other words these situations are supporting the need for schools to have the required teaching and learning materials for the pupils to benefit positively during their schooling experiences. Where pupils had limited resources, the results show that these pupils performed below the level of those who had more resources. These results show that where there are limited or no resources obviously pupils are bound to have low academic achievements. They also showed that there is a strong correlation between the level of provisions and the pupil's achievements in both the SACMEQ Reading and Mathematics tests.

6.2 The performance of the Zimbabwean Provinces compared with the SACMEQ Ministries in the Reading and Mathematics tests.

In Table 6.2 Reading and sampling errors in 2007 for the ten provinces of Zimbabwe as well as those for national Ministries of SACMEQ countries have been presented in descending order of mean scores.

Table 6.2 Means and sampling errors for the **Reading** test scores of pupils for SACMEQ countries and Zimbabwe Provinces (SACMEQ III

Zimbabwe Provinces	SACMEQ III Mean Scores	SE	Countries
1. Harare	**599.3**	11.18	
2. Bulawayo	**589.5**	13.33	
3.	**577.8**	3.40	Tanzania
4.	**575.1**	3.10	Seychelles
5.	**573.5**	4.92	Mauritius
6.	**549.4**	2.98	Swaziland
7.	**543.1**	4.92	Kenya
8.	**534.6**	4.57	Botswana
9.	**533.9**	3.11	Zanzibar
10. Midlands	**533.1**	22.85	
11. Masvingo	**516.3**	15.76	
12.	**511.8**	3.69	**SACMEQ III**
13.	**507.7**	5.66	**Zimbabwe**
14. Mashonaland West	**497.2**	22.89	
15.	**496.9**	2.99	Namibia
16.	**494.9**	4.55	South Africa
17. Mashonaland Central	**481.0**	7.74	
18.	**478.7**	3.46	Uganda
19. Matabeleland North	**476.9**	12.17	
20.	**476.0**	2.82	Mozambique
21.	**467.9**	2.86	Lesotho
22. Manicaland	**466.7**	15.17	
23. Mashonaland East	**464.5**	8.41	
24. Matabeleland South	**464.1**	2095	
25.	**434.4**	3.34	Zambia
26.	**433.5**	2.63	Malawi

SOURCE: SACMEQ (2007)

The Zimbabwe's mean score for SACMEQ III Reading was 507.7 while the SACMEQ III Ministries mean was 511.8. This means that the Zimbabwean mean was below the SACMEQ III average score. Zimbabwe occupied the eighth performance position among the fifteen participating Ministries. Two of Zimbabwe provinces, **Harare and Bulawayo** had mean performances that were above the means of the fifteen SACMEQ Ministries in the Reading tests. The SACMEQ III best nation, Tanzania had a mean Reading score of 577.8 while Harare Province had 599.3 and Bulawayo had 589.5. Tanzania is followed by six nations of Seychelles, Mauritius, Swaziland, Kenya, Botswana, and Zanzibar which were above the SACMEQ III mean of 511.8. Midlands and Masvingo had mean scores of 533.1 and 516.3 respectively while Zimbabwe's mean was 507.7. Therefore four of Zimbabwe's provinces were above its national SACMEQ III mean of 507.7.

Mashonaland West's performance was above the national performance of Namibia and South Africa, Mashonaland Central's performance was above that of Uganda while Matabeleland North performed above Mozambique and Lesotho. Manicaland, Mashonaland East and Matabeleland South had performances above Zambia and Malawi.

Zimbabwe's overall performance is satisfactory as evidenced by its provincial performances compared with those of the fourteen SACMEQ countries. Four of the provinces are above the SACMEQ average performance of 511.8 and are within the performance range of the best seven SACMEQ countries, while the remaining six provinces are performing at the same level as the other seven SACMEQ countries in the bottom level. There is room for Zimbabwe to improve on this performance if its economic situation can become stable and would enable the Government to give more financial support to its schools and the education system.

In Table 6.3 Mathematics and sampling errors in 2007 for the ten provinces of Zimbabwe as well as those for national Ministries of SACMEQ countries have been presented in descending order of mean scores.

Table 6.3 Means and sampling errors for the pupils' **Mathematics** test scores for SACMEQ III countries and Zimbabwe Provinces

Zimbabwe Provinces	SACMEQ III Mean Scores	SE	Countries
1.	**623.3**	5,83	Mauritius
2. Harare	**585.4**	10.75	
3. Bulawayo	**577.2**	12.96	
4.	**557.0**	3.98	Kenya
5.	**552.7**	3.51	Tanzania
6. Midlands	**551.0**	21.15	
7.	**550.7**	2.45	Seychelles
8.	**540.8**	2.39	Swaziland
9. Masvingo	**531.7**	16.28	
10.	**520.5**	3.51	Botswana
11.	**519.8**	5.00	**Zimbabwe**
12. Mashonaland West	**510.5**	18.96	
13.	**509.5**	3.23	**SACMEQ**
14. Mashonaland Central	**500.0**	6.10	
15.	**494.8**	3.81	South Africa
16. Manicaland	**488.3**	11.68	
17. Matabeleland North	**486.7**	12.52	
18.	**486.2**	2.35	Zanzibar
19. Mashonaland East	**486.1**	5.67	
20.	**483.8**	2.29	Mozambique
21.	**481.9**	2.92	Uganda
22.	**476.9**	2.61	Lesotho
23. Matabeleland South	**474.5**	16.71	
24.	**471.0**	2.51	Namibia
25.	**447.0**	2.89	Malawi
26.	**435.2**	2.45	Zambia

SOURCE: SACMEQ (2007)

In Table 6.3, Mathematics and sampling errors in 2007 for the ten provinces of Zimbabwe as well as those for national Ministries of SACMEQ countries have been presented in descending order of mean scores. The Zimbabwe's mean score for SACMEQ III Mathematics score was 519.7 while the SACMEQ III Ministries mean was 509.5. This means that Zimbabwe's mean was above the SACMEQ III mean score. Zimbabwe occupied the sixth performance position among the fifteen participating Ministries. Four Provinces, two urban and two rural performed above the Zimbabwe mean score of 519.7 and the SACMEQ III mean score of 509.7. The two Zimbabwean (urban) provinces, **Harare and Bulawayo** were just below the best performing nation, Mauritius that had a mean average of 623.3 and were above the second and third best performing nations, Kenya and Tanzania.

Midlands (rural province) was above the performances of Seychelles and Swaziland, while Masvingo (also rural) was above the performance of Botswana. The remaining six provinces performed below the SACMEQ III mean. Mashonaland West and Mashonaland Central were above the performance of South Africa. Matabeleland

North and Manicaland were above Zanzibar. Mashonaland East was better than the mean averages of Mozambique, Uganda and Lesotho. Matabeleland South was better than Namibia, Malawi and Zambia.

These data show that there were wide variations in performance between urban and rural provinces, ranging from Harare with 585.4 to Matabeleland South with the lowest mean score of 474.5. The four better performing provinces among them, the two urban provinces had better teaching and learning provisions than the last six provinces. The differences in performances are undoubtedly caused the levels of resources provisions among the provinces and within the schools. The question to ask now is, which teaching and learning materials had some influence on the pupil's performance in the in both the Reading and Mathematics skills – in the SACMEQ III project?

6.3 Teaching and learning materials and their relationship with the pupils achievements in the SACMEQ tests.

Provinces got different scores in Reading and Mathematics achievements as already shown by the results in Table 6.1. The question arises, as to why some provinces performed better than others. General observations are that schools in prime areas of development especially in urban areas where pupils are likely to come from homes where parents care about their children's education, ensure that the pupils are well fed, try to help them with their learning as soon as can be possible, show interest in their children's school work and assist school through regular payment of development levies are likely to make better achievements in school work. This situation is evident in the two urban provinces of Bulawayo and Harare which had better provisions than the other eight rural provinces. The pupils in the two urban provinces did better than their counterparts in the rural provinces. There is no doubt that pupils in most rural schools do not get adequate resources and support from their parents and consequently their learning is not as good as that of pupils in urban areas.

It is put forward that school that have high achievements are well equipped, the schools that have ample space, places to sit and write for every pupil in the classroom, text books for every pupil and plenty of reading library books, ball point pens, pencils and supportive learning materials for all the pupils achieve better results, (Fuller, 1965 and Ross & Posthlewaite 1992). There is also no doubt that in most cases pupils who are doing well have good teachers, but this study took the professional qualifications of the teachers in Zimbabwe as a controlled variable since 86 percent of the primary school teachers were suitably trained and qualified, (Ministry of Education 2007) Therefore from that argument most schools are assumed to have allocated the Grade 6 classes to qualified and trained teachers. The 2009 Rapid Assessment survey showed that Harare and Bulawayo provinces had however well qualified and experienced teachers unlike in the rural provinces that experienced high teacher turn over as these teachers were always seeking for chances to transfer to better schools especially into the urban communities. The focus of this study was on the provision of the basic teaching and learning resources and how they are likely to be related to the pupil's

performance in the SACMEQ project. So far it has been established that pupils who had better resources performed better than those who had limited or no resources.

Table 6.4 below shows how the pupil's performed in the reading skills in relationship to the availability of the classroom resources.

Table 6.4 Reading mean scores of pupils that had /did not have the resource materials.

Teaching /learning resources	Mean score for YES (Having)	Percentage % - YES	Mean score for Not having	Percentage for No- Resources
Sitting Place	516.4	90.0	428.6	10.0
Writing Place	515.7	86.6	454.3	13.4
Text book- Reading	518.9	80.7	463.5	19.3
Text book Mathematics	515.6	76.2	475.9	13.8
Teachers table	508.8	70.1	507.2	29.9
Teachers chair	511.2	67.8	500.6	32.2
Teacher chalkboard	507.5	76.9	508.2	13.1
Access to maps	512.1	51.3	502.6	48.7
English dictionary	512.5	50.1	502.6	49.9
Teachers guide -English	513.9	53.9	500.4	46.1
Teachers guide -Maths	511.7	53.9	503.1	46.1
Tr- Geom -instruments.	546.9	65.0	504.9	35.0
Class library book/p ratio	506.3	48.6	509.1	51.4
Zimbabwe SACMEQ III	**507.7**	-	-	-

SOURCE: SACMEQ (2007)

Table 6.4 above, shows the performance of the pupils who had the resources and those who did not have. It is interesting to note that except for having teacher's tables and class libraries, the rest of the pupils who had the resources had mean scores above the Zimbabwe mean of 507.7. None of the pupils who did not have the resources performed above this national mean. Pupils whose teachers had access to the use of Geometrical instruments (65 percent) had the highest mean score of 546.9 while the 35 percent whose teachers did not have access to the instruments had a mean score of 504.9. Pupils who had use of own or at least sharing reading textbooks (80.7 percent) had a mean score of 518.9 while the 19.7 that did not have the readers at all had a mean of 463.5. On availability of own sitting place, 90 percent of the pupils had own sitting places and their mean score was 516.4 and 10 percent of the pupils who did not have some sitting place or else they were sitting on the floor had a mean score of 428.6. The provision of class libraries although very necessary for the reading lessons showed that the pupils who did not have library books performed better than those who had with mean scores of 509.1 and 506.3 respectively.

As for the textbooks the situation, the percentage of 80.7 for having one was accepted as long as the pupils had some books for own use or were sharing with other pupils. The situation for those not having a textbook (19.3 percent) was where the pupils did not have one at all or where only the teacher had a text book.

These data show that there is some strong relationship between the provision of the teaching and learning materials and the performance of the pupils in the Reading tests. Pupils with the provisions performed better than those without. In other words these achievements in reading test are related to the provision of the teaching and learning resources.

Since Zimbabwe had not taken part in the SACMEQ II project in 2000, on re-joining the study in 2007 the country obtained the Mathematics mean score of 519.8 while the SACMEQ III score was 507.7. The table below shows how the pupil's performed in the Mathematics tests and how their performances are related to the availability of the benchmark classroom resources.

Table 6.5 Mathematics means scores for pupils who had /did not have the materials

Teaching /learning resources	Mean score for YES (having)	Percentage % - YES	Mean score for No Resources	Percentage score for No Resources
Sitting Place	527.5	90.2	449.7	9.8
Writing Place	526.7	86.6	475.1	13.4
Text book- Reading	528.5	80.6	482.5	19.4
Text book Mathematics	525.3	77.1	501.8	22.9
Teachers table	519.3	69.9	526.3	30.1
Teachers chair	520.6	67.8	518.7	32.2
Teacher chalkboard	518.7	77.8	521.3	22.2
Access to maps	519.7	51.3	520.2	48.7
English dictionary	512.7	50.2	502.7	49.8
Teachers guide English	520.8	53.9	518.9	46.1
Teachers guide Maths	519.9	53.9	519.9	46.1
Tr- Geom -instruments.	519.9	68.2	518.2	31.8
library –book/pupil ratio	519.4	48.5	521.4	51.5
Zimbabwe **SACMEQ**	**519.8**	-	-	-

SOURCE: SACMEQ (2007)

Table 6.5 shows the performance of the pupils who had the resources and those who did not the resources in the Mathematics test. Generally, the pupils who had the resources performed better than those who did not have. For example 90.2 percent of the pupils who had own siting places had a mean score of 527.5 and the 9.8 percent without the sitting places had a performance of 449.7. Pupils with Reading text books (80.6 percent) had the highest mean score of 528.5, while the 19.4 percent who did not have the reading text books had a score of 482.5 For the Mathematics text books, 77.1 percent of the pupils having the textbooks had a score of 525.3 while 22.7 percent without the textbooks had a score of 501.8. However in some cases the performances of those who had the resources is not very different from those who did not have. For example on teachers' table, 69.9 percent of pupils in classrooms whose teachers had the tables had a score of 519. 3 while 30.1 percent whose teachers had no tables had a mean score of 526. 3. This shows that maybe the teachers' table may not have much relationship with the pupils learning achievements. Pupils who had some library books had a mean score of 519.4 while those without had a higher score of 521.4.

50.2 percent of the pupils whose teachers had access to a dictionary had a score of 512 .7, while 49.8 percent whose teachers did not have the tables had a mean score of 502.7. Pupils whose teachers had access to geometrical instruments had a mean of 519.9, while those whose teachers did not have access to the instruments had a score of 518.2. In some of these cases the performances of the pupils who had the resources and those who did not have are almost the same. These data show that maybe the provision of some resources such as the teachers table, English dictionary, Mathematics teachers guide, teacher's geometrical instruments, and library books may have little influence on pupil's achievements tests although they are very essential in the classroom. The rest of the provisions showed that they had some close relationship with the achievements as pupils that had the resources had better scores than those without.

Pupils whose provinces had high levels of the basic resources performed better in both the Reading and Mathematics tests. Harare and Bulawayo provinces that had the highest levels of resources in almost all the areas did not only perform above the other eight provinces but performed above all the SACMEQ countries in the SACMEQ III Reading. They also came second and third after Mauritius the best performing nation in the Mathematics skills. There also seem to be a similar trend between the provision of the resources and the performance of the pupils in the SACMEQ tests and in the Grade 7 National examinations (Discussed in Chapter 4), that Provinces that had more resources are equally performing better in the two evaluation assessments. There are strong relationships between schools having more resources that are linked towards meeting the norms of the benchmark provisions and increasing achievements in Reading and Mathematics tests. Schools and communities need to work towards meeting the resource provisions as specified in the benchmark standard list.

The Ministry's benchmark list provides the essential items for each classroom and the required numbers of items can be identified, hence the unit costs can be established and therefore the total amount of money can also be calculated to establish the budget. Where insufficient money exists, the ministry should consider giving the provisions to those schools with the most need first.

However the Ministry need to shoulder its full responsibility and consider increasing more financial support to these poor schools than giving them equal amounts as are given to the better and developed urban schools. Free basic education for all may be more pronounced through more Government contributions to the poor local Authorities' schools.

In terms of the Reading and Mathematics achievements, Zimbabwe's achievements were below the expected levels. The national mean score of **507.7** for the SACMEQ III Reading tests and mean score of **519.7** for the Mathematics tests can easily be raised if the schools get the necessary teaching and learning resources. Efforts should be made to engage the Donor communities to assist in the provision of text books to all the schools. The primary school curriculum may also need to be revisited in an

effort to improve the syllabuses in line with the world's modern developmental trends and changes in the dynamic and ever changing society. Most of the national syllabi had not been revised since the past decade or so.

Conclusion

The chapter has shown how the Zimbabwean provinces performed in both the Reading and the Mathematics test in SACMEQ III. The levels of performance varied according to the levels of materials provided. Provinces that had more resources had better achievements than those that had limited resources. In other words, there is some correlation between resource provisions and pupils' achievements in the SACMEQ tests. Pupils in provinces that had higher proportions of resources had better performance scores, while also those with low resource levels had lower performances scores. All the resources listed on the benchmark table have some positive influence on the pupils' achievements in both the Reading and Mathematics tests. The performance of the individual provinces were also compared with those of the fourteen SACMEQ countries and found to be more or less on the same level with the SACMEQ Ministries. Provinces with more resources performed on the same level with the best SACMEQ Ministries while those with limited resources were also on the same level with the lowest performing SACMEQ Ministries.

The conclusions and recommendations of the study are made in the next chater.

Chapter 7 CONCLUSIONS AND RECOMENDATIONS

The purpose of the study was to establish the availability of the basic classroom resources and assess whether they had some relationship with the pupil's achievements in the SACMEQ III Reading and Mathematics tests.

The literature review enabled the researcher to gain a more informed insight into the problem under study. The review promoted a basis from which the data were analysed and interpreted. The objectives of the study were compared with the findings and conclusions were drawn on how much and in which manner the goals of the study could have been achieved.

7.1 Summary and recommendations

In summary, it is commendable that Zimbabwe made an impressive progress since its independence in increasing the enrolments in schools so that the requirements of 'Education for All' could more or less be achieved. But some of the conditions in the schools outside the big cities of Harare and Bulawayo leave much to be desired that is, if the children enrolled are to learn and not just listed on the register as attending school.

The results of this study indicate that there are problems in the provision of teaching and learning resources in the primary schools system. There are schools without the basic benchmark standard amenities, equipment and supplies. There are instances of pupils not having their own text books, exercise books and ball point pens to write with. There are schools without the necessary chalkboards, chairs and teachers guides in their classrooms. In other words the resources at most schools did not meet the Ministry's set benchmark standards. The resources are also not equitably distributed among and within the Provinces. In this respect, the pupils' achievements were rightly found to vary in relationships to the materials provided across the provinces. Provinces with more resources had higher achievement scores than those with fewer resources.

In terms of Reading and Mathematics achievements, Zimbabwe's achievements were slightly above the SACMEQ II mean set levels of 500. The national mean scores of **509.7** for the Reading tests was below the SACMEQ III mean score of **511.8** and for the Mathematics tests mean score of **519.8** was above the SACMEQ III score of **509.5** The Zimbabwe can easily improve its Reading and Mathematics performance if the schools can get the necessary teaching and learning resources. There are strong relationships between having high levels of resources or schools meeting the norms of the benchmark provisions and increasing achievements in both the Reading and Mathematics tests. Where there are limited or no resources the pupils had low academic achievements. This showed that there is a strong correlation between the level of provisions and the pupil's achievements in both the SACMEQ Reading and Mathematics competences. Both the urban and even two of the rural provinces that had high levels of the basic resources performed better in the SACMEQ project and

also in the National assessment tests. Harare and Bulawayo provinces that had the highest percentages of resources in almost all the areas did not only perform above the other eight provinces but performed above all the SACMEQ countries in Reading and also came second and third after Mauritius in the Mathematics skills. This result is clearly indicating that the rural Provinces can also perform much better if they can get the necessary teaching and learning resources. Funding modalities for providing resources to these poorer schools should be found. If obtained, the resources need to be distributed equitably to both the rural and to some poorer urban schools.

In terms of inputs, it is clear that the appropriate authorities should now take action and strive to provide sufficient numbers of;

- Sitting and writing places in each classroom
- Text books for Reading and Mathematics for each pupil
- Teachers' Guides for both Reading and Mathematics for teachers
- Exercise books, note books and other necessary writing materials and,
- Adequate writing and sitting facilities for teachers in each classroom.

As for the inputs, the Ministry's benchmark list provides the essential items for each classroom and hence the required numbers of items can be identified. The unit costs can be established and therefore the total amount of money for drawing up a budget can also be calculated. For example the results have shown that 90.0 percent of the Grade 6 pupils had own sitting places that means 10.0 percent did not have sitting places. A unit cost of each sitting place, a bench or a chair can be calculated and multiplied by the total number of pupils (10.0 percent) who did not have the sitting places. All the resources with shortfalls to the benchmark standards can be worked out, priced and included on the annual schools budgeting plans for implementation.

It has also been established that the eight largely rural Provinces are less well off in the provision of the resources than the two urban Provinces of Harare and Bulawayo. It known that Schools belonging to the Rural Councils are least provided for and are in need of more support. In this case it means that all the Rural Council - Responsible Authorities need to make some conceited efforts to improve the overall levels of the resource provisions of all the benchmark items that have short falls in their schools.

In order to support the provision of the basic materials into the education system, it is therefore recommended that where there were major variations in the provision of resources among Provinces, the Ministry should take the necessary responsibility to correct the situation at the National level. And, where there were variations among schools in a Province, the Provincials Directorate should work with the local Authorities' and School Development Committees to try and correct the varied learning situations in the individual schools.

7.2 Recommendations

The Ministry should therefore seriously consider implementing the following recommendations in an effort to improve equity in the provision of the teaching and learning resources and quality in the learning in all its schools.

1. The Ministry's Quality Assurance Division should sensitive all Primary school Heads on what SACMEQ project is all about. School Heads whose schools provided data for SACMEQ III data did not know what SACMEQ was all about.
2. The Ministry's Policy, Planning, Research and Development Division should review and publish benchmark standards that are deemed to be reasonable for the proper functioning of all the primary schools in the country. Each school should be given a copy of the benchmark standards. It appears most Schools had not been given this report after the recommendation from SACMEQ I. Therefore the Provincial School Inspectors should monitor and report on progress made by individual schools in providing the recommended basic Benchmark resources.

3. The Provincial Education Officer; Planning and the District School Inspectors should carry out audits of all the schools and identify schools without the basic teaching materials and classrooms furniture with a view to redressing the situation. Priority lists of schools in greatest need should be drawn in all the provinces. The Provincial Planning sections should be tasked to collect, compile the data and distribute the data for use at national level.

4. The Ministry should give priority in resource allocation to the rural Provinces in terms of the teaching and learning resources for both the teachers and pupils. The Donor Community and the Ministry Officials should work together in the distribution of the resources to the most deserving schools. The Finance and Administration Section and the Human Resources Sections should be responsible for implementing this recommendation.

5. The Ministry should launch a campaign to encourage schools to have library books for use by all the pupils. This may be in the form of special library books provisions to all the schools that do not have them or set up cluster library centres to serve clusters of schools in the rural Provinces. School Heads, School Development Committees and all the Responsible Authorities should be sensitised to take this recommendation seriously. The Education Service Section (Curriculum Development unit) and the District Education Officers should be responsible.

As the writing of this report was progressing, it was very pleasing to learn that all the primary schools in Zimbabwe were receiving basic text books for the four main primary school subjects from a UNICEF Textbook Project on a one textbook per pupil

ratio. A highly commendable effort had been made by UNICEF (Harare) and the Ministry of Education to mobilise funds through the Education Transition Fund (ETF) to the tune of US$50 million donor programme for the purpose of improving the quality of Education in Zimbabwe Primary schools. (see - Annex 3). The project is set to have delivered the text books to all the schools by the end of 2011. Similar effort efforts should be made to mobilise funds for the provision and improvement of the basic classroom furniture and the general schooling conditions in all the primary schools. This is a good example of good collaboration between the Ministry and the donor community hopefully by the Ministry after considering some of the recommendations made after the SACMEQ I Report of 1995.

7.3 What could have been done better as part of this research?

It is noted with concern that this report is now written three years after the data were collected in 2007. Efforts should have been made to compile, publish and circulate the report at least within two years from 2007. Schools could have made better use of the report as they are preparing pupils' learning for the next SACMEQ IV project.

What further research could be done?

Now that all the Primary schools in Zimbabwe have been given Text books and stationery from the donor community, (Annex 3) it would be very interesting to find out how the schools will perform in the next SACMEQ IV project. The new results will be interesting if they will show that the performance will have improved due to the improvement in the provision of the classroom teaching and learning resources.

If the text books provision would then be taken as a controlled factor, teacher qualities, teacher management support and family background could be interesting to research on.

Other researchers should look in the relationship between teacher's qualifications, experiences and pupils achievements in relationship to distributed resources. The research should attempt to establish the areas where teachers would need to be staff developed in. Parents' educational backgrounds and economic status of the families may also be assessed in relationship to the pupils' achievements.

The report showed that urban provinces had more resources than the rural ones. Further studies could also be done to establish the resources variations and their relationships with pupil's performances among schools by Responsible Authorities and within schools in Provinces

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Annex 1: The Provinces of Zimbabwe as at 2007

www.maps of world.com. (Dec 2010)

The Zimbabwe Political and Educational Provinces and their Cities are as follows;

Provinces	**Provincial Cities**
1. Bulawayo	Bulawayo
2. Harare	Harare
3. Manicaland	Mutare
4. Mashonaland Central	Bindura
5. Mashonaland East	Marondera
6. Mashonaland West	Chinhoyi
7. Masvingo	Masvingo
8. Matabeleland North	Lupane
9. Matabeleland South	Gwanda
10.Midlands	Gweru

Bulawayo and Harare are the two urban provinces; the other 8 are largely rural.

Annex 2: Primary schools Enrolment totals by Provinces in 2010

Province	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Special Class	Total
Bulawayo	15487	15123	15167	14999	14241	14522	13666	1821	105026
Harare	37061	36879	36978	36437	34106	33194	31452	2262	248369
Man -land	84944	61372	59242	56251	54016	53036	48899	2432	420192
Mash Cent	48920	40592	37889	34670	32945	31554	27355	2064	255989
Mash East	50856	44072	42737	38805	38410	38611	36666	1042	291199
Mash West	62821	51640	49127	44488	43800	42653	38507	2885	335921
Masvingo	80257	56304	51719	48221	46349	46495	42169	5062	376576
Mat North	36040	27913	27206	25488	24800	23741	20968	1853	188009
Mat South	26447	23281	23583	22123	21084	21499	19750	1632	159399
Midlands	68169	58108	53280	49339	47393	47487	41098	1788	366662
Grand Total	**511002**	**415284**	**396928**	**370821**	**357144**	**352792**	**320530**	**22841**	**2747321**

Source; Ministry of Education Statistics March(2010).

The table shows the drop out of pupils between classes by provinces. The actual percentages were not calculated but the 2010 enrolments are used to show the drop out trends in the education system.

The Primary education system covers years 6 – 12 and is a seven year programme. There is automatic promotion from one grade to another. The primary completion rates have been decreasing from 72.1% in 2000 to 68.2% in 2006 and further down to 59% in 2008. The decreases could have been attributed to the economic hardships the country was experiencing.

The national transition rate from grade seven to form one has been ranging between 67% and 72 % from 1995 up to 2009.

The 2010 Zimbabwe Primary school enrolments are just used to give a broad picture of how school children drop out between grades. The statistics are meant to express the concern that without **free and compulsory primary** education many children drop out of schools and remain out of school at the tender ages of between 6 and 14 years. If the global EFA goal of having all children in schools by 2015 is to be achieved, then Zimbabwe should take stein measures to trace and bring back to school all the children who fall by the way side at least up to the end of primary education.

The situation in Zimbabwe schools as assessed by the Rapid Assessment Survey in 2009

Textbooks

The survey noted that; from 2003 the number of text books in the primary schools started to decrease significantly.

In 2009 the only text books that had recorded some increase were those for Mathematics which were very low in 2003.

English and Ndebele/Shona text books were decreasing quite drastically.

Adequate of Textbooks in per cent in Sample Rural Primary Schools 2009

Text books	Range of Ratios				
	1.1-1:2	1:3 – 1:4	1:5 – 1:8	1:9 and above	No textbooks
English	26.0	14.0	18.9	31.4	9.7
Ndebele/ Shona	19.9	11.8	11.6	41.2	15.4
Mathematics	22.2	15.6	17.5	37.0	7.7

Source: Ministry of Education Rapid Assessment Survey; 2009.

From the above table only 26% of the rural schools had adequate text books for English 19.9% for Local Languages and 22.2% for Mathematics in the ratio of 1.1 and 1:2. This means that almost 80% of the rural school needed more text books.

Availability of textbooks in the schools in the sample differed markedly according to whether schools were rural or urban. The table above shows the text book situation in urban primary schools

In the urban primary schools which had adequate textbook with ratios of between 1.0 and 1.2 were 40.6% for English, 42.9% for Local Languages and 37.3% for Mathematics. These percentages are higher than those for rural schools, which averaged at about 20%.

In its conclusion the Rapid Assessment Survey (2009)made the following observations;

- the differences between the privileged schools and the deprived schools have widened considerably exacerbated by the ability of the rich to pay for better qualified and more experienced teachers, more and better teaching and learning materials.
- The children of less affluent parents often could not afford to supplement their teachers' pay substantially, (during 2007 to 2010) were getting less quality education.
- Recommended the Ministry to establish and maintain reasonable levels of professional and academic standards at all the schools.

Annex 3: New lease of life for Zimbabwe's Primary school children

STAFF WRITER - Apr 08 2011 15:34

Thirteen year old Sarah Motsi (not her real name) is writing her Grade 7 examinations this year and has high hopes of passing. She wants to become a doctor when she finishes school. A few months ago Sarah would not have harboured these ambitions at all as shortages of textbooks and stationery made it difficult to study at home and learn in class. "Our teacher had the only textbook in our class and this made learning very hard for us," recalled Sarah." I remember in Grade 5 I failed my end of year examinations because I couldn't write fast enough. Each time I was finishing off the first part of the exam, the teacher was already erasing it. I failed because I wasn't able to write fast enough not because I didn't know the answers to the questions.

I wanted to quit, I thought school was very hard." But for Sarah, the new lease of life given to the education sector through the Education Transition Fund (ETF) programme, has revived her desire to use education to better her life. Under the ETF programme, the Ministry of Education, Sport, Arts and Culture, in partnership with the United Nations Children's Fund, has overseen the production and distribution of more than 13 million textbooks and stationery to all primary schools in Zimbabwe allowing children like Sarah to realise their full potential.For the past six years of their primary education Sarah and her classmates have experienced the collapse of Zimbabwe's education sector first-hand. They had no idea until a few months ago what it meant to own and read from their own textbook. With a weakened economy and political challenges Zimbabwe's education took a huge blow. Challenges in school funding meant that many schools had no funds to buy textbooks and learning materials decreasing the quality of education in most schools. For Sarah this had meant sharing one textbook with as many as 15 others or having the teacher read for them from the only textbook in the class. In fact, 20% of all primary schools did not have a single textbook in English, Mathematics, Shona and Ndebele.

The ETF is a $50 million multi-donor programme which pools resources with the singular purpose of improving the quality of Zimbabwe's education through the provision of learning materials including textbooks, supplies, capacity development to School Development Committees (SDCs) and technical assistance to the Ministry of Education Sport Arts and Culture. The financial support comes from the governments of Australia, Denmark, Finland, Germany, Japan, Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States and the European Commission.

The ETF is managed by Unicef. "The ETF is arguably the most effective joint venture between the Government and the Donor Community since the Global Political Agreement was established," said Education, Sport, Arts and Culture Minister David Coltart "In a remarkably short space of time, we have distributed 13 million textbooks to primary schools and before the end of 2011, we will deliver another batch to

secondary schools. This has been achieved through an exceptionally good working relationship of the Ministry of Education, Sport, Arts and Culture, Unicef and the donor community." By April 2011, every Zimbabwean primary school child will have a complete set of core textbooks.

Since the distribution of the textbooks began last year at least 13 252 000 books have been dispatched to 5 667 primary schools in the country. A further 2 million books is being distribution in April, bringing the total to 15 million textbooks and ensuring all children have access. ETF has already begun bridging the pupil/textbook ratio from 15:1 to 1:1 in all primary schools across Zimbabwe, benefiting more than 2,8 million pupils.

"As Ministry of Education, Sport, Arts and Culture we are very pleased with the difference that these resources have made to Zimbabwe's education sector," said Stephen Mahere, Permanent Secretary in the Ministry. Unicef Country Representative Peter Salama believes the ETF is a good foundation for the recovery of Zimbabwe's educations sector. "Over the past decade and against great odds, Zimbabwean communities managed to keep their children in school and maintained high national enrolment, despite a declining economy, rising unemployment, an orphan crisis and an under-resourced education sector," said Dr. Salama. "The ETF is the first large scale, external support to the education sector in the last decade and it has managed to provide much needed learning resources to every Primary School in the country. With these much needed resources I think Zimbabwe's education sector is on the road to recovery. Over the years we have witnessed a decline in Grade 7 pass rates from 53% in 1999 to 39% in 2009 and we know that almost 50% of primary students are not going on to secondary school.

Within the next months the ETF is expected to move into its second phase with the distribution of textbooks to Zimbabwe's secondary schools and continue to support the strategic priorities of the Ministry of Education, Sport and Culture. These priorities include Water and Sanitation in schools, "Second Chance" opportunities for children out of school, review of the curriculum and school grants to ensure access of Orphans and Vulnerable Children as well as children with special needs to school.

Extracted from the Zimbabwean Herald on April 8 2011.