The development of a school self-evaluation framework for classroom quality in Zimbabwean primary schools

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By

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List of Acronyms

'A' Level	Advanced Level
AIDS	Acquired Immune Deficiency Syndrome
BEAM	Basic Education Assistance Module
CAQDAS	Computer Aided Qualitative Data Analysis
CD	Compact Disc
CDU	Curriculum Development Unit
DEO	District Education Officer
ECD	Early Childhood Development
ECEC	Early Childhood Education and Care
GDP	Gross Domestic Product
HIV	Human Immune Deficiency Virus
IEA	International Association for the Evaluation of Educational Achievement
MDC	Movement for Democratic Change
MDG	Millennium Development Goals
MoESAC	Ministry of Education, Sport, Arts and Culture
MoESC	Ministry of Education, Sports and Culture
NGO	Non-Governmental Organisation
'O' Level	Ordinary Level
OECD	Organisation for Economic Co-operation and Development
OFSTED	Office for Standards in Education
PED	Provincial Education Director
PIRLS	Progress in International Reading Literacy Survey
PISA	Programme of International Student Assessment
SACMEQ	Southern African Consortium for Monitoring Educational Quality
SDA	School Development Association
SDC	School Development Committee
SSE	School Self-Evaluation
TVET	Technical Vocational Education and Training
TIC	Teacher-in-Charge

TIMSS	Trends in International Mathematics and Science Study
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children‘s Fund
USA	United States of America
ZANU	Zimbabwe African National Union
ZAPU	Zimbabwe African Peoples’ Union
ZEBO	Self-Evaluation in Primary Education
ZIMSEC	Zimbabwe Schools Examinations Council
ZJC	Zimbabwe Junior Certificate

List of Appendices

***Note: Owing to their size, Appendices 9-24 are located on the CD in an envelope at the back of this Thesis.**

Declaration of Originality

I, Elizabeth Garira, hereby declare that this PhD thesis titled *The development of a school self-evaluation framework for classroom quality in Zimbabwean primary schools* is my original work. It is being submitted for the degree of Doctor of Philosophy in the University of Pretoria, South Africa. It has not been submitted before for any degree or examination at this or any other University. Where other people's work has been consulted, this has been indicated and properly acknowledged by means of complete references in accordance with Departmental requirements.

Signature: .....

Elizabeth Garira

Date: .....

Dedication

Firstly, I dedicate this thesis to the following late people: my mother, mother-in-law, brothers, and my sister's daughter, Muneni. Secondly, I dedicate this thesis to the following: Concillia, S. Honye, Tongoona Masvokisi, Mollin Muradza, Simon Garira, Liliosa Garira (nee Manzvera) and Gideon Masvokisi who passed away during the course of this study. You are all deeply missed. This thesis is also dedicated to my father and most importantly, to God Almighty for strengthening and protecting me during the course of the study.

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I am thankful to God, my heavenly Father, through Jesus Christ, for giving me strength, wisdom, patience and courage to carry on even when I felt exhausted and thought that this was beyond my reach. Through His Grace, I later realised that 'I can do all things through Christ who strengthens me' (Philippians, 4 verse 13).

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Summary

There are growing concerns about quality of education in schools in many countries, and education systems implement mechanisms like school inspection, an external education quality assurance measure, to evaluate their education. Realising that effective improvement of education quality may be achieved from within rather than from outside, many education systems are adopting School Self-Evaluation (SSE), an internal evaluation process, to evaluate quality of education.

This study attempted to identify the characteristics of effective SSE frameworks in order to develop one for Zimbabwean primary schools. The study utilised exemplary frameworks as facilitators for introducing SSE practices in Zimbabwe and was guided by the following question: *What are the characteristics of an effective SSE framework for improving classroom quality in Zimbabwean primary schools?*

The study espoused design research approach which aims to provide solutions to various education problems. The study comprised three phases, the preliminary phase which included a literature review and a needs analysis with the former aimed to gain insight into the efficacy of SSE in evaluating quality of education. The needs analysis sought to establish how education is evaluated in Zimbabwean primary schools. The second, the prototyping phase, involved developing and formatively evaluating various prototypes. The last phase, a semi-summative evaluation, involved field-testing and appraisal of the intervention. Interviews and questionnaires were used to collect data. Six design principles were generated with the main ones being to engage stakeholders in developing SSE frameworks, to agree on the need for SSE initiative and to define the quality indicators in context. The main characteristics of the SSE framework were that it should have a clear purpose, be context specific, and should focus on what is essential for education. The main conclusion of the study is that there are no clear policy guidelines for Zimbabwean primary schools, coupled with lack of SSE instruments, to engage in self-evaluation of quality of education and therefore, no meaningful SSE takes place. An SSE framework with procedural guidelines developed in this research appears to be relevant, feasible and is expected to be effective for use in Zimbabwean primary schools. Some recommendations were made in order to improve Zimbabwe's quality of education.

Key words: *design principle, design research, framework, needs analysis, preliminary phase, prototype, quality, quality of education, semi-summative evaluation, school self-evaluation, school self-evaluation framework.*

CHAPTER 1

INTRODUCTION

1.1 Introduction and Background to the Study

The aim of this study is to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. Quality, in this study, is defined as fit for purpose where this fit for purpose applies to the entire features and characteristics of education (inputs, processes and outputs). For the purposes of this study, a framework is defined as a tool which can be used to find out about the performance of an education system either at the international, national or institutional level. In this study, SSE is defined as a process whereby schools systematically find out about their conditions, processes and performances so as to make improvements where necessary (MacBeath, 2006; The Scottish Office Education and Industry Department, 1996).

Like many other former colonial countries, the leading challenges of the Zimbabwean education system in recent years have mainly been to provide all its citizens access to education. This was done in order to redress the former Rhodesian education system that left the country with apparent disparities along racial lines (Gatawa, 1998). Since the Universal Declaration of Human Rights (1948) avowed that elementary education should be free and compulsory to all children in all countries (UNESCO, 2004), achieving universal basic education for all has been on the agenda of many education systems. To date, most countries have made great strides towards the achievement of universal basic education (Ibid, 2004), with also Zimbabwe having moved closer to the achievement of Universal Primary Education after independence (Kanyongo, 2005; Ministries of Education, Sport and Culture & Ministry of Higher and Tertiary Education, 2004).

However, the dramatic increase of access to education in Zimbabwe and other countries later posed problems, as access to education alone was failing to yield the desired goals of Education for All (Barrett, Chawla-Duggan, Lowe, Nikel & Ukpo, 2006; Gatawa, 1998; Kanyongo, 2005; UNESCO, 2004). After the United Nations Educational, Scientific and Cultural Organisation (UNESCO) declared that the quality of education was generally deteriorating in many countries (UNESCO, 2004); quality of education has become a key focus of many countries for improvement purposes. As

a result, there was a need for education systems, all over the world, to widen their view of achieving universal basic education to providing education of good quality to their citizens. Thus, the debate on the quality of education has received much attention globally. This is particularly because it has become highly likely that in order for countries to attain universal participation in education, they also have to provide good quality education (Ibid, 2004). Whilst quality of education may refer to many things (see 1.6 & 3.2), in this study, it is used to mean the extent to which the performance of an education system manages to fulfil the desired educational goals.

The shift from *Access to education to Quality of education* is based on the idea that Education for All may not be attained without improving quality (Millennium Development Goal (MDG), Goal 6) (UNESCO, 2006). Moreover, access to education that is of poor quality has been equated to no education at all (UNESCO, 2004). This is particularly so because there continues to be a huge gap between the number of students completing school and those among them who would have mastered a minimum set of cognitive skills (UNESCO, 2004).This shift from *Access to Quality of education* has coincided with the introduction of many international assessment studies aimed at trying to establish the quality of education in different countries. Examples of such studies include Trends in International Mathematics and Science Study (TIMSS) (since 1995); Progress in Reading Literacy Study (PIRLS) (since 2001); Programme for International Student Achievement (PISA) (since 2000) and Southern and Eastern Africa Consortium on Monitoring Education Quality (SACMEQ) (since 1995). These assessment studies are meant to assess the quality of education in different countries in terms of progress in student learning with emphasis on cognitive achievement in Mathematics, Science, Reading, Civics Education and Information and Computer Technology (ICT) (Bernbaum & Moore, 2012). Although similar assessments are not conducted in other subject areas across the curriculum, performance in these subjects would be a good indicator of performance in the other subjects.

The international assessment studies focus primarily on achievement, and these assessments may be seen as an indicator or output measure for quality of education which may be used to compare national achievement levels in different countries (Howie & Plomp, 2005). This comparison of national achievement levels may help to enlighten national authorities about the achievements of other education systems in terms of student outcomes, delivery of instruction, the use of resources and the qualifications of teachers (Grisay & Griffin, 2006). Based on the results of these international studies, policy makers of different education systems may design strategies on how to improve their education. The findings may help policy makers to judge their education systems in order to make decisions about changes needed (Howie & Plomp, 2005). Therefore, these international assessment studies are essential for they help to identify factors which may contribute to differences in student achievement levels, information of which may be used for planning purposes.

Participation in international assessment studies is essential for any country's understanding of the quality of its education system from an international perspective for improvement purposes (Howie & Plomp, 2005). Although Zimbabwe sometimes participates in some international assessment studies like SACMEQ, its participation is inconsistent. This erratic participation may mean that student academic achievement may not be up to the expected international standards. A study conducted by SACMEQ during its first cycle in 1995 (SACMEQ 1) on the quality of education in Zimbabwean primary schools revealed that the reading levels of the grade 6 pupils was poor compared with their counterparts in the region (Machingaidze, Pfukani & Shumba, 1998). Similarly, a study conducted in Zimbabwe in 1991 revealed that except for a few former group A[1] schools which offer high quality of education, most schools, particularly in the rural areas, offer poor quality of education (Nyagura, 1991). Therefore, the quality of education in Zimbabwean primary schools is lower than expected.

This chapter introduces the study of developing a school self-evaluation (SSE) framework for classroom quality in Zimbabwean primary schools. The section that follows provides the problem this research aims to address (1.2) with an illustration of the significance of the study being offered (1.3). This is followed by the aim of the study and research questions (1.4). The research approach followed in this study is outlined (1.5). Operational definitions of key terminologies used in this study then follow (1.6). The chapter concludes with a structure of the thesis (1.7).

1.2 Problem Statement

Any education system needs to continuously evaluate and monitor its education quality, in the meaning of fit for purpose and this fit for purpose applies to all aspects (that is, inputs, processes and outputs) of the functioning of a school. The introduction of SSE in many countries was partly intended for schools to find out about their conditions, processes and outputs for improvement purposes. Furthermore, it was meant to lessen the pressures related to a once-off school inspection, an external quality assurance measure, which was thought to be providing static pictures of the quality of education in schools (MacBeath, 2006).

Although external evaluation, which may be done by school inspectors, is essential in providing information to demonstrate accountability (MacBeath, 2005; Nevo, 1995), schools should also engage in internal self-evaluation processes in order to have continuous feedback for improvement (Ibid,

[1] In Zimbabwe, former group A schools are schools which used to serve predominantly white pupils and are well-resourced.

1995). Such self-evaluation may help schools to identify their strengths and weaknesses, and use the information obtained from the process for improvement purposes (MacBeath & Sugimine, 2003; MacBeath, Schratz, Meuret, & Jakobsen, 2000; The Scottish Office Education and Industry Department, 1996). Given that school inspection is mostly concerned about accountability (Plowright, 2007; Wilcox & Gray, 1996), education systems in many countries are now opting for SSE processes to ensure continued improvement of quality of education since it is an on-going process (Earley, 1998; MacBeath, 2006; Privitelli & Bezzina, 2006).

The problems confronting the Zimbabwean education system in endeavouring to realise and improve quality of education are twofold. Firstly, there is an apparent lack of awareness in schools of the need to evaluate the quality of their education. Secondly, there is no standardised instrument for conducting self-evaluation processes in schools (UNESCO International Bureau of Education, 2001) despite the overwhelming evidence that SSE is essential for the improvement of quality of education (Carlson, 2009; De Grauwe & Naidoo, 2004; MacNamara & O'Hara, 2005). Due to this lack of awareness, there may be some misconceptions among key stakeholders in schools about SSE, in general, and SSE of quality of education in schools, in particular. This situation may lead to the use of ineffective ways of evaluating and monitoring quality of education by school administrators, which may, perhaps, be one of the reasons for poor quality of education in Zimbabwe as evidenced by some studies conducted in Zimbabwe (Kanyongo, 2005; Machingaidze, Mazise, 2011; Nyagura, 1991; Pfukani, & Shumba, 1998). This lack of effective evaluation methods and instruments was also raised at the 48th International Conference on Education held in Geneva, where it was noted that one of the challenges faced by the Zimbabwean Ministry of Education, Sport, Arts and Culture (MoESAC) is that of weak supervisory, evaluation and monitoring mechanisms (Ministry of Education, Sport, Arts and Culture & Ministry of Higher and Tertiary Education, 2008).

Therefore, the problem in Zimbabwean primary schools is that, notwithstanding the substantial evidence that SSE is important to improve the quality of education in schools (De Grauwe & Naidoo, 2004; MacNamara & O'Hara, 2005); there is currently no policy which requires schools to evaluate the quality of education delivered by the schools themselves. Apart from some quality-related arrangements in place, which requires school heads[2] to monitor educational provision in classrooms, currently, there is no SSE process practised in Zimbabwean primary schools. Moreover, there is currently no standardised instrument for use in schools to evaluate and monitor the quality of education for improvement purposes.

[2] In Zimbabwe, a school principal is referred to as a school head

The extensive emphasis on quality of education by the World Declaration on Education for All in the early 1990s (UNESCO, 2004) has led many countries to seek effective ways of monitoring and evaluating quality of education in their education systems. Many education systems around the world have personnel such as school inspectors who monitor the quality of educational provision in schools (Gray & Gardner, 1999; MacBeath, 2006; Office for Standards in Education (OFSTED), 1999b; Thomas, 1996). However, school inspection is now considered expensive in most countries (MacBeath, 2006). This is mainly true in most developing countries and particularly in Zimbabwe where material resources like vehicles to be used by school inspectors are limited. Besides, information from school inspection often provides static pictures of the quality of education in schools, for the process is not done on a continuous basis (Ibid, 2006). Therefore, if quality of education is to be realised and improved in schools, formative evaluation procedures should be carried out (Visscher & Coe, 2002).

Many education systems internationally are now emphasising the use of SSE to monitor and evaluate the quality of their education (MacNamara & O' Hara, 2005; The Scottish Office Education and Industry Department, 1996). SSE involves the use of well-developed instruments for effective evaluation of quality of education to take place. Since there is recognition that external evaluation and SSE have complementary roles in improving the quality of education in schools (Eurydice, 2009; Nevo, 1995; South African Department of Education, 2002), there is a need to develop SSE instruments for use in schools to evaluate educational quality. Such an innovation will go a long way to inform the improvement of quality of education and in addition, will also provide the much-needed information on the quality of education to parents and other social structures with interest in education. It is against this background that this study aims to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context.

Some research has been done on the quality of education and substantial evidence on the poor quality of education in some Zimbabwean schools has been provided (Jenjekwa, 2013; Mazise, 2011; Ncube 2004; Nyagura, 1991). All these researchers conducted their studies on the quality of education in Zimbabwe in various primary and secondary schools. A general conclusion was that there is poor quality of education in some Zimbabwean schools. However, there is a gap in research in Zimbabwe on how to improve the poor quality of education in schools. Research has shown and literature is consistent regarding the evaluation of quality of education through SSE as important for improvement purposes since it is believed that when improvement is effected from within rather than from an imposition from outside, it is likely to be effective (De Grauwe & Naidoo, 2004; Herselman & Hay,

2002; Nevo, 1995; MacNamara & O' Hara, 2005). For example, MacNamara & O' Hara (2005) analysed the Looking At Our School (LAOS) SSE framework for the Irish education system and found that SSE constitutes the best way forward in school evaluation and leads to school improvement. Herselman and Hay (2002) conducted a study to find out how quality of education may be enhanced in the foundation phase and found out that one way is to establish self-evaluation processes at schools. In Zimbabwe, however, there is lack of research on evaluation and monitoring of quality of education in general and on SSE in particular. Additionally, research on instruments to be used in SSE processes in Zimbabwe is limited. Not enough is known about how evaluation should take place, specifically regarding the quality of education offered in primary schools. Furthermore, there does not appear to be a standardised means or common evaluation instrument used in Zimbabwean primary schools and no clear solution exists as to how to do this in the Zimbabwean context. Additionally, nothing has been documented about what should be evaluated and how to evaluate in order to improve education in Zimbabwe. It is against this backdrop that the investigation of characteristics of and requirements for an effective SSE framework in order to design and develop one specifically for use in Zimbabwean primary schools is undertaken in this study.

1.3 Significance of the Study

As previously indicated (see 1.2), there is evidence of problems in student achievement in schools as well as regarding the evaluation of quality of education in Zimbabwean primary schools. These problems are mainly due to lack of quality assurance measures and awareness of the need for schools to do self-evaluation of the quality of education they provide for multiple purposes of improvement, accountability or for economic purposes (MacBeath, 2006). Therefore, this study is significant to the Zimbabwean context for several reasons. It is the first study of its kind in Zimbabwe to investigate, identify and understand the characteristics of effective SSE frameworks internationally in order to develop a suitable SSE framework for use in Zimbabwean primary schools. Identifying the characteristics of effective SSE frameworks and the consequent development of one specifically contextualised for Zimbabwean primary schools may help to encourage research on SSE and its relevance in improving quality of education among researchers which is currently limited in Zimbabwe. Moreover, the investigation, identification and understanding of the characteristics of effective SSE frameworks in this study is done by applying design research, a systematic study of designing, developing and evaluating educational interventions (see Plomp, 2009) as the research design. Characteristics for this research design may result in 'research-based' principles for designing SSE framework in this study. Following Plomp (2009), these design principles may be utilised by others who may want to develop SSE frameworks for similar contexts and in doing so, this may widen the validity of these design principles.

As previously stated, currently in Zimbabwe, not enough is known about how evaluation is taking place in education, specifically regarding the quality of education offered in primary schools (see 1.2). Furthermore, nothing has been documented about what should be evaluated and how to evaluate in order to improve education in Zimbabwe. This may be a contributory factor to the poor quality of education in some Zimbabwean primary schools (Mazise, 2011; Nyagura, 1991). It is the aim of this study to make a significant contribution to research, particularly on SSE and instruments for use thereof in Zimbabwean primary schools.

Findings of this study could possibly offer a springboard to assist policy and practice on ways of ensuring enhanced SSE processes in order to improve the quality of education. Through this study's findings, it is hoped that the knowledge and understanding of quality of education and its evaluation in primary schools will be enhanced. As a result of this understanding, various stakeholders in education may be made more aware of the vital roles they should play in order for quality of education to be realised in schools. Moreover, the SSE framework to be developed in this study might help to provide school communities with crucial knowledge and skills on how to evaluate quality of education in their institutions. Developing such an SSE framework is essential because literature indicates that when improvement is effected from within rather than from an imposition from outside, effective measures can be put in place to help improve the quality of education in schools (MacBeath, 2006; Nevo, 1995). Taking this statement into consideration, this study is also significant in that it aims at creating a platform for understanding the quality of education in Zimbabwe from schools' perspectives, where most education processes and practices take place. Such an understanding may present a dialogue for improvement of the quality of education in schools among policy makers, school heads, teachers and other stakeholders interested in education. The results of the study may also serve as a basis for developing policy on SSE in Zimbabwe, as currently, there is no policy guiding the conduct of SSE.

1.4 Aim of the Study and Research Questions

The aim of this study is to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. This identification and understanding of characteristics of an effective SSE framework is essential to offer guidelines to SSE framework designers in different contexts in Zimbabwe. With the supposition

that SSE has the potential to support schools in understanding their conditions and improving their processes of education, it was pertinent to phrase the research questions for the study in a way that it not only aimed at developing a useful support tool for all involved in the improvement of education, but also at identifying the principles underlying the design and development of this tool. The central research question that guided the overall study was formulated as follows:

- **What are the characteristics of an effective School Self-Evaluation framework for improving classroom quality in Zimbabwean primary schools?**

Characteristics refer to features typical of the SSE framework and how these would interrelate with each other in the intended setting. The involvement of various stakeholders in the development process of the SSE framework for Zimbabwean primary schools in this study may result in a number of characteristics specific for the context of Zimbabwean primary schools. The development of these characteristics will start from some standardised SSE frameworks developed in other countries. For example, an SSE framework may have various characteristics based on similar research in Scotland, such as:

- It should have a purpose
- It should have a process;
- It should have rating criteria; and
- It should address a particular audience

  (MacBeath, 2006).

In order to develop and specify in this research the characteristics of an effective SSE framework for the context of Zimbabwean primary schools and classrooms, specific sub-questions were composed to direct and guide the process and to provide a platform for mapping the way through the overall investigation. The sub-questions are phrased in such a way that they aim to achieve the criteria that Nieveen (1999, 2009) has proposed for good quality interventions. This means that the SSE framework to be developed in this research, should meet the following quality criteria:

- be relevant to the target group and settings for which it is designed;
- achieve consistency between the various elements of evaluation;
- be practical for the setting for which it has been designed and developed;
- be effective in evaluating quality of education in schools; and
- inform policy and practice about the quality of education for improvement purposes

  (Nieveen, 1999).

These quality criteria are mentioned here to structure the sub-questions. The sub-questions, each of which has a role to play in answering the main research question, were devised in a way that guided the context analysis (Chapter 2) and the review of the relevant literature (Chapter 3), refined the design principles and directed the design, development, implementation and evaluation of the intervention (Chapters 5-7). They were formulated as follows:

a. What is the current status of the quality of education in Zimbabwean primary schools?

In order to develop an effective SSE framework for classroom quality, there is a need to first understand the current situation in Zimbabwean primary schools through a context analysis (Chapter 2) and also the status of education in Zimbabwean primary schools through a needs analysis (Chapter 5). Such an understanding would help to determine whether it is necessary to develop an SSE intervention for improving the quality of education in primary schools in Zimbabwe. This is particularly essential for quality of education in Zimbabwe could only be achieved if specific challenges within the education sector, and particularly in schools, are identified as a way towards addressing such problems. The needs analysis was aimed at understanding the general quality of education in Zimbabwean primary schools and the gaps between the ideal and what is currently happening (McCawley, 2004) (see 5.3). This information is vital in order to establish whether there is a need for an SSE intervention for Zimbabwean primary schools.

b. How do Zimbabwean primary schools currently evaluate the quality of education?

As part of the needs analysis phase and before designing and developing an SSE framework for use in evaluating the quality of education in Zimbabwean primary schools, it is vital to understand how quality of education is currently evaluated. This understanding is important for it would reveal the gaps between the current practice and the ideal which may help for improvement purposes. This question also aims at understanding the instruments currently used in the evaluation of the quality of education and the processes followed. Such information will then be compared with international best practices in order to develop the intervention.

c. How can the SSE framework contribute to the improvement of the quality of education in Zimbabwean primary schools?

In order determine how the SSE framework may contribute to the improvement of the quality of education in schools and classrooms, it is important to seek opinions from various participants who include teachers, school heads, education officials and parents, whether it is essential to have a common instrument for use in evaluating the quality of education in primary schools. Based on their recommendations, it may be possible to identify the aspects of a possible structure of the intervention. Participants' views are vital for they could help to improve the quality of the SSE intervention so that it could effectively contribute to the improvement of the quality of education in schools.

d. Which dimensions and measures of school and classroom quality are needed to design a relevant, effective and consistent SSE framework for improving the quality of education in Zimbabwean primary schools?

In order to design and develop an effective SSE framework for use in evaluating quality of educational provision in schools and in classrooms, aspects of quality which are worth evaluating should be established. These dimensions of quality of education will form the basis of the SSE framework for evaluating classroom quality in Zimbabwean primary schools. Literature emphasises the importance of quality indicators in an SSE framework (South Africa Department of Education, 2002; The Scottish Office Education and Industry Department 1996; Bernhardt, 1999) in order to effectively evaluate the quality of education in schools. Establishing the indicators of quality of education is essential as this would facilitate a common understanding of what quality of education entails. This may simplify the evaluation process. There is also a need to ascertain the various methods used to evaluate quality of education in schools and to establish the components of the SSE framework.

e. How can the SSE framework be used in Zimbabwean primary schools?

For schools to produce valid and reliable results about their conditions and processes of education using the SSE framework, implementation guidelines should be in place. Some of these guidelines may be system-based, while others may be school-based. Although the SSE framework proposed in this study will contain some guidelines on how it should be used, it is also vital to seek participants' views on how they think it could best be implemented in the evaluation process. This may be important in helping to promote transparency as well as finding ways of addressing the identified implementation problems as a team. Although the ultimate goal is to use the SSE framework in evaluating the quality of education in all subjects across the curriculum, in this study it will be operationalised using Mathematics as an example. Evaluators have to identify whether the Mathematical competencies which pupils are expected to acquire are emphasised in the teaching and learning processes. The aim is then to extend this to other subject areas.

f. How consistent is the developed SSE framework in evaluating the quality of education across different environments in Zimbabwean primary schools?

The issue of the consistency of the SSE framework is of significance to the improvement of quality of education. If, for instance, the SSE framework is used in various schools and does not produce reliable results, this may be difficult for policy-making to ensure overall improvement of quality of education. The SSE framework, therefore, has to be consistent when used in different school environments. This would help to find effective ways of improving the quality of education across

various school environments in the Zimbabwean context. It is, therefore, vital for the SSE framework to be logically designed and developed in order for it to be reliable when used in different schools in the Zimbabwean context.

g. How effective is the developed SSE framework in evaluating the quality of education systemically in Zimbabwean primary schools?

This question tries to ascertain whether or not the SSE framework may be effective in evaluating the quality of education in all schools in the Zimbabwean education system. The effectiveness of the SSE framework includes both the perceived effectiveness of the exemplar intervention as observed by the knowledge experts, as well as the actual effectiveness as informed by the users after field-test. The expected and actual effectiveness (Nieveen, 1999) of the developed SSE framework will be ascertained after field-test through expert as well as user appraisal.

Since the concept of the development of an intervention for use in evaluating the quality of education in schools is still in its infancy in the Zimbabwean context, there was a need to make use of a number of ideas that were developed and tested in contexts different from the Zimbabwean situation. To achieve the goals of developing an SSE framework for use in evaluating the quality of education in schools and classrooms, the research route had to turn from the traditional research approaches where educational interventions were just decided upon and not developed in research-based ways. This study adopted design research approach, which is further investigated in the next section.

1.5 Research Design used in this Study

As stated earlier on, this study aims to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context (see 1.4). As there are no guidelines available for designing and developing an SSE framework for the context of Zimbabwean primary schools, a design research design has been used in this research (see 4.3). Design research is the systematic study of designing, developing and evaluating educational interventions as solutions for complex problems “with the dual aim of generating research-based solutions for complex problems in educational practice, and advancing our knowledge about the characteristics of these interventions and the processes of designing and developing them” (Plomp, 2009, p.13). The SSE framework for Zimbabwean primary schools is the intervention aimed for in this research and the scientific yield of the knowledge about the characteristics and about the principles for designing such an SSE framework.

Both these purposes are addressed in this study. In line with these purposes of design research, this study intends to:

1. identify and understand the characteristics of and requirements for an effective SSE framework for evaluating the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design guidelines for appropriate and effective use in this context;
2. generate design principles for the design and development of SSE frameworks which may be used by others in their own contexts.

Although research has often been viewed as a means of discovering or generating new knowledge, it has mainly been distanced from the natural setting which might have affected its relevance (Brown, 1992). For this reason, there was a need to make research part of the natural setting rather than divorcing it. As a result, the design research approach was introduced with the aim of addressing multi-faceted problems in education where no apparent guidelines for solutions are accessible (Plomp, 2009) (see 4.3). Since design research aims at developing and evaluating educational interventions, it is the most suitable research approach in the development of educational interventions. This is particularly so for other research designs may produce results which may not perfectly apply to everyday educational problems.

A typical study applying design research will consist of three phases namely, the preliminary phase, the prototyping phase and the semi-summative evaluation phase. The preliminary phase comprises a needs analysis (see 5.3), review of the literature (see 3.3-3.5), and the development of a conceptual framework for the study (see 3.6). This phase is essential in order to understand the current quality of education, how it is evaluated in Zimbabwean primary schools and instruments used in thereof. The preliminary study also involves establishing the components of quality of education, how aspects related to the quality of education are evaluated in Zimbabwean primary schools and classrooms and what can be done in order to improve the quality of education. Based on the findings of the preliminary phase, in the second phase of the study, the prototyping phase, various SSE prototypes of the intervention will be developed and formatively evaluated in collaboration with stakeholders in education (see 6.4, 6.7 & 7.3). In the third phase, the semi-summative evaluation phase, the developed SSE framework will be field–tested so as to determine whether it meets the pre-arranged requirements (Plomp, 2009) (see 7.6). A cyclic approach of design, evaluation and revision (Kelly, 2004; Van den Akker, Branch, Gustafson, Barab & Squire, 2004) will be adopted in the development of the prototypes, which are preliminary versions of the intervention. During all the phases and cycles, there is going to be reflection on the process and product in terms of design principles. Figure 1.1 below shows the stages to be followed in the development of the prototypes in this study.

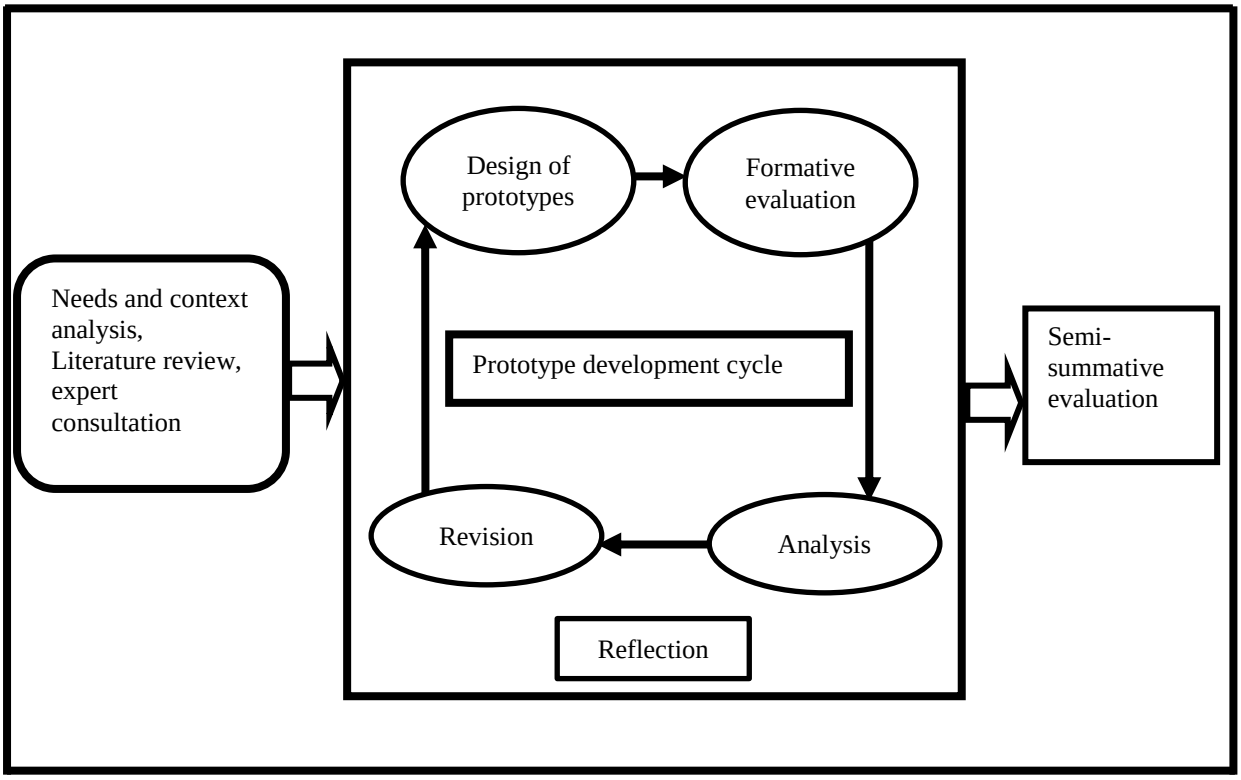

Figure 1.1: Stages of design research in this study

After development, each prototype will be subjected to formative evaluation so as to improve its quality. Suggestions from the evaluation of the prototypes would then be incorporated into the development of the subsequent prototype. The research approach followed in this study is discussed in detail in Chapters 5-7 (see 5.2, 6.4, 6.7, 7.3 & 7.6) where each of the phases is discussed.

The prototyping phase comprises the iterative process of development and use of the prototypes by the intended users until the desired quality intervention is reached. The development of the prototypes in the different stages of design research is guided by the criteria of validity, practicality and effectiveness (Nieveen, 2009). The process of design and development of prototypes is guided by formative evaluation which provides information necessary for the cyclic process of design research. This process also requires participation of the target group. User participation in the development, try-out and formative evaluation of the prototypes helps to address problems which might be experienced during the implementation process, particularly when an intervention is new to the system as is the case with Zimbabwe in SSE processes. The characteristics of the SSE framework will be progressively specified through the prototyping approach used in the process (Nieveen, 2009).

Van den Akker (1999) argues that traditional research approaches, for example, surveys and experiments produce explanatory knowledge which barely provides solutions to various problems in education. For this reason, design research is often used for complex problems for which few authenticated principles are available to support the design and development of educational interventions (Ibid, 1999). As indicated in earlier sections (see 1.3-1.4), the idea of SSE is still new to Zimbabwean primary schools and, currently, there is no common instrument used in evaluating the quality of education and hence, this was considered problematic. Therefore, it was hoped that a design research approach may help to address some of the problems encountered in the evaluation of quality of education in Zimbabwean primary schools. There are various terms used in this study some of which require working definitions as delineated below.

1.6 Definition of Terms

This study makes use of a range of terms all of which are related to quality of education and its evaluation processes. Some of the definitions of these terms are continuously being discussed in literature. It is necessary here to clarify key terms through providing working definitions so as to provide a common understanding of the terms used in this study.

Quality

Quality may be viewed as the entire features and characteristics of a service that allow satisfaction of specified needs (Green & Harvey, 1993). In this study, quality is defined as fit for purpose and this fit for purpose applies to all aspects (that is, inputs, processes and outputs) of the functioning of a school.

Quality of Education

Various definitions of the concept of quality of education do exist. Quality of education may be thought of in terms of the following:

- Learners who are healthy, well-nourished and ready to partake and learn, and supported in learning by families and communities (UNESCO, 2000; UNICEF; 2000);
- Environments that are healthy, safe, protective and gender-sensitive (Govinda & Tapan, 1999; UNESCO, 2000; UNICEF, 2000);
- Content that is reflected in relevant curricula and relevance of educational objectives (UNESCO, 2000; UNICEF; 2000; Williams, 2001);
- Processes through which teachers use child-centred teaching approaches in well-managed classrooms and schools to transform system inputs into system outputs (OECD, 2005; UNICEF, 2000; Williams, 2001);
- Enough resources which are fairly allocated and successfully used (Scheerens, Glas & Thomas, 2003; UNESCO, 2000; UNICEF; 2000; Williams, 2001); and
- Learning outcomes that include knowledge, skills, attitudes and values (Barker, 1988; UNESCO, 2000; UNICEF, 2000).

The quality of education comprises the quality of human and material resources, which are available for teaching (inputs), the quality of the teaching and learning practices (processes) and the quality of results (outputs or outcomes) (Grisay & Mahlck, 1991) which is normally measured through outputs. Although it can be debated about what quality of education entails (see 3.2), a common view is that there are certain systemic educational goals that should be achieved (Adams, 1997; Williams, 2001). The more these systemic educational goals are realised, the better is the quality of education. In order to find out whether or not these goals have been achieved, an evaluation process has to be carried out. Such a process is essential, for it may help to identify goals which would have been realised and those that are still to be achieved (Scheerens et al., 2003). In this study, quality of education is defined as fit for purpose which applies to all aspects of inputs, processes and outputs of the functioning of a school in an effort to fulfil educational goals.

Classroom Quality

Pianta and Hamre (2009) define classroom quality in terms of instructional support, emotional support and classroom organisation. In this study classroom quality is defined as the quality and quantity of resources (both human and material), quality of teaching and learning processes, emotional support and the quality of student achievement.

Framework

A framework may be viewed as a tool which should explain how an education system should work by laying out the components and the steps needed to achieve the desired results (Frankel & Gage 2007). A framework may also be thought of in terms of a structure which helps to increase the understanding of an education system's goals and objectives (Kahan & Consulting, 2008). For the purposes of this study, a framework is used to refer to a tool which can be used to monitor and evaluate the content and process of the performance required of an education system.

Prototype

In this study, the word prototype is defined an initial version of an intervention before the final product is developed and implemented (Plomp, 1999).

School Inspection

School inspection is an outside school evaluation process which is mainly concerned about accountability purposes (Earley, 1998). School inspection is also considered as a resolute visit to educational institutions by school inspectors, in order to provide an independent and external evaluation of quality of education being provided (Thomas, 1996). In this study, school inspection is

used to refer to an external approach to evaluation of quality of education in schools by school inspectors (MacBeath, 2006).

School Self-Evaluation (SSE)

SSE is viewed as a process whereby a school analytically gathers information about its performance and then uses this information to make a judgement about the quality of education in the school (MacBeath, 2006). SSE may also be described as a process of engaging the school community in reflecting on a school's achievements in regard to student learning (Nevo, 1995). For the purposes of this study, SSE is defined as a process whereby schools systematically find out about their conditions, processes and performances so as to make necessary improvements (The Scottish Office Education and Industry Department, 1996).

School Self-Evaluation (SSE) Framework

In this study, an SSE framework is defined as a tool which can be used to evaluate and monitor the performance required of an education system at the school level and its classrooms.

Design Principles

In this study design principle is defined as guidelines for the development of an educational intervention (Bell, Hoadley, & Linn, 2004).

To conclude the chapter, a summary of this chapter and indications of the remaining chapters is presented in the following section.

1.7 Thesis Structure

This section provides an outline of the chapters of the thesis. **Chapter 1** has introduced the study. It included the problem statement, significance of the study, aim of the study and research questions, an overview of the research design and clarification of key terms used in this study. In the next chapter, **Chapter 2**, the context of Zimbabwe, in which the study is carried out, is described. In that chapter, background information of Zimbabwe's geography, economy, demography and its education system are provided. In **Chapter 3,** a review of related literature is presented. Herein, issues surrounding quality of education and its evaluation in schools are discussed. Moreover, international, national and institutional evaluations of quality of education are debated with an intention to gain insight into SSE of education quality. A conceptual framework for the study is also presented in that chapter.

In **Chapter 4,** the overall research design and methods in general are discussed (details for the methods for each phase are presented together with the findings for each phase in chapters 5-7). The

research paradigm is reflected in this study and ethical considerations are also presented in the chapter. **Chapter 5** presents the results of the preliminary phase, where a needs analysis, which formed the basis of the development of the first prototype are discussed. The initial design principles of an SSE framework are also presented in that chapter. **Chapter 6** presents findings of the prototype development phase of the study which seeks to establish the dimensions and quality indicators of the SSE framework. This will be done through consultation with knowledge experts and experts in terms of practice, who include school heads and teachers. The preliminary design principles of an SSE framework are also discussed in the chapter. In that chapter, prototypes 1 and 2 are designed, developed and developed and formatively evaluated by both experts and users in order to improve their quality. In **Chapter 7,** findings of the semi-summative evaluation phase of the study are presented. Moreover, the practicality of the developed prototype intervention and its use by the school communities is explored. Design principles and characteristics of an SSE framework are also discussed in the chapter. In that Chapter, prototypes 3 will be tried out and revised as necessary. Prototype 4 will be field-tested before its semi-summative evaluation. The thesis ends with **Chapter 8** where conclusions, recommendations and future research directions are provided.

CHAPTER 2

CONTEXT OF THE STUDY

2.1 Introduction

Chapter 1 introduced this study about identifying and understanding the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework for appropriate and effective use in this context. This chapter describes the context of Zimbabwe in which the study on the development of an SSE framework for classroom quality study was conducted. The major aim of this description of the context is to acquire a good understanding of the current situation in which primary schools in Zimbabwe operate. Secondly, the description of the Zimbabwean context is intended to generate ideas that may help in the design and development of an SSE framework for evaluating the quality of education in Zimbabwean primary schools. The background of Zimbabwe is given in Section 2.2. Here, the physical description, historical background, national economy and demographics of Zimbabwe are presented. Section 2.3 examines the social services and health status in Zimbabwe while Section 2.4 focuses on Zimbabwe's international relations. All these aspects have a bearing on the education system of the country. Thereafter, in Section 2.5, Zimbabwe's education system is deliberated on in terms of its levels of education and how each is managed. Section 2.6 explicates education provision and financing in Zimbabwe. The monitoring and evaluation of the quality of education in Zimbabwean primary schools is discussed in Section 2.7 and a conclusion for the chapter is made in Section 2.8.

2.2 The Zimbabwean Context

This section explicates the background to Zimbabwe. In sub-section 2.2.1, the country's physical features are described. This is followed by the historical background in 2.2.2, where Zimbabwe's history from the pre-colonial era to independence is briefly described. Zimbabwe's demographics are presented in 2.2.3. Thereafter, issues of governance and political stability and their effect on education are discussed in 2.2.4. In 2.2.5, aspects essential to Zimbabwe's economy are discussed.

2.2.1 The Physical Background

Zimbabwe is a land-locked country in Southern Africa. Its geographical area covers about 390 759 square kilometres. Zimbabwe shares borders with Mozambique to the East, South Africa to the South, Botswana to the West and Zambia to the North. Zimbabwe lies on a high plateau between the

Zambezi River in the north and the Limpopo River in the south (see Figure 2.1). The landscape consists of high plateau, with mountains in the East. Major rivers include the Limpopo, Lundi, Save and Zambezi. The north-western border is defined by the Zambezi River. Victoria Falls is a popular tourist destination on the Zambezi River. Nyangani Mountain is the country's highest point at 2592 meters above sea level. The capital city of Zimbabwe is Harare. Other major cities are Bulawayo, Mutare, Gweru and Masvingo (see Figure 2.1).

Figure 2.1: Physical map of Zimbabwe: (Source: The Zimbabwe National Commission for UNESCO, the Ministry of Education, Sport & Culture & the Ministry of Higher Education & Technology (2001).

The rich soils and the sub-tropical climate in the country maintained very successful agricultural activities until the land reform programme embarked on by the government after the year 2000. The country has a variety of resources, which include minerals, wildlife, historical and natural sites such as the Great Zimbabwe, the Victoria Falls, Khami Monuments, and Matopo Hills among others (see

Figure 2.1 above). These were the basis of a blooming tourism industry, especially during the 1980s and early 1990s. However, after the land reform programme in 2000, the tourism industry gradually deteriorated (Shizha & Kariwo, 2011). This is also true for the agriculture sector which has also been affected by lack of resources for agricultural activities. The decline of the tourism, agricultural and other sectors of the economy have negatively impacted the country's economy, which relies heavily on agriculture and to a large extent on tourism. This decline of the country's economy also affected the education sector to a larger extent, for some parents who depended on agriculture for employment were driven out and could no longer afford to pay school fees and buy education materials for their children.

2.2.2 The Historical Background

Zimbabwe is a former British colony that was known as Rhodesia. From June to December 1979, the country was erroneously renamed Zimbabwe-Rhodesia, as a result of a short-lived deal between The Rhodesian Front, led by the late Ian Smith and the African National Council that was led by the late Bishop Abel Muzorewa. Zimbabwe attained political independence on 18 April 1980 after a prolonged liberation war which was waged by two main political parties in the country, namely the Zimbabwe African National Union (ZANU) led by Robert Mugabe and the Zimbabwe African Peoples' Union (ZAPU), led by the late Joshua Nkomo. The British ruled colonial Zimbabwe for nearly a century from 1890. Nevertheless, the colonists and missionaries, mainly the British and some Portuguese, had arrived in the country earlier around the 1850s (Zvobgo, 2009). Zimbabwe's name is derived from the Great Zimbabwe National Monuments in Masvingo. These monuments were built of stones. Hence, the name Zimbabwe, meaning 'House of Stone' originated (see Figure 2.2 below for part of the Great Zimbabwe Monuments).

Figure 2.2: Part of the Great Zimbabwe Monuments (Source: Chirikure & Pikirayi, 2008)

The Great Zimbabwe monuments are one of the most exciting structural features in Zimbabwe, as well as in Southern Africa. The monuments are a cultural symbol and heritage to the country and attract both domestic and international tourists. As such, they are important not only to Zimbabwe, but also to the world. This importance is demonstrated by their designation as a National Monument, as well as a World Heritage site (Ndoro, 2005). Because of their importance, the Great Zimbabwe monuments have become a historical education, as well as a tourist attraction centre.

2.2.3 Zimbabwe's Demographics

This sub-section focuses on Zimbabwe's demography. Firstly, Zimbabwe's population is presented followed by its culture. Ethnic groups in Zimbabwe are then discussed followed by its languages. Lastly, Zimbabwe's religion is deliberated on, particularly as this and other dimensions of demographics relate to education and its provision.

Population

According to the 2012 national census, Zimbabwe's population is around 12.9 million in contrast to about 11.6 million recorded in the 2002 national census (Central Statistical Office, 2012). This statistics reflects a growth rate of about 1.3% per annum, of which about 80% of the population lives in rural areas. The population growth in any country results in an increased demand for basic services such as health and education. In Zimbabwe, the growing need for health and education may exceed the available resources due to the limited resources as compared to the number of people who require such services. Most of the people in rural areas are spatially distributed so that it is difficult for the government to provide social amenities like libraries. This is likely to affect the quality of education in rural areas as pupils may not have access to a wide range of resources such as textbooks, which might help to improve their reading and writing skills. Research has found positive relationships between school libraries and student academic achievement, especially in reading and writing (Lance, Rodney & Hamilton-Pennell, 2005). Therefore, pupils in rural areas are likely to be disadvantaged in terms of their reading and writing skills due to lack of libraries in these areas.

Culture

Culture may be thought of in terms of customs, ideas and behaviour of certain people. Zimbabwe is a multi-cultural society because of the existence of different ethnic groups in the country. Traditionally, local culture recognised the belief of superstitions, rituals and the fear of the unknown, including honouring the departed. Many of these beliefs have since been eroded due to westernisation which has resulted in cultural imperialism (Magwa, 2008). Families which usually used to live together in the past in small communities no longer stay together. The norm of child-upbringing roles done by elders

such as aunties and grandparents, to advise young people, is steadily diminishing due to the long distances between families. As a result, many people in Zimbabwe have been alienated from their cultural roots (Ibid, 2008). Today's culture encourages a more nuclear family perspective. Although Zimbabwe is becoming more westernised, children still value what they are taught by their parents. The Government's policy in general and education policy in particular, seeks to accommodate different cultures and encourage cultural diversity as enshrined in its Education Act of 1987 as amended in 1991 (Ministry of Education, Sports and Culture (MoESC, 2002).

Ethnic groups

Zimbabwe is made up of several ethnic groups. Black people[3] comprise about 98% of the total population (Levinson, 1998). Black people in the country are mainly related to the two major Bantu-speaking groups, the Shona and the Ndebele. The Shona constitute about 82% of the population, and occupy Mashonaland, Masvingo, Manicaland and some parts of the Midlands Provinces (Shizha & Kariwo, 2011). Included among the Shona speaking people are descendants of migrant workers from Zambia, Malawi, and Mozambique. The Ndebele comprise approximately 14% of the people (Ibid, 2011). The Ndebele, who are descendants of the Zulu from South Africa, consists of various clans of the Ndebele, comprising the Kalanga, Nambya and the Tonga. The Ndebele occupy the Matabeleland North and South regions (Magwa, 2008), but they are also found in some parts of the Midlands Province. Some other African ethnic groups in Zimbabwe account for a further 2% of the population (Shizha & Kariwo 2011).

Another less populous Zimbabwean ethnic group consists of the white people[4], mostly of British origin. However, some are of Afrikaner, Portuguese and Dutch origins as well. The white people make up approximately 1% of the total population (Shizha & Kariwo, 2011). Small groups of Asians and people of mixed ancestry make up the remaining 1% of the population (Ibid, 2011). However, it is difficult to keep track of the current population trends of the white and the other smaller ethnic populations in the country as some of them left and continue to leave the country since the beginning of the fast-track land reform programme in 2000. In Zimbabwe, there is no racial discrimination in terms of access to education as evidenced in the Education Act of 1987 as amended in 1991 (Ministry of Education, Sport, Arts and Culture & Ministry of Higher and Tertiary Education, 2008).

Languages

[3] Black people in Zimbabwe are mainly the indigenous people and are the majority in the country

[4] In Zimbabwe, white people are settlers, mainly British and also Afrikaner, Portuguese and Dutch origins

There are three main languages in Zimbabwe which are English, ChiShona and IsiNdebele. English is the official language of communication in work places and business. ChiShona and IsiNdebele are the main indigenous languages, each with a variety of dialects (Magwa, 2008). All the three languages are used in education and in government. However, English is traditionally used for official business and serves as a common language for most Zimbabweans (Ibid, 2008). The national prominence of ChiShona and IsiNdebele is due to the Education Act of 1987 as amended in 1991, which prescribed these two languages for the school curriculum for both primary and secondary education (MoESC, 2002). Although ChiShona and IsiNdebele were prescribed for the school curriculum, English continues to enjoy high status as compared to the indigenous languages (Magwa, 2008). In primary schools, for the first three years, pupils are taught the subjects, except English, in their mother tongue while learning English. From grade four onwards, all the subjects are taught in English except for ChiShona and IsiNdebele.

Religion

There are many religions found in Zimbabwe, however the majority of the people are Christians (CIA World Factbooks, 2011). The main Christian denominations are the Roman Catholic, the Anglican, and Methodist Churches. However, over the years, a variety of indigenous churches and groups have emerged from these mainstream denominations. Evangelical denominations, primarily Pentecostal churches and apostolic groups, were the fastest growing religious groupings in recent years, and they continue to grow. Like most former European colonies, in Zimbabwe, Christianity is often mixed with permanent traditional beliefs. Besides Christianity, ancestral worship is the most practiced non-Christian religion, which involves ancestral respect and spiritual intercession (Elsener, 2001). As such, some people continue to believe, in varying degrees, in indigenous religions as well.

Since the religious beliefs of a community lay the foundation for its ideological worldview (van der Westhuizen, 2002), this may affect people's attitudes towards certain services like education and health offered in the country. For example, various Apostolic Faith sects discourage their members from seeking medical help when ill. This may particularly be detrimental to their children when they fall ill. These children may take a long time to recover from illnesses. In such cases, these children may have to absent themselves from school for longer periods due to lack of treatment. This absenteeism may reduce the concerned children's opportunities to learn, which has been found to be essential in improving educational outcomes (Bedi & Marshall, 1999). Moreover, some religious sects do not value the education of the girl child. This is detrimental to the concerned children as well as to the development of the country in general. A country's demographics may provide vital information which may be useful in the provision of social services, like health and education to people.

2.2.4 Governance and Political Stability

Governance is a word that makes up an image of abstract political, administrative and management processes in a country (UNESCO, 2008). Governance can therefore, be viewed as the control of the affairs within every country. In Zimbabwe, since the pre-colonial era and after independence, those in political power control the education system. Governance, in general and education governance in particular, is something that affects the lives of the people, the school experiences of students and the effectiveness and impartiality of education provision (UNESCO, 2008). For some time, Zimbabwe has been affected by both economic and political instability. The education system, at every level, has suffered and was negatively affected due to this volatility. At some stage, from 2007 to 2009, there was lack of basic teaching and learning as well as human and financial resources in schools. This meant that the quality of education may have been negatively affected due to lack of these resources. While poor governance may affect the whole society (UNESCO, 2008); in Zimbabwe it has been the education sector, and particularly the poor who have had to bear the greatest burden. Unlike the rich who could opt for private education provision in other countries for their children, poor parents depended on the government to deliver education services, which, unfortunately, it could not sustain. It is, thus, essential for governments to take responsibility to make changes in the way through which decisions are made and implemented in education (Rodrik, 2008) in order to address the persistent problems in education that limit progress towards the achievement of quality of education.

2.2.5 The National Economy

Zimbabwe's economy is largely agro-based. However, some sectors like tourism, mining and manufacturing also make significant contributions to the national economy. Zimbabwe has many mineral resources such as copper, nickel, coal, gold, diamonds and others. The surveying and exploitation of these and other minerals is on-going, and this has recently led to the discovery of large deposits of diamonds in Chiadzwa communal area, in Manicaland province in 2006. This discovery is expected to help boost the country's economy and also to revive social services sectors such as health and education.

The level of industrialisation in different countries is an important aspect of the nature of the relationship between education and employment markets (Penrose, 1993). Countries whose economies are performing well have the resources to support their education systems to help enhance quality of education. The capacity of a country to provide a reasonable quality of education for its people depends, to a large extent, on its economic status. Zimbabwe's economic growth has been hindered in part by economic sanctions imposed by Western countries and also by poor governance and this has resulted in it being a fragile state. Countries whose economic growths have been stalled by fragility tend to have limited national budgets (Save the Children, 2010). This is the case with Zimbabwe whose economy has been under siege for over a decade now. As such, Zimbabwe is unable

to finance its education system sufficiently, and this may compromise the provision of quality education in schools.

For the past decade and a half, Zimbabwe's economy has been on the verge of collapse. Since 2000, the rate of unemployment in the country has been ever-increasing. Currently, formal employment in the country is estimated to be between 5% and 10% (Shizha & Kariwo, 2011). In 2003, it was estimated that about 81.8% of students who leave secondary school in the period of 1999 to 2001 were unemployed (World Bank 2003). This figure is likely to have increased sharply in the subsequent years due to the continued decline of the economy over the past years. The rate of inflation in Zimbabwe reached extraordinary levels over the same period and was estimated at 164,900% in February, 2008 (Central Statistics Office, 2008). This somehow improved in 2009 when the inclusive government adopted the use of multiple foreign currencies chief among them, the United States of America Dollar, the South African Rand and the Botswana Pula. Although this arrangement helped to stabilise the inflation rate which was soaring on a daily basis, the country continues to face some development challenges because of this economic reduction. As a result, many skilled people have since left the country for better job opportunities in neighbouring countries such as South Africa and Botswana. Other nationals have even migrated to countries such as the United Kingdom, Canada and the United States of America and others. This mass exodus of professionals, including teachers and lecturers, has affected the education sector. To date, the country has experienced a shortage of qualified teachers and university lecturers and this has negatively impacted the quality of education in Zimbabwe.

Zimbabwe's Gross Domestic Product (GDP) is estimated at US $ 10.142 billion and of this amount; about 8.26% goes towards education expenditure (World Bank, 2011). A large amount of this is for staff salaries. This leaves the education sector with little amount of money for the purchase of educational and other resources needed in schools. Moreover, this lack of funding may also affect other developments in schools such as infrastructural development. This could have an impact on the quality of education being provided in schools. If schools do not have adequate infrastructure like classrooms, they may resort to 'hot sitting'[5]. Research has shown that this issue of 'hot sitting' compromises education standards in Zimbabwe (Towindo, 2012), thereby negatively affecting the quality of education. Therefore, education expenditure on infrastructural development in schools needs to be improved so as to have enough infrastructures in schools.

[5] In Zimbabwe, hot sitting refers to a situation whereby there are limited classrooms in schools and they have a two-session system in place where some pupils come to school in the morning while others come in the afternoon.

Many white people have left the country due to the harsh economic and political climate that has prevailed since 2000 (Shizha & Kariwo, 2011). Although the majority of businesses and properties are still in the hands of white Zimbabwean citizens, many of them are now living abroad. As a result, businesses operate below capacity due to lack of further investment by the owners who have lost confidence in the country's leadership. This negative impact on Zimbabwe's economy has affected the education and other sectors of the economy. It is possible that any long-term change in Zimbabwe's political situation may bring many white Zimbabweans back home. This could help improve investment, which in turn, is likely to improve the country's economy. This would boost employment opportunities and help parents to be able to finance their children's education.

2.3 Social Services and Health

Social services are benefits and facilities such as health care, education, food subsidies and subsidised housing provided by government to improve the life and living conditions of children, the disabled, the elderly and the poor. Many countries provide such services to its needy people so as to improve their quality of life. Since Zimbabwe's economy has been affected by poor performance for over a decade now, the government can no longer afford to provide such services to the needy who continue to live a very bad life. Research conducted in Zimbabwe has shown that most people who move to urban areas from rural areas, where there are poor social services and amenities, end up in informal settlements where they still struggle for social services (Gukurume, 2012). Lack of such services may force families to use their limited resources on basic needs like food and very little to spend on their children's education.

As the HIV/AIDS pandemic continues to wreak havoc on the Southern African region, it is particularly poor countries which endure the brunt. Although the prevalence rate of HIV/AIDS is said to be on the decline in Zimbabwe (World Bank, 2013), the damage caused by the epidemic in the past years is still being felt to date. The epidemic has robbed and continues to rob the country of highly active and skilled professionals and this has negatively affected the country's economy (Government of Zimbabwe, 1999). Among the worst affected sectors of the economy is education, which has lost a massive number of teachers due to the pandemic. Besides the fact that the education sector lost a number of trained teachers, families have also suffered because many children have been orphaned and some may also be victims of the pandemic.

As of July 2002, an estimated 25% of the teachers in Zimbabwe were infected with HIV (Price-Smith & Daly, 2004). Because of the infection, teachers, and some pupils, who may also be infected may suffer from AIDS-related illnesses. Such illnesses may result in irregular school attendance by both teachers and pupils which may affect the teaching and learning processes. Education quality is also

likely to decrease as teachers may not be able to teach the way they used to do before they fell sick. The HIV/AIDS epidemic may also affect education resources owing to the costs that it imposes on the system (Coombe, 2004). In order to compensate for the loss of teachers or to replace the sick ones, schools may hire temporary ones. This replacement may raise the costs of employee benefits, recruitment and training costs (Ibid, 2004). In Zimbabwe, teachers continue to receive salary benefits even when they are on sick leave. Therefore, the education system may continue to pay a large number of non-working teachers in addition to paying those hired to replace them. Over time, as teachers fall victim to AIDS, the government may be overburdened by the costs of training new teachers. Schools may have to depend more and more on less qualified teachers with less experience. This situation may result in a decrease in the quality of education being offered in schools, and this may in turn affect student learning.

In Zimbabwe, children are the most affected as a result of HIV/AIDS. In many cases, children live with sick parents and relatives in families with limited resources. They may be left emotionally and physically vulnerable in the event of either illness or death of one or both parents or relatives. This situation, in most cases, may result in children withdrawing from school to stay at home and care for the sick. They may also work in the informal sector so as to boost the family's income, in order to buy basic things. In some cases, children may be the ones in charge of some households after the death of both parents due to HIV/AIDS. In Zimbabwe, there are many child-headed families because of the HIV/AIDS pandemic. In such cases, children assume the roles of parents and, as such, attendance at school may become erratic and, in most cases, some may even withdraw from school. The AIDS epidemic, therefore, had a serious impact on the education sector. This needs urgent attention so as to avoid the collapse of the education system in Zimbabwe. Currently, the government, on its own, cannot adequately address the problems that have been caused by HIV/AIDS in education. Thus, there is a need to have good relations with other countries so as to receive assistance from them, which may help to improve education.

2.4 International Relations

Relationships among countries are essential in order for them to assist each other in various ways for their general development - as the saying goes, "no country is an island". As domestic policies of any country are frequently affected by developments outside, countries should form coalitions rather than to completely isolate themselves from others. These partnerships may enhance many countries' survival in the international system, especially those which have limited resources. International relations make easy connections between people and financial markets worldwide (Penrose, 1993). Countries with good relationships may help each other economically, socially as well as academically.

Zimbabwe's relations with some international countries, particularly Western nations from 2000 to 2009, have not been good. Negative relations with other countries have adversely impacted many sectors of the country's economy, particularly education and health, which were almost on the verge of collapse due to lack of resources. However, Zimbabwe's relations with other countries gradually improved in 2009 after the formation of the inclusive government. Because of the inclusive government, some signs of improved relations with some countries in the international community were apparent and this improved the country's education sector significantly. The improved international relations led to some textbooks being donated to schools by some international donors including United Nations Children's Fund (UNICEF). This initiative has gone a long way in improving the quality of education through student academic achievement as evidenced by an increase in the 2011 Grade 7, Ordinary Level ('O' Level) and Advanced Level ('A' Level) pass rates (The Herald, 7 March 2012) although the Grade 7 & 'O' level pass rates remain shockingly low (see 5.3).

In some countries, donors may also assist education systems with financial and other technical assistance in order for them to develop. However, in Zimbabwe, the internal conflict among political parties currently prevailing, especially after the disputed July 31 2013 general elections, is failing to attract more donor assistance and other investments. This also affects the education system. Research has shown that investment in education in countries experiencing conflict is low because of donor hesitation to invest (Save the Children, 2010). Many donors perceive investing in Zimbabwe as risky because of lack of coordination and poor accountability (Dryden-Peterson, 2006a; Sommers, 2004). Although heavy reliance on foreign aid may result in problems of sustainability (Penrose, 1993), poor and conflict-affected countries, such as Zimbabwe, require this aid in order to sustain their education systems.

Since an education system is embedded in a certain context, all the contextual factors discussed in the preceding sections may affect education in one way or another. Hence, all these factors should be conducive in order for quality of education to be realised in schools.

2.5 The Zimbabwean Education System

This section focuses on Zimbabwe's education system. In this section, the historical background of Zimbabwe's education system is discussed in 2.5.1. Here, Zimbabwe's pre- and post-independence education is discussed. An overview of the structure of the Zimbabwean education system from pre-school, secondary up to tertiary education is presented in 2.5.2. Thereafter, the Ministry of Education, Sport, Arts and Culture's objectives and structure are presented in 2.5.3, while its education

administration is discussed in 2.5.4. Lastly, the structure of tertiary education is deliberated on in 2.5.5.

2.5.1 Historical Background

Zimbabwe is a former British Colony that formally became independent on 18 April 1980. Every practice, process and action both in politics, social life or education has a history, and the development of Zimbabwe's education system is inevitably related to its past. After independence, Zimbabwe inherited the British system of education, which was racially biased and unequal in terms of governance, financing and the quality of education offered to the different racial groups in schools. Since the education system is a function of the state of the economy, the government, after independence, made some significant changes to the education system due to the stable economic conditions that were prevalent at the time. In order to redress the inherited inequalities of access to and provision of education, the government made primary education tuition-free while secondary education was made affordable to many. As a result, education at primary and secondary school levels was expanded. Primary school enrolments increased from 819 566 in 1980 to 2 256 318 in 2007 while during the same period, the number of primary schools also increased from 2 411 to 5 056 (Ministry of Education, Sports and Culture, 2007a). Secondary school enrolments rose from 66 215 in 1980 to 862 267 in 2007, whereas the number of secondary schools increased from 177 to 1 803 during the same period (Ibid, 2007a).

In Zimbabwe, education has positively impacted on skills development in people. Zimbabwe's literacy rate is very high and is estimated to be around 90% (UNESCO, 2011). Such a high literacy level is credited to the importance placed on education by the government, especially after independence, where there was extraordinary expansion of education at all levels of the education system. Zimbabwe's education system performed very well in the past as a result of the highly qualified teachers who had been educated since 1980 and the good working environment. However, due to HIV/AIDS and the 'brain drain', the gains which had been made in education are being destabilised (Gwaradzimba & Shumba, 2010).

2.5.2 An Overview of the Structure of the Education System in Zimbabwe

Zimbabwe's education system falls under two Ministries. The first one is the Ministry of Education, Sport, Arts and Culture (MoESAC) and the second one is the Ministry of Higher and Tertiary Education. MoESAC manages and organises Early Childhood Education and Care (ECEC), primary and secondary education, while the Ministry of Higher and Tertiary Education manages and organises education in universities and colleges. Primary education runs from pre-primary to grade 7 and the official age at which pupils are supposed to enter primary education is six years. Secondary education

runs from Form 1 to Form 6, after which one may then proceed to tertiary education. Table 2.1 below summarises the country's education system.

Table 2.1: Structure of the Zimbabwean Education System

TERTIARY EDUCATION		⇧
Secondary Education (Advanced Level)	Form Six (Public Examinations) (17-18 years)	
	Form Five	
Secondary Education (Ordinary Level)	Form Four (Public Examinations) (13-16)	⇧
	Form One up to Form Four years	⇧
Primary Education	Grade Seven (Public Examinations)	⇧
	Grade Zero up to Grade Seven (4-12 years)	
	PRE-SCHOOL (1-3 years)	⇧

(Source: MoESC, 2005).

In providing education to students at all levels of learning, the MoESAC is guided by certain objectives to which it is devoted.

2.5.3 The Ministry of Education, Sport, Arts and Culture

The aim of the MoESAC is to provide high quality education for all Zimbabwean citizens. The objectives of the MoESAC are preserved in the Ministry's mission statement which states:

> *The Ministry of Education is committed to the provision of good quality basic, secondary and continuing education to all children and adults through school and other learning centres and multi-media approaches so as to produce individuals with potential to contribute towards development. In the quest for efficiency and effectiveness, the Ministry cherishes in its clients and employees the value of: critical thinking, innovation, self-discipline, self-actualisation, consultation and involvement, teamwork, transparent, professionalism and the role these play in development* (The Ministry of Education, Sport and Culture & The Ministry of Higher Education and Technology, 2001, p. 5).

A policy framework governs the education system in Zimbabwe, and it is through this policy framework that the historical imbalances in the education system were rectified (The Zimbabwe National Commission for UNESCO; The Ministry of Education, Sport and Culture & The Ministry of Higher Education and Technology, 2001). Substantial expansion of education occurred during the 1980s. This was driven by the need to satisfy the nation's crave for education, which it had been deprived of during the colonial era. The education system is governed by the Education Act of 1987, as amended in 1991, and its main goals are:

- abolition of all forms of racial discrimination in education;
- creation of a unitary national education system;
- abolition of primary school tuition fees as a way of introducing free and compulsory primary education;
- provision for all children who complete the primary school cycle to acquire secondary education;
- provision of state support for non-formal, adult education and literacy programmes;
- decentralisation of the management and administration of the education system to promote efficiency and equity in the development of regions; and
- expansion of teachers' education so as to release more trained teachers into the school system, and reduce the use of untrained and under-qualified teachers and expatriates.

(The Zimbabwe National Commission for UNESCO; The Ministry of Education, Sport and Culture & The Ministry of Higher Education and Technology, 2001).

The MoESAC is responsible for Basic Education, which comprises ECEC, primary and secondary education (see Table 2.1).

Early Childhood Education and Care (ECEC)

ECEC is a preparatory stage for primary education and is offered to children aged between 0-4/5 years. ECEC is offered in ECEC centres mainly in urban areas. However, realising the importance of ECEC education after the Presidential Commission of inquiry into education and training (Nziramasanga, 1999), Grade zero (0), a preparatory stage for Grade 1, is now currently offered in mainstream primary education. To address the shortage of teachers for pre-school education, the Ministry of Higher and Tertiary Education developed a diploma and a degree programme in Early Childhood Development (ECD) to train ECEC teachers. Children in rural areas can now access ECEC education in schools, and, after attending pre-school, they then attend Grade 0 for one year before proceeding to primary education (see Table 2.1).

Primary Education

In Zimbabwe, primary education is a seven-year cycle (see Table 2.1). There is an automatic promotion from one grade to the other. Primary education is mostly tuition-free except for the levies parents are expected to pay depending on individual schools' circumstances. Such levies may be in the form of a building fund and sports fees. The curriculum for primary schools is centrally designed and developed by the MoESAC's Curriculum Development Unit (CDU), which designs syllabi and teaching materials. Subjects taught in primary schools are Mathematics, English, either

ChiShona/IsiNdebele, Social Studies, Environmental Science, Religious and Moral Education, Music, Art and Craft, HIV/ AIDS Education and Physical Education. Most teachers in primary schools hold a Diploma in Education from Teachers' Colleges, while others are Bachelor of Education degree graduates from universities. However, there are some untrained teachers, especially in isolated parts of the country where trained teachers are unwilling to teach or where a genuine shortage exists. This may affect the provision of quality of education in such areas.

Primary education runs from Grade 1 to Grade 7 (see Table 2.1). At the end of Grade 7, pupils write an exit public examination before proceeding to secondary education. The examinations are centrally prepared by the Zimbabwe Schools Examinations Council (ZIMSEC). At Grade 7, pupils are tested in the following four subjects/areas: English, Mathematics, ChiShona/IsiNdebele and a General Paper, which comprises of Social Studies, Environmental Science, Religious and Moral Education, Music, Art and Craft, HIV/AIDS education and Physical Education. Pupils' performance in the Grade 7 public examinations will determine the type of school they may attend for secondary education as some secondary schools are selective and may set selection criteria based on the Grade 7 results. This tends to restrict to some extent pupils' access to certain secondary schools. In Zimbabwe, public schools are run by the government; church-owned schools by the various church denominations, urban and rural council schools by the responsible authorities and private schools are run either by individuals, Non-Governmental Organisations (NGOs), Board of Trustees or by companies.

Secondary Education

Secondary education in Zimbabwe begins in Form 1 and progresses through to Form 6 (see Table 2.1). Unlike in primary schools, parents pay fees for secondary education. Parents may choose to send their children either to boarding schools or day schools. Boarding schools tend to be well-resourced and provide better quality of education than the day schools. Boarding schools are expensive compared to day schools. As is the case in primary education, the secondary school curriculum is centrally designed by the CDU (MoESC, 2002). Secondary education consists of two cycles. Firstly, there is a four year 'O' Level cycle which has automatic progression from one Form to the next until Form 4 (see Table 2.1). In the past, there used to be an examination written at the end of the first two years of secondary education, the Zimbabwe Junior Certificate (ZJC) examinations. The ZJC examination was discontinued in 2000 since running an examination of that magnitude was no longer sustainable. After four years of secondary education, students write 'O' Level examinations which determine their progression to 'A' Level, tertiary education or employment.

Those who pass 'O' Level but fail to go to 'A' Level can enter any of the following:

- Teacher education;

- Nursing education;
- Agricultural education and training;
- Polytechnic education;
- Industrial training ; and
- Vocational training
- (see Figure 2.3).

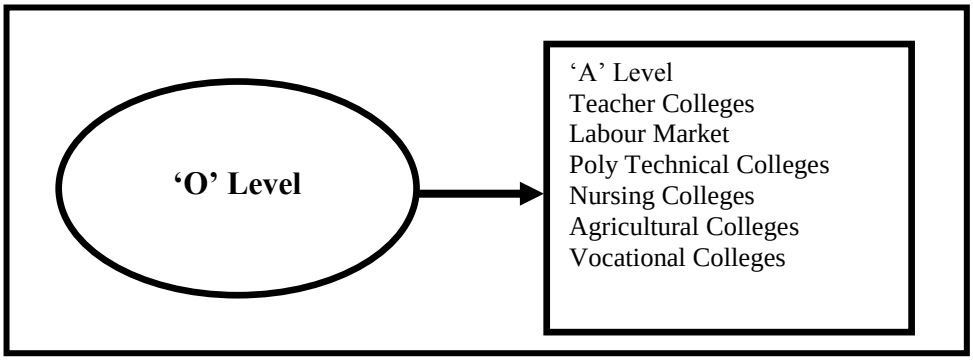

Figure 2.3: Possible student pathways after 'O' Level (Source: MoESC, 2005).

The 'A' Level examination is the final step in the secondary school education in Zimbabwe, and is prepared by ZIMSEC. 'A' Level results are used for certification, employment and selection purposes to university and other tertiary institutions of higher learning. In addition to basic education, primary and secondary education is also offered to those with special needs, some of whom may require special resources and infrastructure (MoESC, 2002).

Special Needs Education

Up until independence, the Zimbabwe government's involvement in the provision of special needs education was minimal. There were only a few schools which catered for the education of students with special needs, and most of them were either privately- or church-owned. Education for the disabled has been taken for charity work rather than a right. After independence, the government legislated for the provision of education for all. It established a division of the Schools Psychological Services and Special Needs Education to cater for the provision of quality education to all students with special needs. This involved government training staff for special needs education and setting up structures for learners with special needs, for example, the National Education Audio Logical Laboratory which produces hearing aids for the hearing impaired and the National Braille Printing Press for printing textbooks for the blind. All these gains in education at all levels were made possible through the Ministry's objectives (MoESC, 2002).

2.5.4 The Ministry of Education's Administration

The Ministry of Education, Sport Arts and Culture is headed by a Minister. All communications to the Ministry are done through the Permanent Secretary. These officials operate from the central office of the Ministry, which is situated in Harare, the capital city of Zimbabwe. In order to ensure effectiveness, the education administration system is made up of ten Administrative Education Regions (see Figure 2.4 below). Each of these Regions, is headed by a Regional Director, and further divided into Administrative Districts which in turn are headed by District Education Officers (DEOs). The Regional Director and the DEO are responsible for the administration of the implementation of educational programmes in the Province and District respectively (MoESC, 2002). The Education Regions in Zimbabwe are shown in Figure 2.4 below. The arrows on Figure 2.4 below indicate the sites in the areas where this study was carried out, namely Harare and Masvingo.

Figure 2.4: Education Regions in Zimbabwe (Source: The Zimbabwe National Commission for UNESCO, the Ministry of Education, Sport & Culture & the Ministry of Higher Education & Technology (2001).

The number of Education Districts in each Education Region differs depending on the size of the Region. Prior to Harare and Bulawayo being made education regions, there were fifty-nine education districts in all (Ministries of Education, Sport and Culture & Higher and Tertiary Education and Technology, 2004). Harare has seven educational administrative districts (Ibid, 2004). Bulawayo has five educational administrative districts. In total, Zimbabwe has seventy-one education administrative districts. This increase in the number of education districts helps the education system to manage the education in schools (Ministries of Education, Sport & Culture & Higher; & Tertiary Education and Technology, 2004). However, the MoESAC remains responsible for the overall administration of the education system in all Zimbabwe's education regions. After completing secondary education offered by the Ministry of Education, Sport, Arts and Culture, students proceed for further education and training at Tertiary institutions headed by a different Ministry (MoESC, 2002).

2.5.5 Tertiary Education

Tertiary education encompasses three main sub-sectors, namely Teacher Education, Technical and Vocational Education and Training (TVET) and University Education. TVET is made up of Agricultural Colleges, Nursing Colleges, Technical and Polytechnic Colleges and other Vocational Skills Training Centres around the country. Tertiary Education in Zimbabwe comprises a multiplicity of programmes offered in different types of institutions of higher learning and training. It falls under the Ministry of Higher and Tertiary Education. There are no education regions as is the case with the Ministry of Education, Sport, Arts and Culture. The duration of the programmes in tertiary education institutions varies according to the type of institution and the course in which a student is enrolled. Some students may enrol in Teachers' Colleges to do teacher education.

Teacher Education

Teacher education colleges educate and produce qualified teachers for primary, secondary, technical schools and vocational training centres. The pre-service teacher training programme is open to those who would have successfully completed either their 'O' or 'A' levels. Entry into primary school teacher education colleges requires five 'O' level passes, including English Language and Mathematics. The duration of the course is three years. For secondary school teacher training, the entry requirement is 'A' level and the duration is generally three years although in some colleges it is two years. On completion, the trainees are awarded a Diploma in Education. Currently, the Government owns and runs ten of the thirteen teachers' colleges (MoESC, 2002). The quality of education offered in teachers' colleges may also influence the quality of education provided in schools by the teachers. Besides Teacher education, students may also choose to do various Diplomas in TVET Colleges, Technical and Polytechnic Colleges, Agricultural Colleges or in Nursing Colleges. Some may choose to go to universities.

University Education

Entry into University is the preserve of those who would have successfully completed their 'A' and or 'O' levels for some universities like the Zimbabwe Open University offer some qualifications requiring 'O' level. Universities offer undergraduate and postgraduate programmes. The duration of most undergraduate degree programmes is usually three years, although there are some which last longer, for example the sciences, or shorter such as is the case with the University of Zimbabwe or Solusi University's Bachelor of Education degree programme for teachers with Diploma/Certificate in Education. Masters and Doctoral degrees are also offered at certain universities (Ministries of Education, Sport and Culture & Ministry of Higher and Tertiary Education 2004). The government is determined to continue the thrust to enhance access to university education by Zimbabweans. Before independence, there was only one university, the University of Zimbabwe. After 1980, the university net has grown significantly (Shizha & Kariwo, 2011). Currently, there are about thirteen universities in Zimbabwe.

Other Ministries which Provide Education in Zimbabwe

The provision of education in Zimbabwe is not restricted to the two education ministries. There are other ministries and government departments, which own and manage their own schools and training institutions. These include the Ministries of:

- Health and Child Welfare;
- Lands and Rural Resettlement;
- Agriculture, Mechanisation and Irrigation Development;
- Youth Development, Indegenisation and Empowerment;
- Women's Affairs, Gender and Community Development;
- Public Service, Labour and Social Welfare;
- Defence ;
- Mines and Mining Development;
- Home Affairs ; and
- Tourism and Hospitality Industry.

(MoESC, 2002).

Education in the various institutions of learning, from primary, secondary and the tertiary institutions is provided and financed by various stakeholders.

2.6 Education Provision and Financing in Zimbabwe

In Zimbabwe, education is provided and financed by various stakeholders. In this section, the relevant education financers are discussed. Church organisations that have, and continue to make significant

contributions to the education of Zimbabwe, are discussed (2.6.1). Thereafter, the government, which bears the greatest load in financing the education system, mostly in terms of teachers' salaries, is deliberated on (2.6.2). This is followed by a discussion involving schools financed by local authorities such as Rural District and Urban Council authorities (2.6.3). Lastly, other education providers who may include companies, individuals, Non-Governmental Organisations (NGOs) and Committees/Trustees are focused on (2.6.4).

2.6.1 Church Organisations

Before 1980, education for the majority of black people in Zimbabwe was mainly provided by church organisations. Even today, different church organisations continue to contribute greatly to the education system, as well as the expansion of education in Zimbabwe. Various schools established at different Catholic, Anglican, Free Presbyterian and other church organisations in the country provide education from pre-school to tertiary education. This contributes to the development of education through the provision of school infrastructure (MoESC, 2002). To date, many church schools have been and continue to be built. Although church schools may request teachers from their denominations to be deployed to their schools, the government is the employer of all teachers. Besides getting their salaries from the government as their employer, teachers in church-owned schools may get some incentives from the church organisations, whose purpose is to motivate them to execute their duties effectively. Such an arrangement could improve the quality of education in such schools. This was evidenced by the good performance of church schools at both 'O' and 'A' levels examinations of 2011. Nine out of the ten best 'O' level schools were church-owned schools, with only one government school making it to the top ten. Similarly, at 'A' level, only one government school managed to secure a position in the top ten schools, while the rest were church-owned schools (The Herald, 7 March, 2012).

2.6.2 The Government

The government plays a significant role in the Zimbabwean education system as it is the organisation which bears the greatest load in terms of financing the education system. In its national budget, education has been and continues to receive the greatest share compared to other sectors of the economy. In the 2002 Budget, the Ministry of Education, Sport and Culture and Higher and Tertiary Education Ministry were allocated 21.2% and 5.4% respectively of the total budget giving a total of 26.6% of the national budget (Ministries of Education, Sport and Culture & Higher and Tertiary Education 2004). Most of the government's funds to education go towards the payment of teachers' salaries, while a small percentage is allocated to grants for students which may be used for buying teaching and learning resources and for infrastructural development in schools. For example, 93% of the 2002 budget allocated to education went to staff salaries and allowances leaving only 7% for other school developments (Ibid, 2004). Besides helping in financing education, the government also

provides guiding principles and a policy framework for the provision of education in schools. The government owns a small percentage of schools in the country, about 5.8% of the primary schools and about 12.8% of the secondary schools across the country (see Table 2.2) (Ministry of Education, Sport and Culture, 2000). A larger percentage of schools are owned by local authorities (MoESC, 2002).

2.6.3 Local Authorities

A larger percentage of schools in Zimbabwe is owned and run by the local authorities (see Table 2.2) such as the Ministry of Local Government, National Housing and Public Works. In Zimbabwe, there are Rural District and Urban Council authorities (MoESC, 2002). It is through these authorities that the Ministry runs local schools. In Urban and Rural District Councils, local communities and parents have and continue to make a momentous contribution to the improvement of education. The community and parents' involvement in education is mostly evident in their payment of school fees and other development levies required in schools. Besides paying the fees and levies, parents also supply labour whenever infrastructural facilities need to be built at schools. Although the schools provide textbooks and other stationery to pupils, in some cases these may be insufficient. In such cases, parents have to buy stationery for their children, as well as school uniforms and other learning materials to assist with the teaching and learning processes.

2.6.4 Other Education Providers

In Zimbabwe**,** churches, the government and Local Authorities are not the only providers of education (see Table 2.2 below). The Education Act (1987) as amended in 1991 allows anyone in Zimbabwe to start a school, but it should be registered with the Ministry of Education (MoESC, 2002). Hence, private companies, individuals, Non-Governmental Organisations (NGO) and Committees/Trustees also own schools in Zimbabwe. Collectively, private education providers own and run 10.2% of primary schools and 5.5% of secondary schools in Zimbabwe (MoESC, 2009).

Table 2.2: Distribution of schools by Responsible Authority

Responsible Authority	Primary Schools (%)	Secondary Schools (%)
Government	5.8	12.8
Local Authorities	79.4	70.4
Churches	4.6	11.3
Trustees/Board of Governors	2.3	2.0
Other	7.9	3.5

(Source: MoESC, 2009).

From Table 2.2 above, it is evident that a large percentage of both primary and secondary schools in Zimbabwe are run by local authorities. In order to ensure efficiency in education, there is a need to constantly evaluate its provision in all schools irrespective of the responsible authority.

2.7 Monitoring and Evaluation of the Quality of Education in Schools

In most developing countries, the introduction of formal education was accompanied by inspection services in order to keep an eye on the quality of education being offered to students in schools (MacBeath, 2006). In Zimbabwe, inspection was introduced in the 1930s, but it was only for white education while African education saw its first inspectors in 1972 (De Grauwe, 2001). This may be due to the fact that the government of that time wanted to ensure that white people were afforded good quality education as opposed to their black counterparts. Inspection in Zimbabwe is now being re-introduced after its suspension for over a decade due to lack of resources. In Zimbabwe, there is no specific training for school inspectors. However, on appointment, inspectors will be familiarised with the process through an induction course mainly conducted at the regional level. Inspectors normally offer direction and counsel to those newly appointed on how to conduct inspection. However, considering that in Zimbabwe one school inspector is allocated to forty schools (MoESAC, 2009), it may take some time in an inspection cycle before all schools are inspected due to a shortage of resources like vehicles. Therefore, it is important that schools do not rely solely on external evaluation process for monitoring the quality of education that they offer.

Realising the challenges faced in the supervision of schools by school inspectors, schools are now being given more responsibility to monitor the quality of their education (MacBeath, 1999). Inspection tasks are now entrusted to schools whereby they are expected to carry out self-evaluation of their education provision for development purposes. This move is also meant to enhance collaboration between the school inspectors and their schools to ensure that quality measures are being put in place in the schools themselves and by the stakeholders involved. Therefore, schools are required to be more accountable for their performance and the quality of education that they provide to pupils. In order to do this effectively, there is a need to develop a culture of quality assurance in schools by promoting School Self-Evaluation (SSE) processes. This would involve schools monitoring and evaluating the quality of their educational conditions, processes and outputs for improvement purposes. Although this is an innovative idea, in Zimbabwe, there is still a lack of awareness of the need for schools to conduct self-evaluation processes. Moreover, there is currently no standard instrument in place for schools to use in the self-evaluation process and this may be a drawback for schools to fully assume the roles of internal inspection and supervision (MacBeath, 2006). Hence, this study attempts to bridge the gap between lack of awareness of the need for schools

to carry out self-evaluation processes and the absence of an SSE framework in Zimbabwean primary schools by identifying the characteristics of and requirements for an effective SSE framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context.

2.8 Conclusion

Chapter 2 presented the context of Zimbabwe in which the study on the development of an SSE framework for classroom quality took place. In this chapter, it was shown that there was a marked increase in the number of schools and enrolments after independence. It was also noted that lack of resources in schools might hinder the provision of quality of education to pupils. It emerged that the gains that have been made in human resource development since Zimbabwe's independence are being affected by the brain drain and HIV/AIDS thus leaving the education system with less skilled professionals who may not be competent enough to deliver quality education to students in schools and other institutions of learning. Education financing has also been found to be minimal due to budgetary constraints which affect the quality of teaching and learning at all levels of the education system. Education in Zimbabwe has been shown to be provided and financed by various service providers who include the government, churches, local authorities, trustees or board of governors, NGOs, private companies as well as individuals, with the government bearing the greatest burden in financing education. Monitoring and evaluation of quality of education in schools is faced with numerous challenges. The shortage of resources has been identified as the main obstacle in the quest to provide and monitor education quality in schools. Although schools have been given the authority to evaluate and monitor their education quality, it has been, however, noted with concern, that this idea may not be fruitful unless there is awareness by all stakeholders of the need for schools to carry out self-evaluation processes of the quality of their education. Moreover, for SSE to be effective there is a need for a common SSE framework to be used in the process. To develop some understanding of the quality of education and frameworks used in its evaluation and monitoring, the next chapter, Chapter 3 focuses on a review of the related literature.

CHAPTER 3

REVIEW OF RELATED LITERATURE

3.1 Introduction

In Chapter 2, the context of Zimbabwe in which this study was conducted is discussed. This chapter, Chapter 3, presents a review of the related literature where issues related to quality of education and its evaluation are discussed. In the review of literature, it is recognised that there is a large corpus of research and literature on School self-Evaluation (SSE) and its importance in improving the quality of education (Carlson, 2009; Hofman, Dukstra & Hofman, 2005; MacBeath, 2006; Schildkamp, Visscher, Luyten, 2009). However, research as well as literature on the development of SSE frameworks globally, and particularly in Zimbabwe, are limited. The literature review, therefore, focuses on SSE and on SSE frameworks used internationally to evaluate the quality of education in schools so as to understand their characteristics. As previously stated, the aim of this study to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe. Based on this aim, the ultimate goal is to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context.

As an orientation to the chapter, in the next section (3.2), a brief discussion of the various meanings of quality of education is provided. Section (3.3) focuses on issues related to how schools may enhance quality of education; the concepts of school effectiveness and school improvement are also discussed. Thereafter, SSE and its importance in improving quality of education in schools are presented (3.4). Section (3.5) discusses available frameworks for evaluating quality of education, while a conceptual framework for the study is presented in Section (3.6). The chapter ends with a conclusion in Section (3.7).

3.2 A Systemic Perspective on Quality of Education

Quality is a difficult term to define and some people have even argued that quality is elusive and is neither easier to describe nor to deliver in practice (Gibson, 1986). Initially, the quality debate began in the business community where there was a need to guarantee that products conformed to specifications (Sallis, 1996). This discussion, however, has also spread to other sectors of the

economy such as education. As education involves large amounts of public funds, stakeholders began to ask for value for money as they sought quality education provision. Although the concept of quality was borrowed from the business community, the quality of the finished product in the business community has much more in common with the quality of the end product in education. Initially, while the emphasis on quality was on the finished product in the world of business, this later shifted towards quality assurance of the processes where emphasis was placed on avoiding the production of bad quality products (Greenwood & Gaunt, 1994). This is also the case in education where the focus on quality of education is to avoid the production of sub-standard outputs. Steyn (2001a) affirms that the need for quality of education is the single most important thing and quality makes the difference between success and failure in education. Although there is a general consensus that there is a need to provide good quality education to all students worldwide (Greaney & Kellaghan, 1996; OECD, 2005; UNESCO & UNICEF, 2012), there is little agreement as to what constitutes quality of education.

On defining quality as a concept, some have argued that definitions may be grouped into distinct but related ways of thinking about quality as follows:

- Quality as fitness for purpose where quality is viewed as fulfilling a customer's needs or desires (Juran, 1989). The focus here is on the efficiency of the processes in an institution (Vlasceanu, Grunberg & Parlea, 2007).
- Quality as value for money which is mainly concerned about accountability in institutions of learning (Harvey, 1995).
- Quality as excellence in aspects where an institution's outstanding performance is considered (Campbell & Rozsnyai, 2002).
- Quality as fitness of purpose which focuses on the defined objectives and mission of an institution without checking the fitness of the processes in the institutions in relation to external objectives (Vlasceanu, Grunberg & Parlea, 2007).
- Quality as improvement highlights continuous search for improvement where achieving quality is central to the ethos of the people in the institutions (Campbell & Rozsnyai, 2002; Vlasceanu, Grunberg & Parlea, 2007).

In this study, quality is defined as fit for purpose and this fit for purpose applies to all aspects (that is inputs, processes and outputs) of the functioning of a school.

However, various stakeholders have different emphasis of the concept of quality of education. As observed in the subsequent discussion, these viewpoints may be a reflection of what people value in education. In the next sub-section (3.2.1), inputs into the education system as an indication of quality of education are discussed. This is followed by a discussion on processes in schools (3.2.2), and outputs as indicators of quality of education (3.2.3). Thereafter, quality as content of the curriculum is

discussed (3.2.4), while quality as value-added is presented in (3.2.5) and lastly, quality as selectivity is discussed (3.2.6).

3.2.1 Inputs into the Education System

Inputs into the education system may be regarded as an indicator of quality of education. Student background (Howie, 2002) and the characteristics of a community, that is, whether it is urban or rural are all context issues which may affect education in schools. The availability and quality of resources in schools, such as school buildings, textbooks, furniture, instructional materials and other amenities may be viewed by some as indicators of high quality of education (UNESCO, 2000; UNICEF, 2000). While resources and other facilities in schools may be essential in enhancing quality of education in schools (Oertel, 2005), merely having all the facilities and resources may not, on their own, account for quality of education. In fact, it is the way these resources are gainfully utilised for the benefit of students that makes a difference in the quality of education being provided in schools.

The numbers of teachers and the school administration in schools as well as their characteristics are also viewed as inputs to the education system. As such, quality of education in schools may also be thought of in terms of the sufficiency and characteristics of teachers and school administrators in schools. Teachers and school administrators' characteristics may include their levels of education as well as their training (Adams, 1997). While teachers are viewed as the single most important resource in the realisation and improvement of quality of education in schools (Darling-Hammond, 2006; Smith, 2008), research is inconclusive in identifying specific characteristics of teachers which are essential in improving the quality of education. Some list those characteristics that teachers bring to the teaching field for example, educational attainment, years of experience, and professional development (Nye, Konstantopoulos & Hedges, 2004; Yeh, 2009) as essential in enhancing quality of education in schools. Although these characteristics are essential, they may not adequately predict the way teachers perform in the classrooms. Therefore, while inputs, both human and material, are essential in order to enhance quality of education in schools, they may not, on their own, fully account for quality of education as other processes within schools and classrooms may also be at play.

3.2.2 Processes in Schools

While it may be easy to think of quality of education in terms of inputs to schools, processes, which are also essential in determining quality of education, may not be easy to establish. Since pupils do not enter schools as failures, the basic causes of pupil failure are the schooling processes themselves (Westwood, 1997). This argument implies that the school and classroom processes are the ones which are at fault when quality of education is not realised. This may be the reason why, in some cases, schools with the same quantity and quality of resources, both human and material, may not

necessarily produce the same results. The processes which enhance quality of education in schools may vary from school to school, but may include the following:

- interactions between school staff and the administration and among themselves;
- interactions between pupils and teachers and among themselves; and
- Teaching and learning processes in the school and in classrooms
  (Adams, 1997).

Although the aspect of school and classroom processes may be difficult to conceptualise and quantify, it has the potential to contribute greatly to the quality of education in schools. Therefore, the processes that go on in schools and classrooms should be closely evaluated and monitored as they are far more essential in helping schools realise quality of education which will eventually improve their output.

3.2.3 Outputs and Outcomes

The output of education in primary schools is also another perspective from which quality of education may be viewed. Outputs denote the short-term consequences of schooling, which may include student achievement, participation, completion rates and certification (Adams, 1997; Howie, 2002). Outcomes denote the long-term consequences of education, such as employment, salaries, health and social attitudes, behaviours, and skills (Adams, 1997). Quality of education, in terms of output, is better understood by many stakeholders in education (Williams, 2001) and achievement in tests is the bottom line for many who would assess the effectiveness of schools (Barker, 1988). Although student achievement in tests and public examinations may signify good quality of education to many (Barker, 1988; Williams, 2001), a holistic understanding of education quality should be in terms of inputs, processes and outputs as well as outcomes of education which include student knowledge (academic and cultural heritage), social preparation (societal trends and needs) and also personal development (personal and educational needs and interests) (Thijs & Van den Akker, 2009 p.14).

3.2.4 Content

Some may interpret quality of education in terms of content of the curriculum (Adams, 1997; Williams, 2001). Quality of education in terms of content denotes all the skills, knowledge and attitudes which are intended to be transmitted to pupils through the school curriculum (Williams, 2001). Quality as content is a reflection of what pupils should learn through the curriculum. Quality of education as content mirrors the specific choice of a country, community, or an institution, to some body of knowledge, skills, or information (Adams, 1997; Blenkin, Edwards, & Kelly, 1992). In order for schools to successfully deliver curriculum content to pupils, they should have clear educational

goals. But for quality of education to be realised, there should be effective institutional processes to deliver the intended curriculum.

3.2.5 Value-Added

Value-added is another perspective in which quality of education may be understood. According to Adams (1997), quality as value-added refers to the extent to which a school or a class has improved its pupils. Herein, the academic gains made by pupils are investigated. Quality as value-added may be determined at various levels, namely the individual pupil level, the classroom level and the school level. At the student level, value-added quality considers the contribution that schools make to pupils and the relative progress that pupils make in contrast to their preceding progress (Tymms, 2000). Therefore, a value-added focus on quality of education is concerned about the extent to which pupils have improved from their previous achievements irrespective of other factors related to student achievement such as gender, ethnic group, level of special education needs, and socially disadvantaged background. This perspective of quality of education is essential as it measures the gains that would have been made by pupils whilst controlling for extraneous factors.

3.2.6 Selectivity

Quality of education can also be thought of in terms of selectivity. Quality as selectivity may be considered in terms of some schools' restrictive measures in their enrolment processes (Williams, 2001). The way some schools select pupils may only allow excellent ones to be enrolled at such schools. Pupils who gain entrance into these schools will continue to keep up the standards of such schools by working hard. Failure to do so may result in them being unable to meet the next selection criterion to continue at such schools. As a result, the fewer pupils who enter or stay in selective schools, the higher the quality of education. This may be partly because if pupils are few, this may increase their chances of getting individualised instruction from the teachers over and above the fact that they are generally well performing pupils. Research has shown that schools which offer individualised instructions are more effective than those which do not (D'Agostino, 2000).

The various perspectives on quality of education, as noted in the preceding discussion, are all vital in the realisation of quality of education in schools. Quality of education, in the meaning of fit for purpose which applies to all aspects of inputs, processes and outputs of the functioning of a school in an effort to fulfil educational goals, refers to all these perspectives. In order for quality of education to be realised, there should be a joint effort by all stakeholders at all the levels of the education system. Most importantly, schools should be effective in their educational provision to pupils as they are directly responsible for the teaching and learning processes.

3.3 School Effectiveness and Quality of Education in Schools

School effectiveness research began a long time ago where earlier studies indicated that schools were less important in changing the society around them and to influence student improvement (Bernstein, 1970; Coleman et al., 1966). The idea was that the influence of family background is so strong on student development that they are incapable of being affected by the school and, therefore, schools were considered as not capable of making meaningful differences to educational outcomes (Ibid, 1970; 1966). However, many renowned experts (Scheerens, 1992; Teddlie & Reynolds, 1998; Teddlie & Stringfield, 1993) have provided compelling arguments against the notion that schools do not make a difference on educational outcomes. Recent literature and research studies on school effectiveness suggest that the school and the classroom, in particular, have a substantial impact on educational outcomes (Botha, 2010; Creemers & Kyriakides, 2008).

Previously, research on school effectiveness and improvement tended to focus on effective schools rather than on the less effective ones (Reynolds & Teddlie, 2001). The thinking behind might be that, once identified, the policies and practices in effective schools could easily be adopted in the less effective ones as a model for improvement. Although it was thought that school effectiveness research could serve as a foundation for school improvement, the factors that enhance effectiveness in schools might be quite different from those that lead to ineffectiveness. Considering the social and cultural differences of schools, it may be an isolated objective for ineffective schools to adopt the policies and practices that exist in well-performing schools in order for them to be effective (Slavin, 1998). Instead of assuming that policies and practices in well-performing schools may easily be adopted by the less effective ones, there is a need for an understanding of the problems inherent in each school for effective improvement of quality of education to take place. This may be achieved through having knowledge of all the conditions and processes and outputs of the schools and classrooms.

Whereas much information has been provided on the poor quality of education in most developing countries (Lockheed & Verspoor, 1991; UNESCO, 2004), information on how such education systems may improve is less readily available. Although literature is consistent in reporting that inadequate resources contributes greatly to the poor quality of education in most developing countries (Lockheed & Levin, 1993; Lockheed & Verspoor, 1991; Riddell & Nyagura, 1991), there is little evidence that resources alone will make schools effective. Most developing countries may encounter a plethora of collective difficulties, in providing education of high quality. Consequently, many schools may not be effective enough in their educational provision to pupils. While schools' lack of effectiveness may be attributed in part to lack of resources to provide the most basic environments for

success (Lockheed & Verspoor, 1991), there may be other factors which may equally affect the effectiveness of schools. In this section, school effectiveness and its effect on quality of education in schools is discussed. The concept of school effectiveness is considered in Section 3.3.1. Thereafter, characteristics of effective schools (3.3.2) and processes of effective schools (3.3.3) are discussed. Finally, school improvement, an aspect related to school effectiveness, is deliberated on (3.3.4).

3.3.1 The Concept of School Effectiveness

Literature offers varied definitions of school effectiveness. Scheerens (2000) defines school effectiveness as the performance of a school in terms of its output as determined through student achievement at the end of a particular stage of learning. An effective school may also be viewed as one that makes a substantial contribution to student achievement irrespective of their backgrounds (Grisay & Mahlck (1991). Sammons (2007) views an effective school as one where students progress in their learning. Some argue that schools may not be considered to be effective if the products of their activities do not realise or surpass their aims (Hoy & Miskel, 2001). On the other hand, school effectiveness may be considered as "…the extent to which a school can adapt to internal and external constraints and achieve its multiple goals in the long run …" (Cheng, 1996, p. 41). In this study, school effectiveness is used to refer to the performance of a school which can be expressed in terms of its outputs (Scheerens, 2000).

Although literature offers diverse definitions of school effectiveness, the overarching issue common to all is that of the accomplishment of educational goals. Literature is consistent that schools' main goals and objectives centre on student achievement (Barker, 1988; Williams, 2001). There is a general consensus that effective schools are ones which are able to promote student learning and achievement (Sammons, 2007; Scheerens, 2000; Teddlie & Reynolds, 2000). Effectiveness in schools, thus, does not depend on inputs, but on processes which happen within schools and classrooms with the inputs which will eventually result in good output. Since there are many processes which happen within schools (Teddlie & Reynolds, 2000), effective schools may excel in some of the processes at one point, but may work to improve on the others. It is, therefore, essential for schools to evaluate and monitor the quality of their education to find out those aspects in which they are effective and those on which they still need to improve, for the actual improvement to take place.

3.3.2 Characteristics of Effective Schools

Schools have different characteristics which are essential in order to enhance quality of education. Without such characteristics, it may be difficult for schools to effectively achieve their educational goals. In this sub-section, a generalised discussion of characteristics of effective schools is made with a discussion on effective leaders being deliberated on. This is followed by discussions on effective

teachers, sufficient teaching and learning resources, and lastly, other characteristics of effective schools.

Effective Leaders

For schools to be effective, they should have leaders with good leadership and management skills. Good leadership and administration have long been found to be essential in the achievement of effectiveness in any organisation, with schools being no exceptions (Calitz, Fuglestad & Lillejord, 2002; Latchem & Hanna, 2001). Effective school heads are sources of direction and instruction in schools (Cronje, Du Toit, Marais & Motlatla, 2004). They have the capability of directing and influencing the school staff towards the achievement of predetermined educational goals in the school (Leithwood & Duke, 1999). If everyone in schools is directed towards the achievement of goals, this may go a long way in schools' efforts of realising quality of education. In order to achieve this, effective school leaders should make strategic plans which involve the joint efforts of all stakeholders. If stakeholders are involved in school activities which are directed in a reliable method, they may develop a positive attitude towards the school and assist the school in achieving its goals (Naidu, Joubert, Mestry, Mosoge, & Ngcobo, 2008**)**. Schools should, therefore, have efficient leaders, as poor leadership in schools may lead to ineffective practices and processes which may hinder the achievement as well as improvement of education.

Effective school heads have visions and missions for their schools to guide the achievement of educational goals in their institutions. In order for a school's vision and mission to be effective and be realised, these should be communicated to everyone in the school in a convincing way. If a school vision is communicated in an influential way, it will become a shared vision for everyone in the school (Crawford, Kydd & Riches, 1997). Once it has become a shared vision, this will guide the school activities. Everyone will be committed and motivated to work towards the achievement of the school vision and mission. Therefore, teaching and learning as well as the quality of education, are likely to succeed in a school where key stakeholders feel ownership of the school's vision.

Effective Teachers

Effective schools have competent teachers who are able to teach all pupils. Teachers, particularly quality teachers, can make a significant contribution to pupils' learning regardless of their different educational needs. Teachers have been recognised as an indispensable resource in the education system (Hopkins & Stern, 1996; Nye, Konstantopoulos & Hedges, 2004). Teachers make a substantial contribution to the teaching and learning processes. Research indicates that effective teachers have the potential to improve student achievement (Darling-Hammond, 2006; Smith, 2008). For teachers to achieve this, they should have high expectations of all their pupils, which may enhance student learning. Moreover, such teachers should be able to set stepping stones which may help pupils to

achieve their expectations. Therefore, competent teachers are essential as they help to make schools realise their effectiveness.

Frequent assessment of pupils' achievement is an essential characteristic of effective teachers (Edmonds, 1979). This assessment is particularly vital in helping teachers identify problems which pupils face in their learning processes. An assessment of pupil's learning and achievement is indispensable as the information obtained may help to provide a general overview of the quality of education in a school. Literature indicates that the purpose of learning and assessment has changed from selection, guidance and prediction of future performance (Stiggins, 2002) to accountability of the school and the education system as a whole (Airasian & Abrams, 2002). Therefore, effective teachers evaluate pupils' learning progress (Gasemann, 1993) with the intention of providing useful feedback to pupils (Thorndike & Thorndike-Christ, 2010) as a way towards improvement.

Sufficient Teaching and Learning Resources

For effectiveness to be realised in schools, there should be a good supply of teaching and learning resources. Although resources on their own may not determine effectiveness in schools, the way they are utilised by both teachers and pupils is important just as their availability for effective teaching and learning processes to take place. Research has shown that student achievement is higher in schools with educated teachers and good resource materials such as textbooks which are frequently used (Lockheed & Longford, 1989). The availability of resources, both human and material, is essential to enhance student learning. The provision of teaching and learning materials may help to improve the teaching and learning processes. Literature has shown that pupils' opportunity to learn is enhanced through the use of instructional materials (Woronov, 1994). Since textbooks are one of the most important instructional materials in many schools, particularly in the developing countries (Mohammad & Kumari 2007), their provision in schools is crucial to enhance quality of education. A study conducted in Zimbabwe found student achievement to be higher in schools with more textbooks and a higher percentage of trained teachers (Riddle & Nyagura, 1991). Consequently, for schools to be effective, they should have adequate teaching and learning resources, which should be gainfully utilised by quality teachers for the benefit of all pupils.

Other Characteristics of Effective Schools

Providing insight into further characteristics of effective schools, Sammons (2007, p.6) indicates that a high quality curriculum, a safe school and class climate, a high degree of parental involvement, effective learning time and structured instruction are all essential for effectiveness to be realised in schools. Of importance to this study is the fact that, for all these characteristics to be in place in schools, the leadership, and the teaching and learning processes in schools should be effective. Effective leadership has been identified as vital for better school reform (The Wallace

Foundation, 2010). Thus, schools with such leaders are likely to excel in effectiveness. For Wrigley (2004), the problem of determining school effectiveness emanates from what counts as success. Considering different indicators of school effectiveness, some schools may achieve success to a greater extent, while others may simply aspire towards effectiveness. Hence, the ability of schools to achieve effectiveness depends, to a great extent, on the quality of leadership in the school. While there may be various characteristics of effective schools, it is the quality of the school leadership and teachers as well as the important roles that they play, which determine school effectiveness.

3.3.3 Processes within Effective Schools

Whilst it is essential to have enough resources for effectiveness to be realised in schools (Lockheed & Longford, 1989; Riddle & Nyagura 1991), it is also vital to have effective processes in place. These processes are essential as they have the potential to improve education standards. If school and classroom processes are effective, this may help to enhance student learning and achievement. Therefore, effective leaders and teachers are essential for schools to realise effectiveness in some processes which are essential for schools to realise effectiveness such as the process of monitoring progress at all levels and that of involving parents in their children's learning.

Monitoring Progress at all Levels

In order to find out whether pupils are succeeding or not in their learning, there is a need to evaluate and monitor their learning. Evaluating pupils' learning regularly provides teachers with information of whether they are making progress. This information is vital for it helps to inform teachers how they should plan for subsequent learning activities. Literature has shown that student learning is mostly understood by various stakeholders through student achievement (Barker, 1988; Williams, 2001). Therefore, pupil achievement should constantly be evaluated and monitored, in order to determine pupils' strengths and weaknesses for improvement purposes. Assessing student achievement and providing feedback performance to interested stakeholders may help to provide information of where pupils have problems in their learning processes. Such information is vital for it may serve as a basis on which pupils may be helped both at school and at home. In effective schools, pupil achievement is regularly monitored and information on pupil learning and achievement is used in order to improve pupil performance (Lezotte, 2001). For effective improvement purposes, monitoring of pupils' progress should be done at the individual, classroom and the school levels.

Involving Parents in their Children's Learning

Improving the quality of education in schools should not be an individual effort. All stakeholders should be involved if quality of education is to be successfully realised in schools. There are various stakeholders in education, and these include parents, who have a vital role to play in the education of

their children. Parents should, therefore, continuously be involved in their children's learning so that they can assist them in any way possible.

The process of involving parents in productive and appropriate ways in assisting their children in their learning is essential for schools to be effective. Parents' involvement in their children's learning has been found to be essential in improving student learning and achievement (Dekker & Van Schalkwyk, 1989; Van der Westhuizen, 2002). If parents are involved in their children's learning, this will make them understand and support the mission and vision of the school (Lezotte, 2001). When parents understand and support schools' missions and visions on education, this may help to enhance the effectiveness of such schools which is likely to result in the improvement of overall levels of attainment in schools (Goldman, 2005; Harris & Goodall, 2007). Nevertheless, in some communities, some parents may fail to support their children's education fully which is likely to create failing schools (Gentry, 2011; Williams & Chavkin, 1989). In such cases, it is essential for schools to involve other social structures with interest in education in school activities, for example, church organisations and NGOs. There should be co-operation between the education system and social structures which have an interest in education (Van der Westhuizen, 2002), so as to improve education effectiveness. Schools should, therefore, utilise the involvement of parents and other social structures with interest in education in order to enhance their efficiency and effectiveness.

For all these processes to be effective there is a need for schools to have clear educational goals, which should be guided by the schools' vision and mission on education. This may help to make school and classroom processes effective, and in turn, enhance pupils' learning.

3.3.4 School Effectiveness and School Improvement

A notion closely associated with the subject of school effectiveness is that of school improvement. Researchers and authors from the school effectiveness perspective (Creemers, 1994; Sammons, 2007 Scheerens, 1992; 2000) are output driven in that they are interested in the school characteristics which lead to relatively higher performance when student characteristics are constant (Scheerens, 2000). On the other hand, those from the school improvement perspective (Hopkins, 1987; 1989; MacBeath, 1999; 2006; Nevo, 1995) are process driven in that they are interested in identifying strategies and processes at various education levels which improve the quality of schooling (Hopkins, 1989) in order to improve pupils' outcomes, including levels of achievement and wellbeing. These two concepts, while they are not synonyms, are closely related when used in the debate on quality of education in schools. This is particularly so, because schools which are thought to be ineffective have to improve, in order to be effective, hence the close relationship between the two concepts. In order for schools to fulfil the goal of education provision for all, they need to continually revise and improve their performances (Hopkins, 1989; MacBeath, 2006; Nevo, 1995; UNESCO, 2004). Schools should

constantly find out how effective they are in their educational provision and seek ways of improving where they are not doing well (The Scottish Office Education and Industry Department, 1996). The assumption here is that school improvement will lead to school effectiveness. It may be concluded, therefore, that the aims of the two concepts are closely linked and cannot be detached in discussions about quality of education in schools.

School improvement is about curriculum development, strengthening the school organisation and the teaching-learning process, as well as a developmental approach to evaluation (Hopkins, 1989). School improvement is also viewed as a joint, supportive and stimulating process that involves all stakeholders in learning how to make efficient progress in realising the aims and responsibilities of schools (Creemers, 1994; Sammons, 1996). Therefore, school improvement may be viewed as a procedure which involves schools in identifying their strengths and weaknesses in order to devise strategies of how the identified weaknesses may be overcome in order to achieve effectiveness.

Given the importance of school effectiveness in student learning and achievement (Edmonds, 1979; Sammons, 2007), it is vital for schools to be effective so as to enhance pupils' learning. For schools to achieve effectiveness, they should have in place ways of evaluating and monitoring their conditions and processes of education. Such an exercise is particularly important both for improvement and accountability purposes (MacBeath, 2006; 1999). Most developing countries do not have sufficient human and material resources, among other things, and for schools to fully realise effectiveness under such conditions, remains a major challenge. Since effectiveness may not be fixed (Preedy 1993), quality of education in schools should continuously be monitored and evaluated to find out where improvement is necessary. If schools are to evaluate the quality of their education in their own contexts, this may help them to find context-specific solutions for effective improvement to take place. Therefore, there is a need to develop an awareness of the need for schools to monitor and evaluate their quality of education, particularly in a developing country such as Zimbabwe, where the concept of SSE is relatively new. This awareness should also be accompanied by the development of a relevant SSE framework to be used in this context. This SSE framework may help schools to find areas where improvement is desired. If schools work towards improving the identified areas of need, this may help them to achieve effectiveness, which will go a long way in improving education standards.

School improvement should focus on both the school and the classroom levels. This is particularly important, for it may be difficult to change education in a classroom without changing the organisational set-up of the school (Hopkins, 1987). In order for schools to improve, they have to understand their conditions and processes so as to devise and implement improvement strategies in their institutions so as to enhance their outputs. The Scottish Office Education and Industry

Department (1996) highlights the importance of understanding how good their schools are through the use of a set of indicators of quality of education. It may not be enough, therefore, to urge schools to evaluate their education quality without providing them the appropriate SSE frameworks for use in such exercises. In order to ensure effectiveness in providing pupils with good quality education, there is a need for schools to constantly evaluate and monitor and evaluate their conditions and processes for continuous, effective improvement.

3.4 School Self-Evaluation of Quality of Education

Schools are educational institutions where all inputs from the education system should be utilised for the benefit of pupils. They have and continue to play an important role in developing learning in pupils, as well as preparing them for life so that they can become responsible citizens. In order to ensure that pupils receive good quality education in schools, there is a need to constantly evaluate and monitor the quality of education offered in these institutions. This section focuses on SSE where the background to SSE is first presented (3.5.1). Thereafter, the concept of SSE is discussed (3.5.2) while research on SSE for classroom quality is deliberated on in 3.5.3.

3.4.1 Background of School Self-Evaluation (SSE)

School inspections are used in many countries as an external means of quality assurance in schools. The aim is to keep watchful eyes on education standards in schools in an effort to maintain and improve the quality of education. It is believed that schools need some form of outside pressure for them to perform well (MacBeath, 2006; MacBeath, Schratz, Meuret & Jakobsen, 2000). However, with the global economic meltdown, school inspection is now considered expensive internationally (MacBeath, 2006). This effect is felt particularly in most developing countries where there are limited resources for school inspectors to constantly visit schools for quality assurance purposes. Besides, it may be strange for schools to simply wait for school inspectors to tell them where improvement is needed without making efforts themselves to find out how they are performing for improvement purposes. Therefore, SSE is fast being adopted in many countries as an effective and inexpensive way of evaluating and monitoring the quality of education in schools. Moreover, literature is consistent that evaluation done by schools themselves is more effective for improvement purposes (De Grauwe & Naidoo, 2004; Saunders, 1999; Office for Standards in Education 1998; Turnbull, 2008).

The process of decentralisation of education in most education systems around the world is perceived as an effort to make schools become self-directing. For this reason, effective improvement of quality of education in schools should be school-based (MacBeath, 1999). Literature has shown that the top-down approach to change in schools which school inspectors normally recommend, does not work for

effective improvement purposes (Goodlad, 1984; Lezotte, 1989; Smith, 2008). Instead, there should be a balance between the top-down and bottom-up approach to evaluation processes in schools. Such an approach can be realised through both school inspection and SSE. This is particularly important because change which is driven from outside might be temporary. Schools might feel as if this change has been imposed on them rather than coming from within (MacBeath, Schratz, Meuret & Jakobsen, 2000), in order for sustainable improvement of quality of education to be realised. For this reason, many countries are opting for SSE as a means of ensuring quality of education in schools (Scheerens & Hendricks, 2002; The Scottish Office Education and Industry Department, 1996). In SSE, the school community evaluates the quality of its educational provision, identifies areas for improvement and work to improve such areas without recommendations being made from outside (Plowright, 2007). Therefore, schools need to be given the autonomy to monitor and evaluate the quality of their own education conditions and processes which may help to improve their outputs.

3.4.2 The Concept of School Self-Evaluation (SSE)

SSE has received much attention from various authors (MacBeath, 2005; MacNamara & O'Hara, 2005; Nevo, 1995; Schildkamp, Visscher & Luyten, 2009). Those from the school effectiveness perspective have defined SSE as a process carried out by a school, whereby representatives of the school community evaluate the school's functioning and scrutinise the evidence in order to make decisions regarding the overall development of the school (Literacy & Numeracy Secretariat, 2007; Van Petegem, 2005). This implies that SSE is done in order to improve the whole school. From an improvement perspective, SSE has been defined as a process of reflection on practice, made systematically and transparently by the school community, with the aim of improving student, professional and organisational learning (MacBeath, 2006). SSE may be viewed as a procedure which is started by the school in order to gain information on the functioning of the school, and to make policy decisions on school improvement (Nevo, 1995). A closer look at the definitions shows that SSE is done by people within the school mainly for improvement purposes. SSE has been studied in relation to various aspects by different authors. In this sub-section, SSE and school improvement are discussed, followed by SSE and student achievement.

School Self-Evaluation and School Improvement

International research has focused on different aspects of SSE. Hofman, Dukstra and Hofman (2005) studied and identified two criteria that lay the foundation of an assessment framework for SSE instruments, namely, accountability and school improvement. An input-process-output model was used in the assessment of quality of education both at the school and classroom levels. They concluded that SSE instruments should be assessed for quality before they can be used in schools for accountability, school improvement or both. Of significance to this study is the assertion that SSE instruments should be assessed for quality before their use. This is particularly essential, so as to

improve the quality of the instruments before they are implemented which may help to clarify all implementation issues.

In their internal review of SSE, McNamara and O'Hara (2005) analysed the gradual move in the Irish Education System towards a combination of inspection and SSE. They sought to analyse the Looking at Our School (LAOS) framework, which places greater emphasis on SSE. Unlike Plowright's 2007 study, where SSE activities were aimed at evaluating the roles of the HoDs, the LAOS framework has various indicators on which quality of education may be evaluated. The indicators of quality in the LAOS framework were quality of teaching and learning, quality of support for students, quality of school management, quality of school planning and quality of curricula provision. Their results suggest that SSE constitutes the best way forward in school evaluation and leads to school improvement. Of importance to this study is the acknowledgement that quality of education cannot be established through one quality indicator but through a variety of indicators.

In his study of the SSE activities aimed at monitoring the roles of the Heads of Departments (HoDs), Plowright (2007) found evidence to support the idea that SSE helps to improve quality of education in schools. His study was aimed at monitoring the roles of HoDs as this can make an important contribution to school improvement. The results of the study revealed that, if managed effectively, SSE is a strong argument against the external inspection model, as it is the basis of school improvement. Plowright (2007) recommends external inspection for school accountability and development needs and SSE for school development and improvement of practice which will raise education standards. However, Ferguson, Earley, Fidler, and Ouston, (2000) argue for a combined arrangement where SSE and school inspection are both used to evaluate and monitor quality of education in schools. Although Plowright's 2007 study found evidence to support the idea that SSE helps to improve the quality of education after evaluating the roles of HoDs, there is a need to evaluate the roles of all staff members and all the inputs, processes and outputs in schools, rather than focussing on the role of a single human resource in the school, if quality of education is to be realised and improved.

School Self-Evaluation and Student Achievement

Schildkamp, Visscher and Luyten (2009) studied the use of an SSE instrument in seventy-nine primary schools in the Netherlands over a period of five years. They used seven indicators on which to evaluate quality of education, namely educational leadership, professional development, achievement orientation, team cohesion, didactic methods, student achievement and adaptive education. An evaluation instrument with various indicators of quality is likely to provide a more holistic evaluation of the quality of education than the one with a single indicator, which may not be useful for effective improvement purposes. The study revealed that the use of the SSE framework has

not yet led to higher spelling or mathematics achievement levels. They however found that the use of the SSE framework had an effect on the professional development of teachers. Their findings may indicate that when doing SSE, schools may excel in some aspects while they have to work to improve the others. This notion finds support in literature which encourages schools to find out how well they may be performing in different aspects of their conditions, processes and outputs for improvement purposes (Bernhardt, 1999; The Scottish Office Education and Industry Department, 1996). Schildkamp, Visscher and Luyten (2009)'s findings also show that most schools find it difficult to use SSE results conceptually or instrumentally on their own. This suggests that there is a need to develop strategies in the training of school staff in evaluation processes, and how they may utilise the information obtained for improvement of quality of education.

Herselman and Hay (2002) conducted a study to find out if and how provision is made to enhance quality of education in the foundation phase. They found out that one way of ensuring quality of education is to establish evaluation processes at schools. This practice makes provision for reflection, which may help teachers to see how they are performing and how they can improve, in order to enhance student learning and achievement. These findings are in line with The Scottish Office Education and Industry Department (1996)'s 'How Good is our School' framework which aims to make schools find how good they are for improvement purposes. However, there is a need to find out whether provision is made to improve quality of education in all phases of education in primary schools and not only in the foundation phase.

Although research on SSE has received much attention, (Ferguson 2000; Herselman & Hay 2002; McNamara & O'Hara, 2005; Plowright, 2007; Schildkamp, Visscher & Luyten, 2009), very few studies have focused on it with an emphasis on the development of SSE frameworks to be used in SSE processes, particularly in developing countries. Research studies on SSE have mainly concentrated on its effects on school improvement (Hofman, Dukstra & Hofman, 2005; McNamara & O'Hara, 2005), and on student achievement (Herselman & Hay 2002; Schildkamp, Visscher & Luyten 2009). However, an understanding of SSE in relation to student achievement and school improvement without the necessary evaluation instruments may not be complete. Student achievement and school improvement should be understood in terms of information obtained through SSE done with appropriate SSE frameworks for effective improvement to take place.

SSE is essential in evaluating and monitoring the quality of educational provision in schools. Knowing how people are doing in schools may help to reveal embedded strengths and weaknesses, which may be a basis for finding improvement strategies (MacBeath, 2006). Although SSE will reflect the quality of education in schools in terms of the teaching and learning processes that happen there, there is a need for SSE to pay particular attention to classrooms. This is very important, as

pupils spend most of their time in classrooms. Moreover pupils learn more from the classroom level than they do from the school level.

3.4.3 Research on SSE for Classroom Quality

Classroom quality is a multi-pronged phenomenon which may be defined differently by various authors. Pianta and Hamre (2009) conceptualise classroom quality in terms of instructional support, emotional support and classroom organisation. Classroom quality has also been viewed as the classroom processes where sufficient time is devoted to teaching and learning so as to cover sufficient breadth and depth of content aligned to national standards using instructional processes which are effective enough for the benefit of all students (Hollingsworth, Fowler & Ybarra, 2006). In this study classroom quality is used to refer to the quality and quantity of resources, quality of teaching and learning processes, emotional support for pupils and quality of student achievement.

Of the researchers who have studied classrooms, many have focussed on the evaluation of classroom quality by enumerating parts of its components such as the physical environment (Earthman, 2004; Griffin, 1990; Sztejnberg & Finch, 2006), and teacher quality (Clare & Aschbacher, 2001; Hopkins, Beresford & West, 1998; Hopkins & Stern, 1996) in an effort to ascertain how these affect pupil learning and achievement. Conclusions were drawn based on their studies on single aspects of the classroom and how they affect student achievement. In this sub-section, classroom quality and the learning environment are discussed. This is followed by a discussion on classroom quality and teacher effectiveness.

Classroom Quality and the Learning Environment

The physical environments of classrooms may influence how well pupils learn. Sztejnberg and Finch (2006), in their study of how secondary school teachers in Poland make use of the classroom learning environment, found evidence to support that the quality of the physical classroom environment can affect classroom quality and this, in turn, affects student academic achievement. Similar findings were reported by Griffin (1990), who investigated the quality of the physical environment of the college classroom and its effects on students. These results probably suggest that the physical environments of classrooms, though they are not the ones that educate students (Oertel, 2005), have an impact on the quality of education. This view is supported by Earthman (2004), who is of the opinion that the quality of the physical environment will influence how well students learn. Although the quality of the physical environment of the classroom may affect classroom quality, a solid conclusion may not be made based on this single aspect alone. There are other aspects which also play a part, which need to be understood in relation to the physical environment of the classroom which enhance classroom quality.

Stewarts, Evans and Kaczynski (1997) evaluated instruments to enable teachers to assess their classroom environments. They found that, besides the physical environment, time management, behaviour management and teacher effectiveness all affect student success in learning. Their study also found out that, for favourable student learning to take place, teachers should think about seating arrangements that facilitate learning, and also ensure that their classrooms are visually appealing. However, McCombs and Whistler (1997) are of the view that, in addition to quality physical environments, teacher use of relevant teaching methods, clarity in communication and enthusiasm all impact on student learning. Such findings suggest that there are various aspects which contribute to classroom quality.

Classroom Quality and Teacher Effectiveness

Teachers play a fundamental role in the education of students the world over. Growing awareness of the importance of teachers in education has generated a variety of research. Research has shown that effective teachers have a significant impact on the teaching and learning processes, which have the potential to improve student academic achievement (Darling-Hammond, 2006; Hopkins & Stern, 1996; Smith, 2008). There is much debate as to what constitutes effectiveness in teachers with some researchers enumerating those characteristics that teachers bring to the teaching field for example, educational attainment, experience, attitudes, behaviours and professional development as essential features of teacher quality which enhance their effectiveness (Ballou 1996, Ehrenberg & Brewer 1994; Goe, 2007). However, research has also shown that teachers' credentials such as university degrees are ill-related to student achievement, just like teaching experience beyond the first or second year of a teacher's career (Goldhaber, 2002; Nye, Konstantopoulos & Hedges, 2004; Wenglinsky, 2001). Although teachers' credentials are necessary for them to be certified to do the job, it is their specific practices that are most likely to improve pupils' learning rather than their qualifications and experiences. Hence, in order to effectively evaluate classroom quality, more focus should be paid on the teachers' actual classroom processes than on their credentials.

Some studies have shown that classroom quality depends, to a large extent, on the effectiveness of the individual teachers. In their study of evaluating classroom quality in Cyprus, Kyriakides, Campbell & Christofidou (2002) focused on the teacher as the subject of evaluation for classroom quality. Their study revealed that teacher effectiveness could best be measured through self-evaluation procedures. Since teachers are the most significant resources in schools (Hopkins & Stern, 1996), they are critical in raising the quality of education (Hopkins, Beresford & West, 1998). However, Santiago and Benavides (2009) argue that teacher evaluation alone cannot account for classroom quality, but should be analysed as part of an evaluation which includes other essential components of classroom quality such as student assessment, school evaluation and system evaluation. This demonstrates tht there is a bi-directional influence of quality of education within the education system. The inclusion of these

components in the evaluation of classroom quality suggests that, the classroom, as part of the education system, cannot be understood in terms of teacher effectiveness alone. Therefore, classrooms, being part of the education system, do not function in isolation, but are constantly influenced by various factors that determine their atmosphere (Van der Westhuizen, 2002).

Studies on effective schools have shown that the classroom is more influential than the school level in determining student performance (Muijs & Reynolds, 2000; Yair, 1997). Providing further insight into factors that impact classroom quality, Creemers (1994a) argues that student academic achievement depends more on the procedures and activities carried out in the classroom than on the school level. While organisational aspects of schools and the national level of the education system provide enabling conditions for effective teaching and learning (Dekker & Van Schalkwyk, 1989; Scheerens, 1990; Van der Westhuizen, 2002), it is the quality of the classroom, mainly determined through instructional quality, that determine student learning progress (Pianta, LaParo, & Hamre, 2008). Therefore, without effective teacher guidance and instruction in the classroom, learning progress may not be achieved (Munro, 1999).

Although all the levels of the education system are essential in the realisation of quality of education, it is the school, and, particularly the classroom, where the actual teaching and learning processes take place which is most important in this respect. It is for this reason that all school and classroom conditions and processes should be evaluated continuously, for effective realisation and improvement of educational quality. For this to be achieved, frameworks to be used in the evaluation of quality of education should be in place.

3.5 Frameworks for Monitoring and Evaluating Quality of Education

Quality of education has gained prominence for most education systems with its significance topping the agenda. Critical to this discussion are ways in which education systems evaluate their educational quality with the most difficult challenge, however, being that of using relevant frameworks in the process. This is of particular concern to most developing countries where systems for evaluating quality of education are not well established as is the case with their developed counterparts where comprehensive frameworks to constantly monitor the quality of education are readily available. In this Section, the concept of a framework is discussed (3.6.1). Thereafter, frameworks for international evaluation of quality of education are looked at (3.6.2). This is followed by frameworks for national evaluation of quality of education (3.6.3) and frameworks for institutional evaluation of quality of education in 3.6.4. All this is done to gain insight into the development of an SSE framework for classroom quality in Zimbabwean primary schools.

3.5.1 The Concept of a Framework

There are various definitions of the term framework. Frankel and Gage (2007) view a framework as a tool which should explain how educational programmes should work by laying out their components and the steps needed to achieve the desired results. This view is also shared by Kahan and Consulting (2008) who opine that a framework is a structure which helps to increase an understanding of an educational programme's goals and objectives by defining the relationships between factors essential to the implementation of educational programmes and the internal and external elements that affect their success. The key issue in these definitions, which is also important for this study, is that a framework should have indicators by which standards of quality may be assessed. Although this study focuses on the development of an SSE framework for institutional evaluation of quality of education, which include the school level and its classrooms, a brief look at frameworks for international and national evaluation of the quality of education is done. This is essential in order to gain insight into the design and development of an effective SSE framework for use in the Zimbabwean context.

3.5.2 Frameworks for International Evaluation of Quality of Education

With increased concentration on education quality globally (Kellaghan, & Greaney, 2001; UNESCO, 2004; UNICEF, 2000), there is growing interest in international or cross-national evaluation of quality of education. International evaluation of quality of education is aimed at collecting, analysing, interpreting and comparing data about the quality of various education systems (Ross & Genevois, 2006, p. 27). This information is used to make judgements about the performance of education systems of various countries. Although this study is not aimed at the international evaluation of quality of education, an understanding of frameworks used for international evaluation of education quality is essential.

There are numerous assessment frameworks used to monitor and evaluate the quality of education at the international level. The common ones include those developed by international organisations such as the International Association for the Evaluation of Educational Achievement (IEA) and the Organisation for Economic Co-operation and Development (OECD). IEA developed assessment frameworks for studies such as the Progress in International Reading and Literacy Study (PIRLS; Mullis, Martin, Kennedy, Trong, & Sainsbury, 2009); and the Trends in International Mathematics and Science Study (TIMSS; (Mullis, Martin, Ruddock, O'Sullivan, Arora, & Erberber, 2005).The OECD developed the Programme for International Student Assessment (PISA) (OECD, 2004). These assessment frameworks detail the measurement of outcomes of numerous education systems as well as describe possible determinants of these outcomes based upon state of the art research knowledge. The PIRLS assessment framework monitors progress in student reading achievement at grade 4 level, as well as trends in the home and school contexts for learning to read (Mullis, Martin, Kennedy &

Foy, 2007). The TIMSS assessment framework focuses on evaluating student achievement in Mathematics and Science across countries, and it focuses on grades 4 and 8. The PISA assessment framework tests student achievement in three subjects, namely mathematical literacy, science literacy and language literacy of the 15 year olds (OECD, 2004). Information obtained is used to compare the attainments of students from different countries.

A variety of functions of international assessment studies on education have been identified. Some of them are:

- to identify the major determinants of national achievement per country;
- to enable policy makers to judge their education systems;
- to identify factors that affect differences between countries;
- to compare levels of national achievement between countries; and
- to assess educational processes at different levels of the education system in order to make informed decisions about needed change

(Howie & Plomp, 2005).

The comparison of education systems is essential as it may allow educational systems to compare and to learn from each other which may help to improve education. Literature indicates that research on quality of education requires an international focus, for variations of educational policies and practices among countries provide a standard laboratory for the study of aspects likely to improve the quality of education (Genevois, 2006; Greaney & Kellaghan, 1996; Ross & Williams, 2003; Saito & Van Cappelle, 2009).

3.5.3 Frameworks for National Evaluation of Quality of Education

Various countries have their own means of monitoring and evaluating quality of education. They may develop assessment instruments in the form of tests, which they will administer to pupils or to a particular section, for example, a specific grade or a particular age group (Postlethwaite & Kellaghan, 2008), to ascertain the quality of education. In some countries, education ministries do the assessment, while in others; a group of educational bodies carry out the assessment (Greaney & Kellaghan, 2008). An example of such a consortium is the Southern Africa Consortium for Monitoring Education Quality (SACMEQ). SACMEQ monitors the quality of education in language and mathematics in most Southern and Eastern African countries. Zimbabwe occasionally participates in this assessment. The development of the SACMEQ assessment instruments is based upon the analysis of curricula of participating countries. Background information which may provide insight into student achievement is also collected. A national evaluation of education quality is intended to describe student achievement in a curriculum area at a given time (Kellaghan, 2008; Postlethwaite & Kellaghan 2008). Student achievement may offer an estimate of the level of achievement in the education system as a

whole. The main indicator of quality of education for assessment frameworks used in evaluating national quality of education, therefore, is student achievement mainly in language and mathematics, although contextual information is also collected.

3.5.4 Frameworks for Institutional Evaluation of Educational Quality

Besides assessing quality of education at the international or national levels, education can also be evaluated and monitored at the institutional level. There are various institutions of education in any country's education system. These include pre-schools, primary schools, secondary schools and higher institutions of learning which include universities and colleges. Most developed countries, unlike most of the developing ones, have well established assessment frameworks in place for use in institutional evaluation of education quality. For example, the Classroom Assessment Scoring System (CLASS) framework in America (Pianta, LaParo, & Hamre, 2008) was developed mainly for pre-K classes and it focuses on the quality of classroom interactional processes between teachers and pupils. Other frameworks like the School Portfolio Toolkit in America, (Bernhardt, 1999); 'How Good is our School' in Scotland (The Scottish Office Education and Industry Department 1996); The Framework for School Inspection in London, (Ofsted, 2012) amongst others, were developed for use in evaluating and monitoring the quality of education in schools. There are other frameworks which were developed for use in higher institutions of learning. These include: A Framework and Checklist for Evaluating Online Learning in Higher Education in Australia, (Hosie, Schibecia & Backhaus, 2005); Framework for Institutional Audits in South Africa, (Council for Higher Education Accreditation, 2002), to mention but a few.

Frameworks for evaluating quality of education at institutional levels have various indicators on which quality of education may be judged. The indicators mainly focus on the administration, the teaching and learning processes, student achievement, and on resources and infrastructure in the institutions. Although there are various frameworks which can be used to monitor and evaluate quality of education in a variety of institutions of learning, some of them may have indicators that are context specific. While these frameworks may be adapted for use in contexts other than the ones they were designed and developed for, some aspects may fail to be fully adapted to suit the new contexts. In such cases, evaluation of quality of education may not be effective. Thus, there is a need to design and develop context specific frameworks, which can be used to effectively monitor and evaluate the quality of education in various institutions of learning.

The literature reviewed in this chapter has highlighted the importance of quality of education in schools. The literature has revealed that school effectiveness is vital in order for quality of education to be realised in schools. It has been shown that for schools to become effective, they should engage in self-evaluation processes. The literature has demonstrated the significance of frameworks in the

evaluation of quality of education, with several of them having been developed mainly in developed countries. However, issues surrounding how these frameworks were developed are not articulated. In spite of vast literature outlining the importance of SSE in improving quality of education in schools (Carlson, 2009; Hopkins, 1989; MacBeath, 2006; Nevo, 1995) no tangible steps have been taken towards developing instruments for use in such exercises in Zimbabwe. Again, there is lack of evidence of any publications elucidating SSE in Zimbabwe. Moreover, issues surrounding the development of SSE frameworks are still under-represented in the scholarly literature. Although the identified frameworks may be adapted or adopted for use in settings other than those they were developed for, it may not be possible to cater for all the contextual and other differences of diverse education systems. Furthermore, most frameworks which were developed were not specifically for SSE for classroom quality. In the next section, the conceptual framework for this study is introduced to show the thinking behind quality of education in schools and SSE for the improvement of education at the school level and at the classroom.

3.6 Conceptual Framework for the Study

The proposed conceptual framework for quality of education in schools in this study (see Figure 3.1) is based on existing institutional frameworks for quality of education for example; Scheerens' basic systems model on the functioning of education (Scheerens, 2004) and Howie's factors affecting mathematics achievement model (Howie, 2002). The conceptual framework for quality of education in this study is based on an input-process-output approach where these are specified at every level of education, namely, the national, pre-school, tertiary and school levels (see Figure 3.1).The consideration of inputs, processes and outputs at every level of education in conceptualising quality of education in schools in this study is based on the awareness that in order for quality of education to be realised, there needs to be a clear understanding of the responsibilities of each of the different levels of education (see Figure 3.1).

The proposed conceptual framework for quality of education in schools (see Figure 3.1), assumes a systems approach to education (see 3.2). This approach derives its notion from science, where it is believed that a set of parts of a system interact to achieve specified objectives (Banathy & Jenlink, 2004; UNESCO, 1979). Likewise, in an education system, the pre-school, primary and secondary schools and the tertiary education levels, together with their associated classrooms, interact in order to achieve systemic educational goals. This systems approach is important for understanding the education system for it contrasts with numerous fragmentary reforms aimed at improving aspects or parts of education which may not normally succeed (Banathy, 1991). As a result of the systems approach to education, the proposed framework for quality of education in schools in this study

acknowledges a bi-directional influence of quality of education within the different levels of education, whereby the quality of the higher levels will influence those of the lower levels and vice versa (see Figure 3.1). Due to a bi-directional influence of quality within the education system, when educational goals are not realised, it may be inappropriate to assume that problems may be within any one of levels and its associated classrooms alone. Rather, a comprehensive analysis of the whole education system should be done in order to find out where the problem exactly lies to ensure effective improvement may take place. Without such a systemic approach to solving educational problems, improvements to education may largely be based on trial and error which may fail to address the problems (Frick, 1993).

The conceptual framework for quality of education in schools proposed in this study is based on the assumption that any systematic attempt to improve the performance of an education system should comprise monitoring systems (UNESCO International Bureau of Education, 2001). Realising the need for monitoring systems to enhance quality of education (see 3.5), the central aim of this study is to develop a specific monitoring system, namely, the School Self-Evaluation (SSE) framework, to enhance the management and improvement of the quality of education in schools. The focus in this study on the SSE framework as a central pillar in the management and improvement of quality of education finds support in a famous statement attributed to Florence Nightingale who appropriately captures the performance-quality-management relationship of a health system: 'the ultimate goal is to manage quality. But you cannot manage it until you have a way to measure it, and you cannot measure it until you can monitor it' (Eagle & Davies, 1993). This performance-management relationship of a health system is also similar to that of an education system. The framework for quality of education in schools in this study intends to bring structure and stability to the way in which education should be evaluated in schools in order to find out their performances so as to manage their quality of education. SSE has been chosen as a key element of this study (see 3.4). In the conceptual framework for quality of education, which considers inputs, processes and outputs (see 3.2) at different levels of the education system, SSE falls under the process domain at the national level in terms of facilitating the designing of the SSE framework, and formulating policies that support its implementation in schools (see Figure 3.1). So, the designed SSE framework and supporting policies are part of the output at national level and feed into the pre-school, school and tertiary levels as inputs (see Figure 3.1). In turn SSE falls under the processes domain at the school level in terms of carrying out the evaluation process, and further falls under the output domain at school level again in terms of the documented evaluation report and the school improvement plan (see Figure 3.1).

The proposed conceptual framework for quality of education in schools demarcates responsibilities to various levels of the education system associated with the inputs, processes and outputs of the education system in order to enhance quality. The SSE framework to be developed in this study will

be rooted in the conceptual framework for the study. Most of the SSE framework's components and quality indicators will be derived from the conceptual framework. However, the list of the quality indicators indicated in the inputs, processes and outputs at each level in the conceptual framework may not be exhaustive as some of these will be generated and specified during the development process of the SSE framework.

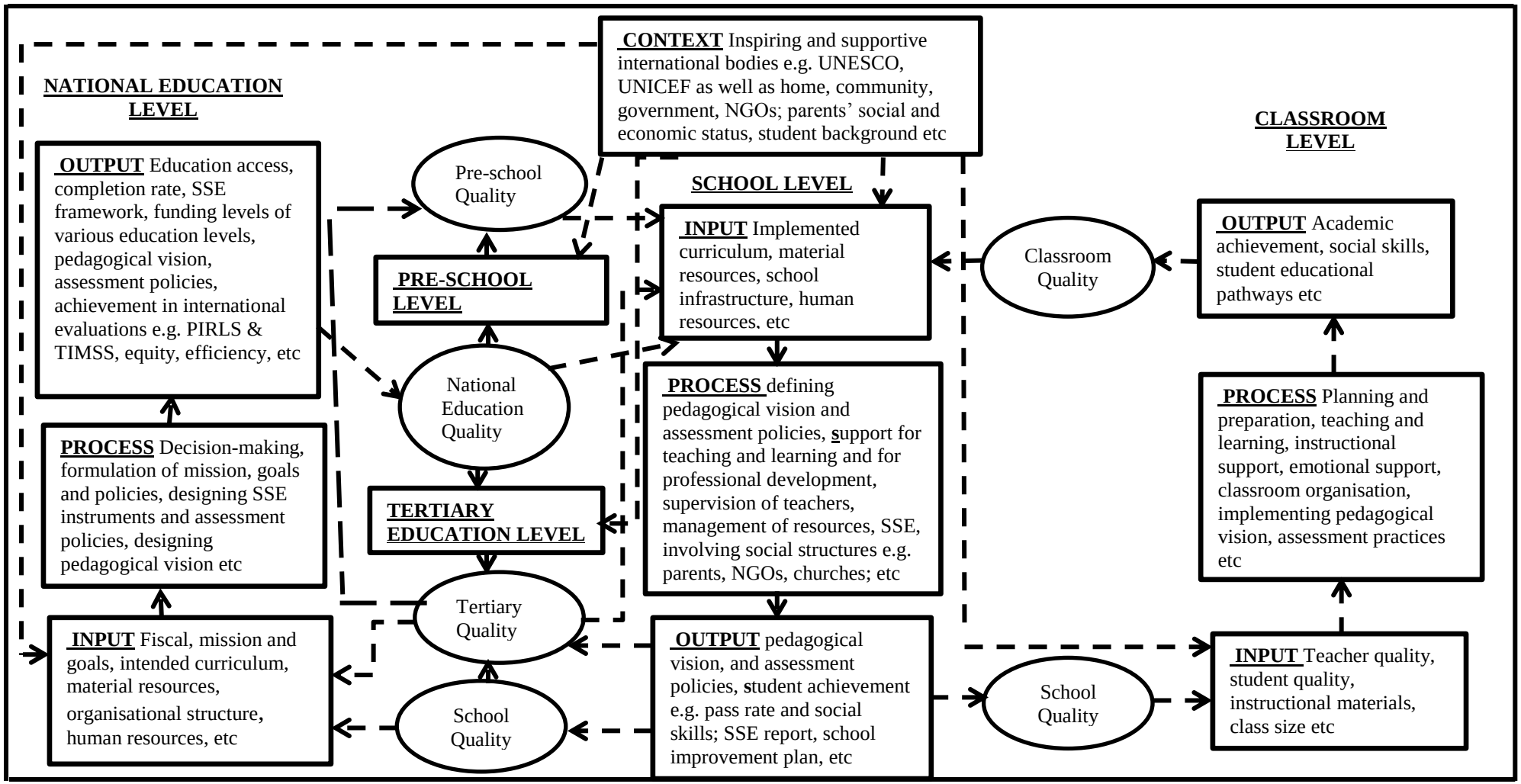

Figure 3.1 Framework for Quality of Education in Schools.

The framework for quality of education in schools, (see Figure 3.1), was designed to provide the essential conceptual underpinning for the design of the study. The following subsections describe the proposed conceptual framework. Sub-section 3.6.1 deliberates on the context and its role. This is followed by a description of the national education level (3.6.2) and the tertiary level (3.6.3.) in terms of the associated inputs, processes and outputs. The pre-school level is presented in sub-section 3.6.4 and thereafter school level (3.6.5). Lastly, the classroom is looked at in sub-section 3.6.6.

3.6.1 The Context

In the proposed conceptual framework for quality of education in schools, the context provides inputs to all the levels of education (namely, the national, the tertiary, the pre-school and the school) (see Figure 3.1). The context may include the government, international bodies like UNESCO and UNICEF, NGOs and other social structures with interest in education which may include parents, the community and other civic and private organisations (see Figure 3.1). The context also includes parents' social and economic statuses, student background and the location of a school, that is, whether it is located in an urban or rural area. All these factors have an influence on school and classroom processes. The context also provides inputs directly to the classroom. This may be in form of exercise books which parents buy for their children for use in classrooms. The parents may also help their children with homework which will be an input to the classroom. The context plays an important role in education in that it provides enabling conditions for schooling (Scheerens, 2004).

3.6.2 The National Education Level

The national education level comprises the national head office of the education system, the provincial, and the district levels. In the proposed conceptual framework, Figure 3.1 shows that the national education level receives inputs from the context. After having received the inputs, some processes happen at this level of education. These processes may include decision-making on various aspects of education like designing educational mission and goals, formulation of education policies, designing pedagogical vision, designing assessment policies and should also involve the designing and development of SSE frameworks for use in evaluating and monitoring the quality of education in schools (see Figure 3.1). These processes produce outputs, which have been highlighted in the conceptual framework as education access, completion rate, SSE framework; funding levels of various education levels, pedagogical vision, assessment policies, equity and efficiency (see Figure 3.1). Another output at the national level may also be achievement in international assessments (see 3.5), for example, TIMSS and PIRLS among others (see Figure 3.1). These outputs, put together comprise the national education quality (see Figure 3.1). Most of the outputs at the national education level are given to institutional levels of the education system (tertiary, school and pre-school levels) as an input (see Figure 3.1). These three institutional levels in turn give their outputs to their respective

classrooms as inputs. Although the national education level is not the main focus of this study, it is an essential level of the education system for it provides inputs and other enabling conditions for effective teaching and learning to take place in schools (Scheerens, 2000). The national education level also designs and develops the intended curriculum which will be given to schools for implementation (Howie, 2002) together with other inputs.

3.6.3 The Tertiary Education Level

In the conceptual framework for quality of education in schools proposed for this study, the details of the input, process output are not provided for the tertiary level in Figure 3.1 because this level is not the focus for quality improvement in this study. Nonetheless, the quality at this level in terms of inputs, processes and outputs affects and is in turn affected by the other institutional levels of the education system (pre-school and school levels) (see Figure 3.1). The tertiary education level, which includes colleges, (including teacher education colleges), and universities, receives inputs from the national education level which may include human and other resources (see Figure 3.1). Like the school level, the tertiary education level has its institutional and classroom levels. Processes like teaching and learning as well as decision-making also happen at the tertiary education level and this will produce an output, labelled Tertiary Quality (see Figure 3.1). This output, mainly consisting of human resources, will be given as an input to the lower levels of the education system; the school and the pre-school (see Figure 3.1) as graduates of universities and teacher education colleges are the teachers and leadership in the schools. The tertiary quality is also fed back to the higher level of the education system, the national education level because it provides manpower for the labour market as well as the research and innovation outputs.

3.6.4 The Pre-school Level

The pre-school is another essential level of the education system. Like at the tertiary level, the input, process and output details at this level are also not indicated in Figure 3.1 as neither this level is a focus for quality improvement in this study. The pre-school also receives inputs from the context and from the national level in form of human and other resources (see Figure 3.1). The processes which happen at this level of education mainly comprise teaching and learning which include emotional support, instructional support and classroom organisation (Pianta & Hamre, 2009). Within each of these major components of the processes in the pre-school level, there are various dimensions of classroom interactions which are essential to the development of pupils. The emotional support domain consists of positive and negative climate, sensitivity and regard for pupils' perspective aspects while the classroom organisation domain comprises dimensions such as behaviour management, productivity and instructional learning formats (Ibid, 2009). The instructional support domain is characterised by such aspects as concept development, quality of feedback and language modelling

(Pianta & Hamre, 2009). In addition to these teaching and learning processes, some decision-making processes also happen at this level. These pre-school level processes produce a certain quality, denoted in the conceptual framework as pre-school quality (see Figure 3.1), which will be given to the school level as an input, mainly in form of pupils.

3.6.5 The School Level

In the proposed conceptual framework for quality of education in schools, the school receives inputs from the national education level, the tertiary level, the pre-school level as well as from the context (see Figure 3.1). These inputs may include human and material resources, mission and goals of education, organisational structure, pedagogical vision; assessment policies among others (see Figure 3.1). After receiving these inputs, many processes happen at the school level. These processes may include decision-making by school administrators on the allocation of resources to classes, support for teaching and learning, supervision and support of teachers, management of resources, support for professional development, school self-evaluation and involvement of social structures with interest in education, for example parents, NGOs, churches and others (see Figure 3.1), (see also 3.3). Since schools differ in their effectiveness (Lezotte, 2001; Sammons, 2007) in terms of processes and outputs as well as their inputs, (see 3.3) their qualities are also bound to differ. The processes which happen at the school level produce an output which is denoted as school quality in the proposed conceptual framework (see Figure 3.1). Some of the outputs at this level include student achievement in terms of pass rate at the school, social skills, SSE report, school improvement plan among others (see Figure3.1).

At the school level, how the curriculum will be implemented depends on the quality of the processes within the school level and also on the quality and quantity of the inputs provided to this level by the context, the national, tertiary and the pre-school levels (see 3.3). The output from the school level, which is indicated as school quality in the conceptual framework (see Figure 3.1), is given to the classroom in form of inputs as well as being fed back to the national and tertiary levels in terms of quality of labour force and quality of students (see Figure 3.1). So, if school quality is good, this may also have a positive effect on the quality of the national education level (see Figure 3.1).

The Classroom

The classroom is within the school and receives inputs from the school and from the context (see Figure 3.1). The context may provide inputs directly to the classroom level in form of exercise books and other textbooks which parents buy for their children which can be used in classrooms in cases where there is a shortage of textbooks (see 5.3). Student background (Howie, 2002) as well as the characteristics of a community are context inputs which may also affect the quality of education in

classrooms (see 3.2). Classroom quality in the proposed conceptual framework is established through inputs, processes and outputs (see 3.4). In the conceptual framework for quality of education in schools, the classroom inputs are listed as teacher quality; student quality; instructional materials and class size (see Figure 3.1). Thus, in order to ensure quality of education in classrooms, it is vital to monitor and evaluate what goes on in schools, and particularly in classrooms, so as to find out where improvement may be required (see 3.3).

While schools may prescribe the processes they expect to take place in classrooms through the induction of teachers, these may merely be guidelines of how teachers should deliver curriculum content to pupils. The actual classroom processes are determined through the interactions between teachers and the pupils with the provided resources (see 3.3). There are various processes which occur in the classroom (see 3.3). Examples of some of these are listed in the proposed conceptual framework for quality of education in schools as teaching and learning, such as instructional support, emotional support, planning and preparation of lessons, implementing pedagogical vision and assessment practices among others (see Figure 3.1). The teaching and learning processes may include such aspects as breadth of curriculum, time on task and instructional effectiveness (Hollingsworth, Fowler & Ybarra, 2006). These classroom processes will also determine the attained curriculum, which may be thought in terms of student achievement, social skills and future student educational pathways (MacBeath, 2006; Thijs & Van den Akker, 2009) (see Figure 3.1). Due to a bi-directional influence of quality within the education system, the quality of education in the classroom also influences the quality of education of education at the school level and in turn, the school level's quality of education will also influence the quality of education at the national education level (see Figure 3.1). Although all the other levels of education contribute to the final output of education, which some authors (Barker, 1988; Williams, 2001) and many stakeholders underscore academic achievement as the most important (see 3.2), it is at the classroom where this final output is mostly evident since most of the pupils' time is spend in the classrooms. However, cognitive achievement is not the only desired output of education as it should also include preparation for society and for professional life (Thijs & Van den Akker, 2009). It is, therefore, essential to monitor and evaluate classroom processes in order to improve education.

3.7 Conclusion

The literature reviewed in this Chapter has shown that the quality of education may be understood differently by various stakeholders (Adams, 1997; Williams, 2001). Although quality of education is understood differently, it has taken centre stage in discussions about education worldwide. It has also emerged from the review of the related literature that quality of education may be monitored at the

international, national and institutional levels. Various outputs of education have been identified; nevertheless, academic achievement has been shown to be the chief output of education at all the levels of the education system. Within the education system, quality of education may be monitored and evaluated at the national level, the school level and the classroom. Literature on school effectiveness has shown the essence of both inputs and processes in schools in order to achieve the desired outputs. It has been shown that SSE is important in order for schools to realise and improve the quality of education. Various frameworks for monitoring and evaluating the quality of education at various levels have been identified with concerns, however, being raised on the lack evidence of how they were developed. A framework for quality of education in schools, based on systems theory in education, which comprises the context, national level, and the institutional levels with the associated classrooms, was also proposed in the Chapter. The conceptual framework further considers quality in terms of inputs, processes and outputs associated with each of these levels of the education and examples have been given for the national, school and the school's associated classroom. However, a comprehensive list of these aspects that are relevant at the primary school level and classrooms in Zimbabwe will be established through this study. The conceptual framework can be easily extended to a system-wide conceptual framework for quality of education beyond the specific school level considered in this study by incorporating details of inputs, processes and outputs at the remaining institutional levels (tertiary, pre-school) and their associated classrooms. The next chapter, Chapter 4 focuses on the research methodology for the study.

CHAPTER 4

RESEARCH DESIGN AND METHODS

4.1 Introduction

As stated in Chapter 1, this study aims to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. This aim is instituted on the recognition that quality is now at the heart of all education systems around the world. This Chapter introduces the research design and methods of the study of developing an SSE framework for use in evaluating the quality of education in Zimbabwean primary schools. Section 4.2 discusses the research paradigm chosen for this study while Section 4.3 expounds on the research design for the study. An overview of the research methods is discussed in Section 4.4. Section 4.5 focuses on methodological norms with ethical considerations being deliberated on in 4.6. A conclusion for the Chapter is drawn in Section 4.7.

4.2 Research Paradigm Chosen for this Study

A paradigm is a fundamental viewpoint and assumptions that forms the basis to one's approach and methodology (De Villiers, 2005).The subject of choice of a paradigm to use in a study is dealt with by various authors and it often differentiates qualitative and quantitative researchers. Whilst there are various paradigms from which researchers may choose (see Table 4.1 below), pragmatism was perceived as appropriate for this study. In this section, pragmatism, as the paradigm chosen for this study is elaborated.

Pragmatism is located between the 'paradigm wars' of objective positivism and constructivist epistemology and offers an immediate middle position both philosophically and methodologically (Johnson & Onwuegbuzie, 2004, p. 17). In pragmatism, both the meaning and truth of any idea are functions of its practical outcome (Maxcy, 2003). According to pragmatism, the conduct of inquiry does not need to rely on certain foundations of knowledge, but what counts are outcomes, and not necessarily knowledge claims, laws or even what is true (Ibid, 2003). Pragmatism views the problem

as more essential in a research study than a preoccupation of the methods to be used (Creswell, 2003) (see Table 4.1 below).

Table 4.1: Comparison of important paradigms

Paradigm	Positivism/ Post-positivism	Pragmatism	Constructivism
Methods	Primarily Quantitative	Quantitative + Qualitative	Qualitative
Logic	Primarily Deductive	Deductive + Inductive	Inductive
Epistemology	Objective, Findings probably objectively true	Both objective and subjective points of view	Subjective point of view. Knower and known are inseparable.
Axiology	Inquiry is value-free or values can be controlled	Values play a large part in interpreting results	Inquiry is value bound.
Ontology	Naive realism /critical transcendental realism	Accept external reality. Choose explanations that best produce desired outcomes.	Relativism

(Adapted from Tashakkori & Teddlie, 1998).

Pragmatism rejects the choice between the methods and uses both deductive and inductive logic. The integration of different methods in pragmatism augments the credibility of findings (Petter & Gallivan, 2004). Researchers who lean towards pragmatism use both objective and subjective points of view. Within the pragmatic framework, values play an essential role in the interpretation of results. The primary goal of pragmatism is to solve an overarching problem, with the research question playing a significant role in determining the method to be used (Creswell, 2003). The issue of the method to be used is not of primary importance (Tashakkori & Teddlie, 1998) since the research question will take care of that.

This study is rooted in the pragmatic knowledge claim. The primary appeal for pragmatism in this study is that it represents a practical and applied research philosophy, which enables one to study what is of value and interest in different ways, as one deems appropriate (Tashakkori & Teddlie, 1998). Moreover, pragmatism makes the investigation of the perceived problem feasible without imposing methods to be used. It allows the researcher to make options of all possible tools, in order to address the problem in a comprehensive manner. In this study, the research process did not begin with an identification of the research method to be used. Rather, the problem to be solved was first identified and then methods relevant to obtain valid and reliable answers to the questions were sought. Pragmatism was, thus, chosen in this study as it views the problem as more important than the actual

methods chosen (Creswell, 2003) for it is the problem that determines the methods to be used. It is also consistent with Design research itself which is pragmatic in its approach.

4.3 Research Design

As previously stated in 4.1, the aim of this study is to identify and understand the characteristics of effective SSE frameworks, with the intention of developing one for use in Zimbabwean primary schools. Since the study aims at developing an intervention, Design Research was made use of as the appropriate research design to address the main research question, which was formulated as follows: ***What are the characteristics of an effective School Self-Evaluation framework for improving classroom quality in Zimbabwean primary schools?*** The development of an educational intervention is based on design research, a systematic study of designing, developing and evaluating educational interventions (Plomp, 2009). Design research intents to produce new theories, artefacts and practices that account for, and influence teaching and learning processes (Barab & Squire, 2004).

Design research was considered a suitable research design for this study because it aims at pursuing new, novel and socially constructed solutions to problems, through generating design principles, which are both theoretically supported and practically tested (De Villiers, 2005). Through design research, researchers do not only aim to solve current problems, but also to contribute to a body of knowledge (Plomp, 2009). Since not enough is known about how evaluation is taking place, specifically regarding the quality of education offered in Zimbabwean primary schools and nothing has been documented about what should be evaluated and how to evaluate in order to improve the education in Zimbabwe, this study intends to make a contribution in this respect. Moreover, it may also help to solve the problem of a lack of an SSE framework in Zimbabwean primary schools. This study will also contribute to the body of scientific knowledge as it will generate and validate some design principles for designing and developing SSE frameworks for use in Zimbabwean primary schools. In this section, overview of design research is presented (4.3.1) followed by the nature of design research (4.3.2). Thereafter, evaluative criteria in design research (4.3.3) and the research process and phases in design research (4.3.4) are discussed. Lastly, the process of developing an SSE framework followed in this study is presented (4.3.5).

4.3.1 Overview of Design Research

Following the pragmatic view described above (see 4.2), this study, firstly, intends to identify evaluation practices used in Zimbabwean primary schools to evaluate the quality of education. Secondly, it aims at developing an SSE framework for evaluating the quality of education in

Zimbabwean primary schools and classrooms, as well as generating guidelines for the design and development of similar SSE frameworks in other contexts. Such an SSE framework is currently not available in primary schools in Zimbabwe. It was observed from experience as a primary school teacher for over a decade that schools do not have a common instrument to evaluate the quality of education. This also came out through a needs analysis that was conducted in Zimbabwean primary schools. Participants noted with concern that the evaluation of quality of education in schools is haphazard because of lack of a standardised instrument (see 5.3). Such a situation may have a negative effect on the realisation as well as the improvement of the quality of education in schools.

Unlike scientific studies which are carried out in laboratory settings, studies utilising design research in education are conducted in complex social settings, such as schools or classrooms (Brown, 1992; Collins, 1992). Design research aims at both the design of an intervention and a logical study of how this designed intervention works in its natural setting. The designing of the intervention takes place in cycles where the intervention would be designed, appraised, evaluated and redesigned until an estimate of the model intervention is reached (Nieveen, 1999). Because of the results it yields for intervention purposes, design research has received much attention from all walks of life, including health (Bryant-Lukosius & DiCenso, 2004), industry (Chong & Crowther, 2005), and most importantly for this study, education (Barab & Squire, 2004; Hoadley, 2004; Kelly, 2003; Plomp & Nieveen, 2009). As a result, the use of design research has since increased in all fields of research as it provides interventions for identified problems, as well as advances knowledge about these interventions' characteristics (Plomp, 2009).

Design research is most suitable for educational practice as it aims at finding research-based solutions for problems faced by practitioners in their everyday life in the teaching and learning processes. The characteristics of design research summarised by various authors (Barab & Squire, 2004; Design Based Research Collective, 2003; Kelly, 2003) are aligned to this study of the development of an SSE framework for classroom quality. These characteristics as summarised by Van den Akker, Gravemeijer, McKenney & Nieveen, 2006, p.5, in Plomp, 2009 and their application in this research are presented in Table 4.2

Table 4.2: Characteristics of Design Research and their Application in this Research

Characteristic	Description	Application in this Research
Interventionist	The research aims at designing an intervention in a real world setting.	This study is also interventionist in that it aims to develop an SSE framework for use in evaluating the quality of education in Zimbabwean primary schools.
Iterative	The research incorporates cycles of analysis, design and development.	This study is conducted through repeated cycles of design, development, implementation, evaluation and revision, in order to come up with an effective SSE framework.
Involvement of practitioners	Active participation of practitioners in the various stages and activities of the research.	In this study, practitioners are involved during the development, formative evaluation, try-out and semi-summative evaluation of the developed SSE prototypes.
Process oriented	The focus is on understanding and improving interventions.	This study also aims at understanding and improving the developed SSE framework.
Utility-oriented	The merit of a design is measured, in part by its practicality for users in real contexts.	In this study, the merit of the SSE framework is established through its practicality during try-out and field-test.
Theory-driven	Design research contributes to theory building.	In this study the feedback received from the participants about the prototypes will contribute to design principles for SSE frameworks.

Unlike other research designs, design research is a malleable methodology (Wang & Hannafin, 2005). It aims at refining educational processes and practices through its involvement of everyone with a stake in education in finding solutions to problems. This is done through its iterative analysis, design, development, and implementation of the intervention, which will result in design principles and theories (Brown, 2002). This effort also results in design principles that characterise the intervention (Gravemeijer & Cobb, 2006). Design research, therefore, aims to address problems where no clear guidelines for solutions to problems are in place (Plomp, 2009).

There are basically three phases in design research which are the preliminary, the prototyping and the semi-summative evaluation phases. These phases and the multiple cycles in design research were followed in this study. During the preliminary phase, the identification of the problem takes place. Problem identification is mainly done through practice and needs analysis. In this study, the problem was identified through educational practice and a needs analysis conducted in some Zimbabwean primary schools in order to ascertain the problem. The review of relevant literature is also part of the preliminary phase. The prototyping phase involves the development of prototypes which are preliminary versions of the intervention. During the semi-summative evaluation phase, the developed

prototype intervention is evaluated for its effectiveness before it is used in its intended setting (Nieveen, 1999).

As discussed above, design research has some specific essential features and characteristics. These features are well-captured diagrammatically by Wademan, (2005) in his model of design research. The model shows the iterative, cyclical nature of design research, its product development, and contribution to theory. The model highlights the concerted efforts of practitioners, experts and researchers in different phases of design and development of an intervention (see Figure 4.1).

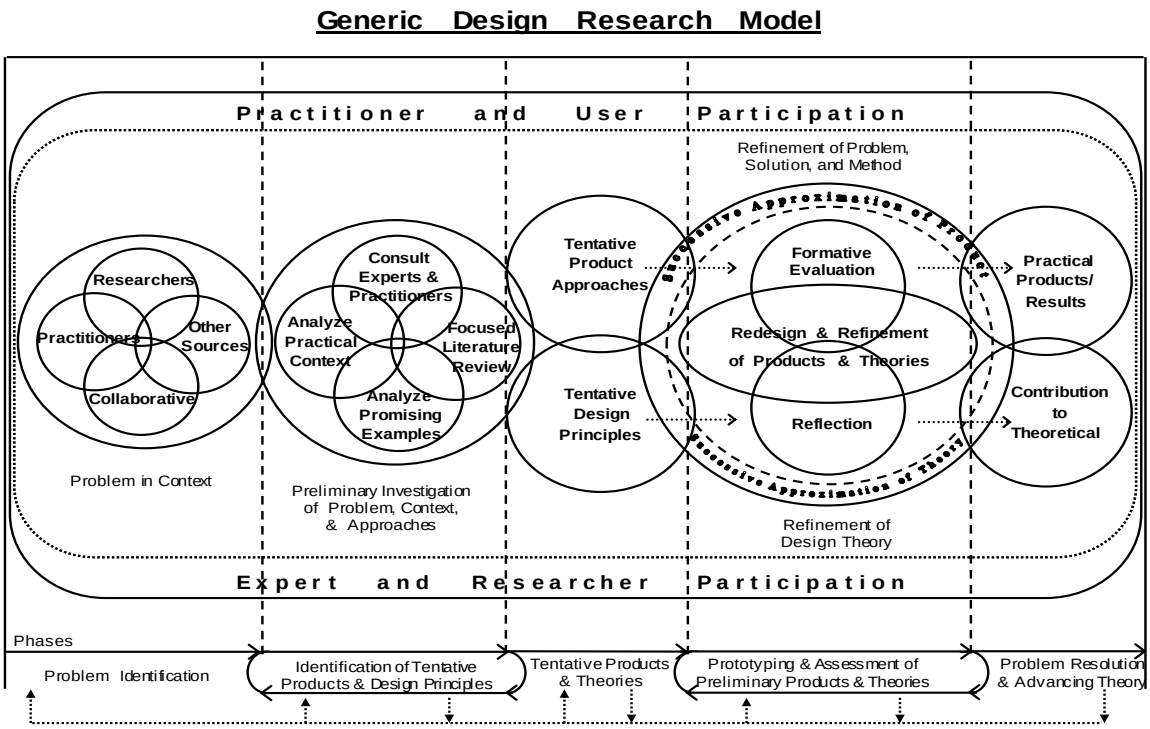

Figure 4.1: Generic Design Research Model (Wademan, 2005)

(Source: Plomp, 2009 p. 16)

Wademan's (2005) research design model was utilised in this study to develop an SSE framework for Zimbabwean primary schools. The generic design research model (see Figure 4.1 above) shows various cycles and activities which were also followed in this study, to develop the intervention. This is briefly explained below. In this study, user, expert and researcher participation occurred throughout all the phases of design research.

Design Cycles as Micro-cycles of Research

Design research is not only characterised by multiple cycles throughout its application. Each cycle is also a micro-cycle of research (Plomp, 2009) and encompasses a sequence of activities as briefly described below:

- ***Design and development:*** To design and develop an intervention, data from the review of the related literature and also from the previous cycle's evaluation are analysed and interpreted. The results inform the planning and designing of the prototypes.
- ***Implementation:*** To ascertain whether the developed prototypes work in their intended contexts, they have to be tried-out. The implementation process also involves the evaluation of the developed prototypes by both knowledge and user experts to inform further improvement.
- ***Evaluation:*** To investigate whether the prototype satisfies its goals, the evaluation has to be designed as a piece of research. In the various cycles, judgments by and data from users and experts about the developed prototypes are made. Feedback from both experts and users may help to point out errors in the developed prototypes, as well as provide a foundation for further development and improvement of the prototypes. All these activities take place in each of the cycles of design research and were also utilised in this study.

4.3.2 The Nature of Design Research

Wang and Hannafin (2005, p. 6) describe design research as a flexible methodology, which aims at improving educational practices. This is done through iterative analysis, design, development and implementation of interventions based on collaboration among researchers, experts and practitioners in real-world settings. The aim is to develop 'what works' to solve complex problems in educational practice and to establish design principles that characterise the intervention (Collins, Joseph & Bielaczyc, 2004; Gravemeijer & Cobb, 2006). This partnership between the researcher and different stakeholders in education is also utilised in this study, and it may help to explain relations between various variables of quality of education, which may facilitate the improvement of the main components of the SSE framework intervention.

In order for the study to be responsive to iterative stages of formative evaluation and re-design (Bannan-Ritland, 2003), it has to remain flexible all the way through. This is important so as to have room for the ever-changing nature of natural settings (Mertens, 2010). As a result, this involves various cycles of designing, testing and revising the prototypes as demonstrated by McKenney (2001)'s CASCADE-SEA study (see Figure 4.2 below).

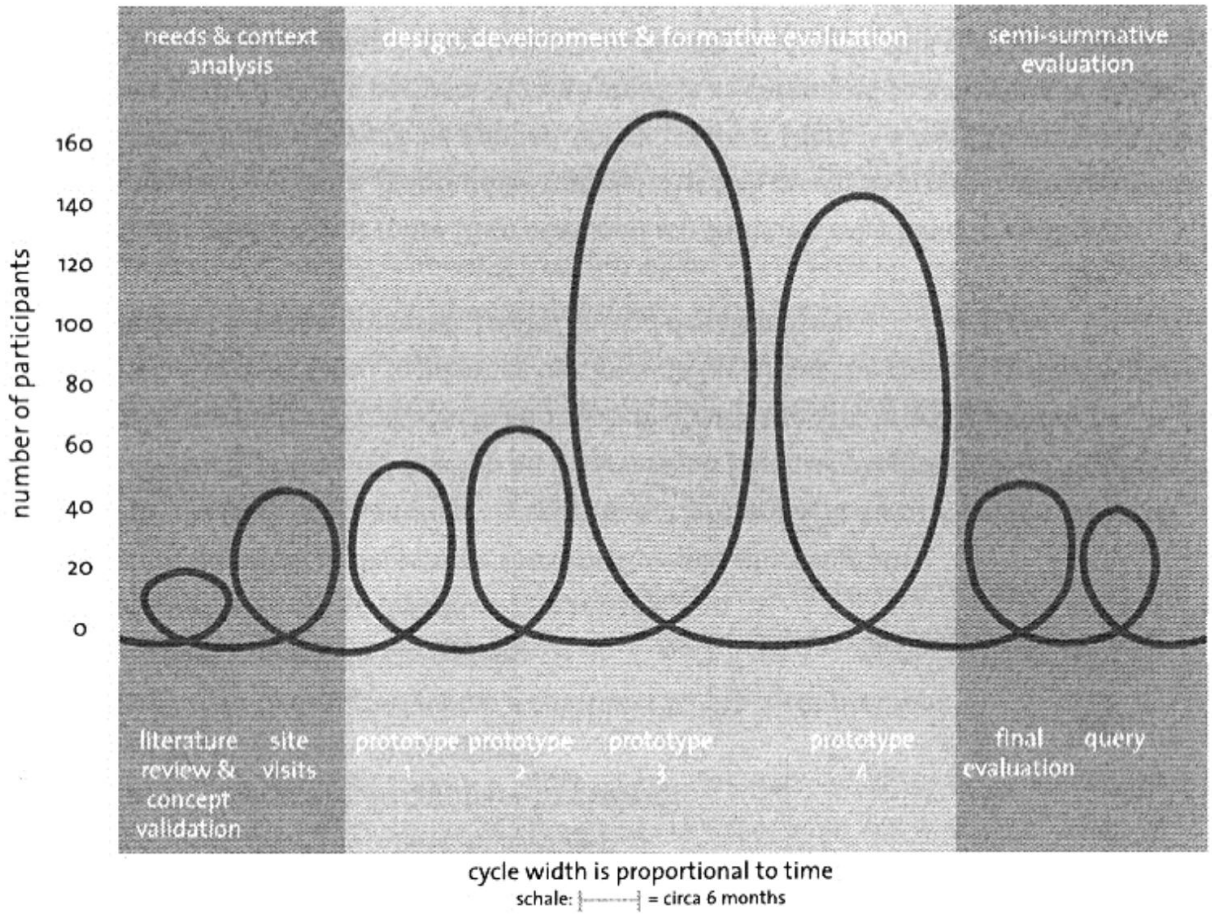

Figure 4.2: The cyclic process of Design Research (McKenney, 2001)

(Source: Plomp, 2009 p. 14)

The cyclical nature of design research is also applied in this study, as it may help to refine the SSE framework intervention. Three unique phases can be distinguished from this illustration as follows:

- Preliminary research: this involves a needs and context analysis and a review of the related literature (including site visits) leading to a conceptual framework.
- Prototyping phase: this requires iterative and cyclical design and development with formative evaluation of several prototypes as the most important activity aimed at refining the intervention.
- The Assessment phase: This involves semi-summative and final evaluation to conclude whether the intervention meets the predetermined specifications.

  (Plomp, 2009).

Tessmer (1993) produced a model of the layers of formative evaluation (see Figure 4.3 below). Tessmer's model illustrates the scale of resistance to revision, which may be anticipated throughout various stages of formative evaluation in the process of developing prototypes. In fact, Tessmer's

model shows that resistance to change during the formative evaluation process of the prototypes is lower during the beginning stages of the development process, and it increases towards the completion of the intervention. Therefore, informal formative evaluation activities of the prototypes such as self-evaluations and expert reviews are normally done during the early stages of the prototype development. More formal evaluation methods, like field tests, are used when there is high resistance to change later on in the process (Tessmer, 1993) (see Figure 4.3 below).

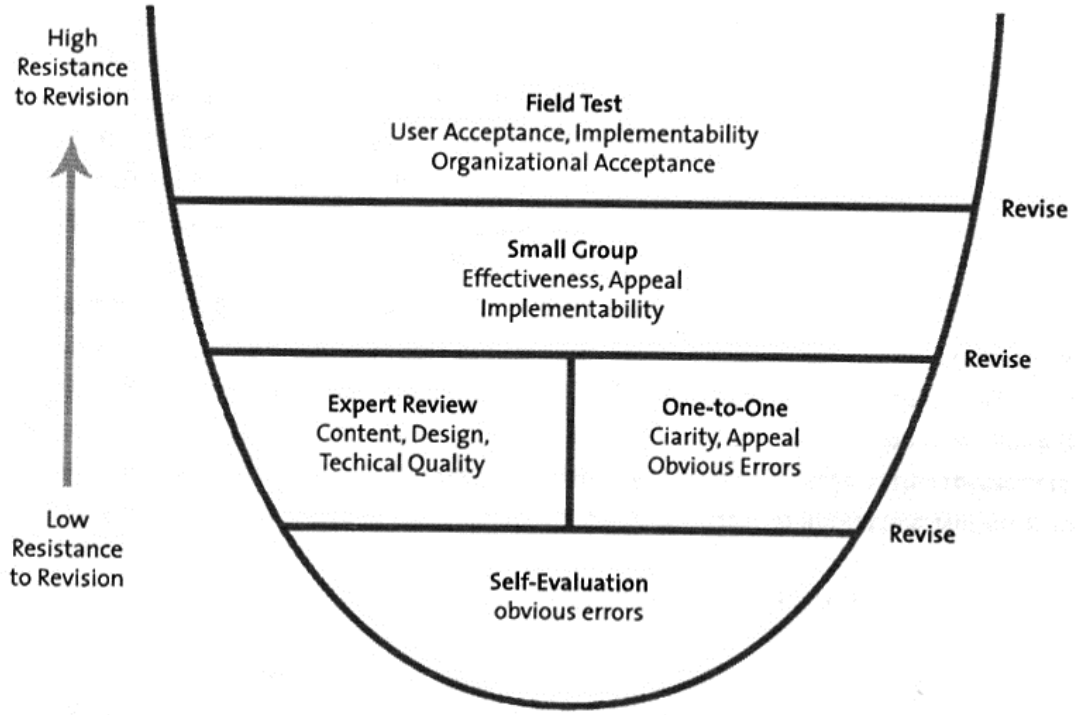

Figure 4.3: Tessmer's layers of formative evaluation

(Source: Plomp, 2009 p. 28)

During the process of design research, the information obtained from the formative evaluation of the developed prototype is used to further develop and adjust the subsequent prototypes. There is therefore, progression between evaluation and design, in an effort to make the finest possible estimate of the ideal intervention (Nieveen, 1999). The design cycles continue until the design conforms to certain basic evaluative criteria. This process is also followed in this study.

4.3.3 Evaluative Criteria in Design Research

In design research, formative evaluations are organised activities carried out to produce improved prototypes of the intervention. Nieveen (2009) argues that a completed design intervention should

satisfy certain quality criteria (see Table 4.2 below). These criteria are hierarchical. For example, in order for the intervention to be **effective** it should first of all be **practical** in the setting for which it has been developed. Likewise, the intervention has to be **relevant** to the setting for which it was intended in order for its **consistency** to be established.

Table 4.3: Criteria for high quality interventions

CRITERION	DESCRIPTION
Relevance (also referred to as content validity)	There is a need for the SSE framework and its design is based on state-of-the-art (scientific) knowledge. The SSE framework should be linked to the components of quality which it will monitor.
Consistency (also referred to as construct validity)	The SSE framework is 'logically' developed. All the components of the framework and how it should be used are well defined.
Practicality	**Expected** The SSE framework is expected to be usable in the settings for which it has been designed and developed. **Actual** The SSE framework is usable in the settings for which it has been designed and developed.
Effectiveness	**Expected** Using the SSE framework is expected to result in improved quality of education. **Actual** Using the SSE framework results in improved quality of education.

(Adapted from Nieveen, 2009, p. 94)

Data on the actual practicality of the intervention is determined after the target users had practical experience with using the intervention. Likewise, the actual effectiveness of the intervention may be determined after the intended users had used the intervention in the target setting (Nieveen, 2009). In instances where experts predict the practicality and effectiveness of the intervention before its use in the target setting by the target users, only data on the expected practicality and effectiveness will be obtained (Ibid, 2009). When applying the evaluative criteria during the various cycles, the participants might assume a variety of roles.

Participants' Roles in Design Research

Nieveen (2009) distinguishes three types of roles which participants in design research may presume during the evaluation of the various developed prototypes which were also applied in this research. These are:

Learner: This type of participant will not be an expert in the specific subject matter. The evaluator needs some learning of some sort before one can bring one's expertise to be realised.

Critics: According to Nieveen, (2009), critics are participants who, based on their fields of expertise, comment on the developed prototype intervention.

Revisors: In design research, participants as revisors do not only comment on the intervention, but they also put forward recommendations for its improvement (Nieveen, 2009).

4.3.4 Research Process and Phases in Design Research Followed in this Study

In this study, various processes were followed during the designing and development of the SSE framework. There was collaboration between the researcher, education practitioners, education officials and experts, as well as other stakeholders in education. This was done in order to solve the complex problem of lack of a standard instrument to evaluate and monitor the quality of education in Zimbabwean primary schools. Both experts and school participants assumed various roles during the evaluation process in this study. At one point, they took the roles of critics, where they were asked to comment on the developed prototypes. Special attention was paid to the structure, content and the process involved. At some point, they were expected to be revisors of the prototypes. The sampling of participants in this study is discussed in 4.4.

Details of the design and evaluation collaborations of the SSE framework in this research are diagrammatically represented in Figure 4.4 below adapted from the figurative style of Mafumiko's (2006) study. Each cycle in the prototype development phase in this study comprised the development of a prototype of the SSE framework, which is an initial version of the SSE framework before its final development and implementation. The first prototype was formatively evaluated by experts in the field of education whilst the second prototype was evaluated by the school practitioners. Prototypes three and four were tried-out and field-tested respectively by the practitioners. Prototype four was formatively evaluated by both the practitioners as well as by the knowledge experts. This was aimed at perfecting the final product. Although the final SSE framework in this study was not evaluated for further improvement, this might be done beyond the scope of this study (see Figure 4.4). Figure 4.4 below illustrates the research design for the study. These research processes for this study are distinctly discussed in Chapters 5 to 7.

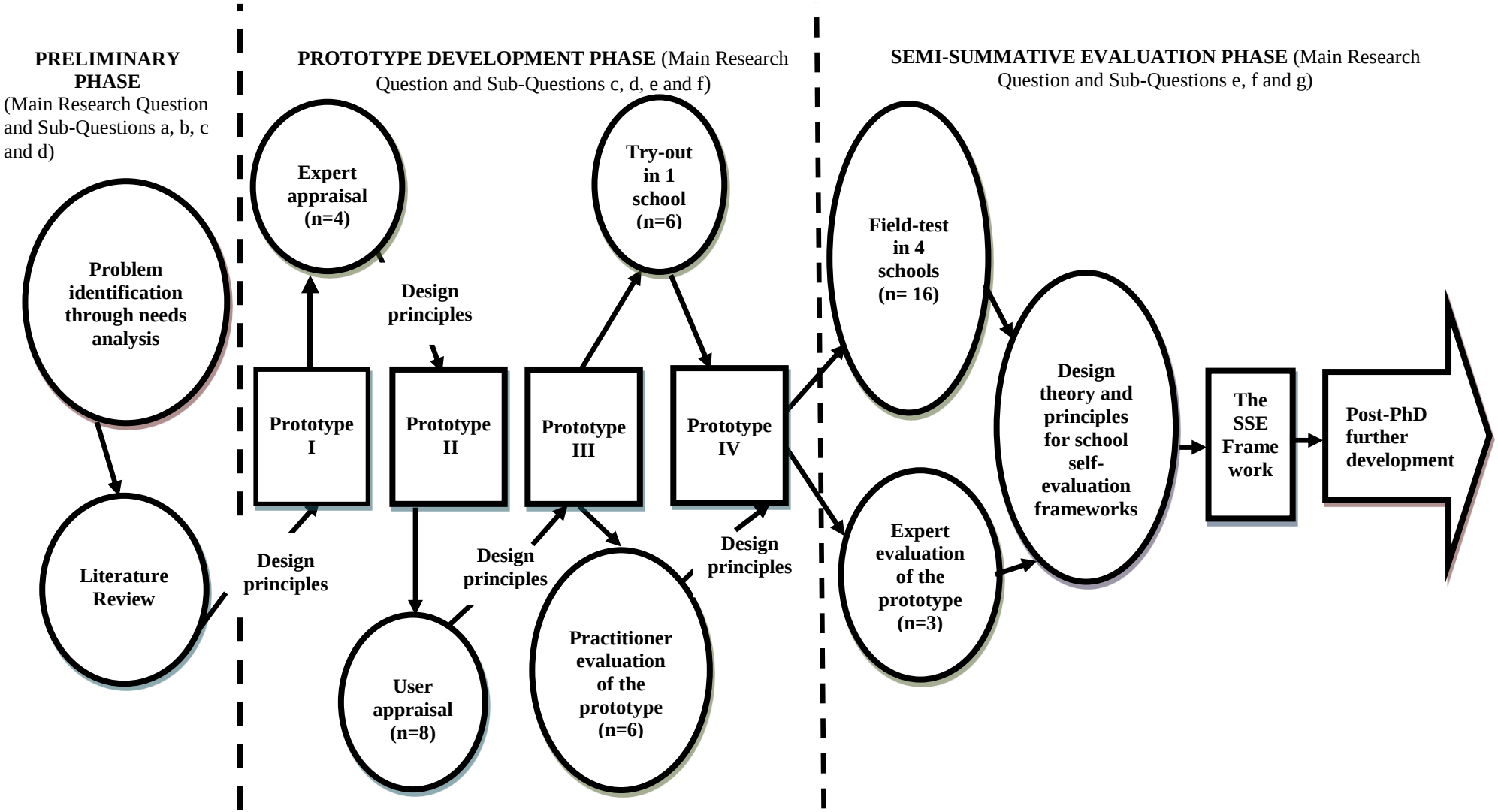

Figure 4.4: Research design for the study (adapted from Mafumiko, 2006).

Within the phases of the research design for the study (see Figure 4.4), a number of cycles in design research can be distinguished, which were followed in this study. During the design process, the cycles shift focus and move through the three phases (see Table 4.3 below). Table 4.3 below shows phases and cycles in design research followed in this study.

Table 4.4: Phases and cycles in the development of an SSE framework in this study

	PHASE 1: PRELIMINARY PHASE **Problem identification**	**Sub-research question addressed**
Cycle 1	Identifying the problem through practice and needs analysis	a, b, d
	PHASE 2: PROTOTYPYING PHASE **Design, development and formative evaluation of prototypes**	
Cycle 2	Development and expert appraisal of the first prototype	c, d and e
Cycle 3	Development and user appraisal of second prototype	c, d and e
Cycle 4	Development and try-out of third prototype	e
	PHASE 3: ASSESSMENT PHASE **Evaluation and assessment of the intervention**	
Cycle 5	Development and field-test of the intervention and expert and users' evaluation of fourth prototype	e and f
Cycle 6	Development of the final product	f and g

(Informed by Nieveen, 2009)

These phases are discussed next.

Phase 1: The Preliminary Phase

This phase addresses the needs analysis. In this study, the problem facing the education system in the evaluation and monitoring of the quality of education in Zimbabwean primary schools was identified through practice and needs analysis. This phase also included a review of the related literature (see 3.5), in order to gain insight into the development of the SSE framework. This helped to identify some design principles for the SSE framework. Literature is consulted when there is a problem in education where no solutions are easily available, and this helps to provide design principles for the intervention (Cobb, Confrey, diSessa, Lehrer & Schauble, 2003). What is happening internationally gave some ideas of innovative solutions to consider in designing an SSE framework which would be most appropriate for the Zimbabwean context (see 3.5). This phase addressed the overall research question of the study in a more general way which was formulated as follows:

- **What are the characteristics of an effective SSE framework for improving classroom quality in Zimbabwean primary schools?** (see 1.4)

Characteristics refer to features that should exist in the SSE framework, and how they would interrelate with each other in the setting for which it is intended (see 1.4). An SSE framework may have various characteristics, but most importantly, it should:

- be relevant to the target group and settings for which it is designed;
- achieve consistency between the various elements of evaluation;
- be practical for the setting for which it has been designed and developed; and
- be effective in informing policy and practice for improving quality of education (Nieveen, 1999). (see 1.4)

In pursuit of answers to the main research question, the following sub-questions were addressed in this phase:

- *What is the current status of the quality of education in Zimbabwean primary schools?*
- *How do Zimbabwean primary schools currently evaluate the quality of education?*
- *Which dimensions and measures of school and classroom quality are needed to design a relevant, effective and consistent SSE framework for improving quality of education in Zimbabwean primary schools?*
  (see 1.4).

Cycle 1: Identifying the problem and the needs analysis

This cycle focused on the problem identification and addresses sub-questions a, b and d (see 1.4). The problem was first identified through practice where it was noticed that schools do not have a common instrument for use when evaluating the quality of education. School heads are thus, faced with a dilemma in this respect. The needs analysis conducted in some Zimbabwean primary schools revealed that the Ministry of Education does not provide a standard instrument for monitoring and evaluating the quality of education in primary schools, and school heads are expected to develop their own instruments (see 5.3). Considering the complexity of developing educational interventions (Plomp, 2009), not all school heads may be competent enough to develop meaningful instruments for evaluating the quality of education. This perceived incompetence might affect the education standards in schools.

On realising that no easy solutions to the problem were available, it was considered important to undertake a study on the development of an SSE framework to monitor and evaluate the quality of education in Zimbabwean primary schools. In order to understand the current quality of education and its evaluation in Zimbabwean primary schools, a needs analysis was carried out. The results of the needs analysis are discussed fully in Chapter 5 (see 5.3) but briefly elaborated on here.

A needs analysis is an independent initiative that analyses gaps between the current state of an organisation and the desired conditions in order to find solutions to these gaps (Kaufman & English, 1979). The needs analysis in this study sought to investigate the current status of education, how quality of education is monitored and evaluated, challenges encountered in the evaluation process, and what might be needed in order to improve the process of evaluating and monitoring the of quality of education in Zimbabwean primary schools. A needs analysis was, therefore, essential, particularly in this study, to establish the current status of education and to identify the existing challenges in its provision and evaluation (see 5.3). This required identifying varied key stakeholders in education, who could be the best sources of information of the key needs (Rossett, 1987) of Zimbabwean primary school education. Failure to involve various stakeholders during needs analysis may lead to the failure of the intervention due to lack of adequate attention to coordinating the intervention plan and contextual reality during its initial stages (London, 1993). This phase also involved a review of the related literature so as to gain insight of the international best practice of the phenomenon under study. This phase resulted in a conceptual framework for the study (see 3.6).

Phase 2: The Prototyping Phase

This phase involved iterative cycles of research, where several prototypes of the intervention were developed and formatively evaluated so as to reach an approximation of the model intervention (Nieveen, 1999). This phase, (see 1.4), addressed sub-questions c, d and e formulated as follows:

- *Which dimensions and measures of school and classroom quality are needed to design a relevant, effective and consistent SSE framework for improving quality of education in Zimbabwean primary schools?*
- *How can the SSE framework contribute to the improvement of quality of education in Zimbabwean primary schools?*
- *How can the SSE framework be used in Zimbabwean primary schools?*

Having identified a first draft of the design principles for designing and developing an SSE framework for classroom quality from a review of the related literature and from a needs analysis, there was progression into the stage of designing prototypes. Once a prototype was developed, it was subjected to formative evaluation by experts and users, so as to enlighten the development of the subsequent prototype.

Cycle 2: Development and expert appraisal of the first prototype

In developing the first prototype of the SSE framework, exemplar SSE frameworks such as the Scottish Inspectorate (The Scottish Education and Industry Department, 1996), The School Portfolio Toolkit (Bernhardt, 1999), among others, were consulted as a basis for developing the intervention. The first draft prototype had to be formatively evaluated by the researcher after development. This was done so as to identify and rectify obvious errors. After revision, the draft prototype was then given to experts in the field of education for appraisal. Expert opinion was sought from university and college lecturers from Zimbabwe and South Africa so as to enhance the quality of the prototype. Their feedback helped to inform the revisions that were to be made to the prototype, and these acted as design principles in the development of the succeeding prototype (see 6.4).

Cycle 3: Development and user appraisal of the second prototype

After experts had reviewed the first prototype, suggestions made for improvement were incorporated in the development of the second prototype. This was then subjected to practitioners for user appraisal. The information obtained from this cycle helped to inform the development of the third prototype (see 6.7).

Cycle 4: Development and try-out of the third prototype

Feedback from the users' appraisal of the second prototype was incorporated in the development of the third prototype. This cycle was mainly concerned about trying-out the developed prototype so that implementation issues may be clarified. The try-out of the third prototype was done so as to get practitioners' views about the practicality of the intervention. Their suggestions for improvement were incorporated into the development of the ensuing prototype (see 7.3). This phase resulted in various prototypes of the SSE framework.

Phase 3: The Semi-Summative Evaluation Phase

This is the final phase of the design research process. This phase examines the practicality and effectiveness of the developed intervention. In this phase, a comprehensive evaluation that examines the functioning of the developed SSE framework was done. This might probably be followed by further design to improve the quality of the SSE framework (see Figure 4.4). This is important in that it might lead to subsequent development of a more fully detailed intervention through further consultation (Design-Based Research Collective 2003). This phase was meant to establish the consistency, as well as the effectiveness of the SSE framework. It addressed sub-questions e, f and g formulated as follows:

- *How consistent is the developed school self-evaluation framework in evaluating quality of education across different environments in Zimbabwean primary schools?*
- *How can the SSE framework be used in Zimbabwean primary schools?*
- *How effective is the developed SSE framework in evaluating quality of education across different environments in Zimbabwean primary schools?*

(see 1.4).

The phase comprised two cycles which are briefly explained below.

Cycle 5: Development and implementation of the SSE framework and experts and users' evaluation of the fourth prototype

Feedback from the try-out and appraisal of the third prototype was incorporated in the development of the fourth prototype. After designing and developing the fourth prototype, it was field-tested in four schools. In this context, field-test was part of the development process of the SSE framework in that it informed further improvement of the prototype. This resulted in the development of the final product. Challenges at the implementation stage helped to inform the development of the final product. Therefore, even after the development of the final SSE framework, efforts should be made to continually seek to improve it and make it more systematic (MacBeath et al., 2000). The evaluation of the fourth prototype was intended to assess its consistency and effectiveness in evaluating and monitoring the quality of education in schools. Information obtained from the evaluation of the fourth prototype was incorporated in the development of the final SSE framework for Zimbabwean primary schools (see 7.6).

Cycle 6: Development of the final product

The final product of the SSE framework for Zimbabwean primary schools was developed after an analysis of the feedback from field-test of the fourth prototype by practitioners, as well as comments from expert appraisal. This final SSE framework was not evaluated for further refinement. However, a further development of the final SSE framework for Zimbabwean primary schools is possible, but this was beyond the scope of this study. This phase resulted in the final SSE framework for Zimbabwean primary schools. Details of these phases and cycles of design research followed in this study are elaborated on in chapters 5 to 7.

4.3.5 The Process of Developing an SSE Framework Followed in this Study

Since Design Research aims at developing interventions and advancing our knowledge about the characteristics of these interventions and the processes of designing and developing them (Plomp, 2009:13), it was deemed appropriate for this study. In this study, there was collaboration between the researcher, experts, practitioners and other stakeholders in education (see Figure 4.5), in order to develop the SSE framework since no guidelines on the development of such interventions exist (Ibid, 2009). The following process model for the development of the SSE framework was followed in this study.

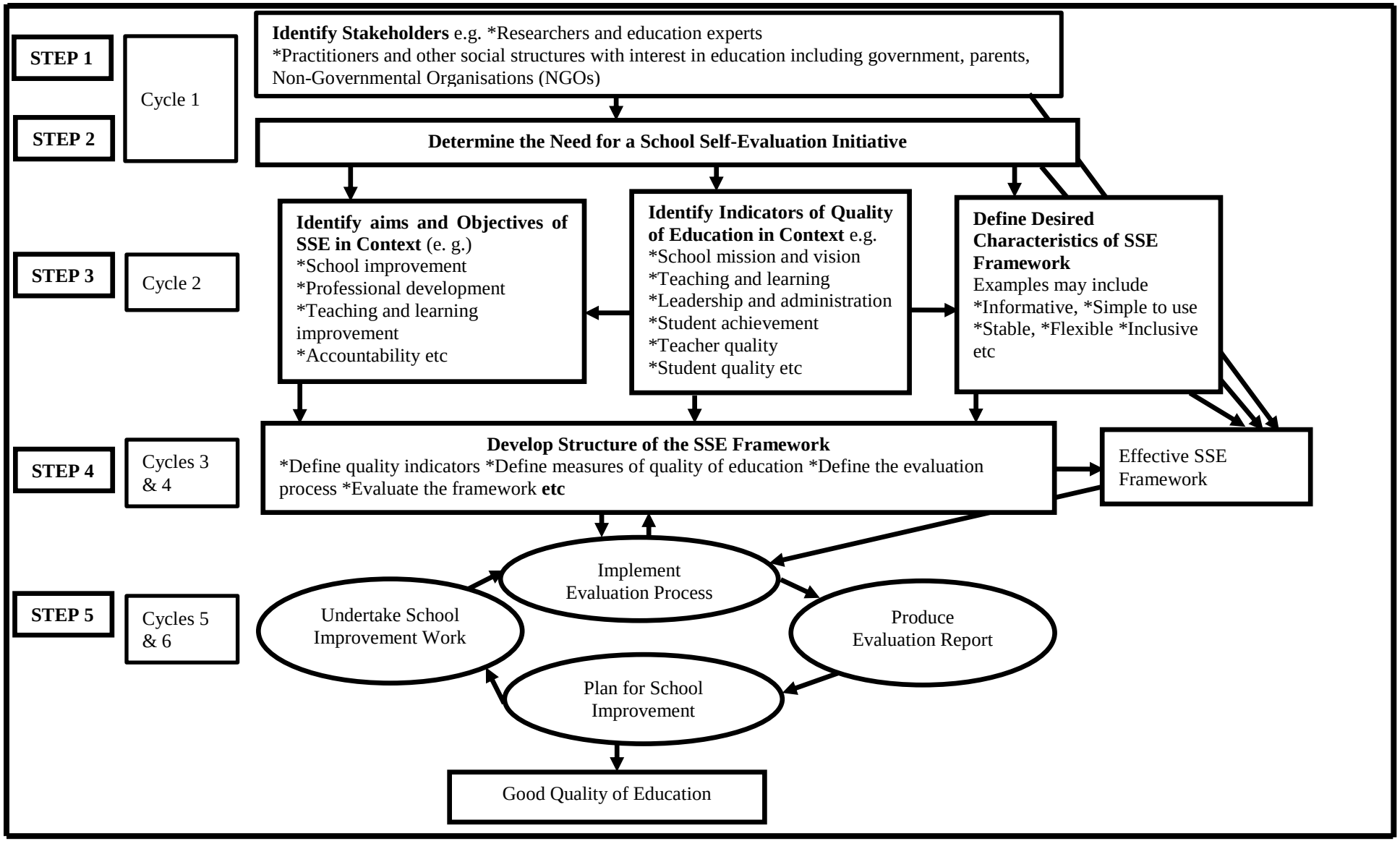

Figure 4.5: A process model for developing a School Self-Evaluation framework in this study

Identify Stakeholders (step 1)

The starting point in developing an SSE framework is to identify key stakeholders who will be involved in its development. The principle assumption in the development of the SSE framework is that all stakeholders, regardless of their roles in the education system, may have the ability to reflect, inform and work to improve it (MacBeath, 2006). In this study, typical examples of stakeholders that were involved in certain parts of the development processs of the SSE framework included education officials, school heads, teachers, parents; experts in education and the researcher (see Figure 4.5, step 1). Stakeholder participation at the onset is critical to ensure commitment and to provide support for the planned change.

Determine the need for the SSE initiative (step 2)

Having identified and understood the problem, stakeholders should determine the need for the initiative of the intervention (see Figure 4.5, step 2). Literature has shown that many interventions fail because some stakeholders may not realise the need for the intervention and, hence, may feel that it is an imposition on them (Smith, 1997; Turnbull, 2008). In this study, it was agreed that there was a need for the SSE initiative before efforts were made to develop and implement the SSE framework (see 5.3). The identification of stakeholders (step 1) and the determination of the need for the SSE initiative (step 2) (see Figure 4.5) are related to the first phase of design research, the preliminary phase, where the identification of the problem is done. This was addressed in cycle 1 of the preliminary phase in this study (see Figure 4.5).

Identify Aims and Objectives, Indicators of Quality of Education and Characteristics of the SSE Framework in Context (step 3)

This step is a reflective stage, which involves the researcher and stakeholders to analyse the aims and objectives of the SSE framework and its characteristics which they want in their own context (see Figure 4.5, step 3). This step aims at identifying the aims and objectives of the SSE framework, indicators of quality of education, and characteristics of the SSE framework. The aims and objectives, indicators of quality of education and the characteristics of the SSE framework should be agreed upon between the researchers and various stakeholders in education during the development process of the SSE framework. This step is related to the preliminary phase and was addressed in cycle 2 (see Figure 4.5).

Develop the Structure of the SSE Framework (step 4)

Step 4 involves developing the actual structure of the SSE framework (see Figure 4.5, step 4). In developing the structure of an SSE framework, care should be given to ensure that it will be relevant, consistent, practical and effective (Nieveen, 2009). These quality criteria are important for they also guide

the evaluation of the interventions. The development of the SSE framework should be done in collaboration with the stakeholders. The development of the SSE framework structure (step 4) is related to the second phase of design research, the prototyping phase, and in this study, this was addressed in cycles 3 and 4 (see Figure 4.5).

The Implementation Stage (step 5)

After designing the SSE framework, it has to be implemented. In this context, the implementation stage is part of the development process, in that it helps to inform further improvement of the initial SSE framework prototype. Since this implementation process is continuous and cyclical in nature (Figure 4.5, step 5), the improvement of an SSE framework should inevitably be a continuous process informed by new challenges at the implementation stage. This step is related to the semi-summative evaluation phase of design research and was addressed in cycles 5 and 6 in this study (see 4.5). After the development of the SSE framework, all stakeholders involved in the development process should continually seek to improve it and make it more systematic.

4.4 Overview of Research Methods

This section focuses on how data for the study were collected. Issues pertaining to the methodology followed in this research study are discussed. These include the sampling procedure and participants included in the study (4.4.1), and data collection strategies and instruments used (4.4.2). Details of the research methods are found within each chapter reporting on results (see Chapters 5-7).

4.4.1 Sampling and Participants

In this study, purposive sampling was adopted to select the schools and participants (Cresswell, 2007; Miles & Huberman, 1994). Since this study involved various phases, there were different schools and participants in each of the phases. All the schools and participants in this study were drawn from Masvingo and Harare Provinces. Details of the schools and participants are presented in Chapters 5 to 7.

Sampling of Schools

Purposive sampling was used to select schools which took part in this study. Schools which participated in this study were chosen because they were found to have certain attributes relevant to the phenomenon under study. Due to financial constraints, only a limited number of schools were accommodated in the study. Sample choice was also based on feasibility, as total coverage of all primary schools in the two

provinces was not possible (de Vos, 2011). However, the sampled schools were drawn from urban and rural areas, and represented most of the school types found in the Zimbabwean context which include district council schools, church-owned schools; government schools and private schools (see 5.2; 6.7; 7.3 &7.6 for details of the schools).

Sampling of Teachers and School Heads

Teachers and school heads were the main participants in most phases of this study and were also purposively sampled. Since the study aimed at developing an SSE framework for use in evaluating and monitoring the quality of education in schools, school heads and teachers were viewed as active subjects in the provision and evaluation of education. For this reason, they were considered to be key participants in providing such information. It was essential to obtain as much information as possible from teachers and school heads about evaluation practices, instruments used in the evaluation process and the general quality of education in schools. Such information would provide an insight into the development of the SSE framework. Teachers and school heads participated in the needs analysis, try-out and in field-testing of the intervention (see Chapters 5 to 7). Since it was not possible to include all the teachers from the selected schools, selection of the teachers and school heads was also based on their willingness to participate in the study (Cresswell, 2007). The SSE framework to be developed in this study was intended to be tried-out using Mathematics as an example. So, all the teachers and school heads sampled for the study should have an understanding of Mathematics since every teacher in Zimbabwean primary schools teaches all the subjects in the curriculum, which includes Mathematics, where the SSE framework was tried out.

Sampling of Education Officials

Besides teachers and school heads, Education Officials from the Ministry of Education, Sport, Arts and Culture were also selected for this study. The Education Officials were purposively selected from Harare Province due to their responsibilities for evaluation and monitoring of the quality of education within the Ministry and also in schools. Of these Education Officials, one was a DEO, responsible for monitoring the quality of education in schools in his District. The other one was a Provincial Education Director (PED) responsible for monitoring the quality of education in the Province. These officials participated in the needs analysis, for it was believed that they would provide information on the evaluation of quality of education in schools, instruments used and the general quality of education in schools (see 5.2). A primary school inspector and a Deputy Provincial Education Director also took part in the third phase of the study, where they were asked to evaluate the fourth prototype (see 7.6).

Sampling of Experts

Experts in the field of education with expertise in Educational Management, Early Childhood Education, Educational Psychology, Mathematics Education and Teacher Education were also sampled for this study (see 6.4 & 7.6 for details of the expertise of the experts). The experts were also purposively sampled for their knowledge in the field of education. The criterion for the selection of the experts was based on their understanding of the research problem (Creswell 2007). Most of the experts participated in the second phase of the study, where they were asked to appraise the first version of the SSE prototype. Expert appraisal of the first prototype was considered essential in improving the content, design and technical quality of the SSE framework (Tessmer, 1993). Experts also participated in the evaluation of the fourth prototype (see 7.6).

Sampling of Parents

Parents were also included in the sample and were also purposively selected in order to triangulate views from teachers, school heads, experts and Ministry of Education officials on the quality of education in schools. Triangulation helped to eliminate bias and allowed for the dismissal of possible opposing explanations (Mathison, 1998). This was done in order to gain an objective view of the topic under study. This helped to have various views on the quality of education and its evaluation in schools, which Yin (2003) refers to as converging lines of evidence or different descriptions of understanding. Details of sampling and participants for each phase of the study are discussed in chapters 5-7.

4.4.2 Instruments and Data Collection Strategies

This sub-section focuses on data collection strategies used in this study. In this sub-section, the pilot study is discussed. Thereafter, interviews, questionnaires and observation are deliberated on.

Pilot Study

Before the actual data collection activity was embarked on, a pilot study was undertaken to control for ambiguity as well as misunderstanding of the questions of both the interviews and questionnaires by the participants. The pilot study helped to clarify the questions. Both the interview and questionnaire instruments for data collection were verified after they were constructed to circumvent uncertainty and misconstruction. The outcomes of the pilot study helped to clarify various misunderstood aspects in the interview and questionnaire instruments and also to revise and rephrase the questions. The results of the pilot study were, thus, not used for any other reason but to refine data collection instruments (Yin, 2003).

The pilot study was conducted at one of the primary schools in Masvingo Province, to pre-test the data collection instruments. This helped to improve the reliability of the instruments (Marshall & Rossman, 1999). The school selected for the pilot study was not part of the sample, but it had similar characteristics to the ones in the main study. The Ministry of Education officials' instrument was piloted with officials in Masvingo Province who were not part of the main study. The aim of the pilot study was to validate the items to ensure that they are clear and meaningful to participants before undertaking the main study. In this study, various instruments were used to collect data. These were the interview schedules, questionnaires, observations and field journal. Interviews were conducted in the early stages of the study to do a needs analysis, while questionnaires were administered during the appraisal and implementation of the developed prototypes. Both the interview schedules and the questionnaires were piloted before the main study was undertaken.

Interview Schedules

The aim of the interviews was to obtain potentially rich data that would help to understand participants' knowledge construction (Bogdan & Biklen 1989). Semi-structured interviews were used with each of the teachers, school heads, Education officials and parents sampled for the first phase of the study. A list of prepared questions was used as a guide to find out people's understanding of quality of education, what is used to evaluate the quality of education in schools, and how education may be improved (see Appendices 5-8). Components of quality of education to be included in the SSE framework were also explored through interviews with the relevant stakeholders in education. The advantage of semi-structured interviews was that the interview schedules acted as guides and not as prescriptive devices (Berg, 1998) as questions could be reworded when need arises. This allowed for in-depth exploration of the phenomenon under study through probing interviewees' responses. Each of the interviews lasted approximately 45 minutes. All the interviews were recorded with a digital voice recorder to enable smooth discussions. Information obtained from the interviews was transcribed and taken back to the respondents, for them to check whether their responses were correctly captured. The field notes were also recorded in a research journal, and these helped to complement the interviews.

Questionnaires

Questionnaires were used to collect data from participants during the appraisal, try-out and field-test of the prototypes. Silverman (2010) is of the opinion that open-ended questions can be administered to small samples. Open-ended questionnaires were used to explore participants' views of the developed prototypes and issues related to their implementation. Information obtained helped to inform the development of the

subsequent prototypes. This helped to improve the quality of the SSE framework. Experts' questionnaires were used to source data on issues regarding the adequacy of the components and indicators of quality of education included in the prototypes in effectively evaluating the quality of education in schools. The questionnaires also sought clarification of the evaluation process and how information on the quality of education in schools should be reported and utilised for improvement purposes. Questionnaires for experts and their responses are presented in Appendices 10 and 11 respectively, and discussed in Chapter 6.

Practitioners' questionnaires included information on the relevance of the intervention to Zimbabwe, adequacy of the components of the SSE framework and indicators of quality of education to be focused on when evaluating and monitoring schools and classrooms for quality, comprehensibility of the language used, the clarity of the evaluation process, and changes they would recommend in improving the quality of the SSE prototype. Details of the practitioners' questionnaires are presented in Appendices 13, 16, and 19 and discussed in Chapters 6 to 7. The information obtained from practitioners' questionnaires and the feedback from the try-out and field-test helped in the development of the SSE framework. This methodology was particularly important, in this study, in that it was concerned with action and reflection of both the researcher and practitioners in the real world. This helped to reduce the possibility of practitioners opposing the innovations which might be suggested by the researchers without their consultation (Fullan, 1991).

Observation

In this study, observation was utilised during the try-out and field-test of prototypes 3 and 4 respectively. Basically, observation of teachers and school administrators during try-out and field-test was directed towards their experiences with the SSE prototypes. Observation was only meant to complement participants' responses to the questionnaires. Observations during try-out and field-test had the advantages that problems that may be encountered by participants could be identified. They also enabled hearing the suggestions for improvement of the prototypes that the participants recommended during the implementation processes of the prototypes (Nieveen, 2009). All the participants who took part in the try-out and field-test were observed conducting the SSE process. Observations are suitable for obtaining complete representations of the dynamics of a situation (Fink, 2005).

Field Journal

As an observer during fieldwork, it was essential to keep a research journal. Personal observations, spontaneous discussions, reflections and notes of body languages shown by participants during the

interviews and observations during try-out and field-test were recorded in the field journal. Other relevant information to the study during interviews with participants was also recorded. Methodological decisions, feelings and thoughts were also recorded in the field journal during the data collection exercise (Lincoln & Guba, 1985). Field notes and reflections of activities directly observed in the schools were also recorded. Such information helped to draw inferences that could not be obtained through interviews only. The field notes also strengthened the validity of the study and helped in the analysis of data.

4.4.3 Data Analysis

At the beginning of data collection, Coffey and Atkinson's (1996, pp. 1-2) suggestion that researchers should avoid collecting data without considerable analysis going on simultaneously was implemented. The analysis of data, in this study, took place after each research cycle. This section presents how interview and questionnaire data were analysed.

Analysis of Interview Data

During the research process, data analysis brings order, structure and meaning to the bulk of the collected data (De Vos et al. 2005). Most qualitative data analysis is a systematic process of coding and categorising data to provide explanations of the phenomenon under investigation (McMillan & Schumacher, 2010). For Creswell (2007), data collection, recording and analysis are interconnected and concurrent techniques that are enduring. Hence, from the onset of the data collection process in this study, it was essential to engage in substantial analysis of the data, with the aim of creating a meaningful story out of the collected data.

In analysing interviews, data from the audio tapes were first transcribed. All the transcriptions were carefully and analytically read. During the process, ideas which came into mind were listed down. In the process of reviewing the transcripts, questions regarding the underlying meanings of the data were constantly coming to mind. This process allowed the examination of the data, in order to identify emerging themes.

Atlas.ti was used to analyse interview data in this study. Atlas.ti is useful as a qualitative data analysis tool, for it has code-based theory building packages (Lewins & Silver, 2009) which assist in data coding. Using Computer Aided Qualitative Data Analysis Software (CAQDAS) is helpful, especially when dealing with an enormous amount of unstructured data which may be difficult to manage (Henning, Van Rensburg, & Smit, 2004). Atlas.ti is useful in analysing textual, audio and graphical data (Scientific Software Development, 2004). Atlas.ti provides relationships between codes (Willig 2001, p. 151), and

thus, is very useful in data analysis. In analysing interview data in this study, separate analytical or hermeneutic units were created for each interview since the version of the Atlas.ti that was used could not accommodate all the interviews.

Analysis of Questionnaire Data

Questionnaire data were analysed for emerging themes since the responses were not close-ended. Thematic content analysis was utilised in analysing data obtained from open-ended questionnaires. Data were organised and analysed according to individual participants. Responses of each individual were first considered before considering the next participant's responses. This was essential so as to reserve the consistency and truthfulness of each of the responses, and to develop a holistic image of each participant's responses (Cohen, Manion & Morrison, 2007). This also enabled the development of tentative themes, categories and sub-categories, which helped in the analysis of the data.

4.5 Methodological Norms

This section discusses the methodological norms of this study. Understanding the concepts of validity and reliability helps to analyse the possible weaknesses derived from uncontrolled variables in a study. No research is perfect; however, controlling the possible threats which might interfere with the cause-effect relationship is crucial (Coolican, 1999). Generally, validity is defined as a demonstration that a particular instrument indeed measures what it is supposed to measure (Cohen et al., 2000). On the other hand, reliability refers to the consistency and replicability over time, over instruments and over groups of respondents (Ibid, 2000). Ensuring the validity and reliability of a research study is of vital importance (Lincoln & Guba, 1985). Face validity, content validity and external validity were considered to establish validity in this study.

Face validity

For this component, the validity was checked in all data collection strategies namely, questionnaires and interviews including the instruments of the formative and semi-summative evaluation of the various developed SSE prototypes. The validity was checked by reviewing whether the instruments subjectively measure the concept they purport to measure (Holden, 2010) in terms of level and breadth of the aspects in the instruments.

Content validity

In this study, content validity was checked through ensuring whether the instruments (questionnaires and interview schedules) actually measured what they were supposed to measure where an element of objectivity exists. This was done through reviewing the contents of the questionnaires and the interview schedules as well as piloting them. It is argued that validity should be seen as a unitary concept that is established through several sources of evidence including content and criterion validity (Messick, 1989). However, validity should go beyond these types of investigations to include the social context as well (Ibid, 1989). It was this extended conceptualisation of validity that was employed with the quantitative components of this study. In this study, the instruments were designed to measure the relevance, consistency, practicality and effectiveness of the SSE framework in Zimbabwean primary schools. The various instruments and the designed and developed prototypes were evaluated by different education experts in order to evaluate their content validity. Data obtained were used to improve the quality of the SSE framework aimed to improve the way education is provided and evaluated in Zimbabwean primary schools.

External validity

The third validity which was considered in this study is external validity of the intervention which deals with the problem of whether the SSE framework can be generalisable to a broader perspective. In a case study like the one reported in this thesis, this generalisation is a particularly difficult concept to achieve. Although no statistical generalisation is possible from the sample involved in this study to all Zimbabwean primary schools, yet this study strives to generalise the findings to the broader theory underlying the design and development of SSE frameworks. Yin (2003) speaks in this context of analytical generalisation. There will have to be more replications of these findings in more schools to determine whether the same results may occur before the results can be statistically generalised.

Credibility

Credibility is viewed as the fit between participants' views and the researcher's representation of these views. Credibility in this study was achieved via the collection of data from multiple sources. Another quality check was to have the participants to review, corroborate and revise the research findings should they consider it necessary through member validation (Bryman, 2004). The truth value or internal validity and transferability or external validity is the extent to which one's research findings match reality (Merriam, 2001). Since reality is a multi-pronged set of mental and social context-specific constructions (Weirsma, 2000, p. 198), reality in participants' understandings, responses to and implementation of evaluation of quality of education in schools could not be established in a single truth. Hence, effort was

made to represent the multiple constructions of reality adequately, through triangulation and respondent validation. This also helped to ensure reliability and confidence in the truth of the data (Silverman, 2004). To achieve respondent validation, the participants were asked for feedback on the data and the conclusions made about the data (Guba & Lincoln, 1989). The data transcripts and findings were taken to the participants for their own corroboration and revisions (Bryman, 2004) and this helped to ensure the credibility of the study.

Reliability

Reliability of any study may be guaranteed by making sure that the research is traceable, logical and well-documented. This may be achieved by creating an audit trail which might enable data interpretation to be confirmed (Tobin & Begley, 2004). This study has a formal database which other researchers may review or trace (Yin, 2003). Data provided by participants through the use of audio-tapes and interview transcripts were not distorted. This would enable anyone assessing the study to have access to the evidence, in order to authenticate the accuracy of the given accounts. Detailed descriptions of participants' views were carefully presented in the analysis of their views on the quality of education and its evaluation and monitoring in schools. In the process of data analysis, it was essential to be conscious of personal attitudes, opinions and experience as a teacher, and try to remove bias (Cohen et al., 2007). The reliability and validity of the study was also yielded through extended engagement in the field and the use of multiple sources of data.

The review of related literature also helped to further validate the research study. It positioned the study within existing literature and identified its place to contribute to knowledge and new insights in the development of SSE frameworks. The review of the related literature strengthened the study's position as part of knowledge-building on the development of SSE frameworks for evaluating and monitoring the quality of education in schools.

4.6 Ethical Considerations

Before conducting this study, an application for ethical clearance was done and granted by the Ethics Committee of the Faculty of Education at the University of Pretoria (see Appendix 1). Two issues which dominate guidelines of ethics in research involving human participants are informed consent and protection of human participants from harm (Bogdan & Biklen, 1989). In terms of professional integrity, it was essential to be transparent about the research study to all participants. All the relevant authorities

and participants were consulted and permission was sought and granted to carry out the study (see Appendices 2-4). The following steps were taken to ensure the ethical conduct of the study:

- Permission to conduct interviews in Provinces and Districts was obtained from the Ministry of Education, Sport Arts, and Culture;
- Permission to conduct research in schools was further acquired from the respective Provincial and District Education offices;
- Permission to conduct the study in the selected schools was obtained from the all the responsible parties (Ministry, provincial departments and districts offices of education, school heads and teachers);
- The identities of schools and participants were protected. They were assured that their participation in the study would not be made known to anyone and therefore they would remain anonymous in the study. They were guaranteed that neither their names nor the names of their schools would appear in the research study (MacMillan & Schumacher, 2000 pp. 366-367);
- Voluntary participation of the participants in the study and the opportunity to withdraw from the study during any stage of data collection should they wish so were explained to all participants (Denzin & Lincoln, 2000 pp. 138-139); and
- Permission to use a voice recorder was sought from all participants.

During the entire study, all participants were treated with respect. Their concerns, confidentiality and anonymity were highly respected. Participants were told, in advance, the aim of the study and the intended uses of the captured data. Transparency was also observed throughout the study (Cohen et al., 2007:52). Hence, it was anticipated that participants would be quite ready to share their views.

4.7 Conclusion

This chapter focuses on the research methodology of the study. The research paradigm, pragmatism, within which this study is situated, was elaborated and argued in terms of this study. The research design for the study was discussed and Design Research was chosen as best suited for the study because the study is dealing with a problem in educational practice for which no clear ‘how-to-do’ guidelines exist (Plomp, 2009). The phases in design research were also discussed, with the research methods explained and argued in each of the phases. Also, an overview of the research methods was provided in this chapter. Sampling procedures were highlighted and instruments and data collection strategies were discussed. Data analysis methods were also described. However, these methods are more completely described in

chapters 5-7 where the findings for the specific phases are presented. Ethical considerations observed in the study were outlined. The following chapter, Chapter 5, presents the findings of the needs analysis.

CHAPTER 5

PRELIMINARY PHASE: IDENTIFICATION OF THE PROBLEM AND NEEDS ANALYSIS

5.1 Introduction

Chapter 4 presented an overview of the research design and methods which adopts a Design research approach in order to address the main research question and its sub-questions for the phenomenon under investigation. This chapter presents the findings of the preliminary phase, which was conducted to gain a better understanding of the current education quality and its evaluation processes in Zimbabwean primary schools. The research design for the preliminary phase is discussed in Section 5.2 while findings of the first phase are presented in 5.3. The discussion and summary of findings are deliberated in 5.4. The chapter ends with a conclusion and implications for the intervention study in 5.5.

5.2 Design of the Preliminary Phase

As previously stated, the aim of this study was to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. The purpose of the development of the SSE framework is to help schools to understand their conditions and processes in order to improve these resulting in better educational outputs. This study employed design research as the appropriate research design. Educational design research, is a systematic study of designing, developing and evaluating educational interventions, as solutions for problems for which no clear guidelines for solutions are available, which also aim at adding to our understanding of the characteristics of these interventions and the procedures for designing and developing them (Plomp, 2009). This situation was particularly the case in Zimbabwean primary schools where SSE and frameworks for use in such activities are not known. Furthermore there is no knowledge about how to improve this situation. As previously indicated in chapter 4 (see 4.3), this study espoused design research design which comprises three phases, the preliminary phase, where the needs analysis was conducted

together with a review of the related literature (see 3.2-3.5). The prototyping phase involved developing various prototypes and formatively evaluating them so as to improve the quality of the prototypes (see 6.4; 6.7 & 7.3). The third phase, the semi-summative evaluation, is where the developed SSE framework was tried-out and evaluated by the practitioners as well as by the experts in various fields of education (see 7.6). In this sub-section, research focus and questions are presented in 5.2.1 followed by the sample and sampling procedures (5.2.2), and lastly, data collection instruments and methods are deliberated on in 5.2.3.

5.2.1 Research Focus and Questions

The research focus for this Preliminary phase of the study was two-fold. Firstly, it was aimed at having a better understanding of the current quality of education, its evaluation and instruments used in Zimbabwean primary schools. Secondly, the intention was to identify the dimensions and measures of quality of education, which would help in the development of the SSE framework for school and classroom quality in Zimbabwean primary schools. The needs analysis and the literature review reported in Chapter 3 is part of the Preliminary phase. The needs analysis was guided by the main research question of the study which was formulated as follows:

What are the characteristics of an effective SSE framework for improving classroom quality in Zimbabwean primary schools?

Based on this question, in this Preliminary phase, only a few sub-questions were drawn up to guide the investigation which are as follows:

- What is the current status of the quality of education in Zimbabwean primary schools?
- How do Zimbabwean primary schools currently evaluate quality of education?
- Which dimensions and measures of school and classroom quality are needed to design a relevant, effective and consistent SSE instrument for improving the quality of education in Zimbabwean primary schools?
  (see 1.4)

5.2.2 Research Design and Methods for the Needs Analysis Phase

The first phase of the study sought to survey participants' perceptions of the current quality of education in Zimbabwean primary schools and how primary schools currently evaluate the quality of education. Participants were interviewed individually and given questionnaires on issues related to quality of education so as to gain insight into the dimensions and measures of school and classroom quality needed to design and develop an effective SSE framework. The participants were drawn from five primary schools, (three from Masvingo Province and two from Harare Metropolitan Province); and from District

and Provincial education offices. Participants comprised teachers, school administrators, Education officials and parents. The participants were interviewed on what they thought about the quality of education in schools, in terms of its current status, its evaluation as well as aspects that are focused on during the evaluation process (see Appendices 5-8). All the interviews with the participants were tape-recorded, transcribed, and coded.

Sample and Participants in the Needs Analysis

As indicated earlier on, participants for this phase of the study were drawn from five primary schools from Masvingo and Harare Metropolitan Provinces to provide geographic variation. Three of the schools were from Masvingo Province and the other two were from Harare Province. For anonymity's sake, schools from Masvingo Province were named A, B and C while those from Harare Province were named D and E. A total of fourteen participants, ten from the schools, two parents and two education officials were sampled for this phase of the study. A small sample of both schools and participants was considered appropriate in order to gain a deeper understanding of the conditions and practices in schools and classrooms. It was also imperative that education officials be included in the sample because it was thought that they would help to provide information on policies on the evaluation of the quality of education in schools, and also on the current status of education.

Sampling of Schools and Participants

Schools and participants were selected based on their willingness to participate in the study. Purposive sampling was adopted to select the schools and the participants. Purposive sampling was used to select these schools and school participants because they were found to have certain characteristics which were pertinent to the phenomenon under study (Creswell, 2007; Miles & Huberman, 1994) and were expected to advance the understanding of issues of quality of education and its evaluation in schools. Education officials were selected based on the fact that they should be based at the head office of the education system so that they could provide relevant information on the phenomenon under study. Participants within schools were sampled based on the fact that at least one should be teaching the following grades 1-3; 4-5 or 6-7. This would enable all primary school levels to be represented in the sample. Another criterion for the selection of participants within schools was that at least one should be in the school administration. School participants were also selected based on their willingness to take part in the study. Parents were selected on the basis that they should have children in primary schools. Two parents were selected based on the criterion that they were expected to have insight into and to understand issues of quality of education. Since the sampled parents had children in different grades in primary schools, it was thought that they would have an understanding of the quality of education their children were getting

from schools. Choice of the sample was also based on feasibility as total coverage of all schools, teachers and parents was not possible (de Vos, 2011 p. 244; Sarantakos, 2000 p. 139).This purposive sampling selection focused on information-rich cases (Patton, 1990), which resulted in proper samples for an in-depth study of the topic under investigation. A summary of the sample is presented in Table 5.1. Schools which took part in the study are briefly described below.

Table 5.1: Summary of the sample

Participants	School A	School B	School C	School D	School E
School Administrators Education Officials Teachers Parents	Rural District Council school, Bikita rural	City Council school, medium density, Masvingo urban	Former Group A school, low density, Masvingo urban	City Council school, high density, Harare Metropolitan	Roman Catholic school, Low density, Harare Metropolitan

The Schools

School A, a Rural District Council primary school from Masvingo Province, is located in Bikita rural district and it serves pupils from under-privileged socio-economic backgrounds. The school had seventeen teachers including the school head and the deputy school head. The school buildings were in a bad state for most of the classrooms had no window panes and doors. Moreover, the classrooms were not adequate for the 748 pupils at the school and as a result, there was hot sitting. It was estimated that the teacher-pupil ratio was 1: 46. The school grounds were not fenced and since it was in a rural area, cattle and goats could be seen in the school grounds and the grounds were untidy. About 13% of the pupils were considered to be from middle to upper socio-economic homes. As a result, most parents could not afford to provide their children with everything needed at school, for example, school uniforms and some books. Some parents were said to be unable to pay tuition fees for their children. The school head said they sometimes sent pupils who would not have paid tuition fees back home to collect the fees, which he admitted affects the teaching and learning processes. In the classrooms, there were some posters on the walls although these were said to be constantly blown off by the winds since most classrooms had no windows. There were also some textbooks donated by UNICEF, which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). Parents are expected to buy books for the other subjects such as; Religious and Moral Education, Social Studies, Environmental Science and Social Studies which were not part of the UNICEF donations. Most parents in this school could not afford to do so and hence, there was a shortage of textbooks in these subject areas. The school had no library except for some corners in the classroom where they indicated that they keep some library books. This school was a low

performing school as evidenced by the grade 7 public examinations results of 2011 where it attained a 41% pass rate.

School B was a city council primary school, located in a medium density urban area of Masvingo. The school served pupils mainly from privileged socio-economic backgrounds. The school had thirty-five teachers including the school head and the deputy school head. The school buildings at this school were nicely painted with window panes on all the windows and doors on all the classrooms However, the classrooms were not adequate for the 1623 pupils at the school and there was hot sitting. It was estimated that the teacher-pupil ratio was 1: 49. The school grounds were well fenced and the school was neat and tidy. About 85% of the pupils were considered to be from privileged homes. As a result, most parents could afford to provide their children with the needed things at school, for example, school uniforms and paying of tuition fees for their children. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). Some teachers reported that they had a shortage of books in subjects like Religious and Moral Education, Social Studies, Environmental Science and Social Studies. Although most parents in this school were reported to be able to buy the textbooks for their children, the teachers said that most pupils do not bring these books to school since parents fear that their children may lose them. Hence, the teachers reported that there was a shortage of textbooks in these subjects. There is a school library with various books. This school was high performing as evidenced in the grade 7 public examinations of 2011 where it was the best performing school not only in the province but also nationally where it attained a 100% pass rate.

Primary *School C* was located in a low density urban area in Masvingo and is a former Group A school. The school served pupils mainly from high socio-economic backgrounds. The school had thirty teachers including the school head and the deputy school head. There were nice school buildings which were well painted. All the windows had window panes and burglar bars and there were lockable doors on all the classrooms. The classrooms were adequate for the 1065 pupils at the school and there was no hot sitting. It was estimated that the teacher-pupil ratio was 1: 35. The school grounds were well fenced and the school was neat and tidy. About 98% of the pupils were considered to be from privileged homes. As a result, parents could afford to provide their children with the needed things at school, for example, school uniforms and paying of tuition fees for their children. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). The school also had adequate books in subjects like Religious and Moral Education, Social Studies, Environmental Science and Social Studies. The school had a big school library stocked with various books. This school

was high performing as evidenced by its performance in the grade 7 public examinations of 2011 where it was among the top five schools in the province and it attained a 96% pass rate.

School D, another city council primary school, was located in a high density urban area of Harare Metropolitan province. This school served pupils mainly from under-privileged socioeconomic backgrounds. The school had thirty-three teachers including the school head and the deputy school head. There were nice school buildings which were well painted. All the windows had window panes and burglar bars and there were lockable doors on all the classrooms. The classrooms were not adequate for the 1272 pupils at the school and there was hot sitting. It was estimated that the teacher-pupil ratio was 1: 41. The school grounds were well fenced and the school was neat and tidy. About 53% of the pupils were considered to be from privileged homes. Some parents could afford to provide their children with the needed things at school, for example, textbooks and paying of tuition fees for their children. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). The school had a shortage of textbooks in the following subjects: Religious and Moral Education, Social Studies, Environmental Science and Social Studies. The school had a library with various books. This school was average performing as evidenced by its pass rate in the grade 7 public examinations of 2011 where it attained a 56% pass rate.

School E was a Roman Catholic primary school with very good school buildings and adequate resources. The school had thirty-five teachers including the school head and the deputy school head. All the school buildings were well painted and the windows had window panes and burglar bars. There were lockable doors on all the classrooms. The classrooms were adequate for the 992 pupils at the school and there was no hot sitting. It was estimated that the teacher-pupil ratio was 1: 30. The school grounds were walled and the school was neat and tidy. About 99% of the pupils were considered to be from privileged homes. Parents could afford to provide their children with the needed things at school, for example, textbooks, school uniforms and paying of tuition fees for their children. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). The school had adequate textbooks in these subjects: Religious and Moral Education, Social Studies, Environmental Science and Social Studies. The school had a big library with many books some of which were said to have been donated by other countries as well as by former students. The school was high performing as evidenced in the grade 7 public examinations of 2011 where it attained a 99.8% pass rate.

These five schools were included as they represented most school types found in Zimbabwe. The schools were sampled based on the school type, location, physical structure as well as on performance. Whilst the

sample in this study, in terms of both the schools as research sites as well as the sample of people participating in this phase of the study was not intended to be statistically representative of the population of the schools and teachers, it represented a variety of schools found in the country. The sample included various stakeholders so as to gather varied viewpoints. The variation in the sample would allow for a representative picture of the current status of education in Zimbabwean primary schools.

Although the current study was on a small scale, the eventual goal is to have an SSE framework that could be implemented in all Zimbabwean primary schools. As such, it was vital to understand what would be acceptable to the Ministry of Education, hence the involvement of education officials in the study. All participants had either a Diploma in Education, Bachelor's Degree in Education or Master's Degree in Education (see Tables 5.2 & 5.3). The sample comprised both female and male participants (see Tables 5.2 & 5.3) and their ages ranged from 30 to 65 years, indicating that they were mature enough to understand issues on education and its evaluation in Zimbabwean primary schools.

Biographical Information of Participants

Before participants were interviewed, they were asked to provide their biographical information by means of questionnaires. This biographical data assisted in the analysis of their personal and professional experiences vis-a-vis their understanding of quality of education. The biographical information of participants from schools and Ministry of Education officials are tabulated in Table 5.2. The parents' biographical information is presented in Table 5.3.

Table 5.2: School Participants' and Ministry of Education Officials' Biographical Information

Participant	Code	Age	Gender	Number of Years in Present Position	Level of Education
District Education Officer (DEO)	P1: 1	59	Male	32	Master of Arts
Provincial Education Director (PED)	P1: 2	64	Male	10	Master of Education
School Head School A	P1: 3	59	Male	17	Certificate in Education
Senior Teacher School A	P1: 4	31	Male	7	Diploma in Education
Deputy School Head School B	P1: 5	38	Female	5	Bachelor of Science (Psychology)
Senior Teacher School B	P1: 6	45	Female	21	Bachelor of Science (Psychology)
Deputy School Head School C	P1: 7	53	Male	8	Bachelor of Science
Senior Teacher School C	P1: 8	45	Female	16	Certificate in Education
Teacher-In-Charge School D	P1: 9	53	Female	9	Certificate in Education
Senior Teacher School D	P1: 10	49	Female	12	Bachelor of Education
School Head School E	P1: 11	65	Male	28	Bachelor of Education
Senior Teacher School E	P1: 12	49	Female	22	Bachelor of Education

Information presented in Table 5.2 reveals that there were six females who participated in the study; four of them teachers, one deputy school head and the other one a Teacher-In-Charge. Table 5.2 also shows that six males took part in the study. Of the six, one was a Provincial Education Director (PED), another, a DEO, two school heads, one deputy school head and another one a teacher. Although there were two female school administrators, a deputy school head and a Teacher-In-charge (TIC) (see Table 5.2); the information indicates that higher positions in education are occupied by males, confirming Hoyt's (2010) assertion that few influential management positions in most sectors are held by women. Most of the teachers are predominantly female probably due to the fact that they are more concerned with pupils' social and emotional development than males MacBeath (1998). Table 5.2 shows that all the participants were qualified for they meet the necessary criteria for their positions and had vast experience in their work. An analysis of school heads and Ministry of Education officials' number of years in their present positions shows that most of them may have studied educational administration a long time ago. This may have a negative effect on their knowledge of quality of education and its evaluation in schools. In support of this view, Stuart in Rubbins and Burridge (1994:8) argue that discussions of educational quality in the

early years in educational administration were not a priority since emphasis was on structure, organisation and resources. This might also be the case with the training of Zimbabwean education administrators in the past. In light of this, the conclusion was that most educational administrators who were tasked to evaluate the quality of education in schools might have little information and training which may hinder their effectiveness in schools. Parents' biographical information is presented in Table 5.3.

Table 5.3: Parents' Biographical Information

Participant	Code	Age	Gender	Level of Education	Number of Children	Ages of Children	Grades of Children
Parent 1 Masvingo province	P1: 13	50	Male	Master of Arts	4	6, 12, 14, 15	Grades 1, 7, Forms 2 & 3
Parent 2 Harare province	P1: 14	33	Female	Advanced Level	3	4, 7, 9	Grades 0, 3 & 4

Table 5.3 shows that two parents, a male and a female, took part in this study. Since parents were not the main participants in this study, and that their responses were not the only data for this study, such a small sample was thought to provide sufficient information needed for the study. Their data complemented data from education officials, school heads and teachers. The idea was to get a parental perspective on the quality of education currently offered in primary schools. Therefore these two parents were selected based upon gender, having multiple children across grades in Zimbabwean primary school, level of education and their willingness to participate in the study. The parents were recommended by the school heads from two of the sampled schools, one from Masvingo province and the other from Harare province. Judging from their ages both parents were mature. It was thought that they could give meaningful information about the quality of education in schools. Both parents were well-educated (see Table 5.3), and had children in two of the sampled primary schools. It was thought that they could provide useful insights into issues to do with the quality of education in Zimbabwean primary schools.

5.2.3 Data Collection Strategies and Instruments

After obtaining ethical clearance from the University of Pretoria to conduct the study (see Appendix 1), permission was concomitantly sought and granted to carry out the study in Zimbabwean primary schools

from the Ministry of Education (see Appendix 2). Authorisation was also granted by the two Provincial Education offices where the study was conducted that is, in Masvingo and Harare Metropolitan Provinces (see Appendices 3 and 4 respectively). In this sub-section, data collection strategies are discussed.

In this phase, semi-structured interviews were used to collect data and were held with the Education officials, school administrators and teachers at their respective workplaces. The parents were interviewed in their respective homes. Various issues were explored through the interviews which included the current quality of education in Zimbabwean primary schools, its evaluation, policies and practices to enhance education quality, aspects to focus on when evaluating schools and classrooms for quality, what can assist in the evaluation of quality of education in schools and how education can be improved (see Appendices 5-8). Interviewing several participants enabled triangulation of the data and this helped to provide credibility to the findings (Ary, Jacobs, Razavieh & Sorensen, 2006 p. 435). Triangulation was used in order to avoid bias and to dismiss probable challenging explanations (Mathison, 1998). This also helped to provide a sense of related issues from various participants on the phenomenon under study. Questionnaires were also used to collect data on participants' background information.

5.2.4 Data Analysis and Processing

Both interview and questionnaire data were collected in this phase of the study. Thematic content analysis was used to analyse the interview data for this phase. This involved summarising participants' responses into similar themes in order to organise the data into meaningful information. The data were coded, and this formed the foundation to data analysis. Original quotes from the participants are used in order to illustrate the findings. Atlas.ti was also made use of to analyse interview data in this phase (see details in 4.5). This facilitated the use of direct quotations so as to enrich data representation.

For anonymity's sake, the primary schools were given alphabet names and participants who took part in the study were given coded names (see Tables 5.2 & 5.3). Since all the participants and their responses could not be accommodated in the version of the Atlas.ti which was used, separate hermeneutic units were created for the analysis of qualitative data. These are units used to analyse data in Atlas.ti. As a result, instead of assigning the documents according to the number of participants who took part in the study, all the documents that were fed into the version of the Atlas.ti that was used for the analysis of the data were referred to as primary document 1 (P1). Instead of the documents being represented as P1- P14 in relation to the 14 participants, all the documents in the Atlas.ti that was used were represented as P1. In order to differentiate the participants, there was a need to add the number given to participants following

the primary document for each participant. For example, P1: 8 would refer to primary document 1 for participant 8.

5.3 Findings of the Preliminary Phase

This section reports on the findings of the first phase of the study, which was a needs analysis carried out to gain insight into the current quality of education and its evaluation in Zimbabwean primary schools. The results are reported in such a way that they would address the following questions used in the semi-structured interviews as an operationalisation of the sub-questions for this phase. The following specific questions are an elaboration of the research sub-questions for this phase: What is the current quality of education offered in schools at present?

- What policies and practices are currently in place to address the issue of quality of education?
- What is used to evaluate the quality of education in schools and classrooms?
- What is your experience of evaluating the quality of education in classrooms in the school?
- What do you think is important when evaluating schools and classrooms for quality?
- What do you think would assist in the evaluation of quality of education in schools and classrooms?
- How can education be improved?
  (see Appendices5-8 for details).

In this section, a discussion on participants' views on the current quality of education in Zimbabwean primary schools is presented (5.3.1). This is followed by measures in place to ensure quality of education in Zimbabwean primary schools (5.3.2). Thereafter, participants' views on the quality of education and its evaluation are discussed (5.3.3). Lastly, participants' views on how education may be improved are presented (5.3.4).

5.3.1 Views on the Quality of Education in Schools

This sub-section focuses on participants' views on the quality of education in Zimbabwean primary schools. It specifically addresses the following sub-question:

- **What is the current status of education quality in Zimbabwean primary schools?**

The following interview question should be seen as elaboration of this sub-question:

- What is the current quality of education offered in schools at present?

During the interviews, it was evident that participants from all the primary schools, as well as Ministry of Education officials and parents had an idea of the concept of quality of education in schools entails, although, in most instances, this understanding was limited to student academic achievement. In this sub-section, participants' understanding of the quality of education and the current status of education are discussed.[6]

Understanding of Quality of Education

The findings of this phase indicate that participants have an understanding of quality of education although this understanding was biased towards student achievement in public examinations and tests. This was seen as the main component of quality of education in schools. Although, through further probing, participants indicated that there are other indicators of quality of education besides student achievement, these were of lesser importance to participants in as far as quality of education was concerned.

As for the interviewed parents, the quality of education in schools was perceived to be effective teaching and learning, which should produce good results. The interviewed parents mentioned that the bottom line, as far as quality of education was concerned, was the good results produced in public examinations. A parent from Harare Province bluntly expressed that quality of education is determined by the good results that schools produce in public examinations. In her own words, "*Quality of education is measured by effectiveness of teaching and learning through good results …"* (P 1:14) 1:1 (5:5). The other parent from Masvingo Province also echoed the same sentiments as he indicated that, "Q*uality of education is the measure of the effectiveness of teaching and learning …"* (P 1: 13) 1:1 (4:4). These views, although they reveal other factors that are essential aspects of quality of education in schools, like the effectiveness of the teaching and learning processes, emphasise student academic achievement as the chief component of educational quality. Likewise, the Education officials showed an understanding of quality of education based on the pass rate of pupils in public examinations (P 1: 1) 1:1 (4:4); (P 1: 2) 1:1 (4:4).

At primary school A, the understanding of quality of education was also linked to pupils' results, either achieved in tests or in public examinations. A senior teacher at this school was of the opinion that unless good results are produced, no one can claim that quality of education has been realised in schools. He

[6] For audit trail purposes, the comment or quotation of each participant is followed by a bracketed reference where the data can be located in the Atlas.ti hermeneutic unit. Each primary document was analysed separately since all documents could not be fed into the version of the Atlas.ti that was used. Thus, all documents are represented as primary document 1. Therefore, the reference "(P1:14) 1:1 (5:5)" (P 1:14) in this case, means primary document 1, for participant 14; "1.1"refers to the first code in this particular primary document number, whereas "5:5" refers to the line numbers of the quotations.

specifically indicated that the ultimate goal of education is student achievement in academic subjects and this is normally shown through the results which everyone is interested in. He clearly pointed out that, "*Quality of education is measured by results* [in academic subjects]. *Even if you prepare charts, if you do not produce good results at the end, those at the top* [will] *say you were doing nothing …" (P 1:4) 1:39 (9:9).* Although the school head at this school also held the view that quality of education is established through student academic achievement, he acknowledged the importance of resources as essential conditions of quality of education. He had this to say,

> *"I think we have not yet achieved very high quality* [of] *education due to factors like lack of resources in the school such as textbooks, furniture, play centres for the Early Childhood Development (ECD), volleyball, basketball, stationary and other equipment for sports etc. So these limitations, I think, they hinder us to achieve high quality* [of] *education."* (P 1: 3) 1:1 (5:5).

The school head demonstrated an understanding that, in order for quality of education to be realised, various resources should be available in schools.

The school head at primary school A acknowledged the fact that pupil academic achievement is an important part of quality of education. He demonstrated an understanding that quality of education cannot be established through academic achievement alone, but also through other activities like volleyball, basketball and other sports (P 1:4) 1:1 (5:5). Such an understanding of quality of education shows that the school head has a broader view of education quality than the teacher in the same school (P 1:3) 1:1 (5:5). The school head's opinion of quality shows a broader vision on education for he does not narrowly focus on academic achievement of pupils alone.

At primary schools B and C academic achievement also dominated as an important indicator of quality of education. A senior teacher from primary school B indicated that what is essential as far as quality of education is concerned, is academic achievement irrespective of the infrastructural and other resources in the schools. The teacher stated that, "*When we look at quality of education we are looking at academic achievement, the results. We are not even worried about how a school looks like. When we hear that it has got 100% pass rate we are happy …"* (P 1:6) 1:14 (73:73). This comment clearly shows that the teacher considers academic achievement of pupils as the most important indicator of quality of education in schools. These sentiments were also shared by a senior teacher from primary school C, who also emphasised the importance of student achievement as a vital indicator of quality of education. She stated that the quality of education can be determined by pupil performance in tests and written daily exercises that she gives to her pupils. She said that if pupils perform well in these tests and exercises, then she will know that the quality of education in the classroom is high (P 1: 8) 1:3 (13:13). The deputy school head

from primary school B also emphasised the significance of student achievement in academic subjects in determining the quality of education in schools. This deputy school head said that *"We do check on results and analyse the monthly tests. We also have end of term tests and analyse the results as a staff. We also check on exercise books to check on the quality and quantity of work …" (*P 1: 5 1:3 (13:13).

Similar trends also emerged at primary schools D and E. An understanding of the quality of education was also mainly thought of in terms of student achievement in academic subjects. A senior teacher from primary school E indicated that emphasis is placed on the pass rate to determine the quality of education in the school. She stated that, "*The school also uses the pass rates ... to evaluate quality of education in classrooms" (*P 1: 12 1:9 (21:21). The teacher indicated that the school uses end of term and end of year tests to compare pass rates of different classes to determine the quality of education. Another school administrator, the TIC from primary school D, also said that, in order to establish the quality of education in the school, they use pupils' results. She indicated that, "*You look at the quality of education being offered, that is, the overall percentage of the school especially grade 7 results …"* (P 1: 9) 1:15 (57:57).

Summary and Conclusion

From the preceding discussion, it is evident from the participants' views that their general understanding of the quality of education is mostly in terms of student achievement in academic subjects. Although the participants mentioned other aspects of quality of education, these were only viewed as necessary in order to achieve high levels of student academic achievement. The findings revealed that, in order to find out about the quality of education, schools and classrooms refer to tests and examinations results. Although all schools currently have sufficient textbooks in Mathematics, English and ChiShona/IsiNdebele which were donated by UNICEF, rural schools continue to face shortages in other textbooks which were not part of the UNICEF donation as well as in other resources such as sporting activities and other infrastructural resources (P 1:3) 1:1 (5:5). This may affect the provision of education in such schools.

Current Status of Education

Participants expressed mixed views on the current quality of education in Zimbabwean primary schools. The participants' views on the quality of education were basically categorised into two groups which were about equal in size. The first group viewed the current quality of education as good, while the second one regarded it as poor. Participants' satisfaction with the current quality of education is discussed next.

Satisfaction with the Current Quality of Education

In relation to whether or not they were satisfied with the current quality of education in Zimbabwean primary schools, some participants said they were happy with the current quality of education in their schools. Most of the participants cited improvements in public examination results as compared to previous years, as evidence that the quality of education was good. Ministry of Education officials expressed satisfaction with the current quality of education. The PED from Harare province demonstrated his satisfaction with the quality of education in the province when he argued that, "*The quality of education in the province is very high. At the moment we have seen* [an upsurge] *of results for both primary and secondary level …" (P* 1:2) 1:1 (4:4). Similar sentiments were shared by a DEO from the same province who responded that the quality of education, as compared to the previous years, has greatly improved. He plainly indicated that:

> *"The quality of education in 2011 has improved as shown by the results for Grade 7, 'O' Level and 'A' Level. Our highest school at Grade 7 had 95.83%. The grade 7 pass rate has improved from 57.09% in 2010 to 59.48% in 2011. At 'A' Level we have also improved our pass rate from 79% in 2010 to 88%, our 'O' Level results have improved from 19% to 21% ..."* (P 1:1) 1:1 (4:4).

Improvement in the quality of education from the Ministry of Education officials was solely associated with the results of public examinations. Although the DEO claimed that there was an improvement in the results (P 1:1) 1:1 (4:4), it can be concluded from the statistics given that the Grade 7 results are very low and 'O' level results are shockingly low. Moreover, the 'A' Level results for the Harare province was not all that convincing considering that only those who would have excelled at 'O' Level would be selected for 'A' level. The pass rates for the Grade 7, and 'O' level are very low and for 'A' level in the Province more satisfactory. The former might indicate that there is a serious problem with the quality of education.

The DEO cited several reasons which he said had contributed to the improved quality of education in schools. He DEO stated that,

> *"Most teachers who went to South Africa came back and I can say we have enough teachers in the primary sector and secondary sector ... and stability in our economy. It is better now although some industries are not operating but the use of the US dollar is giving the parents something to feed their children and pay school fees …"* (P 1:1) 1:4 (8:8).

These opinions were also shared by the PED who also indicated that the stabilisation of the economy and the incentives being given to teachers by parents were among some of the factors contributing to improved quality of education. He pointed out that the incentives were motivating teachers to work hard. He also indicated that the introduction of the US Dollar had seen the return of most teachers who had gone to other countries to look for jobs to take up their posts. (P 1:2) 1:1 (4:4). This gives the impression that there are now adequate qualified teachers in schools which the officials said could be contributing to

the improvement of education quality. However, this improvement as reflected in the given statistics is minimal especially for the Grade 7 and 'O' level results.

Participants from primary school E echoed the Ministry of Education officials' views that the current quality of education in the school was good. Similarly, they cited improvement in public examination results as an indication of good quality of education in the school. The school head from primary school E said that, "*The quality of education offered in this school is above average. The pass rate at grade 7 level has always been high, we have always been in the top ten out of over 200 schools in the province …"* (P 1:11) 1:2 (5:5). A senior teacher from the same school concurred with the school head's comments as she indicated that the current quality of education in the school was good due to the availability of textbooks which she said help pupils to achieve better results. On discussing the reasons for the high quality of education in the school, the teacher pointed out that they give pupils books and encourage them to read even at home and that they also give them homework. She said that they also encourage pupils to come early to school, and thus increase their learning time (P 1:12) 1:10 (13:13).

In primary schools B, C and D a similar story emerged when the school administrators from these schools also acknowledged that the quality of education in their schools was good. A deputy school head from primary school B said that, "*I will say currently* [quality of education] *its good …" (P* 1:5) 1:1 (5:5). She indicated that was partly due to the dedicated, hardworking teachers in the school which contribute to the good quality of work that is produced at the school (P 1:5) 1:2 (9:9). The deputy school head of primary school C indicated his satisfaction with the current quality of education in the school. He pointed out that, "*The current quality of education offered at this school at the moment is ... quite high. I am quite satisfied; it's of high quality …"* (P 1:7) 1:1 (5:5). Asked to give the reasons for this high quality of education in the school, he indicated that the school has a highly motivated staff, and also enough resources which enable teachers to teach effectively (P 1:7) 1:2 (9:9). On the issue of motivation, it was found that teachers in this school, as well as those at primary school B, receive incentives from parents. These incentives could be contributing to their motivation to work hard. The TIC from primary school D also indicated her satisfaction with the quality of education in the school. She stated that the school offers very high quality of education and was among the best performing schools in their district (P 1:9) 1:1 (5.5).

Summary and Conclusion

From what the participants said, the quality of education, in terms of student academic achievement was improving as compared to the previous years. Although the improvement in the pass rate in public examinations was not all that substantial, the participants were happy about the improvement. Therefore, for many people who are involved in education, their understanding of quality of education and its improvement, thereof is based on the pass rates in public and other examinations and tests. However, the improvement as now reflected is insignificant considering the results given for Grade 7 and 'O' level which are very low. So, participants' views that the quality of education was improving was contradictory with the available statistics for the results. However, not all participants were satisfied with the current quality of education as seen in the subsequent discussion.

Dissatisfaction with the Current Quality of Education

Those participants who conveyed dissatisfaction with the current quality of education were conscious that although there seems to be an improvement in the quality of education, a lot still needs to be done. This was particularly apparent from participants in rural areas. At primary school A, a senior teacher openly admitted that, *"The current quality of education is not convincing. Basically looking at expectations as a teacher, to produce quality work which is measured by results that will come out at the end of the course, it needs a lot to be desired…"* (P 1:4) 1:1 (5:5). This indicates that the teacher understands his obligation to deliver quality education to pupils. However, there appears to be a gap between this requirement and what actually happens on the ground. This gap needs to be closed. For this to be achieved, the gaps need to be identified.

When probed for the reasons for his dissatisfaction with the current quality of education, he stated that,

> "*From 2007 to 2009, Zimbabwe was affected by what I can call a national education disaster. My current grade 7 pupils when they were at an early stage of their education, they did not have textbooks. Methods that were used for teaching were lecture. Reading as a major skill was not developed. Now to teach them to read at the same time preparing them for examinations, looking at the teacher-pupil ratio of 1:40 in Zimbabwe, it is a big ratio if pupils have problems …"* (P 1:4) 1:2 (9:9); P 1:4 1:5 9:9).

The teacher found it as a big challenge for him to teach pupils how to read at grade seven level and prepare them for their final grade 7 public examinations at the same time. This means that, those pupils who are unable to read might not perform well in the examinations which may affect the quality of education in the school.

The school head from primary school A concurred with the teacher from school A's views that quality of education in their school is not yet up to the expected standard. For him, lack of resources was their major

hindrance to achieving education quality. He pointed out, *"We have not yet achieved high quality of education due to factors like lack of resources in the school such as textbooks …"* (P 1:3) 1:1 (5:5). Although he acknowledged having received books donated by UNICEF, he said that the books were only for the core subjects, that is, Mathematics, English and ChiShona/IsiNdebele and that parents were expected to buy the books for the other subjects, Social Studies, Religious and Moral Education, Home Economics and Environmental Science. Since the Ministry does not have the money to buy these textbooks, it recommends schools to encourage parents to buy the books for their children. However, most parents in school A could not afford to do so and the classes have to depend on the teachers' books and a few of those pupils with parents who could afford to buy.

A teacher from school B was also not happy with the current quality of education. To her, the quality of education in the school was not up to the expected standard due to lack of textbooks, especially for the core textbooks (P 1:6) 1:1 (5:5**)**. Most urban schools are currently having large class sizes because many parents are transferring their children from rural schools to urban schools where they think there is good quality of education. As a result, even if all schools in Zimbabwe received adequate donated textbooks from UNICEF, some urban schools are experiencing textbook shortages due to the influx of pupils from rural schools. The deputy school head from primary school B mentioned that it was now very rare to have a class of forty pupils in their school (1:5 1:20 (53:53), meaning that there are usually more than 40 pupils in a class. As a result, large class sizes are likely to compromise the quality of education in schools (see 5.2 for average class sizes of the schools).

This dissatisfaction with the current quality of education in schools was also echoed by parents who felt that the shortage of textbooks in schools was contributing to the poor quality of education. Although they were informed about the UNICEF donation, parents were still expected to buy some textbooks for their children. This is because they were learning in town schools where there were large class sizes. Besides, they were also supposed to buy other textbooks which were not part of the UNICEF donation. The parent from Masvingo province indicated that, *"The current quality of education offered in schools is poor …"* (P 1:13) 1:2 (8:8). The parent attributed the poor quality of education to a general lack of up to date reading materials. Furthermore, he indicated that besides lack of textbooks, teachers and school administrators were generally not motivated to work, as their salaries are generally low (P 1:13) 1:3 (12:12). The parent from Harare province had the same opinion as she noted that, in former group A schools, where there are enough textbooks, the quality of education is better compared to most government and council schools. She concurred with the views of some participants who were not happy with the current quality of education. Her observations were that, "*The quality of education is bad but in*

some schools its good especially in the former group A schools …" (P 1:14) 1:2 (9:9). The parent's assumption was that the lack of adequate resources in schools may lead to pupils' failure to read, and this may negatively affect the quality of education. As observed by the teacher from school A, pupils' failure to read might have been exacerbated by endless strikes experienced in the country for a long period (P 1:4) 1:2 (9:9).

Summary and Conclusion

From participants' views, there is general dissatisfaction with the current quality of education in Zimbabwean primary schools. This is based on the general lack of resources needed in order for schools to realise quality of education. Although there was an acknowledgement that all schools received textbooks donated by UNICEF, in some schools these were not enough, due to large class sizes being experienced. Moreover, teachers' lack of motivation to do their work due to poor salaries is also perceived to be contributing to the poor quality of education in Zimbabwean primary schools.

5.3.2 Measures to Ensure Quality of Education

This section focuses on the policies and practices currently in place in schools and classrooms to ensure the quality of education. Methods which are used to determine the quality of education are discussed. This is followed by a discussion on the policies and practices in place to ensure quality of education in schools.

Methods Currently in Place to Determine Quality of Education

Various views were given about the methods currently in place to determine quality of education in schools. The Ministry of Education officials' views are first presented, followed by school administrators' views and lastly, teachers' views.

Ministry of Education officials' views on methods currently in place to determine quality of education

The Ministry of Education officials indicated that they use supervision, where they do classroom observations in schools, as a method of evaluating the quality of education in schools and classrooms. Both officials expressed satisfaction with this method, for they viewed it as very helpful in evaluating the quality of education in schools. The education officials indicated that they normally go to schools annually to evaluate the teaching and learning processes. However, in some schools, it was indicated that they were supervised after more than one year. This might be due to lack of resources. The PED indicated that they determine the quality of education in schools by going out to see teachers teach with the intention of helping teachers teach effectively (P 1:2) 1:13 (20:20). The same sentiments were shared by

the DEO who also indicated that they conduct supervisions in schools, see teachers teach, and make recommendations for improvement where necessary. He stated that, "*We have supervisors who go out and observe teachers teach …"* (P 1:1) 1:12 (28:28). What emerges is the idea that quality of education is basically thought in terms of what pupils acquire as a result of teaching and learning. This is probably why evaluation of quality of education centres mainly on the observation of the teaching and learning processes in schools.

School administrators' views on methods currently in place to determine quality of education

School administrators from all the primary schools A, B, C, D and E, indicated that they also find out about the quality of education in their schools through supervision of teachers as well as checking teachers' records and pupils' exercise books. The school head from primary school E stated that, "*We do this through supervision. The head, deputy and TIC will go and observe lessons and make recommendations. Another thing that we do is to look at pupils' work in the exercise books to see whether there is any progress they are making …"* (P 1: 11) 1:3 (9:9); (P 1: 11) 1:4 (9:9). The school head indicated that they do the supervision at least once every term. At school A, the school head indicated that he evaluates the quality of education in classrooms through lesson observations and inspection of teachers' record books as well as pupils' exercise books (P 1:3) 1:2 (9:9). The TIC from primary school D also said that, "*We have supervisions which take place; we also do exercise book inspection and teachers' record books inspection …"* (P 1:9) 1:2 (9:9).

The deputy school head from primary school C said that they normally carry out supervision in order to find out about the quality of education in classrooms. He indicated that the supervision of the teachers get them to a situation whereby they will be able to say there are meaningful teaching and learning processes going on in the classes (P 1:7) 1:8 (13:13). The deputy school head from primary school B indicated that they do not have a specific tool to evaluate the quality of education in classrooms, but they do supervision of teachers and check on their records and pupils' exercise books (P 1:5) 1:15 (37:37). All the participants indicated that these supervisions or classroom observations are essential, for they aim at identifying the strengths and weaknesses that teachers may face for improvement purposes. However, the quality of these supervisions is dependent on school administrators' vision and mission on education.

Teachers' views on methods currently in place to determine quality of education

Teachers from all the primary schools A, B, C, D and E said that, in order to determine the quality of education in their classrooms, they test their pupils. A teacher from primary school E indicated that they give pupils tests and examinations, in order to establish the quality of education in their classrooms (P

1:12) 1:2 (9:9). The teacher argued that if there is a high pass rate in these tests, this will be an indication of good quality of education in the classroom. This shows that testing is the main method used to find out about the quality of education in classrooms. This is perhaps not surprising as seen in earlier discussions which revealed that examination results are the most commonly used evidence to determine the quality of education in schools (P 1:2) 1:1 (4:4); (P 1:1) 1:1 (1:1); (P 1:4) 1:20 (37:37). A teacher from primary school B indicated that pupils' written work is good evidence to indicate the quality of education in classrooms (P 1:6) 1:22 (65:65). The performance of pupils in written exercises was also said to serve as proof of the kind of quality of education prevailing in the classrooms.

A teacher at primary school C specified that, "*I currently find out about the quality of education in my classroom through the tests that I give to my pupils and also through the daily exercises that I give them. If they perform well in these tests, then I will know the quality of education in my classroom will be high …"* (P 1:8) 1:3 (13:13). Judging from the amount of written exercises to be given per week in all schools, that is, five for Languages (English and ChiShona/IsiNdebele), as well as for Mathematics and three for the Content subjects (Social Studies, Religious and Moral Education, Home Economics, Physical Education, Music, Art and Craft), this may be sufficient to find out whether teaching and learning is taking place in the classrooms.

Asked about how quality of education is ascertained in her classroom, a teacher from primary school D said that she gives pupils daily exercises, weekly and fortnightly tests, homework, as well as morning work to determine quality of education in her classroom (P 1:10) 1:5 (37:37). A senior teacher at primary school A indicated that since he teaches grade seven he had first to give his pupils work from grades 1-6 to find out how much they understand from what they have leant (P 1:4) 1:6 (13:13). He pointed out that this helps him to identify areas they have problems, with the aim of helping them. Therefore, instead of starting by testing them on what they are expected to learn in grade 7, the teacher said that having an understanding of their background knowledge was essential for him to plan for their future learning.

Summary and Conclusion

Both education officials and school administrators interviewed indicated that they get to know about the quality of education in schools and classrooms through supervision of lessons. In order for supervision to be effective, what is observed should be based on a good vision of education. Although all the teachers interviewed indicated that they test their pupils in order to determine the quality of education in their classrooms, the quality of the tests and the exercises given to pupils has to be ascertained. In order for

tests to be of good quality, it is important to ensure that all the knowledge levels of Bloom's Taxonomy are met in the preparation of the tests given to pupils so that tests are of good quality (see Appendix 21).

Policies and Practices to Ensure Quality of Education

In most countries, evaluation of the quality of education is done at four levels, that is, at the national education level (national vision or core objectives), at the school level (specific school curriculum), at the classroom level (teaching and learning processes), and at the individual learner level (learning outcomes) (Thijs & Van den Akker, 2009). Some countries participate in international evaluation of the quality of education where different education systems are compared, for example, SACMEQ, TIMSS and PIRLS. Zimbabwe sometimes participates in SACMEQ. However, Zimbabwe has limited resources to participate in other international studies such as TIMSS and PIRLS. In Zimbabwe evaluation of the quality of education at national level, through school inspection is also affected by shortage of resources (see 1.3). In such cases where there are limited resources to ensure quality of education by external means, there is a need to have policies and practices in place at the school level so as to monitor and evaluate education standards. In this sub-section, Ministry of Education officials, school administrators and teachers' views on policies and practices to ensure quality of education are presented.

Ministry of Education officials' views on policies and practices to ensure quality of education

In trying to find out policies and practices in place to ensure the quality of education in Zimbabwean primary schools, Ministry of Education officials indicated that there is a national policy which stipulates the quantity and quality of work to be given to students. They use this policy when they go for school supervisions to check whether it is being implemented. The PED also indicated that there is a policy that requires school heads to supervise and staff-develop teachers. He had this to say,

> *"We have a national policy which determines the quality and amount of work to be given to both primary and secondary school students as minimum work. School heads are mandated to supervise their teachers and to run staff development workshops for teachers …"* (P 1:2) 1:9 (8:8).

The DEO also reiterated that there is a policy which stipulates the minimum requirements of work to be given to pupils. The policy also states that teachers should have staff development workshops where gaps in methods of teaching and learning would be identified (P 1:1) 1:5 (20: 20) so as to take corrective measures. The Ministry of Education is, therefore, committed to ensuring quality of education in schools. However, this commitment may be hindered by shortage of resources. Regular checking on the

implementation of policies in schools may provide policy makers with feedback on the effectiveness of the policies. It may also allow the policy makers an opportunity to constantly review the policies in order to improve education.

School administrators' views on policies and practices to ensure quality of education

At all the primary schools A, B, C, D and E, it was acknowledged that some policies and practices were in place and also being implemented in order to enhance quality of education. The school head of primary school A reported that they made some school policies as a team, which they implement to improve the quality of education as he said,

> *"We have sat down as a team to formulate policies regarding aspects like lateness, absence from duty, amount and quality of work, working habits, discipline, examinations, tests, homework, morning work and also a policy on class observation to ensure quality of education ..."* (P 1:3) 1:3 (13:13).

This school head indicated that these policies guide them in the execution of their duties as a school.

At primary school B, the deputy school head indicated that they have standing policies that encourage pupils to work hard. She also pointed out that they have policies regarding homework, punctuality and morning work. She also indicated that parents are also involved in their children's learning through homework which they have to monitor and sign every day (P 1:5) 1:7 (17:17). She proudly reported that they have a very effective reading programme policy which runs from grades 1 to 4 where she said that by the time pupils reach grade 7, all of them will be able to read (P 1:5) 1:7 (17:17). With reading having been identified as one of the major factors for student low attainment (Coltheart & Prior, 2007; Commeyras & Inyenga, 2007), this situation is likely to have a positive effect on the quality of education in the school. This was confirmed by the school's pass rate in the 2011 grade 7 public examinations. The school attained a 100% pass rate, making it the best performing school, not only in the province, but also nationally.

The deputy school head at primary school C also reported that they have various policies which help to ensure quality of education in the school. He pointed out that they have a supervision policy and the teachers were aware that the administration is behind them in order to help them in their teaching processes (P 1:7) 1:4 (17:17). He also said that they have a policy on the involvement of parents in their children's learning through homework and consultation. For consultations, he said that parents come to the school to discuss their children's learning with the teachers. He indicated that this helps to improve

pupils' learning as they will be helped both at school and at home (P 1:7) 1:4 (17:17). This parental involvement is likely to improve the quality of education because both parents and teachers will strive to help pupils. Furthermore, he indicated that there are also such policies as discipline, morning work, homework, punctuality and reading policy which help them to improve the quality of education in the school.

At primary school D, the TIC reported that they also implement government policies that stipulate the amount of work and written exercises to be given per week in each subject as well as policies on teachers' behaviours and professionalism at work (P 1:9) 1:4 (17:17). These were said to help in setting academic standards for the school which help to improve the quality of education. Furthermore, she said that they have a discipline policy, attendance and punctuality policy for both teachers and pupils (P 1:9) 1:4 (17:17), all of which were said to be vital in enhancing the quality of education in the school.

The school head from primary school E indicated that they have standing policies in place which help to enhance quality of education in the school. He indicated that they have standards that they demand from the teachers, for example, utilising time fruitfully. It was reported that the school is very strict on the adherence to the timetable. Adherence to the timetable was said to be helpful as it encourages the teaching of all the stipulated subjects per day (P 1:11) 1:9 (13:13). According to the school head of primary school E, there is also a policy which encourages parental involvement in their children's learning in the school. He said that the school interacts a lot with parents at ECD and grades 1 and grade 2 levels on a daily basis. It was indicated that this was essential for there must be some feedback between parents and the teachers (P 1:11) 1:9 (13:13). This is essential for planning purposes to help pupils to learn effectively. For the senior grades, the school head said that the school has a parents' consultation policy where parents are invited to the school to discuss their children's progress. The homework policy, discipline policy and punctuality policies for both teachers and pupils were also said to be adhered to in the school as a way of enhancing quality of education.

Teachers' views on policies and practices to ensure quality of education

Teachers in all the primary schools A, B, C, D and E also acknowledged that they have some policies and practices in their classrooms which help to enhance quality of education. A teacher from primary school B indicated that,

> *"We have got such things as morning work every day before lessons begin. And we normally focus on reinforcing previous concepts. We also have what we call license home where you are given a problem every day to tackle before you go home focusing on learnt concepts as reinforcement. Homework is also given daily to consolidate that. We have our own library in*

> *the classroom for those who finish writing early or gifted pupils it's time to go to that library and read ahead and pupils also bring their own library books to school …" (*School B, P 1:6) 1:3 (25:25).

Morning work was practiced in all schools, both rural and urban and in all grades. Some other policies and practices were also said to be observed in order to enhance the quality of education in schools as indicated below.

> *"We encourage pupils to read both at school and at home. We also give them homework, morning work; we have punctuality policy discipline policy. …we also involve parents to monitor homework …"* (School E, P 1:12) 1:10 (13:13).

> *"We have many policies in this class which help to improve the quality of education. Firstly I encourage my pupils to come to school early so that they do morning work before we start the actual lessons. This helps them to get ready for the day's work. It acts as a motivator to the students. Secondly we have a policy on discipline in the classroom. I tell my pupils to be well disciplined in class so that I don't waste a lot of time disciplining them which may affect the time they should spend on learning. We also have a homework policy. I give pupils homework every day. These are some of the policies which help to improve the quality of education in this classroom …" (*School C, P (1:8) 1:4 (17:17).

A teacher from primary school A also mentioned a number of policies and practices in place in his classroom meant to improve the quality of education. He indicated that he encourages his pupils to come to school early so that they could do recall activities to stimulate their learning memories (P 1:4) 1:10 (21:21). Ability grouping was also mentioned as one of the practices which help to enhance the quality of education in the classroom. This grouping was done to enable pupils to help each other. Grouping was said to be helpful to slow learners because group leaders try their best to explain aspects which the slow learners would not have understood to ensure that their group comes top (P 1:4) 1:12 (21:21). The teacher also said that he gives his pupils some tests whereby he also gives group leaders some targets for their groups, but this time each pupil would work on his/her own P (1:4) 1:10 (21:21).

Although the teacher at primary school D did not have a wide range of policies, she also managed to identify some which she said were helping to improve the quality of education in her classroom. She said that there is a homework policy, morning work policy and also a class policy on tests, which she said are given weekly, as well as fortnightly (School D, P (1:10) 1:5 (37:37). It was indicated that these policies encourage a spirit of competition among the pupils.

Summary and Conclusion

A number of policies and practices are in place at the national education level, the school level and the classroom in order to ensure quality of education in Zimbabwean primary schools. At the national level, supervision was identified as the main policy used to ensure quality of education in schools. Class observation, book inspection, discipline and punctuality were emphasised as essential policies and practices used to enhance quality of education at the school level. At the classroom, a number of policies and practices, which include homework, morning work, discipline, daily written exercises and tests were emphasised.

5.3.3 Quality of Education and its Evaluation

This sub-section discusses issues of instruments used to evaluate quality of education, experiences in the evaluation of quality of education and aspects to be focused on when evaluating the quality of education in schools. Establishing what is used in the evaluation of quality of education was vital as a basis for the development of the SSE framework in this study. This subsection focuses on the instruments used to evaluate the quality of education in schools. This is followed by a discussion of experiences in the evaluation of quality of education and, lastly, aspects of quality of education to be focused on when evaluating schools and classrooms for quality.

Instrument used to Evaluate Quality of Education

Asked whether there was an SSE framework used to evaluate the quality of education at school level, various participants gave different views on the existence of such a framework used in the evaluation of quality of education. Education officials' views are presented first, followed by school administrators' views and, lastly, teachers' views.

Education Officials' Views on Instrument used to Evaluate Quality of Education in Schools

The Ministry of Education officials agreed that they had several instruments in place to evaluate the quality of education in schools. The PED indicated that, *"If it is an evaluation of the teacher, th\ere is an instrument for that, if there is need to evaluate the school head, there is an instrument for that …"* (P 1:2) 1:14 (24:24). Similar views that there were separate evaluation tools used to evaluate the school heads and teachers were echoed by the DEO who indicated that, *"There are a number of instruments we use to evaluate. We have one we use to evaluate the head's effectiveness and one to evaluate teachers …"* (P 1:1) 1:11 (28:28). Although the education officials said that they have in place instruments to evaluate the quality of education in schools, the instruments do not focus on the systemic features but on personal performance of individuals.

When further probed whether there is an SSE framework to evaluate the quality of education in schools and not single aspects like the school head and teachers, the Ministry of Education officials said that no such framework was in place. Although the officials had earlier on indicated that there were various instruments to evaluate the quality of education, they later on admitted that there was a need for a single package of instruments to evaluate the quality of education in schools. They indicated that such a package of instruments was essential as it would help to make the evaluation of the quality of education easier than evaluating a single aspect at a time. They also emphasised the importance of a common SSE framework which they said would guide the evaluators and keep them focused on items they should look for during the evaluation process (P 1:2) 1:25 (68:68); (P 1:1) 1:26 (52:52). Moreover, using different tools to evaluate different aspects of quality of education may produce incoherent results which might lead to a disjointed picture of the quality of education in schools. Furthermore, these are used annually and in some cases after more than a year which will do little to help improve education in schools.

School Administrators' Views on Instrument used to Evaluate Quality of Education

School administrators were also equally confused as to whether there was a specific instrument to evaluate the quality of education in schools. Some repeated the Ministry of Education officials' views that the instrument existed while others reported that there were some external instruments used and no internal evaluation instruments in place. The school head from primary school A stated that, *"We have the grade 7 analysis and the mark schedules; these records can reflect the performance of the school, the performance of the teachers ..."* (P 1:3) 1:6 (25:25). When further asked whether there is an SSE framework to evaluate the quality of education, he indicated that, *At present in Zimbabwe, there is no such instrument, it's up to the head or to the Cluster to design one ..."* (P 1:3) 1:9 (33:33).

These remarks were also supported by school administrators at primary schools B, C, D and E who stated the following:

"We do not have a specific tool but we check on the aspects we have discussed before like teaching and learning, record keeping, written work, homework and morning work ... (School B, P 1:5) 1:9 (29:29).

"The Ministry of Education does not prescribe the nature of the form but simply expects administration to make the assessment in one way or another ..." (School C, P 1:7) 1:1 (33:33).

The school head from school E indicated that although there is no standardised SSE framework for use in evaluating the quality of education in schools, there was a form stipulating what school administrators should look for when doing class observations. He indicated that they are expected to focus on the

personality of the teacher, lesson delivery, student progress and exercise books. He indicated that they are supposed to make their assessment and recommendations where necessary (P 1:11) 1:12 (29:29). Although the form had various aspects to be focused on, it was mainly meant for class lesson observation, not for the entire evaluation of the quality of education in schools. The TIC at primary school D said that they have an assessment tool, which they use to assess teachers as she indicated that, *"We have tools like teacher assessment; we assess our teachers in the actual classroom teaching ... we also assess teachers through book inspection and through their records books ..."* (P 1:9) 1:1 (33:33).

Teachers' Views on Instrument used to Evaluate Quality of Education

Teachers at all the primary schools, A, B, C, D and E expressed total ignorance of the existence of an instrument to evaluate quality of education in schools. They indicated that maybe the school administrators have a tool which they use to evaluate quality of education, but they have never seen one. A teacher at primary school C said, "*I think they have one which they use to evaluate quality* [of education] *because they write reports after class observations ..."* (P 1:8) 1:6 (30:30). The primary school A teacher made comments which also suggested lack of knowledge of an instrument for evaluation of education quality in the school He said that, *"I don't know, may be our administrators they have their own specific way to evaluate but generally they evaluate the quality* [of education] *by using teachers' records ..."* (P 1:4) 1:17 (33:33).

A teacher from primary school B was not quite sure whether there is an instrument in the school for evaluating the quality of education. She said that, "*I think the administrators they have got it when they come for supervision ..."* (P 1:6) 1:35 (45:45). At school E, the teacher was not aware of an instrument used to evaluate the quality of education as she indicated that, *"The school uses the pass rates, they use the record books, pupils' progress books and social record books to evaluate quality of education in classrooms ..."* (P 1:12) 1:9 (21:21). The teacher at primary school D was confused as to whether there is an instrument to evaluate quality of education in the school. At first she indicated that it was there and later on said maybe those who supervise in the school have an instrument as she stated, "*Yes it's there, these supervisors which I have listed above maybe they have got their tool, the document which they use so that they see if you are doing the correct thing ..."* (P 1:10) 1:8 (57:57).

Summary and Conclusion

The findings reveal that there is no common SSE framework used in the evaluation of the quality of education in schools. Although Education officials indicated that there were some instruments in place to

evaluate the quality of education in schools, these were only limited to the evaluation of single aspects of quality of education in schools such as the functioning of a school head and the teachers. School administrators acknowledged the absence of a common instrument for use in the evaluation of quality of education in schools. Teachers demonstrated ignorance of the existence of such an instrument, indicating that they are not involved in the evaluation of quality of education in schools. This is detrimental for effective improvement of quality of education. It has been found that there are external instruments for evaluating individual performance of teachers in schools. However, there is no comprehensive approach to evaluation of quality of education within schools. Moreover, there is also no real attempt by schools to reflect themselves on their practices with the exception of school heads who do class observations but from a professional judgement and more informal approach.

Experiences in the Evaluation of Quality of Education

This sub-section focuses on Ministry of Education officials' views on their experiences in the evaluation of quality of education in schools. This is followed by school administrators' views and lastly teachers' views.

Ministry of Education officials' Experiences in the Evaluation of Quality of Education

Asked about their experiences in the evaluation of education in schools, Education officials acknowledged experiencing changes at different points in time (P 1:2) 1:15 (28:28); (P 1:1) 1:13 (32:32). They viewed the changes as presenting particular challenges in their work. Such changes, which they view as inherent in all education systems, may affect the quality of education. The PED asserted that, *"Education system experiences change in terms of provision of resources; at a certain time there was a shortage of teaching and learning materials and we had a high teacher-pupil ratio and it affected our quality* [of education]…" (P 1:2) 1:15 (28:28). Lack of resources may affect both the evaluation process and the quality of education in schools. Schools may not have adequate materials to use in the teaching and learning processes. Furthermore, it may take school inspectors too long before visiting schools for evaluation, for they may not have adequate transport as observed by the DEO. He indicated that, *"At a certain point, in 2007, 2008 and beginning of 2009, we were running short of resources; in a school everyone was acting so it was difficult to maintain quality* [of education] *and we had a shortage of supervisors and transport for them to go to schools to evaluate quality of education …"* (P 1:1) 1:13 (32:32). The DEO indicated that it would take about two years or more before some schools could be visited for evaluation. There were no vehicles for school inspectors for the Zimbabwean dollar could no longer afford to buy such resources. Now, this situation is said to have improved due to the introduction

of the US dollar and school inspection is now done annually although some schools have to wait longer than a year to be evaluated.

School Administrators' Experiences in the Evaluation of Quality of Education

Lack of resources also emerged as a major challenge in the evaluation of the quality of education for school administrators. The school administrators also expressed that they experience a shortage of resources as a challenge in evaluating the quality of education in classrooms. A deputy school head at primary school C pointed out that, "*Normally teachers tend to give reasons that they do not have enough resources and also children don't behave the way they do when they have their own teacher the moment you sit there* [in a classroom for lesson observation] …" (P 1:7) 1:17-18 (45:45). The deputy head said that the behaviour of pupils during the presence of a school administrator doing lesson observation is not natural. He indicated that he normally does not want to make a lot of class observations as he felt that he would be disturbing the normal teaching and learning processes. He also noted that the shortage of resources in schools encumbers teachers from effectively delivering quality education.

The school head at primary school A pointed out that the evaluation process itself was essential as it helps him to ascertain areas that need improvement. However, he said that, at times, he faces challenges of getting suitable staff to assign to certain grades, in order to realise quality of education. He said that,

> *"The exercise itself is indispensable. Without it, it may be very difficult for us to identify the strengths and weaknesses which may help us to staff develop teachers. The staff you may have during a particular time may not be suitable to teach grade 1 or grade 7. Also the shortage of resources in the school hampers teachers from delivering quality education to students …"* (P 1:3) 1:12 (45:45); (P 1:3) 1:13 (49:49).

At primary school E, the school head also admitted that he experiences challenges of shortages of resources during his evaluation of quality of education in classrooms. Furthermore, he cited lack of innovation on the part of the teachers as another challenge. He specified that,

> *"Sometimes what teachers lack is situational teaching or making use of resources that are available; sometimes teachers don't use concrete objects when they are teaching, especially in mathematics and science, and this becomes a very big problem for the pupils…"* **(**P 1:11) 1:21 (41:41).

The school head indicated that when teachers teach, most of the lessons which should be practical are taught theoretically and this affects pupils learning. The deputy school head at school B pointed out that teachers have a tendency to blame the administration for lack of resources. She stated that, *"The other challenge is also that when the administration does not provide enough resources for the period under review, there is always an outcry* [from the teachers] *that it's because of the resources that you are not*

providing otherwise we could be doing well …" (P 1:5) 1:17 (41:41).

At primary school D, a different issue emerged from the TIC who was also of the opinion that different views on the evaluation outcomes by the teachers were some of the challenges she experiences. She indicated that some teachers, especially young ones, value money more than the job, and when salaries are low, they become de-motivated to do their duties. She asserted,

> *"It's a bit difficult with the young teachers; they are more concerned with money than offering services. Some teachers cite favouritism especially with those teachers whom you think are hard-working …"* (P 1:9) 1:12 (45:45).

Teachers' Experiences in the Evaluation of Quality of Education

Teachers at all the primary schools A, B, C, D and E indicated that they are not involved in the evaluation of the quality of education in the schools. They indicated that it was done by the school administrators alone. They, however, indicated that they should also be involved in the evaluation process. The teacher at primary school A indicated that if teachers were involved in the process, this would help to improve the quality of education and said, *"We are not really involved in the process of evaluating quality of education in the school. I think teachers should also be part of the evaluation team because it would help to improve quality of education …"* (P 1:4) 1:22 (45:45). He however indicated that he evaluates the quality of education in his classroom. At primary school B, the teacher was of the view that everyone including teachers and other stakeholders should be involved in the evaluation process (P 1:6) 1:31 (137:137). The primary school C teacher thought that teachers should also be involved in the evaluation process since they are the implementers of all policies. She argued that, *"Teachers should also be involved since they are the implementers of all the policies and everything that is done in the classrooms because the supervisors don't know what is really on the ground …"* (P 1:8) 1:16 (94:94). She also mentioned that parents should not be involved in the evaluation process for they do not know what goes on in the classrooms. Although parents are not directly involved in the classroom processes, they might have such knowledge through the information they get from their children. Moreover, they are an important stakeholder, who should be involved in the evaluation process. They might help with improvement of quality of education, especially by supplying resources such as, textbooks, school levies and other resources needed in schools.

The teacher at primary school D indicated that she is partially involved in the evaluation of the quality of education in the school. She said that teachers make some classroom tours. This involves all teachers going round all the classrooms to make observations, with a view to making suggestions for improvement

where necessary. (P 1:10) 1:11 (73:73). At primary school E, the teacher indicated that teachers should also be involved in the evaluation process. Furthermore, she suggested that other stakeholders such as parents, the PEDs, DEOs, responsible authorities and even pupils themselves should also be involved in the evaluation process (P 1:12) 1:14 (73:73). She indicated that if every stakeholder is included in the evaluation of the quality of education in schools, this would help to improve education in schools.

Summary and Conclusion

Shortage of resources, both human and material, was identified as a major problem in the realisation and evaluation of quality of education in schools. Findings show that there is a shortage of qualified personnel in schools and this affects the quality of education. Generally, teachers indicated that they are rarely involved in the evaluation of quality of education in schools. However, if effective improvement of quality of education is to be realised in schools, various stakeholders should be represented during the evaluation process. Some may consider the inclusion of parents in the evaluation process as inappropriate because they may think that they are not directly involved in classroom processes (P 1:8). Even though parents are not directly involved in classroom processes, they might have knowledge of what happens in classrooms from their children. Moreover, they may contribute immensely in the learning of their children if they are involved in the evaluation of quality of education in schools. Therefore, inclusion of various stakeholders in the evaluation of quality of education in schools may be vital for the realisation and improvement of quality of education.

Aspects to be Focused on when Evaluating Schools and Classrooms for Quality

The aim in exploring this category was to have an insight of the indicators of quality of education to be included in the SSE framework. Although literature provides some global indicators of quality of education (Department of Operations Education Division, 2004; South Africa Department of Education, 2002; The Scottish Office Education and Industry Department, 1996), there was a need to establish the indicators of quality of education in consultation with stakeholders in education in Zimbabwe. This was necessitated by the fact that the concept of quality of education is defined differently worldwide (Govinda & Tapan, 1999; UNESCO, 2000; 2004; UNICEF, 2000; Williams, 2001). It was felt that the indicators of quality to be established through a combination of a needs analysis and information obtained from literature would help to come up with an informed, comprehensive list of indicators of quality of education to be included in the SSE framework for Zimbabwean Primary schools. In this sub-section, Education officials' views of aspects to be focused on when evaluating schools and classrooms for quality

are presented. This is followed by the school administrators', teachers' and parents' views of which aspects to focus on when evaluating schools and classrooms for quality.

Education Officials' Views of Aspects to be Focused on when Evaluating Schools and Classrooms for Quality

Ministry of education officials felt that when one is evaluating schools and classrooms for quality there is a need to focus on everything that goes on within them. The PED affirmed that, *"It's the content the first thing, next thing are the resources, the third issue are human resources the provision of human resources, and other resources, that is, textbooks …"* (P 1:2) 1:19 (44:44). He further indicated that it was also important to focus on infrastructure and results when evaluating quality of education (P 1:2) 1:19 (44:44). Another aspect of quality which he emphasised was class size. He indicated that, currently, there are large class sizes because the Regional Directors have been directed by the Ministry of Education not to recruit teachers due to lack of funding (P 1:2) 1:20 (52:52).

The DEO felt that everything in the schools and classrooms, and all that happens there, should be focused on when evaluating schools and classrooms for quality. He indicated that there is a need to look at the administrators, the class sizes, quality of the teachers and the issue of inclusivity in the school (P 1:1) 1:15 (36:36). Discipline in the school and punctuality of both teachers and pupils were also emphasised as important aspects to focus on when evaluating quality of education in schools (P 1:1) 1:16 (36:36). Furthermore, he said that it was also important to focus on parental involvement, school infrastructure, teaching and learning materials and school furniture during the evaluation of quality of education in schools. (P 1:1) 1:17 (36:36).

Teaching and learning processes, the teachers and students were also mentioned as essential aspects to be evaluated for quality in schools (P 1:1) 1:19 (36:36). The DEO also emphasised the importance of evaluating the school curriculum, student achievement and student written work (P 1:1) 1:20 (36:36). Finally, he said that it was also fundamental to pay attention to the school ethos, that is, the relationship between teachers, students and parents and parental support (P 1:1) 1:21 (36:36). In summary, he said that all the school aspects, which are, the physical, the professional and the academic aspects, should be focused on during the evaluation process Although the academic aspect was mainly considered in terms of student achievement in tests and examinations by many stakeholders (see 5.3.1), he also emphasised the importance of teaching and learning processes as essential in determining the quality of education in schools (P 1:1) 1:19 (36:36).

School Administrators' views of Aspects to be Focused on when Evaluating Schools and Classrooms for Quality

All the school administrators at primary schools A, B, C, D and E were also of the views that everything that happens in schools and everything in there should be evaluated for quality. The school head at school A indicated that,

> "*Such areas as student performances, teaching and learning, school curriculum, the school development projects, the provision of resources for example, textbooks and furniture; school discipline, the quality of teachers, leadership and parental involvement and the issue of class size they should also be covered in the evaluation…"* (P 1:3) 1:15 (57:57).

The deputy school head at primary school C thought that when evaluating schools and classrooms for quality, attention should be paid to the following aspects: lesson delivery, teacher–pupil relationships, the quality of work produced by pupils, the quality of buildings, the quality of administration, the quality of teachers and quality of parental involvement. **(**P 1:7) 1:20 (53:53). He further indicated that class size should also be focused on during the evaluation process. He mentioned that at times teachers are demoralised to teach classes of up to sixty pupils, and also noted that this might affect effective teaching and learning processes (P 1:7) 1:21 (53:53) (see 5.2 for class sizes of the sampled schools).

The deputy school head at primary school B said that it was essential to focus on aspects like the reading levels of pupils, the quality and quantity of the written work, whether scheming done by the teachers is done from the syllabi documents and whether it covers the syllabi, and also to assess the quality of tests in relation to the local examinations board standards (P 1:5) 1:18 (45:45). On the reading levels of pupils, she said that the school has realised that non-readers fail more than their peers when they write tests. Because of this, they have policies for reading, which she thought should also be evaluated for quality (P 1:5) 1:4 (17:17). She further asserted that leadership quality should also be evaluated, for bad leadership always brings bad results. Community and parental support was deemed to be vital in the evaluation of quality of education in schools (P 1:5) 1:19 (49:49). The deputy school head also emphasised the need to focus on class size when evaluating the quality of education. She, however, noted with concern, that at her school, there were large class sizes which might affect the quality of teaching and learning processes (see 5.2 for class sizes of the schools).

The TIC at primary school D thought that it was essential to look at the overall quality of education in terms of the percentages of the grade 7 results. She was also of the opinion that the performance of the grades 1 and 2 should also be focused on, since they form the foundation of all learning. The TIC also thought that the quality of supervisors or school administrators should also be evaluated. She was of the opinion that the administrators should be results-oriented. Mention was also made that when evaluating

schools for quality, comparisons, in terms of student academic achievement, should also be made with other schools in the district, province and nationally (P 1:9) 1:15 (57:57). She also indicated that it was also important to consider teacher quality in the evaluation process since teachers are the implementers of the school curriculum, which she said should also be evaluated for quality. The other aspects she also mentioned as essential for evaluation are: parental involvement, discipline, infrastructure in the school, quality of students, instructional materials and other resources and technology such as computers in the school and also remuneration of staff (P 1:9) 1:16 (61:61).

The school head at primary school E only pointed out that when evaluating quality of education, it is vital to focus on whether schools are being effective. He indicated that effectiveness was the most important aspect for schools because it will determine the extent to which resources are being used. The school head also said it was essential to evaluate the impact of the education they provide to pupils (P 1:11) 1:24 (45:45). He, however, indicated that although it is essential to focus on teacher quality, for him it did not matter much for he said that one can develop a teacher to the level that one wants (P 1:11) 1:24 (53:53).

Teachers' Views of Aspects to be Focused on when Evaluating Schools and Classrooms for Quality

Teachers also felt that all school and classroom activities and processes should be evaluated for quality. They, however, indicated that emphasis has to be placed on student academic achievement. The teacher at primary school A said focus should be on the resources used in the teaching and learning process. He indicated that the shortage of resources affects quality of education ***(***P 1:4) 1:3 (9:9). The primary school A teacher also said that it is important to focus on infrastructural development, which he said might affect the quality of education, especially in rural areas. Moreover, the quality of administration was also identified as an essential aspect of quality of education. He was of the view that the quality of school administrators should be established, for some might be using traditional ways of administration which may not promote quality of education in schools (P 1:4) 1:26 (61:61). He was also of the view that emphasis should be placed on results, for he said that whatever a teacher does in the classroom, all what people want to see at the end of the day are results (P 1:4) 1:20 (37:37). Parental involvement was also identified as an essential aspect, for he said that if a school has support from the community, quality of education will improve (P 1:4) 1:23 (49:49).

Teachers identified various other aspects essential in the monitoring of quality of education. The teacher from primary school B also identified the following as important aspects of quality of education: class size, resources (P 1:6) 1:16 (81:81); student achievement (P 1:6) 1:14 (73:73); student written work (P 1:6) 1:12 (65:65); infrastructure (P 1:6) 1:13 (65:65); stakeholders' involvement (P 1:6) 1:32 (141:141).

The teacher at school C said that one of the most important aspects was to ensure that teachers use the correct materials to plan pupils' work. She indicated that, "*You should check whether teachers are using syllabi in their teaching and that the work is to the grade level …"* **(**P 1:8) 1:8 (42:42). She further asserted that the following should also be focused on when evaluating quality of education: the availability of resources; furniture; administration in the school; school curriculum; teachers in the school; the sizes of classes and also the involvement of parents in their children's learning. She indicated that all these factors have a role to play in enhancing quality of education in schools.

For the primary school D teacher, similar aspects identified by the previous teachers for primary schools A, B and C were also identified. However, she brought in a new aspect that of time as she referred to hot sitting as limiting pupils' learning time. She also said that when evaluating quality of education, in schools it is important to focus on resources, both human and material. She indicated that, "*Furniture, class sizes again, provision of enough stationery will lead to quality of education, the qualified teacher as well and enough time …"* (P 1:10) 1:17 (113:113). She also indicated that when evaluating quality of education, focus should also be paid to whether schools achieve the expected goals, in her own words, "*The achievement of the expectations, are they implementing, are they doing something so as to achieve what is expected …"* (P 1:10) 1:17 (113:113).

The teacher at primary school E was also in agreement with the teachers from schools A, B, C and D that school inputs, processes and output should all be focused on during the process of evaluating quality of education. She stated that,

> "*I think it's important to think about the availability of materials, teacher quality; attitude of pupils, discipline and also other aspects that I have mentioned earlier. They should also be evaluated for they play a very important role for classroom quality …"* (P 1:12) 1:7 (45:45).

Furthermore, she stated that, *"The quality of leadership in the school, student quality, parental involvement, and infrastructure in the school are very important …"* (P 1:12) 1:6 (41:41).

Parents' Views on Aspects of Quality

Parents also indicated that schools should be judged in terms of the resources which they have, the quality of the processes and personnel, and, most importantly, by the results they produce. The parent from Harare province, for example, stated that,

> "*A good school should be one which produces good results. It should be made up of teachers and administrators who are committed and have enough content of subjects; a good school is also one with a culture of proper discipline; a good school is also one with sufficient reading materials and other resources needed in the school …"* (P 1:14) 1:9 (36:36).

The parent from Masvingo province also concurred with the parent from Harare province when he indicated that,

> "*I think a good school is made up of teachers who are committed and have enough content of subjects they teach. A good school is also one with a culture of proper discipline of both teachers and students. A good school is also one with sufficient reading materials and should also have effective school management …"* (P 1:13) 1:7 (28:28).

He also indicated that when evaluating quality of education, it is important to focus on student achievement in examinations (P 1:13) 1:7 (28:28).

Summary and Conclusion

Although student achievement featured as an essential aspect in the evaluation of quality of education in schools, participants also identified several inputs and processes which are essential in order to produce good outputs which should also be evaluated. Major aspects of quality of education which were identified as essential to be evaluated included teaching and learning, teacher quality, student quality, instructional materials, class size, leadership and administration, school mission and vision, school ethos, school curriculum and school infrastructure.

Views on whether Schools should be evaluated in the same way

The intention in exploring this category was to gain insight into ways in which the various primary schools in Zimbabwe should be evaluated for quality. Participants had different views as revealed in the succeeding discussion. In this sub-section, education officials' views on whether schools should be evaluated in the same way are presented. This is followed by school administrators' views and lastly teachers' views.

Education Officials' Views on whether Schools should be evaluated in the same way

Asked whether schools should be evaluated in the same way, education officials felt that it was not fair to evaluate schools in the same way for there are various schools with varying resources. Therefore, they thought that to evaluate them in the same way would not be fair to some schools with different quantities and quality of resources. This is what the DEO had to say,

> "*I don't think it is fair to evaluate them in the same way with the same instrument; some schools have adequate resources and others do not have resources. So to evaluate them in the same way it's very difficult, it's not fair …"* (P 1:1) 1:27 (56:56).

The PED was also of the opinion that schools should not be evaluated in the same way for he thought that the struggling schools should be given a helping hand. He stated that, "*I think it is not fair to evaluate*

schools in the same way; it is the struggling schools that we need to actually take stock and then give a lending hand …" (P 1:2) 1:24 (64:64).

School Administrators' Views on whether Schools should be evaluated in the same way

The deputy school head at primary school B felt that schools may do better when there is a standardised instrument used to evaluate the quality of education in all schools. She indicated that,

> "*I feel we would do better when there was a specific measuring tool that would be provided because as it is, it's rampant. What is used at school A is not what applies to school B. You do what you feel is right which may not be right in any case …"* (P 1:5) 1:24 (69:69).

She further indicated that she also thinks it would be a good idea to evaluate all schools in the same way as a means of standardising quality of education and said, "*I think it's a good idea because it will standardise everything for everyone to know what should be looked at when evaluating quality* [of education] *in schools* …" (P 1:5) 1:29 (89:89). The TIC at primary school D was in agreement that the instrument should be used in all schools for improvement of the quality of education. She emphasised that, "*When we have one tool to monitor the standards of education it means we are all working towards one goal and we also have one vision and one nation which will improve the quality of education …"* (P 1:9) 1:21 (86:86).

The school head at school A was of the view that it will be essential to have a standard instrument to be used in the monitoring and evaluation of education standards in schools for this will standardise the indicators of quality of education to be evaluated. He indicated that, *"I think a standard instrument will help to improve quality* [of education] *because without this instrument, it is very difficult to determine even what we call quality of education"* (P 1:3) 1:26 (93:93). The school head at school E, whilst acknowledging the importance of a common instrument to be used in monitoring and evaluating the quality of education in schools, suggested that it should not be prescriptive in nature. He had this to say, *"We need it yes for guidance… I think it will be very beneficial then there should be allowance to think outside that…"* (P1: 11) 1:31 (89:89).

Teachers' Views on whether Schools should be evaluated in the same way

The teacher from primary school B also echoed the same sentiments as those of the Ministry of Education officials. She thought that it would not be fair and feasible to evaluate all schools in the same way. She queried that,

> *"Is that fair or practical? Because we are going to judge all schools in the same way…but then there are other situations where we have got mission schools, rural schools, government schools and private schools. All these have different resources …"* (P 1:6) 1:34 (109:109).

However, some of the participants thought it was good for schools to be evaluated in the same way. They were of the idea that, since schools are there for the same purpose, there was no need to evaluate them differently. The teacher from primary school A said, *"It is important to evaluate schools in the same way because, after all, it is the same education system why should it vary; it must be the same …"* (P 1:4) 1:43 (93:93). Also teachers from primary schools D, C and E thought that it was important for schools to be evaluated in the same way as they were of the views that this might help to improve education quality. The teacher from primary school D asserted that, "*It will encourage people to work hard. It encourages even the spirit of competition, it will go on and on if we have got a uniform tool…"* (P 1:10) 1:29 (181:181). These views were also shared by a teacher from primary school C who also said that this will encourage teachers to work hard. In her words, "*It's appropriate because everyone will aim to have quality work wherever you will be because we will be moving towards one goal …"* (P 1:8) 1:18 (102:102). Likewise, a teacher at primary school E also viewed this idea as important in quality improvement as she indicated that, *"It will be very helpful indeed because all schools will be working towards achieving the goal of this instrument hence it will improve the quality of education in all schools …"* (P 1:12) 1:15 (77:77).

Summary and Conclusion

Some participants were of the views that schools should not be evaluated in the same way. What the participants probably thought was that the SSE framework will be used to find out how good the quality of education in schools is for comparison purposes rather than finding out schools' and classrooms' strengths and weaknesses for improvement purposes. However, other participants felt that there was nothing wrong in evaluating schools in the same way, for they viewed schools as serving the same purpose. Since the aim of the SSE framework to be developed in this study is to find out schools' conditions, processes and outputs for improvement purposes, it may be used to evaluate the quality of education in all Zimbabwean primary schools.

5.3.4 How Education can be improved

In exploring this theme, the intention was to gain an understanding of aspects of improvement plans that should be in place to enhance the quality of education in Zimbabwean primary schools. This information was thought to be vital to inform the development of the SSE framework in this study. Participants gave diverse views, which included the supplying of adequate resources, provision of a standardised SSE framework to evaluate and monitor the quality of education and realising and sustaining teachers' needs, both professional development and their personal needs as discussed below.

Supplying Adequate Resources

For many people concerned with education, the solution to poor quality of education in schools is mainly the provision of more resources. Asked how quality of education may be improved, all participants made mention of the supply of resources as the main solution to the improvement of education quality in schools.

Although some participants had previously stated that they were satisfied with the current quality of education in Zimbabwean primary schools (P 1:2 1:1 (4:4); (P 1:1) 1:1 (4:4); (P 1:11) 1:1 (5:5); (P 1:12) 1:10 (13:13); (P 1:5) 1:1 (5:5); (P 1:7) 1:1 (5:5); (P 1:9) 1:1 (5:5), they later on acknowledged that there was a need to improve education standards. The school head at school A plainly stated that,

> *"It is very difficult for us to achieve quality of education where there are limited resources for example, furniture. Our pupils write lying on the floor and it is very difficult to teach where there is a shortfall of textbooks. So if we could have enough resources I think quality of education may improve …"* (P 1:3 1:28 (101:101).

The TIC at primary school D suggested that the government should supply schools, particularly rural ones, with resources, especially modern resources, which would help in improving the quality of education. She had this to say *"Maybe government should provide each school with modern technology like computers so that our e-learning helps even the pupils out there in the rural areas who are suffering most"* (P 1:9) 1:24 (98:98).This was also confirmed by the teacher from school A in the rural areas as he said that, *"We need adequate resources. We also need computers so as to keep abreast with the changing world …"* (P 1:4) 1:31 (81:81). The deputy school head at primary school B was also of the idea that the availability of resources might help to improve quality of education. She said, *"When we have resources it becomes easier to evaluate and monitor* [quality of education]…" (P 1:5) 1:23 (69:69).

Parents also viewed resources as essential in improving the quality of education as they also expressed concern about lack of resources in schools. The parent from Masvingo province stated that, *"Quality* [of education] *can be improved by supplying more teaching and learning resources like reading materials to children …"* (P 1:13) 1:14 (56:56). Similarly, the parent from Harare Metropolitan province also suggested that schools should have enough resources and proper administration if education is to be improved as she indicated, "*There should be enough resources at schools, enough textbooks, enough chalks, enough whatever which is supposed to be used in schools and also proper administration …"* (P 1:14) 1:30 (72:72).

Provision of a Standard Instrument to Evaluate Quality of Education

Another issue raised by the participants which they thought might help to improve education in Zimbabwean primary schools was that the Ministry of Education should provide schools with monitoring tools to be used in the evaluation of quality of education. They indicated that currently there is no standardised instrument used in schools to evaluate the quality of education. This might be detrimental to the provision of quality education in schools as noted by the deputy school head of primary school B, who said,

> "*We would do better when there was a specific measuring tool that would be provided because as it is right now it is rampant. What is used in school A is not what applies to school B. You do what you feel is right which may not be right in any case …"* (P 1:5) 1: 24 (69:69).

The same concerns were raised by the school head at primary school A who thought that there was a need to have a uniform instrument. Such a move, in his view, would help to regularise what is meant by quality of education as he pointed out that,

> ***"****I think it will help to improve quality* [of education] *because without this instrument, it is very difficult to determine even what we call quality in education. The idea of quality of education should be agreed upon …"* (P 1:3) 1:26 (93:93).

The PED concurred with these participants as he felt that this would help to gauge Zimbabwe's development in education. He indicated that,

> *"It is important to have a checklist. It describes us a people, it measures our development so the instrument is critical to us. However, it should not be prescriptive but should act as a guide to how we do our business …"* (P 1:2) 1:25 (68:68-1:26 72:72).

The teacher at primary school A viewed the instrument as belated, since he thought that they could be doing better if there was such an instrument. He noted that, "*I just think it's long overdue otherwise if we had such type of evaluation* [instrument] *I think our pupils would have been performing better …"* (P 1:4) 1:36 (101:101). The teacher also indicated that he hoped that this research study would not just end up in a discussion, but should come to fruition so that such an instrument is adopted for use in schools. He had this to say, ***"****I just hope that this will not end in a discussion like this because you are just helping us in working for the better. So let's hope it is going to come out as you intent …"* (P 1:4) 1:38 (109:109).

The parent from Masvingo province thought that the Ministry of Education should put in place tools to be used in schools to evaluate quality of education. He averred that, *"The Ministry* [of education] *should put in place different monitoring tools to ensure that effective teaching and learning takes place …"* (P 1:13) 1:28 (44:44). One of the reasons why some participants thought that a standard instrument might help to improve education quality was that it would encourage uniformity and competition in schools. This was demonstrated by the teacher from school B, who stated that,

> *"If there is a standard instrument, this will encourage competition in schools. You can come out with something that can be generalised if it is uniform. If it is not the same you cannot have a generalisation to say in Zimbabwe we have quality education. It means we are not doing the same thing in one country which is not good to our quality of education …"* (P 1:6) 1:27 (125:125).

Comparison of schools' performances is essential to improve quality of education in schools because, through comparing their performances with others, schools might be encouraged to work harder, thereby improving their quality of education as indicated by the teacher at school D (P 1:10) 1:29 (181:181).

Realising and Sustaining Teachers' Needs

From the interviews, also emerged a proposition that realising, as well as satisfying teachers' needs, was vital for the improvement of education quality in schools. Participants identified two types of teachers' needs which they highlighted as essential namely educational and professional development needs and financial needs. These are discussed below.

Teachers' Educational and Professional Development Needs

Participants were of the views that professional development courses held at the school, district and provincial levels might help teachers to learn new ideas for the improvement of education. This observation was made by a teacher at primary school D who affirmed that "*We hold some in-service workshops which assist us. If these could also be done at district and provincial levels I think they will help us improve quality* [of education] …" (P 1:10) 1:21 (137:137). The teacher from school A was of the view that some teachers may not be proficient enough; hence, there is a need to have practical workshops so as to help them. He asserted, *"There is a need to improve because at one time teachers go to reading workshops but reading workshops are done theoretically not practically…"* (P 1:4) 1:16 (29:29). The parent from Masvingo province was also of the opinion that teachers may perform better if more professional development workshops were held for them and if they upgrade themselves academically. He emphasised that, *"Quality of education can be improved by conducting more workshops and seminars for teachers; it can also be improved by upgrading teachers and giving more incentives for higher qualifications …"* (P 1:13) 1:14 (56:56).

Teachers' Financial Needs

Participants also felt that teachers could be doing better than currently is the case if they were paid substantial salaries. They felt that presently, teachers are de-motivated because of the poor remuneration they get. Therefore, they thought that this situation may be negatively impacting the quality of education in Zimbabwean primary schools, as some teachers might engage in other activities to augment their

meagre salaries. The parent from Harare province indicated that, "*For education to improve, all teachers must be motivated through salary increments …"* (P 1:14) 1:31 (72:72). The concerned parent from Harare province expressed her anger over extra lessons which are conducted by teachers mainly as a way to supplement their meagre salaries. She said that,

"What I can say is, first of all, they must stop this business of doing extra lessons because it is negatively affecting the quality of education. Teachers should just be paid enough money so that they teach everything to all children …" (P 1:14) 1:24 (76:76).

The teacher from primary school E thought that the poor salaries of teachers are negatively affecting education. In her words,

> "*Well these days we are always talking about motivation of teachers. Teachers are de-motivated because of our salaries. There is need to improve on that one to enhance the quality of education in our classes. If teachers are motivated they can do much better to improve the quality of education in schools …"* (P 1:12) 1:16 (85:85).

Asked about any other suggestions that might help to improve quality of education in schools, the deputy school head at primary school B affirmed that, "*Yes of course, but this comes to the package that the practitioners get. If educators' needs are realised, if they are well paid I think they can work hard …"* (P 1:5) 1:31 (97:97). The teacher at primary school A concurred with the deputy school head of school B's comments, when he said that their employers were expecting too much from them in terms of producing quality work without taking into consideration the remuneration they give the teachers. He commented that,

> ***"****As teachers, we are workers. If you want to produce good results from your worker you must look at what you are giving that worker because if you just want a worker to produce good results and you are not providing the same to that worker it won't work. Those people up there they are expecting much from the teachers, the same applies to them. They are also expected to give their worker enough money for him to be motivated to do his work …"* (P 1:4) 1:25 (57:57).

Summary and Conclusion

Findings show that, in order for quality of education to be improved in schools, there is a need to have adequate resources. These may include both human and material resources. The provision of a standard SSE framework to be used in the schools' self-evaluation of the quality of education was considered vital in the improvement of quality of education in Zimbabwean primary schools. Moreover, the findings reveal that, in order for education to improve, there is a need to address teachers' needs, which include their professional development as well as their personal needs.

5.4 Discussion and Summary of Findings

This section discusses and summarises the findings from the preliminary phase of this study. The main themes summarised in this section are: how education quality is understood in the Zimbabwean context (5.4.1); factors that hinder Zimbabwean primary schools to achieve education quality (5.4.2); how schools should be evaluated for quality (5.4.3); indicators to focus on when evaluating Zimbabwean primary schools and classrooms for quality (5.4.4); and how education quality may be improved (5.4.5).

5.4.1 How Education Quality is Understood in the Zimbabwean Context

From the findings of this phase of the study, it is clear that most participants' understanding of the quality of education relates to student achievement in tests and public examinations. All the participants referred to quality of education as either good or bad in relation to student academic achievement (see 5.3). These findings confirm Williams' (2001, p. 188) who argues that quality of education in terms of its cognitive output is better understood by many than can be done in different other aspects. To this effect, Barker, (1988) argues that achievement in tests is the main aspect for many who want to assess the effectiveness of schools. This is also evident in most international assessment studies on the quality of education such as SACMEQ, PIRLS and TIMSS which target student achievement in reading literacy, mathematics or science in order to determine the quality of education in different participating countries. Although schooling conditions and educational inputs to schools may also be shown in relation to the performance of students, the emphasis is mainly on student academic achievement.

Although many participants viewed student academic achievement as the main indicator of good quality of education in schools (see 5.3), they also acknowledged that, in order for student academic achievement to be realised, various aspects have to be taken into account. Student academic achievement alone might not account for the quality of education as their cultural, social and personal development are also essential indicators of quality of education.

Participants mentioned inputs such as human and material resources, the quality of teachers, the quality of students and infrastructure in schools and processes such as teaching and learning and leadership and administration, among other things, as vital to the achievement of quality education. This is consistent with literature which emphasises the importance of inputs, processes and outputs in the realisation of quality of education (UNESCO, 2004; UNICEF, 2000).

5.4.2 Factors that Hinder Zimbabwean Primary Schools to Achieve Education Quality

Participants identified a number of factors which impede schools from achieving high quality of education. The main ones were: absence of a policy which requires schools to carry out self-evaluation processes, lack of resources and absence of a standard instrument to effectively evaluate education quality in schools. These are discussed below.

Absence of Policy for Schools to Carry out Self-Evaluation Processes

The findings of this phase of the study revealed that schools do not undertake self-evaluation regarding the quality of their education. It has been shown that school heads are required to do some lesson observations and book inspections, in order to determine the quality of education in classrooms (see 5.3). Most participants thought that these classroom observations were equivalent to the evaluation of quality of education in schools. When asked how they evaluate quality of education in schools, school administrators pointed out that they use instruments which they design to observe lessons inspect books, and also analyse results in order to establish the quality of education in schools (see 5.3). The teachers who were interviewed also showed a limited understanding of evaluation of quality of education in schools. They indicated that quality of education in schools is evaluated by school administrators through lesson observations and book inspections (see 5.3). This limited understanding of evaluation of quality of education in schools indicates that there is no meaningful evaluation of the quality of education in Zimbabwean primary schools except for the lesson observations done by the school heads.

However, in order for schools to realise and improve quality of education, there is a need for them to find out and determine what aspects of quality of education in their schools are possibly of relevance in their schools (Hopkins, 1989; MacBeath, Schratz, Meuret & Jakobsen, 2000; MacBeath & Sugimine, 2003; Nevo, 1995). The participants also acknowledged that there is a need for SSE in order for schools to understand the quality of education in their schools for improvement purposes (see 5.3). Although there are some quality-related measures in place for school administrators to do some lesson observations and book inspections, there is no policy in place which requires schools to do self-evaluation of the quality of education in schools which may hamper realisation and improvement of education in schools.

Lack of Resources

The Preliminary Phase's findings indicate that shortage of resources (both human and material) encumbers schools from achieving education quality. The fact that there was a critical shortage of qualified personnel in schools from 2007 to early 2009, as indicated by some participants (P 1:1; P 1:3) (see 5.3), could have led to the deterioration of quality of education in Zimbabwean primary schools. The number of teachers in Zimbabwean primary schools was not proportional to the number of pupils.

Research has shown that smaller class sizes may considerably improve student learning (Finn & Achilles, 1999). Therefore, the large class sizes experienced due to the shortage of teachers because of the brain drain (see 2.2), could have affected the quality of education in schools. This issue of shortage of teachers led the Ministry of Education to employ less qualified teachers who might have been of poor quality which could have affected education standards. Such a conclusion finds support in literature which argues that teacher quality has a significant impact on the teaching and learning processes (Darling-Hammond, 2006; Hopkins & Stern, 1996; Smith, 2008). Therefore, improvements in the human resources, when some teachers returned to take up their posts after the introduction of multiple currencies might have led to the improvement in the quality of education in schools as noted by some participants (P 1:2; P 1:1; P 1:11; P 1:9; P 1:5; P 1:6) (see 5.3).

Shortage of resources like textbooks was also identified as one of the factors which affect quality of education in schools. This shortage of textbooks might result in some teachers resorting to ineffective methods of teaching, such as lecture methods as noted by one participant (P 1:4) 1:2 (9:9) (see 5.3). This method is detrimental to pupils' learning. Sedel (2005) asserts that the problems of quality of education in Africa are linked to shortage of resources and the inefficient use of those that are available. Therefore, the shortage of textbooks could have negatively affected the quality of education in schools until the Ministry of Education received textbooks donated by UNICEF (see 5.3). However, some schools continue to face textbook shortages in subjects which were not part of the UNICEF donations.

Globally, pupils' low reading ability attainment remains challenging (Coltheart & Prior, 2007; Commeyras & Inyenga, 2007). Although reasons for low pupil reading ability may be difficult to identify due to multifaceted relationships of cognitive, socio-economic, educational, family and individual factors, it is usually the schools' responsibilities and, particularly the teachers' duty, to improve pupils' reading skills. It was noted with concern that some pupils in grade 7 were not able to read, and this poses a particular challenge to their teachers, who have to prepare them for the grade 7 public examinations (P (1:4) 1:2 (9:9). This observation is supported by Mullis, Kennedy, Martin and Sainsbury, (2006) who argue that pupils should be able to read by grade 3 and that by the 4th grade they should be reading in order to learn.

This phase's findings revealed that teachers cannot produce good quality of education when they have to teach large class sizes in grade 7, particularly if pupils have problems in reading (P (1:4) 1:2 (9:9). While empirical evidence on the relationship between class size and student achievement is mixed, some studies in the United States of America (USA) (namely, the states of Indiana and Tennessee) respectively have

shown that reduced class sizes, particularly in lower grades, may result in improved student achievement (Bain & Achilles, 1986; Finn & Achilles, 1999). However, literature also suggests that greater learning gains may be achieved in larger classes, especially in upper grades (Bennett, 1996; Blatchford & Mortimore, 1994; Lockheed & Verspoor, 1991). The conclusion that can be made regarding large class sizes in upper grades is that besides teachers' efforts to help pupils read, they should also utilise those who can read to help the non-readers for effective teaching and learning to take place.

Absence of a Standardised Instrument to Effectively Evaluate Education Quality in Schools

This phase's findings revealed that teachers are not aware whether there is an instrument used to evaluate the quality of education in schools. School heads also indicated that, currently, there is no common instrument used in the evaluation of the quality of education in schools except for the instruments they make for lesson observations and book inspections (see 5.3). From what the participants said, evaluation of the quality of education in schools is mainly the administrators' responsibility, and has nothing to do with teachers. This is contrary to what literature suggests that schools should evaluate the quality of their education for improvement purposes with the involvement of key stakeholders which are the teachers (Bernhardt, 1999; Hopkins, 1989; Nevo, 1995). The findings of this phase revealed that there is no school SSE of quality of education taking place. This might affect the standards of education in Zimbabwean primary schools.

5.4.3 How Schools should be evaluated for Quality

Concerning the issue of evaluating all schools in the same way, participants had varying views, with some advocating that schools should be evaluated in the same way; while others were against the idea (see 5.3). Those participants who were against the idea of evaluating schools in the same way thought that this would be done for comparison purposes. Such thinking is not surprising as literature indicates that people have different ideas of the role of evaluation in schools where some think of it in terms of describing everything observed in a school, while others consider it as intended for rating purposes (Stake, 1967). Some of the participants' comments that it will not be fair to evaluate schools in the same way because there are some struggling schools in terms of resources (P 1:2; P 1:1; P 1:6), clearly indicate that some participants thought of evaluation in terms of rating schools. However, if evaluation is to be thought of in terms of improvement purposes (Hopkins, 1989; Nevo, 1995), there is nothing wrong in evaluating all schools in the same way. This was the understanding held by one participant (P 1:4) who argued that since it was the same education system, there was no need to evaluate schools differently. Hence, it can be concluded that, whatever purpose of evaluation, schools may still be evaluated using the same SSE

framework. Focus could be on the same aspects for information obtained from the evaluation process is vital for improvement purposes.

5.4.4 Indicators to Focus on when Evaluating Schools and Classrooms for Quality

Underpinning all considerations to do with aspects of quality of education in schools and classrooms are issues of resources, processes and outputs, as evident in the views given by the participants. This is despite the fact that findings of this phase of the study emphasised student achievement as the principal indicator of quality of education (see 5.3). The findings reveal that some of the aspects to be evaluated at the school level should also be focused on at the classroom level, for example, student achievement. Although the school and the classroom influence each other (Scheerens, 1990), since there is a bi-directional influence of quality of education between them, (see Figure 3.1), some aspects of quality of education such as the school ethos, mission and vision on education, leadership and administration, furniture and quality of the buildings might be understood better at the school level. However, teaching and learning, teacher quality, student quality, class size and instructional materials may be understood better at the classroom level. It is particularly important to present the actual quality of education at each level than to focus on all aspects at all levels, as this may not provide a clear picture of the quality of education at each level and where improvement is needed.

However, student achievement should be evaluated at both the school and the classroom levels. This is particularly so, for student achievement should be understood in terms of what students would have achieved in relation to their specific grades at the classroom level as well as their achievement at the school level (see Appendix 21). Student achievement at the school level may include achievement in sporting and other activities in the school. Although emphasis was placed on student academic achievement as the main indicator of quality of education (see 5.3), participants also recognised the prominence of resources and processes in bringing about the achievements. It was, therefore, concluded that inputs, processes and outputs should all be evaluated at the appropriate levels in order to determine the quality of education in schools and to establish areas requiring improvement.

5.4.5 How Education Quality may be Improved

A number of ways to improve the quality of education were suggested by participants. Central issues to the improvement of quality of education were identified as follows: provision of adequate resources, provision of a standard instrument to be used for school SSE processes and realising teachers' needs. These are briefly summarised in this section.

Provision of Adequate Resources

Fundamental to quality of education improvement in schools is the issue of the provision of enough resources. This has support in literature which recognises instructional resources as essential requirements in the teaching and learning processes (Lockheed & Verspoor, 1991). From the findings of this phase of the study, it may be concluded that if there are enough material resources in schools, teachers may perform better in their delivery of lessons. Moreover, pupils will have a chance to use the resources to enhance their understanding of concepts. Cheng (2001) acknowledges that resources are essential for education organisations to realise various goals and to produce quality education. Pupils from schools with enough resources are likely to attain higher levels of literacy than those from poorly resourced schools (Pretorius & Machet, 2004b). It was also concluded that the problems of quality of education in most schools are associated with scarcity of resources (see 5.3). If these are improved, this might help to enhance education in Zimbabwean schools.

Provision of a Standardised Instrument for Evaluating Quality of Education

This phase's findings indicate that there is no standardised instrument for use in evaluating and monitoring the quality of education in Zimbabwean primary schools (see 5.3). This absence of a standardised instrument in schools may make the evaluation process inconsistent as different schools may focus on different aspects of the quality of education (P 1:3; P 1:5; P 1:6; P 1:2; P 1:4). Literature suggests that if evaluation is meant for improvement purposes, a common instrument should be used (Bernhardt, 1999; Hopkins, 1989; Nevo, 1995). The findings also reveal that schools may not be well versed in designing and developing their own instruments for use in evaluating the quality of education since the Ministry of Education does not supply schools with the evaluation instrument (P 1:3; P 1:5; P 1:7). Participants' views that there is no standardised instrument used to evaluate the quality of education in the schools might be an indication that school heads lack proficiency in designing and developing evaluation instruments. This might not be surprising, given the difficulty involved in the process of designing and developing educational interventions (Plomp, 2009, p.30).

Addressing Teachers' Needs

One of the findings from this phase of the study is that teachers' professional development is essential so as to improve teachers' teaching skills. Findings revealed that some professional development courses were held at schools. However, these may not be enough to address teachers' professional needs. Harwell, (2003) argues that pupils cannot be expected to change if teachers' classroom performances remain unchanged. Participants indicated that professional development courses might help teachers to learn new

and effective ways of teaching in order to enhance pupil learning and achievement. Findings show that teachers' current teaching practices are not effective. This might contribute to the poor quality of education (P 1:3; P 1:13; P 1:14). Therefore, if teachers are professionally developed, they might have knowledge to transform the information they gain into practice for the benefit of pupils (Alexander, Heaviside, & Farris, 1998).

The findings also revealed that teachers were underpaid which might negatively impact the quality of education in schools. Although teachers reported that they are underpaid (see 5.3), research has not established any relationship between teacher salary and the quality of education (Hanushek, 2000). If high salaries were related to quality of education, students in countries which offer such wages for their teachers would outperform those from poor countries in international studies aimed at evaluating the quality of education in different countries. However, this is not always the case. Although teachers should be paid better salaries for a decent living, but their provision of quality of education to pupils should be done irrespective of their salaries.

5.5 Conclusion and Implications for the Intervention Study

The findings of this phase of the study have shown that the concept of SSE of quality of education is still new in the Zimbabwean context. As a result, there is a lack of awareness of the need for schools to do self-evaluation exercises. It has also emerged from this phase of the study that school heads are ill-prepared for conducting effective evaluation of the quality of education in their schools. This problem seems to emanate from the fact that they do not have a standardised tool to use for the exercise. The fact that they are supposed to design and develop their own tools may lead some to focus on trivial issues which may not help in the improvement of education quality. It may also be possible that some school heads are using sub-standard instruments for class lesson observations. It has also emerged that tests, written exercises and public examinations are common ways used to evaluate the quality of education in schools, suggesting that other aspects not easily assessed by such methods may not be meaningfully evaluated.

Although the quality of education in Zimbabwe is said to be improving (see 5.3), much still needs to be done. Supplying enough resources, realising teachers' needs, the provision of a uniform evaluation instrument and the taking up of school SSE initiative in schools, have all been found to be crucial in realising and improving the quality of education. Following these conclusions drawn from the preliminary

phase of the study, the subsequent implications of these findings for the intervention study are summarised next.

Implications for the Intervention Study

Deriving from the preceding discussion, there are challenges faced in the evaluation of the quality of education in Zimbabwean primary schools. In order to overcome these challenges, various stakeholders in education should collaborate so as to improve the quality of education in schools. The implications of these factors for this intervention study are that:

- ***There should be a government policy on SSE and schools should be supported in implementing such a policy***

As evidenced in Chapter 1 (see 1.2) and also from the results of the Preliminary phase of this study (see 5.3), the concept of SSE has not been taken up in Zimbabwe. Furthermore, there is no policy which authorises schools to engage in self-evaluation activities. School heads are just expected to monitor the quality of education in classrooms through classroom observations and book inspections. However, given the importance of SSE in improving the quality of education (Carlson, 2009; Department of Operations Education Division 2004; MacNamara & O' Hara, 2005; Schildkamp, Visscher, & Luyten, 2009; Turnbull, 2008), there is a need for the government to promulgate a policy on SSE which should be implemented in all schools. This may only be possible if schools are supported with proper SSE instruments and procedures for doing this.

- ***The Ministry of Education and schools need help in monitoring and evaluating the quality of education***

It was noted that school administrators do the evaluation of quality of education in classrooms, but no such evaluation being done for the school. Considering the bi-directional influence of quality of education between the school and the classroom, classroom quality cannot be understood in isolation from school quality. What happens in the classroom is influenced by what happens in the school and vice versa. The aim of carrying out school SSE is to determine how good a school is (The Scottish Office Education and Industry Department 1996) for purposes of improvement. Furthermore, education officials also indicated that they evaluate aspects of quality of education in schools using different instruments which may produce a disjointed picture of the quality of education in schools. Consequently, schools and Ministry of Education officials should be helped in the evaluation and SSE processes of the quality of education respectively for them to obtain valuable information especially in contexts where the concept of SSE is

still new such as is the case in Zimbabwean primary schools. Such information will assist them to improve the quality of education.

- ***Schools need to involve various stakeholders in the evaluation and monitoring of education quality***

The findings from the preliminary study showed that education administrators are the only ones responsible for the evaluation of the quality of education in schools. However, literature suggests that central evaluation needs of a school might be realised as a team than as an individual (MacBeath, 1999; Nevo, 1995). Stakeholders who should be included in the evaluation process should include teachers, parents, pupils and the local school community (MacBeath, 1999; 2006). This team should be supported through training of how to evaluate the quality of education in schools.

- ***Schools would benefit from a standard instrument for use in evaluating and monitoring the quality of education***

The findings of this phase of the study showed that in Zimbabwe, there is currently no single, standardised instrument available to evaluate the quality of education holistically in primary schools. From the needs analysis it would appear that there is a need to develop an SSE framework that schools could use to evaluate their conditions and practices to enhance the quality of education. Although the needs analysis and literature review indicate that quality of education is perceived by many stakeholders in terms of student academic achievement neglecting other aspects (Williams, 2001), this achievement should not be the only object of SSE. To this effect, Nevo (1995) argues that there is no meaningful way to judge a school's overall quality by a single criterion. Therefore, more than one indicator is needed to effectively monitor and evaluate the quality of education in schools.

- ***Schools need to communicate their progress in education to various stakeholders for effective improvement of the quality of education to take place.***

Communication of results on the quality of education in schools should be done to all stakeholders. These stakeholders should include the administrators, teachers, pupils, parents, and other social structures with interest in education, for example, church organisations and NGOs. Although some might view it as secondary to communicate results of the evaluation process to other stakeholders like parents (MacBeath, 2006), it is vital for it will help with improvement strategies, especially with regard to those that have to do with the supply of resources.

Based on these findings, it was considered essential to design and develop an SSE framework addressing the issues mentioned for Zimbabwean primary schools. The next chapter, Chapter 6 focuses on the design and formative evaluation of prototypes 1 and 2 of the SSE framework.

CHAPTER 6

ESTABLISHING THE DIMENSIONS AND QUALITY INDICATORS OF THE SCHOOL SELF-EVALUATION INSTRUMENT (PROTOTYPES 1 AND 2)

6.1 Introduction

Chapter 5 presented the findings of the needs analysis conducted in Zimbabwean primary schools in order to gain an understanding of the current quality of education and its evaluation and monitoring. As previously stated, the aim of this study was to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. The review of the related literature (Chapter 3) and the needs analysis (Chapter 5) provided related information on which design principles and specifications for the intervention were formulated. The literature review highlighted the importance of evaluation, either at the international, national or institutional level, as a means of improving the quality of education (Mullis, Martin, Kennedy, Trong, & Sainsbury, 2009; Mullis, Martin, Ruddock, O'Sullivan, Arora & Erberber, 2005). What has been learnt from the literature review and the needs analysis is that schools need instruments to help them in the evaluation of the quality of their education and that there is also a need to train members of the evaluation team, particularly if the concept of SSE is still new like is the case in the Zimbabwean context. More importantly, the needs analysis highlighted the need to support schools in conducting SSE as a means of improving education in schools.

This chapter focuses on the development and formative evaluation of the first and second prototypes of the SSE framework. In Section 6.2, the design principles for the intervention derived from literature review and a needs analysis conducted in Zimbabwean primary schools are presented and discussed. This is followed by a description of the design and development of the first prototype (6.3). Formative evaluation of the first prototype, which was appraised by experts, is presented in Section 6.4, while conclusions and implications for further design are conversed in Section 6.5. Section 6.6 describes the design of the second prototype followed by its formative evaluation by the expected users (6.7). Lastly, a conclusion and implications for subsequent design are drawn (6.8).

6.2 Design Principles for the Intervention

In Chapter 5, the needs analysis was conducted as a preliminary phase of the study in Zimbabwean primary schools. Findings from the needs analysis will be incorporated in the design and development of an SSE framework. The findings of the needs analysis highlighted the need for a standardised SSE framework to monitor and evaluate the quality of education (see 5.3). The findings show that there is a need to involve various stakeholders in the development and particularly in the implementation of the SSE framework for effective improvement of quality of education to take place (see 5.3). In view of the findings from the needs analysis and information from the review of the related literature (see 3.5), the following preliminary design principles were formulated to guide the design, development and formative evaluation of the prototypes:

Identify and engage all Relevant Stakeholders in the Development of the SSE Framework
Agree on the Need for the SSE Framework Initiative
Agree on Aims and Objectives of the SSE Framework in Context
Identify Indicators of Quality of Education in Context
Develop the Structure of the SSE Framework

Each of the preliminary design principles is briefly discussed.

Identify and engage all relevant stakeholders in the development of the SSE framework: The starting point is to identify key stakeholders in education. The principle assumption here in the development of SSE frameworks is that all stakeholders, irrespective of their roles, have the ability to reflect, learn, inform and work to improve the SSE framework (MacBeath, 2006). Typical examples of stakeholders may include the government, the school heads, teachers, teacher associations, support staff, parents, experts, researchers and NGOs involved in education policy and funding. Stakeholder participation at the outset of the SSE framework development process is critical to ensure everyone's commitment towards the initiative. The development of an SSE framework for evaluating the quality of education in schools should not be an individual effort. All stakeholders in education should be involved in the development process since they have an ability to inform and improve the SSE framework regardless of their roles.

Agree on the need for the SSE framework initiative: Before the development of the SSE framework, all stakeholders should agree that there is a need for an SSE intervention. This means that everyone should first understand that there is a problem, and, in order to solve the identified problem in education, an intervention should be in place. Agreeing on the need for an SSE framework by various stakeholders is essential as this may help to enhance its acceptance by the users (MacBeath, 2006). If some stakeholders do not see the need for the SSE initiative, this might negatively affect the SSE framework's acceptance and in turn, the quality of education in schools and classrooms.

Agree on aims and objectives of the SSE framework in context: For an SSE framework to be effective, all contextual factors should be taken into account. This involves stakeholders agreeing on the aims and objectives of the SSE framework taking into account their own contexts.

Identify indicators of quality of education in context

For an SSE framework to be effective in evaluating quality of education, the indicators of quality of education should be identified and contextualised. Although there may be some general indicators of quality of education (The Scottish Office Education and Industry Department, 1996), stakeholders should also think of other indicators particular to their contexts which will enable effective evaluation of quality of education.

Develop the Structure of the SSE Framework

When developing the structure of the SSE framework, care should be taken to ensure that the framework will be relevant to the setting for which it is designed and developed, consistent, practical and effective in evaluating the quality of education in schools (Nieveen, 2009).

Based on these principles, the first prototype of the intervention was then developed (see Appendix 9).

6.3 Design and Development of the First Prototype

As previously stated, the aim of this study was to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. Although student achievement was found to be the principal indicator of quality of

education (Barker, 1988; McGrath, 1990; Michaelowa, 2001; Williams, 2001) (see also 5.3), the SSE framework developed here focuses on many aspects of schools and classrooms. This was considered essential because everything that is found in the schools and classrooms, and what happens there, aims at enhancing pupil learning and achievement.

The SSE framework was developed by the researcher in conjunction with education experts such as University and College Lecturers, who provided the knowledge, Ministry of Education officials, school heads and teachers, the practice, as well as parents. For their roles in the development of the intervention in this study see 4.3. The development of the SSE framework was done following design principles and specifications as described in the previous section (see 6.2). These were derived from the literature review (see 3.5), as well as from the needs analysis conducted in some Zimbabwean primary schools (see 5.3). The knowledge experts were given prototype 1 for appraisal so as to establish the content validity, as well as the consistency of the intervention (see 4.5). Practitioners were involved in the development of the intervention through establishing its practicality and also its effectiveness (Nieveen, 2009) when evaluating education quality in schools.

Previous studies employing design-based research in developing educational interventions for use in schools have concentrated on the development of exemplar materials to be used by teachers to improve the quality of teaching and learning processes in a specific subject area (Januario, 2008, Physics; Mafumiko, 2006, Chemistry; Masole, 2011, Agriculture; Motswiri, 2004, Chemistry; Tecle, 2006, Biology & Tilya, 2003, Physics). However, the improvement of teaching and learning in a specific subject area is just but one aspect of quality of education improvement in schools. Therefore, instead of developing an intervention which may be used to teach a specific subject area, this study took a holistic approach of developing an SSE framework which may be used to evaluate the quality of teaching and learning in all subjects in the curriculum in Zimbabwean primary schools together with schools' inputs, processes and outputs so that schools may identify where improvement is desired. This was particularly important, in this study, because there are various factors, such as the quality of teachers, student quality, the quality of administration in the schools and the school ethos among others (see Appendix 9), which contribute to the quality of education than just the actual teaching and learning processes alone. The principal assumption here was that, through the use of the SSE framework, schools could identify areas hindering them from achieving quality of education, with the aim of taking corrective measures. An overview of the intervention is given below.

Overview of the Intervention

Here, the indicators of quality of education of the SSE framework as informed by the literature review (see 3.5); the needs analysis (see 5.3) as well as the conceptual framework for the study (see 3.6), are presented. The quality indicators for both the school and classroom levels are presented in detail in the SSE framework (see Appendix 9) and discussed below.

School Level Indicators of Quality

The school as an organisation is not removed from the actions and objectives of the classrooms. Therefore, for the SSE framework developed in this study, has to focus on both the school and classroom indicators of quality of education. The quality of education in schools may be monitored through the inputs, the processes which happen within the schools and classrooms, as well as the output. The following are the school level indicators of quality of education:

- **Student Achievement**
- **Leadership and Administration**
- **School Curriculum Quality**
- **School Infrastructure**
- **Involvement of Stakeholders**

  (see Appendix 9)

These school level indicators of quality are briefly explained below and presented in Appendix 9.

Student Achievement

Literature has shown that student achievement, particularly academic achievement, is the one which is best understood by many stakeholders, as the main indicator of quality of education in schools (Barker, 1988; Williams, 2001). Student achievement might be determined at both the school and the classroom levels. At the school level, student achievement is concerned with the overall student achievement in terms of academic achievement as well as achievement in other activities, for example, sport, cultural, societal and personal achievement.

Leadership and Administration

Leadership in a school plays a pivotal role in determining school and classroom quality. For schools to be effective, they need competent school leaders who can provide direction, guidance and support for teachers and pupils, so as to attain educational goals. Research on school effectiveness suggests that

leadership, particularly instructional leadership, such as professional learning of teachers, which emphasises teaching and learning (Bush, 2007), is an essential characteristic of effective schools. Such leaders place an emphasis on aspects such as the provision of an orderly learning atmosphere, setting and coordinating instructional strategies and programmes, dissemination of school's vision, supporting teachers through supervision, and being mission-oriented (Kruger, Witziers & Sleegers, 2007). Hence, effective leadership and administration in a school is essential for schools to realise quality of education.

School Curriculum Quality

A curriculum is one of the most important components of the teaching and learning processes. Without it, it would be difficult for teachers to execute their duties effectively. Having a high-quality school curriculum which caters for individual differences to guide instruction is of vital importance in the teaching and learning processes (Mohamad & Kumari, 2007). If well implemented, a high-quality school curriculum has the potential to enhance quality of education in a school. Therefore, the quality of a school's curriculum, in terms of its alignment to national standards and breadth and balance, is also an essential indicator of quality of education at the school level (see Appendix 9).

School Infrastructure

The physical appearance of a school is important in influencing the quality of education in a school. Although some may argue that it is not the buildings that educate pupils (Oertel, 2005), the school buildings have a bearing on the quality of education provided in a school in that they provide enabling conditions for effective teaching and learning to take place. Although what goes on in a school and in classrooms may be far more important than the buildings, in terms of teaching and learning, school buildings should inspire learning. School infrastructure such as sanitary facilities, a clean water supply and adequate classrooms may influence how well pupils learn (Earthman, 2004), thus making it a good indicator of quality of education in a school.

Involvement of Stakeholders

Schools are a means through which society prepares pupils for life. Because of this, the society is extremely concerned about the education which pupils acquire in schools and in a way, is responsible for it. Stakeholders typically concerned with education include parents, the state, industry and the religious community (Dekker and van Schalkwyk, 1989). These work closely with the education system of which schools are a part. When doing SSE for classroom quality in this area, it is important to focus on whether and the extent to which these stakeholders are involved in the education of pupils in schools.

Classroom Level Indicators of Quality

Evaluation of quality of education in schools may not be complete without a focus on the classroom, which plays a vital role in the teaching and learning processes. This is particularly so because the classroom is where most of the teaching and learning processes take place and it is where pupils spend most of their time. Hence, to think of quality of education in schools without a clear focus on aspects of quality of education at the classroom level might not reflect a true picture of the quality of education in schools. The following indicators, identified during the needs analysis (see 5.3) and through a review of the related literature resulting in the conceptual framework for the study (see 3.6), and presented in Appendix (9), were considered essential for the evaluation of quality of education in schools at the classroom level.

- **Student Achievement;**
- **Teaching and Learning;**
- **Teacher Quality;**
- **Student Quality;**
- **Instructional Materials; and**
- **Class Size**

  (see Appendix 9)

These classroom level indicators of quality of education are briefly elaborated below and presented in Appendix (9).

Student Achievement

Literature is consistent that student achievement, mainly academic achievement, is the most understood aspect of quality of education by various stakeholders in education (Barker, 1988; Williams, 2001). This is also evident in most international studies on the quality of education in various countries such as TIMSS; PISA; SACMEQ; PIRLS among others. Although these assessment studies focus on other aspects of quality of education in schools like schools' and home backgrounds, their main focus is on student academic achievement. However, there are various aspects of student achievement besides achievement in tests and examinations which should also be monitored and evaluated, for example, achievement in sporting activities, cultural and other social activities. The inclusion of student achievement in academic subjects, as an indicator of quality of education at both the school and classroom levels, was necessitated by the fact that the school level reflects the overall achievement of pupils while specific student achievement is determined at the classroom level (see Appendix 9).

Teaching and Learning

Teaching and learning are at the heart of quality of education in schools. This aspect was only considered at the classroom level. Although there are some teaching and learning processes going on within the broader school context, the actual processes which determine quality of education in schools happen in the classrooms. For quality of education to be effectively realised in schools and, particularly in classrooms, school heads should have vision on education which should be communicated to teachers. This vision on education may help to shape teachers vision on teaching which may include applying student-centred pedagogy which will help all pupils learn. Teachers should also find ways of adapting the teaching and learning instructions to pupils' knowledge levels and also motivate them to learn (Slavin, 1998). Although the quality of instruction has been identified as the most important factor influencing student achievement (Darling-Hammond, 2000; Tharp & Gallimore 1988), its evaluation in schools and in classrooms, where there is no explicit SSE framework may not be effective. As a result, schools may not have sufficient information on the quality of instruction in terms of the teaching and learning processes, which could guide them to improve pupil learning.

Teacher Quality

Teacher quality, in terms of professional qualifications, experience, professional development and their knowledge of how pupils learn (see Appendix 9), has a significant impact on the teaching and learning processes. Teacher quality has been found to have a potential to improve student achievement (Darling-Hammond, 2006; Hopkins & Stern, 1996; Smith, 2008). Teachers are recognised as drivers of quality of education (Hopkins & Stern 1996). As such, there is growing awareness of the importance of teacher quality on student achievement, and this has since generated a variety of research (Darling-Hammond, 2006; Green, 2010; Smith, 2008; Yeh, 2009) for the purpose of improving the quality of education. Improvements in teacher quality are critical for student success (Hopkins, 1987; Hopkins & Stern, 1996). Teacher quality, particularly in terms of their teaching processes, should constantly be evaluated for the improvement of quality of education.

Student Quality

Students are central in any education system, for without them, it would be difficult to think about teaching and learning. For this reason, all efforts to improve education are aimed at improving student learning. In order for pupils to learn successfully, all the factors contributing to student learning should be encouraging. Home background factors such as family, socio-economic status, academic guidance and support have been found to be important in influencing how well students learn (Walberg, 1984). Student quality may also be enhanced through attending pre-school education. Research has found that children in

higher-quality pre-school classrooms will enter school being ready, with better mathematics and reading skills (Burchinal, Peisner-Feinberg, Bryant & Clifford, 2000). Hence, it is vital to evaluate student quality as a way towards improving education quality.

Instructional Materials

Teaching and learning processes are enhanced through the use of instructional materials which form an important link between curriculum content and the teaching and learning process. If effectively used, instructional resources have the potential to enhance pupils' learning. The quality and quantity of the instructional materials is essential in helping pupils to easily understand the concepts being taught. Since student opportunity to learn is enhanced through the use of instructional materials (Woronov, 1994), it is essential to ensure their availability and quality, in order for pupils to benefit from the teaching and learning processes. However, it is not only the availability and quality of instructional materials which is essential in order to realise education quality, but also the way they are used which enhance education (see Appendix 9).

Class Size

While empirical evidence on the relationship between class size and student achievement is mixed, some studies have shown that reduced class sizes, especially in lower grades, lead to improved student achievement (Finn, Pannozzo & Achiles, 2003; Krueger, 2003; Robinson, 1990). However, some research studies suggest that greater learning gains may be achieved in larger classes, especially in the upper grades (Bennett, 1996; Blatchford & Mortimore, 1994; Lockheed & Verspoor, 1991). It has been established that large class sizes present more challenges to teachers, especially in terms of class management and student control (Anderson, Ryan & Shapiro, 1989) than do smaller classes, which enjoy more attention from teachers (Galton, Simon & Croll, 1980). Thus, small class sizes may help to increase the proportion of pupils addressed by teachers as individuals which may result in improved pupil learning.

These quality indicators formed prototype 1. In addition to school and classroom level indicators of quality of education, the SSE prototype also has the following dimensions:

Introduction: This dimension introduces the SSE framework to school heads and teachers and its importance in improving the quality of education in schools.

Aims and Objectives: Here, the aims and objectives of the SSE framework, mainly to evaluate the quality of education in primary schools for improvement purposes and to provide feedback to all relevant stakeholders as a means of achieving continuous school improvement, are elaborated.

Evaluation Instrument: This is where the SSE framework's quality indicators and levels of performances are elaborated.

Evaluation Team: In this dimension, those who are expected to carry out the evaluation process and their roles in the evaluation process are defined.

Portfolio of Evidence: This dimension describes a collection of work of everything done in schools and in classrooms to be presented to the evaluation team so as to enable them to make sound judgement about quality of education.

Evaluation Process: Here, a description of when and how the evaluation of quality of education in schools should be carried out is given.

The Evaluation Report: A description of findings of all the strengths and weaknesses of the school and classrooms from the evaluation process and recommendations on how a school might improve its practice.

School Improvement Plan: This is a roadmap that should spell out changes a school needs to make in order to improve its quality of education.

Performance Ratings: This is a description of how schools may judge the quality of their education.

The details of prototype 1 are presented in Appendix (9) and further refined in Appendices (12), (15), (18) & in the final SSE framework in Appendix (21).

6.4 Formative Evaluation of the First Prototype

After its development, the first SSE framework prototype was subjected to expert appraisal as a form of formative evaluation. This was intended to improve the quality of the intervention before it was taken to schools for user appraisal. The focus was on relevance and consistency of the prototype. The appraisal of the first prototype was done by experts in terms of knowledge in various fields of education. In this case, they were not only expected to comment on the prototype, but also to provide suggestions for the improvement of the prototype. Hence they acted as revisors of the prototype (Weston, McAlpine & Bordonaro, 1995), in order to improve its quality (see 4.3). This section explicates the appraisal of the first prototype by experts. The research design for this phase is discussed in 6.4.1. A discussion of findings from the evaluation of prototype 1 follows in 6.4.2.

6.4.1 Research Focus and Design

As previously stated, the aim of this study is to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. The objective is to improve the quality of education in Zimbabwean primary schools (see 1.5). This study employed design research design, (see 4.3), a methodical study of designing, developing and evaluating educational interventions (Plomp, 2009, p. 9). In this sub-section, the research focus and questions are discussed first. This is followed by the sample and sampling techniques. Thereafter, data collection instruments and methods are discussed and finally data analysis procedures presented.

Research Focus and Questions

The focus of this phase of the study was to establish the relevance (content validity) and consistency (construct validity) (Nieveen, 2009) of the developed SSE framework prototype. The other reason for having the first prototype appraised by experts was to ascertain its expected practicality in the Zimbabwean context. This focus on relevance and consistency was guided by the following questions:

- To what extent are the design principles consistent with the developed SSE prototype?
- How relevant is the conceptual framework for SSE for the study?
- Do you think that the SSE framework's performance indicators are sufficient enough to effectively evaluate the quality of education in Zimbabwean primary schools?
- To what extent do you think that the suggested evaluation process can be followed by the school staff?
- In your opinion, do you think that the SSE framework's performance indicators are sufficient to effectively evaluate the quality of education in Zimbabwean primary schools?
- How consistent is this SSE framework with already existing School Self-Evaluation frameworks for evaluating the quality of education? and
- How consistent is this SSE framework with the needs of Zimbabwe for improving the quality of education?

(see Appendix 10 for details).

Sample and Sampling Techniques

Five expert evaluators participated in this evaluation cycle. Purposive sampling (Creswell, 2007; Miles & Huberman, 1994) was used to select the participants. These people were chosen because they were found to have certain characteristics which would enable them to make informed judgements about the relevance and consistency of the prototype to the Zimbabwean context. These people are well versed with the evaluation processes of the quality of education in schools and the instruments which may be used. School level participants were not involved in this particular phase of the evaluation because scientific

knowledge, rather than practical knowledge, was required in the evaluation of the first prototype. School participants were included in the evaluation of the second, third and fourth prototypes which required much more practical knowledge.

Participants

Participants for this phase of the study comprised three Zimbabwean university lecturers, one South African university lecturer and one Zimbabwean Teachers' College lecturer. All the three Zimbabwean university lecturers were senior lecturers in the field of education. The other expert was a professor from Zimbabwe, but now teaching at a certain university in South Africa, in the Department of Educational Leadership and Management. Although this expert was well-versed with the Zimbabwean education system, his inclusion in the sample was based on the assumption that he could also provide an international perspective of the quality of education, its evaluation and instruments used thereof. The fifth expert was a Teachers' College lecturer from Zimbabwe. Biographical information of the participants is presented in Table 6.1. Experts were assigned alphabet names for anonymity's sake (see Table 6.1 below).

Table 6.1: Biographical information of experts for prototype 1 appraisal

Participant	Age	Gender	Level of Education	Position	Area of Expertise	Number of Years in Present Position
Expert A	49	Male	PhD	Professor	Educational Leadership and Management	5 YEARS
Expert B	48	Male	PhD	Senior Lecturer	Educational Psychology	7 YEARS
Expert C	54	Female	PhD	Deputy Dean	Early Childhood Education	6 YEARS
Expert D	53	Male	PhD	Senior Lecturer	Educational Administration	6 YEARS
Expert E	55	Female	MED	College Lecturer	Teacher Education	12 YEARS

Table 6.1 clearly indicates that all the participants are well-educated and have vast experience in education. Their ages also indicate that they are mature in the field of education. Given their experiences in their present positions, it was expected that these experts would have adequate knowledge of issues related to education, its provision, management and ways of evaluating and monitoring it. Each expert's area of proficiency is briefly given below.

Expert A: A Professor of Educational Leadership and Management in the College of Education at a university in South Africa. He has vast experience with Zimbabwean education, its management and evaluation. He also has knowledge about the South African education system. He has specific expertise in Educational Psychology and Special Needs Education.

Expert B: A Zimbabwean academic with vast experience in education. He is an expert in Educational Psychology at a university in Zimbabwe. He has vast knowledge in education particularly the provision of high quality education through the provision of high quality psychology of education to students, who will teach in schools.

Expert C: A Zimbabwean academic with wide-ranging experience in education. She has experience in Early Childhood Education and Care (ECEC). She has considerable expertise in the educational management and evaluation in primary schools, as well as in ECEC.

Expert D: A Zimbabwean academic with vast experience in education. He is an expert in Educational Management and Administration at a university in Zimbabwe. He has vast knowledge in education, its management and evaluation. He has experience in how education in primary schools may be monitored and evaluated for quality.

Expert E: An expert in the field of Teacher Education in primary schools in Zimbabwe. She is involved in the training of teachers in primary schools Teachers' Colleges in Zimbabwe. Has experience in how education in schools may be evaluated for quality.

The diversity of experience and expertise of the experts ensured that all aspects of the intervention would be adequately evaluated for the purposes improvement.

Data Collection Strategies and Instruments

After being designed and developed, prototype 1 was sent to experts for formative evaluation. Open-ended questionnaires were used to collect data on the views of experts about the developed SSE prototype. Various issues were explored and these included the sufficiency of the quality indicators of the prototype, whether it was easy to implement, and whether it was consistent with Zimbabwe's needs for improving quality of education (see Appendix 10). Triangulation was achieved through collecting data from multiple sources in order to dismiss probable challenging explanations (Mathison, 1998). The

questionnaires were personally delivered to the participants, which afforded the opportunity to create rapport and bonding with the participants (de Vos, Strydom, Fouche & Delport, 2011). Some of the questionnaires were sent to participants through emails after prior arrangements had been made for this. Formative evaluation of the first prototype by experts was meant to get initial formative feedback regarding the quality of the prototype. Since it was not possible to conduct interviews with the experts, they were given some questions which guided them in the appraisal of the SSE prototype (see Appendix 10). The questionnaires were personally delivered to the Zimbabwean experts and the experts were briefed about the study. The expert from South Africa was contacted through telephone and the questionnaire was posted through email. The experts were told about the roles they were supposed to assume during the evaluation of the SSE prototype. Experts were asked to comment in writing on the overall content and on specifics per question in the draft SSE prototype (see Appendix 9), and on its general quality. The formative evaluation of the first prototype was to establish its relevancy, consistency and also its expected practicality (Nieveen, 2009) in the Zimbabwean context.

Data Analysis and Processing

Quantitative and qualitative data were collected in this phase of the study. Quantitative data were collected on participants' background information and were analysed using descriptive statistics through tables. Qualitative data gathered from the experts on the developed SSE prototype were analysed qualitatively using thematic content analysis. This involved categorising participants' responses into similar themes to help organise the data into meaningful information (Creswell, 2007). This was done in order to determine what should be focused on, in order to further improve the SSE prototype. Since experts were also supposed to assume the roles of revisors (see 4.3) during the formative evaluation of the first prototype (Weston, McAlpine & Bordonaro, 1995), they also pointed out areas that needed improvement and what could be done to improve the SSE prototype. The experts were informed about the roles they were supposed to assume in evaluating the SSE prototype.

6.4.2 Findings from the Evaluation of Prototype 1

Data collected from the formative evaluation of prototype 1 by the participants are presented in Appendix11. In this section, findings on design principles of the intervention are presented. Thereafter, findings on the aims and objectives of the intervention and on the conceptual framework for the study are discussed. This is followed by findings about the evaluation instrument, the portfolio of evidence, the evaluation team, the evaluation process, the evaluation report and, finally, the school improvement plan.

Design Principles of the SSE Framework

All the experts were of the opinions that the suggested design principles of the SSE framework were consistent with the developed prototype (see Appendix 11) as the prototype's key characteristics, implementation conditions and aims and objectives were clearly spelt out. Comprehensive design principles have the potential to contribute to the existing knowledge base and information on the effect of using the intervention and how it works in practice (Nieveen, 2009). In addition, design principles may also help others who may want to design and develop similar interventions for their own contexts in order to solve educational problems (Ibid, 2009).

Aims and Objectives

The experts were of the views that the aims and objectives of the prototype were relevant and would help in the improvement of quality of education in Zimbabwean primary schools. However, expert B suggested that there was a need to make reference to Mathematics as it has been opted for use in this research. Although the developed SSE framework is intended to be tested using Mathematics as an example, the ultimate goal is to use it in evaluating the quality of education across the curriculum. The choice of Mathematics was based on the assumption that pupils who perform well in Mathematics normally do so across the curriculum (Schoenfield, 2012).

Expert C suggested that an objective should be developed which looks at issues of student achievement in a holistic assessment of schools and classrooms where student achievement at the school and classroom levels should not be focused as separate entities (see Appendix 11). Although this could be achieved, in this study there was a need to look at student achievement at both the school and classroom levels (see Appendix 9). Hence this suggestion was not incorporated in the development of prototype 2. This was necessitated by the fact that at the school level, the SSE framework aims to evaluate student achievement in terms of a school's overall student achievement, that is, pupils' academic achievement in public examinations (Grade 7 examinations), pupils academic achievement in comparison with other schools and also pupils achievement in non-academic disciplines (athletics, ball games and other social activities). At the classroom level the aim is to determine student achievement in terms of grade specific tasks, class tests and achievement in school examinations.

Expert D suggested that the kind of support expected from the national, provincial and district levels should be spelt out. Expert B's suggestion that there was a need to make reference to Mathematics and expert D's suggestion that the kind of support expected from the national, provincial and district levels should be spelt out were incorporated in the development of the second prototype (see Appendix 12).

The Conceptual Framework for the Study

Effectively, all experts agreed that the conceptual framework was very relevant to the study. The experts commented positively on the conceptual framework for the study (see Appendix 11). Expert B observed that the conceptual framework has comprehensive indicators. Expert C was of the opinion that the conceptual framework was quite relevant to the study because it explicitly outlines the variables to be assessed. All the experts commented positively on the idea of undertaking the evaluation at both the school level and the classroom, particularly with regard to resources (see Appendix 11). This is perhaps because issues of resources are critical in discussions of quality of education in most developing countries (Lockheed & Verspoor, 1991) and, particularly, in Zimbabwe at present since educational resources are limited. Expert D commented that the conceptual framework should have feedback loops. This was in line with Scheerens' (1990) model of school effectiveness. The feedback loops were added to the conceptual framework for the study (see 3.6).

The Evaluation Instrument

The experts viewed the quality indicators of the evaluation instrument as sufficient enough to efficiently evaluate the quality of education in Zimbabwean primary schools (see Appendix 11). Suggestions were, however, made by experts B and C who opted for the addition of ethos of the school. Likewise, expert D thought that issues of supervision and staff development should be included at the school level. Expert E suggested that a school mission and vision could also be included to the school level quality indicators (see Appendix 11). All these suggestions were incorporated in the development of the second prototype of the intervention (see Appendix 12).

All the experts viewed the evaluation instrument as consistent with other existing SSE frameworks (see Appendix 11). This was so because, in developing this SSE framework, some of the information from existing SSE frameworks was used. Information on 'How Good is Our School?' (The Scottish Office Education and Industry Department, 1996); Knowing our School (Department of Operations Education Division, 2004); The School Portfolio Toolkit (Bernhardt, 1999), were consulted and shared with experts in the development of the SSE framework in this study. Experts were also in agreement that the SSE framework prototype was consistent with Zimbabwe's needs for improving quality of education. Expert C was of the view that since Zimbabwe has gone through many changes economically and politically, it was essential to evaluate the quality of education, especially using instruments reflecting the local conditions (see Appendix 11).

On the issue of the quality indicators of the evaluation instrument, all the experts, except for expert D, were of the view that they were sufficient enough to effectively evaluate the quality of education in schools (see Appendix 11). Expert D, however, thought that the evaluation instrument's indicators of quality were too many and that focus should only be on variables that directly contribute to student achievement (see Appendix 11). This observation was not surprising since student achievement, mainly academic achievement, is the one better understood by many stakeholders in terms of quality of education (Barker 1988; Williams 2001). Since this study aims to develop an SSE framework for use in evaluating the quality of education in schools, it was necessary to include all aspects which contribute to the quality of education. This would enable schools to have a clear picture of areas that contribute to quality of education than to narrowly focus on those that directly contribute to student achievement. Hence, the suggestion was not incorporated in the in the development of the second prototype.

The inclusion of various quality indicators in the evaluation instrument finds support in literature where other SSE frameworks used to evaluate the quality of education have other indicators besides that of student achievement, for example, How Good is Our School? (The Scottish Office Education and Industry Department, 1996); The School Portfolio Toolkit (Bernhardt, 1999); Knowing our School (Department of Operations Education Division, 2004); School Self-Evaluation in the Netherlands: Development of the ZEBO-instrumentation (Hendriks, Doolard, & Bosker, 2001). These SSE frameworks have various indicators upon which quality of education may be judged in schools. However, it was indicated in the SSE framework that if schools feel that the indicators are too many to be focused at once, they may choose to focus on a few at a time (see Appendix 12).

Concerning the relevancy of the evaluation instrument to Zimbabwe, all the experts were in agreement that the evaluation instrument was relevant to Zimbabwe and would contribute to education quality improvement (see Appendix 11). However, expert C suggested that since grade zero, a preparatory grade for grade one was introduced in the mainstream primary schools, indicators of ECEC should also be incorporated in the evaluation instrument so as to cater for this sub-sector (see Appendix 11). Since ECEC's indicators of quality are mainly based on emotional and instructional support as well as classroom organisation (Pianta & Hamre, 2009), they can easily be assessed using the developed SSE framework. Student social and emotional functioning in the classroom is viewed as a student outcome that might be administered by a set of standards similar to those for academic achievement (The Illinois State Board of Education, 2004). This is particularly so, for motivated pupils are likely to establish positive trails of development both socially and academically (Hamre & Pianta, 2001). Instructional support in ECEC may also be evaluated through the quality indicator of teaching and learning. At the same time, the

indicator classroom organisation for ECEC may also be established when evaluating the indicator teaching and learning at the classroom. So, this suggestion was not incorporated in the development of prototype 2. However, if the indicators of ECEC are not adequately catered for in the developed SSE Framework, there is a need for further research in order to develop an SSE framework specifically for ECEC.

Portfolio of Evidence

Concerning the portfolio of evidence component, the experts agreed that the suggested sources of evidence were sufficient enough to be used in the judgment of quality of education in schools (see Appendix 11). Some additional sources of evidence were, however, suggested. Expert B suggested the inclusion of inputs by parents or their representatives as additional sources of evidence of the quality of education in the schools (see Appendix 11). This may be essential to find out whether there are enough inputs in schools which may help to enhance quality of education. Since parents are an important stakeholder in education (Dekker & van Schalkwyk, 1989), if inputs are not adequate, they may be asked to supply more inputs for effective teaching and learning processes to take place.

Expert C suggested the inclusion of the schools' development plans as part of the portfolio of evidence (see Appendix 11). A school's development plan will show what a school intends to do in future. Such a source of evidence will show that schools know how they are doing and what they plan to do next (The Scottish Office Education and Industry Department 1996). Such information is essential to guide schools in their improvement of quality of education. Expert E suggested the inclusion of the inventory records[7] in the school's portfolio of evidence (see Appendix 11). This may also help schools to identify things which are in short supply and urgently needed in order to improve quality of education. All these suggestions were incorporated in the development of prototype 2 (see Appendix 12).

Expert D was of the opinion that a reason should be given as to why the portfolio of evidence is needed. In order for schools to know how they are doing, there is a need for some form of evidence which will enable them to judge the quality of education. Hence, a portfolio of evidence is needed so as to enable sound judgement of quality of education in schools and classrooms. What can be concluded from these suggestions was that in order for quality of education to be effectively judged in schools, various sources of evidence should be supplied to those judging the quality. These suggestions were incorporated in the second version of the SSE framework prototype (see Appendix 12).

[7] These are books where all school and class resources are recorded.

Evaluation Team

On the evaluation team component, suggestions were made that there was a need to be clear on who will be doing the evaluation (expert A) (see Appendix 11). This expert was of the view that an evaluation team needs to be clearly defined to spell out who would be included. Such an observation is consistent with literature, which indicates that the SSE process should be coordinated and managed by an evaluation team comprising staff members, representatives of key parent or community groups and students if appropriate (Bernhardt, 1999; The Scottish Office Education and Industry Department, 1996). The suggestion that members of the evaluation team should be clearly spelt out was incorporated in the development of the second prototype (see Appendix 12).

On the issue of time to be taken in carrying out the evaluation exercise, expert B observed that one day may not be enough, but two to three days may suffice (see Appendix 11). This observation was logical considering the fact that the exercise would be carried out for the whole school. Hence, the suggestion was incorporated in the development of the second prototype (see Appendix 12). Expert D thought it better to carry out the evaluation exercise when the grade 7 public examination results are out so as to incorporate the evaluation outputs into the next academic year. This suggestion was logical since SSE is meant for improvement purposes (Hopkins, 1989; Nevo, 1995). Hence, for effective improvement to take place, all the inputs, processes and outputs of the previous year need to be considered so as to identify those areas which need improvement. This proposition was amalgamated in the development of the second prototype (see Appendix 12). Expert E noted that there was a need for development workshops for evaluation teams before carrying out the evaluation process (see Appendix 11). Given the fact that SSE is still a new concept in the Zimbabwean context, this suggestion was very valid and was integrated into the second prototype (see Appendix 12).

While all experts agreed that the suggested evaluation team could make judgments about the quality of education in schools, some made suggestions that the school administrators (experts A, B, E), parents (expert A), the School Development Committee (SDC) and School Development Association (SDA) members (expert C) be included in the evaluation team (see Appendix 11). Their suggestions were incorporated in the development of the second prototype and the suggested members were included in the proposed evaluation team (see Appendix 12). Expert D questioned the inclusion of outsiders for a self-evaluation exercise. This suggestion was in line with MacBeath's (2006) definition of SSE which he defined as an evaluation exercise done by the schools themselves for themselves. In this study, the inclusion of outsiders in the evaluation process was based on Carlson's (2009) assertion that, in order for SSE process to be objective, a critical friend may be included. Realising that schools may not be

comfortable to include outsiders in their self-evaluation exercises, particularly if this is done for the first time as noted by expert D, it was suggested that they may need to carry out the evaluation on their own. However, critical friends may be included in the process once schools have gained confidence in the evaluation process (see Appendix 12) so as to enhance objectivity.

On the issue of the performance ratings, all the experts were in agreement that the ratings/levels of performance were clear enough to be followed by the evaluation team (see Appendix 11). Nonetheless, expert A questioned what would be done if only one description of the performance levels is observed in cases where there are two or more descriptions (see Appendix 11). This suggestion was incorporated in the development of the second prototype where it was suggested that if some of the descriptions were not observed at a level, a lower level may be awarded (see Appendix 12). This is consistent with what literature suggests that a lower level should be awarded if most of the descriptions at a level are not met (The Scottish Office Education and Industry Department, 1996).

Evaluation Report

Experts were of the opinions that the suggested evaluation report format was sufficient to help schools improve the quality of education provision (see Appendix 11). Nevertheless, expert C suggested that aspects of the evaluation focused on should be assessed for successes, limitations and mitigations (see Appendix 11). This suggestion was vital for effective improvement to take place in schools and was incorporated in the development of the second prototype (see Appendix 12). This suggestion was in line with The Scottish Office Education and Industry Department's (1996) How Good is Our School framework which emphasises the need for schools to consider aspects such as what schools are doing, how they know what they are doing and things they need to do next in order for them to improve. If schools are going to assess their successes and limitations, this may help them to come up with ways of mitigating the identified problems. Literature also indicates that when improvement is effected from within rather than imposed from outside, effective measures based on the evidence gathered from the evaluation process, can be put in place to help improve the quality of education in schools (MacBeath, 2006; 1999). Moreover, it has been shown that people are likely to be more dedicated to things which they make themselves than to those imposed to them by others (Smith, 1997). Therefore, through analysing their successes and weaknesses, schools may come up with effective improvement plans, which they may be committed to.

School Improvement Plan

The experts were of the views that the proposed format of the school improvement plan was adequate for effective improvement of quality of education to be realised in schools (see Appendix 11). However, expert B believed that parents should also be included in the school improvement plan, for they may be in a position to push the schools to improve (see Appendix 11). Such a suggestion finds support in literature, which views parents as an essential stakeholder with interest in education (Dekker & van Schalkwyk, 1989) and it was incorporated in the development of prototype 2 (see Appendix 12). Parents are concerned with education and, particularly, with what goes on in schools as the education system is a means through which their children are prepared for life. Hence, there should be cooperation between schools and parents for the sake of and to the benefit of pupils. Such cooperation is essential, for it helps to ensure quality of education in schools (Van der Westhuizen, 2002).

Expert C suggested that the methodology of the actions to be done should be added; while expert E suggested that the mission statement should also be included in the contents of a school improvement plan (see Appendix 11). What was concluded from these suggestions was that the inclusion of a methodology of the actions to be carried out was essential for it would help the evaluators to carry out the exercise with a lot of ease, which is also one of the quality criteria of effective SSE frameworks (MacBeath, 2006). Expert E also viewed that the inclusion of the school's mission statement was essential to help schools to achieve their visions. These views were incorporated in the development of the subsequent prototype (see Appendix 12).

6.5 Conclusion and Recommendations for Further Design

There was high approval by the experts on the need for an SSE framework to be used in Zimbabwean primary schools to evaluate the quality of education (see Appendix 11). All the experts welcomed the development of the intervention as a way forward in solving the issue of quality of education in Zimbabwean primary schools. The experts felt that, if well implemented, the SSE framework could help to improve the quality of education in schools. Some of the experts felt that since this exercise of SSE is still new in the Zimbabwean context, there was a need for staff development courses before schools could use the SSE framework effectively to improve the quality of education (see Appendix 11).

From the experts' comments (discussed above), the first prototype was found to lack the following:

- Early Childhood Education and Care indicators;
- clarity on who will comprise the evaluation team;

- clarity on the awarding of performance ratings;
- clarity on the school improvement plan;
- time to be taken in the evaluation process; and
- training of the evaluation team in order for them to understand their tasks in the SSE process

(see Appendix 11).

Overall, expert appraisal was instrumental in improving the validity, consistency and some aspects of practicality of the intervention by generating valuable suggestions for improvement. On the issue of Early Childhood Education and Care indicators, it was thought that these could easily be evaluated using the indicators of the developed SSE framework. All the other suggestions were incorporated in the development of the second prototype (see Appendix 12). The design and formative evaluation of the second prototype follows in the next section.

6.6 Design of the Second Prototype

This section focuses on the design of the second prototype. The design of the second prototype was made after the formative evaluation by experts of the first prototype. The comments and suggestions made by experts were instrumental in the development of the second version of the prototype. In this stage, the experts also have the role of 'revisors', which implies that the changes made were a 'joint decision' of researcher and experts. Essentially, the changes made to the first prototype were related to these components:

- **Aims and objectives;**
- **The evaluation instrument;**
- **Portfolio of evidence;**
- **Evaluation team;**
- **Evaluation process;**
- **Performance ratings/levels of performances;**
- **Evaluation report; and**
- **School improvement plan**

The following suggestions of experts (sometimes phrased as a question) were incorporated in the second prototype of the SSE framework.

Aims and objectives

The aims and objectives are sufficient and clear but:

- you must make reference to Mathematics since you opted to use it in this research;
- you must clarify the kind of support the schools may expect from the provincial and national levels of education

The evaluation instrument

The quality indicators of the evaluation instrument are sufficient. However:

- you can also add school ethos;
- a school mission and vision may also be added
- at the school level you may want to consider supervision; and
- the indicators are too many and may not be sufficiently covered in one exercise

Portfolio of evidence

The suggested sources of portfolio of evidence are sufficient and very relevant. Nonetheless:

- they should also include inputs from parents;
- the schools' development plans should also be included in the portfolio of evidence;
- you need to specify why they are needed; and
- you could also include inventory books as they show textbooks and other materials needed to ensure quality of education

Evaluation team

The suggested evaluation team is adequate enough to make a good judgement about the quality of education but:

- you are not very clear on who the team members are;
- this is where one can involve members of the SDC & SDA and school cluster members in order to enhance objectivity; and
- why do you want to include outsiders for self-evaluation exercises?

Evaluation process

The evaluation process is understood and can be followed. However:

- one day will not do justice to evaluating what went on throughout the year. At least two or three days will give the evaluation team a realistic picture of what would have taken place and reflect on what they would have come across while still in location;

- why not doing it once results of public examinations are out so that they will be able to factor in the outputs from the evaluation into the next academic period; and
- there might be need to have team development workshops prior to carrying out the evaluation

Performance ratings/levels of performances

The suggested performance ratings are clear but:

- what will the team do if only one description of the performance levels is observed when in some cases two or more descriptions apply to the situation?

Evaluation report

The suggested format of the evaluation report contains sufficient information. Nevertheless:

- the aspects of evaluation focused on should be critically assessed in terms of successes, limitations and mitigations; and
- staff should be developed to equip the evaluation team

School improvement plan

The proposed format of the school improvement plan has the necessary components to improve quality of education in schools. However:

- it leaves out the parents who will, in fact, be in a position to push the school administration to carry out quality-ensuring reforms;
- I suggest that the methodology for specific actions be added; and
- perhaps a mission statement should also be included
  (see Appendix 11 for details).

These suggestions were incorporated in the development of the second prototype of the SSE framework (see Appendix 12). The second prototype was developed by the researcher in collaboration with the experts and then subjected for appraisal by the expected users, namely; the school administrators and teachers.

6.7 Formative Evaluation of the Second Prototype

After incorporating the changes suggested by the experts in the development of the second prototype, it was then subjected to formative evaluation by the expected users. The focus of this phase of the study was to establish the relevance (content validity), expected practicality and also consistency (Nieveen, 1999) of the prototype. This was intended to further improve the quality of the intervention before its try-out. The

formative evaluation of the second prototype was done by teachers and school heads. The practitioners were asked to comment on the prototype from the perspective of their skills and knowledge. They were therefore, expected to be critics of the developed prototype (Weston, McAlpine & Bordonaro, 1995). Their comments about the prototype were also vital in improving the quality of the prototype. This subsection focuses on the formative evaluation of the second prototype. The research design for this phase is discussed in 6.7.1. Thereafter, findings from the evaluation of prototype 2 are presented (6.7.2).

6.7.1 Research Design

As previously stated the aim of this study was to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. This study employed design research design which was considered most appropriate for the study (see 4. 3). This sub-section takes a look at the research focus and questions for this phase of the study. This is followed by a discussion on sampling techniques. Thereafter, data collection instruments and methods are presented and, finally, data analysis procedures are discussed.

Research Focus and Questions

The focus of this phase of the study was twofold: firstly, to establish the relevance (content validity) and secondly to establish the expected practicality of the developed prototype (Nieveen, 1999) in Zimbabwean primary schools. This phase of the study was guided by the following research (or evaluation) questions:

- In your opinion, how relevant are the suggested aims and objectives of this SSE framework in the improvement of quality of education in Zimbabwean primary schools?
- Do you think that the instrument's performance indicators are sufficient enough to effectively evaluate the quality of education in Zimbabwean primary schools?
- To what extent would you consider including external evaluators in your school evaluation team?
- To what extent do you think that the suggested evaluation process can be followed by the school staff?
- How consistent is this SSE framework with the needs of Zimbabwe for improving the quality of education?
- In your opinion, which are the most important indicators to judge the quality of education in Zimbabwean primary schools?

(see Appendix 13 for details).

Sample and Sampling Techniques

Two primary schools were purposively sampled for this phase of the study. Purposive sampling was used to select these schools and participants because they were found to have certain characteristics which were pertinent to the phenomenon under study (Creswell, 2007; Miles & Huberman, 1994). One of the schools was urban, hereafter referred to as school A, while the other was rural, henceforth referred to as school B. All the schools were drawn from Masvingo province because of its convenience.

The schools

School A, a city council primary school, is located in a medium density urban area of Masvingo, and serves pupils mostly from privileged backgrounds. This school participated in the needs analysis. Most parents could afford to provide for their children's school needs for example, school uniforms, paying tuition fees and buying some textbooks which were not part of the UNICEF donation. Parents could also afford to pay money to the school to give to teachers as incentives. The school had nice buildings and all classrooms were painted and had lockable doors and had window panes on all windows. The school was fenced and it had neat grounds. There were thirty-five teachers including the school head and the deputy school head. There was a nice school library with different textbooks. The school had 1 623 pupils and the teacher-pupil ratio was 1:49. The classrooms were not adequate for the number of pupils and there was hot sitting. In the classrooms, there were many textbooks donated by UNICEF and others bought by the school. There were also some nice posters on the classroom wall. The school was high performing as evidenced by its pass rate in the grade 7 public examinations of 2012 where it attained a 98.86% pass rate.

School B, a Rural District Council primary school from Masvingo Province, is located in Bikita rural district and it serves pupils from under-privileged socio-economic backgrounds. This school also took part in the needs assessment. The school had seventeen teachers including the school head and the deputy school head. The school buildings at this school were in a bad state for most of the classrooms had no window panes and doors. Moreover, the classrooms were not adequate for the 748 pupils at the school and as a result, there was hot sitting. It was estimated that the teacher-pupil ratio was 1: 46. The school grounds were not fenced and since it was in a rural area, cattle and goats could be seen in the school grounds and the grounds were untidy. About 13% of the pupils were considered to be from middle to upper homes. As a result, parents could not afford to provide their children with everything needed at school, for example, school uniforms, buying textbooks and paying tuition fees. The school head said they sometimes sent pupils who would not have paid tuition fees back home to collect the fees, which he admitted, affects the teaching and learning processes. In the classrooms, there were some posters on the walls although these were said to be constantly blown off by the winds since most classrooms had no window panes. There were also some textbooks donated by UNICEF. The school had a shortage in

textbooks which were not part of the UNICEF donation. The school was low performing as evidenced by the grade 7 public examinations results of 2012 where it attained a 41.87% pass rate.

Participants

Views on the second prototype were gathered from eight participants from the two selected schools. The participants included two school administrators, a TIC from primary school A and a Deputy School Head from primary school B, and three teachers from each of the schools (see Table 6.2). All the teachers were senior teachers and had vast experience in the profession (see Table 6.2).

Table 6.2: Biographical information and codes of participants for prototype 2 appraisal

Participant	Code	Age	Gender	Level of education	Position	Number of years in present position
Teacher-in-Charge School A	TIC-A	54 years	Female	BED	Teacher-in-Charge	9 years
Teacher 1 School A	T1-A	46 years	Female	BSC (Psychology)	Senior Teacher	18 years
Teacher 2 School A	T2-A	45 years	Female	BED	Senior Teacher	14 years
Teacher 3 School A	T3-A	45 years	Female	BED	Senior Teacher	13 years
Deputy School Head School B	D/SH-B	46 years	Male	BED	Deputy school Head	12 years
Teacher 1 School B	T1-B	36 years	Male	Diploma in Education	Senior Teacher	7 years
Teacher 2 School B	T2-B	32 years	Male	Diploma in Education	Senior Teacher	5 years
Teacher 3 School B	T3-B	34 years	Female	Diploma in Education	Senior Teacher	6 years

Data Collection Strategies and Instruments

This section focuses on how data for this phase of the study was collected and the instruments used to collect the data. After development, prototype 2 was given to practitioners for formative evaluation. Since it was not possible to conduct interviews with the participants because pupils were writing Grade 7 public

examinations, data were collected through questionnaires. As answers to closed questions were deemed to provide little information which could not help much in the improvement of the prototype, open-ended questions were used to collect data on practitioners' views about the developed prototype. The participants were supposed to be critics in evaluating the SSE framework prototype (Weston, McAlpine & Bordonaro, 1995) (see 4.3) through giving comments of what they thought about SSE intervention.

A range of issues were explored as indicated in the research questions above and these included the sufficiency of the quality indicators of the prototype, whether it was easy to implement, whether they would like to use it in evaluating quality of education and whether they would recommend it to other schools (see Appendix 13 for details). Triangulation was achieved via collecting data from multiple sources as a way of reducing bias (Creswell, 2007). Formative evaluation of the second prototype by the practitioners was meant to produce information about the quality of the prototype, as well as its relevance and expected practicality (Nieveen, 1999) in Zimbabwean primary schools.

Data Analysis and Processing

Quantitative and qualitative data were collected in this phase of the study. Quantitative data were collected on participants' background information and these data were presented in the form of tables. Data from the practitioners, regarding the developed prototype, were analysed qualitatively using thematic content analysis (Creswell, 2007). Participants' responses were coded and significant ideas were singled out and systematically arranged into themes for a thematic discussion. The responses were summarised into similar themes, in order to organise the data into meaningful information. The obtained information from the practitioners was fundamental in the improvement of the quality of the prototype. Practitioners were also supposed to comment and make suggestions for improvement of the prototype during the formative evaluation (Weston, McAlpine & Bordonaro, 1995) (see 4.3). They did this through commenting on a number of aspects that needed improvement.

6.7.2 Findings from the Evaluation of Prototype 2

The data collected from the formative evaluation of prototype 2 by the participants are presented in Appendix 14. In this section, findings from the evaluation of prototype 2 are discussed in relation to the structure of the SSE framework as follows: aims and objectives; the evaluation instrument; the evaluation team; portfolio of evidence; the evaluation process; the evaluation report and the school improvement plan. These are discussed next.

Aims and Objectives

All the participants were in agreement that the aims and objectives of the SSE framework prototype were relevant to the improvement of quality of education in Zimbabwean primary schools (see Appendix 14). A TIC at primary school A was of the opinion that, *"The aims and objectives target at identifying strengths and weaknesses in the quality of education in schools for improvement purposes. They also aim to identify specific reforms which will eventually help to improve quality of education in schools …"* (TIC-A) (see Appendix 14). These sentiments were also echoed by a teacher at the same school who felt that the aims and objectives of the prototype are quite relevant because when strengths and weaknesses are identified and suggestions for improvement are made and implemented, this would help to improve quality of education in schools (T1-A) (see Appendix 14). Literature is consistent that if schools find out how good they are and how they can improve their conditions and processes, this is likely to help improve education outputs (Ofsted, 1998; The Scottish Office Education and Industry Department, 1996). A teacher at primary school B observed that the aims and objectives of the prototype are very relevant, as they help in the continuous evaluation of the teaching and learning processes in schools (T2-B) (see Appendix 14). This continuous self-evaluation has been found to be effective in improving quality of education (De Grauwe & Naidoo, 2004; Hofman, Dijkstra & Hofman, 2006).

The Evaluation Instrument

On the evaluation instrument, participants were asked whether the instrument's quality indicators are sufficient to effectively evaluate the quality of education in Zimbabwean primary schools. Almost all participants were positive of the sufficiency of the quality indicators in the SSE framework (see Appendix 14). The TIC-A was of the opinion that the indicators are adequate as she indicated that, *"The instrument's indicators look at both the school and classroom levels in evaluating quality of education than to concentrate on the school level which may fail to reveal some problems at the classroom level …"* (TIC-A) (see Appendix 14). A teacher at school B observed that, *"The performance indicators are sufficient and can be used to effectively to evaluate the quality of education because they are a holistic approach as they cover all aspects in education …"* (T2-A) (see Appendix 14). Echoing the same sentiments, the deputy school head at primary school B had this to say, *"The instrument's indicators are sufficient enough to evaluate quality of education effectively in schools. It contains all the aspects schools are expected to focus on …"* (D/SH-B) (see Appendix 14).

From the participants' comments, it is clear that when evaluating quality of education, focus should be on all school and classroom processes. This seems to corroborate what literature suggests (Cheng, 1997; Griffith, 2008; The Scottish Office Education and Industry Department, 1996). Another teacher at school

A thought that the indicators were sufficient but felt that there was a need to look into teachers' welfare. The teacher suggested that, "*They are sufficient but should also include motivating factors for teachers, e.g. acceptable salaries and incentives …"* (T1-A) (see Appendix 14). This was interpreted to mean that although it was essential to evaluate all school and classroom activities to ensure quality of education, teachers should be well motivated for them to do their job. Although the quality of education in schools may largely be thought of in terms of the indicators in the developed SSE framework (see Appendix 12), satisfying teachers' needs, both educationally and professionally as well as their financial needs, may go a long way in improving teacher quality.

Asked about the clarity of the performance ratings or levels of performance as presented in the prototype, participants felt that these can easily be understood and followed (see Appendix 14). A teacher at primary school A had this to say, *"The performance ratings clearly show things which should be noted in each level and the levels cover all possible things which can be measured against …"* (T3-A) (see Appendix 14). Similar observations were made by another teacher from primary school B who reiterated that, *"They cover all the areas in the evaluation process. The portfolio of evidence has been clearly summarised in the levels of performance …"* (T2-B) (see Appendix 14). These observations concur with literature which advocates for the inclusion of various aspects in the levels at which performance is to be rated (The Scottish Office Education and Industry Department, 1996). This is particularly essential for it provides evaluators with adequate information on which to judge quality of education in schools.

On the issue of the consistency of the SSE framework with the needs of Zimbabwe for improving quality of education, all participants were positive about its potential to improve quality of education. The participants were of the views that the instrument was consistent and was in line with the education system of the country. All the participants felt that if the instrument was to be well-implemented in schools, this will help in the realisation and improvement of quality of education. The TIC at primary school A clearly noted that,

> "*The SSE framework is consistent with Zimbabwe's needs for improving quality of education because right now, resources are not enough for school inspectors to visit all schools to ensure quality of education. So if schools are to do self-evaluation, this will complement school inspectors' work which will go a long way in improving quality of education …"* (TIC-A) (see Appendix 14).

Literature is in agreement that if schools engage in self-evaluation processes, this will help to improve the quality of education (MacBeath, Schratz, Meuret, & Jakobsen, 2000; MacBeath & Sugimine, 2003; Plowright, 2007). Thus, if primary schools in Zimbabwe are to evaluate the quality of their education, this may help them to recognise their strengths and identify areas where improvement is desirable (The

Scottish Office Education and Industry Department, 1996). Such information may assist them in drawing up school improvement plans, which will act as guides in their improvement processes.

Although most of the participants were positive about the consistency of the SSE framework in improving the quality of education in schools, some felt that the SSE framework may fail to be consistent given the diversity of schools in Zimbabwe. A teacher at primary school A said that, "*The SSE framework is consistent, however, considering that different schools have different challenges, the instrument might not be as consistent as desired …"* (T1-A) (see Appendix 14). Another teacher at primary school B reiterated these opinions as he indicated that, "*Yes it is consistent but some communities are poverty stricken, some of the indicators may not be consistent …"* (T2-B) (see Appendix 14). Such observations and comments are not surprising for it is possible that the participants thought that SSE results might be used for comparison purposes, which would require schools to account for their quality of education. This kind of thinking has support in literature where various reasons for SSE are offered. These include improvement, accountability, economic among others (MacBeath, 2006; 1999). Since SSE is still a new concept in the Zimbabwean context, its main purpose of school improvement may not be well understood by many. This may be the reason why some participants felt that the SSE framework might not be consistent in poverty-stricken schools. However, if SSE is to be understood in terms of improvement of education, the SSE framework may be used in all schools, regardless of their different challenges. Such challenges may be good platforms for improvement. Therefore, the SSE framework developed in this study is meant to be used in Zimbabwean primary schools to monitor and evaluate the quality of education for the sake of school development and hence, can be used in all schools.

On the issue of the most important indicators to judge the quality of education in Zimbabwean primary schools, all participants thought that all the indicators in the instrument were essential in determining quality of education (see Appendix 14). However, for all the participants, the main indicator of quality of education was student achievement. A teacher at primary school A clearly indicated that, "*Student achievement is the most important of them all because if we do not produce results, parents and those on top will say we are doing nothing …"* (TIC-A) (see Appendix 14). These findings are not surprising for they have support in literature. Williams (2001) notes that understanding quality in terms education's output is better assumed than can be done in different other aspects. Similarly, Barker, (1988) argues that achievement in tests is the bottom line for many who assess the effectiveness of schools. The participant's remarks indicate that by student achievement, he referred to academic achievement as he was results-oriented.

The Evaluation Team

Concerning the evaluation team, participants felt that the suggested composition of the evaluation team was adequate enough to make judgements about the quality of education in schools (see Appendix 14). A TIC at primary school A was particularly positive about the inclusion of teachers in the evaluation team, and clearly stated, "*If teachers, who are the implementers of the school curriculum, are included in the evaluation team, they will make good judgements from the implementers' perspectives …"* (TIC-A) (see Appendix 14). This remark finds support in literature which advocates that in doing SSE, it should be the school staff who should reflect on how good their schools are in terms of the provision of quality of education (The Scottish Office Education and Industry Department, 1996).

Another teacher from the same primary school made similar observations and suggested that the teachers should be selected from all levels of the primary school. She indicated that, "*The suggested evaluation team is enough. If the selected team will be within the mainstreams of the school that is from infant, junior and senior grades this will be efficient enough …"* (T3-A) (see Appendix 14). Such observations concur with those researchers who say that teachers are the drivers of quality education (Hopkins & Stern, 1996). Teachers from the various levels of primary education may have an understanding of quality of education at these levels. Such knowledge may help in the judgement of quality of education during the evaluation process if they are included in the evaluation team. This may help the evaluation team to come up with constructive recommendations for improvements based on their knowledge and expertise in their particular grade levels.

Whilst participants were positive that the suggested evaluation team was adequate enough to make judgement of the quality of education in schools, they recommended the inclusion of external evaluators in the school evaluation team to ensure effective evaluation to take place. A teacher at primary school B stated that,

> "*External evaluators are very important because what locals may think is* [good] *quality* [of education] *may be relatively below the standards of other regions or schools. External evaluators bring competition as they will have a tendency of comparing the work at different schools …"* (T2-B) (see Appendix 14).

Similar comments were also made by another teacher from the same school who also thought that external evaluators should be included in the school evaluation team to enhance objectivity in the evaluation process. The teacher specified that, "*I would consider including external evaluators because what you might consider as good quality on your own at the school level might not be sufficient enough. Externals are more objective than locals…"* (T1-B) (see Appendix 14). These comments may be an indication that, although schools can evaluate the quality of their education, they need some form of

support from someone outside so as to ensure that what they are doing is the right thing. Research has shown that when the self-evaluation process is a new concept in a school, people may initially be self-protective about the quality of education in their school and in classrooms (Carlson, 2009). People might find it difficult to accept objective criticism of their conditions, processes and outputs, and this may affect the improvement of the quality of education in the school and in classrooms. Participants felt that the inclusion of some external evaluators in their school evaluation team might enhance objectivity of the process. This observation seems to concur with findings of other researchers who argue that an external evaluator will act as a critical friend, who will provide support and development to schools during SSE and ensure that careful evaluation of the quality of education is done (Ibid, 2009).

Asked about the externals they would like to see included in the school evaluation team, participants had various preferences. The TIC at primary school A indicated that some teachers from neighbouring schools, some parents and School Development Committee (SDC) members should be included (TIC-A) (see Appendix 14). A teacher from the same primary school felt that teachers from other schools were the ones appropriate to be include in the school evaluation team as she clearly indicated, "*Two staff members from our cluster might be of help since they are specialists in the area …"* (T1-A) (see Appendix 14). Others were of the opinion that various stakeholders like NGOs, DEOs and school inspectors should also be included in the school evaluation team (T2-A) (see Appendix 14). Likewise the deputy school head at primary school B had a similar list of externals to be included in the school evaluation team and suggested that Curriculum designers, Education officers and neighbouring school heads and teachers should be included (D/SH-B) (see Appendix 14).

These remarks were, therefore, interpreted to mean that although schools may carry out their self-evaluation of quality of education, they needed various stakeholders to be included in the evaluation team. This may be due to the fact that the stakeholders may help schools in many possible ways to improve the quality of education since the realisation, improvement and evaluation of quality of education in schools is the responsibility of everyone (MacBeath, 2006). Literature indicates that a crucial step in developing a school improvement plan is to involve all stakeholders to work together to gather and analyse information about the school and its students so that they may determine what needs to be improved in the school (Bernhardt, 1999; Ibid, 2006). Therefore, the issue of the inclusion of externals in the school evaluation team was incorporated in the development of the third prototype (see Appendix 15).

Portfolio of Evidence

Questioned to what extent they thought the suggested sources of portfolio of evidence were sufficient to be used in the judgement of quality of education in schools and classrooms, all the participants were of the views that the suggested sources were adequate (see Appendix 14). One teacher made this observation, "*The suggested sources of evidence are drawn from everyone including the administration, teachers and students; this will make evaluation of quality of education thorough because everyone and everything will be evaluated …"* (TIC-A) (see Appendix 14). Similarly, another teacher indicated that, "*The portfolio of evidence shows exactly what transpire in schools and classrooms …"* (T1-A) (see Appendix 14). A teacher from school B was also of the view that the suggested portfolio of evidence is adequate and reiterated that, "*I think the suggested sources of portfolio of evidence are sufficient; they cover all aspects of a school and classrooms …"* (T2-A) (see Appendix 14). From these comments, it is apparent that a clear portfolio of evidence is essential to enable the evaluation team to make judgements of the quality of education in schools. With a clear portfolio of evidence, the judgement of quality of education will not be based on hearsay, as this might lead to wrong conclusions being made about the quality of education thereby impeding improvement. Literature also suggests that when doing SSE, there should be enough evidence to help people to know about the quality of education in a particular school or classroom (The Scottish Office Education and Industry Department, 1996).

Some participants, although they were of the views that the portfolio of evidence was sufficient enough to be used in the judgement of quality of education, felt that these might be forged. One concerned teacher had this to say,

> *"The portfolio of evidence is enough. However, evidence can be presented theoretically without practical activities being done on the ground. Documents are crucial but can be forged. These should be evaluated in relation to the actual work done …"* (T1-B) (see Appendix 14).

Another teacher from the same school made similar observations and made these remarks,

> *"I don't think too much clerical work on the part of the classroom practitioner should be used quite often in making judgements. Such records may be kept up-to-date and available all the time when they are needed but with poor results …"* (T2-B) (see Appendix 14).

Based on these comments, it seems that some teachers' records may not be a true reflection of what happens in the classrooms. This may be detrimental to the improvement of quality of education for these documents are important in determining where improvement is desired. If teachers do not make correct records of what exactly transpired in their classrooms, it might be difficult for them to plan for effective improvement. Their teaching and their improvement plans will be haphazard and this may do little to help in the improvement of education in schools.

Evaluation Process

Responding to whether the evaluation process was easy to be followed by the teachers, the participants were of the views that it was easy and can be followed by the school evaluation team (see Appendix 14). However, participants made several comments regarding the evaluation process. One teacher argued that, "*The suggested process can be followed by the school staff. However, it is time-consuming considering that some schools are hot-sitting …"* (T2-A) (see Appendix 14). Related remarks were also made by another teacher who commented that,

> *"The evaluation process can be followed. However, this can be done if the team gathers information in periods and the results will be compiled. The once off evaluation cannot be completed as the team has other duties to do and is time-consuming …"* (T3-A) (see Appendix 14).

In the same vein, another teacher echoed that, *"The process can be followed. However, too much paper work may end up producing fake results. More time will be spent doing paper work other than the actual job, that is, of teaching pupils …"* (T3-B) (see Appendix 14). On a different note, a teacher from school A commented that, "*It is very useful but calculating averages will not bring out a clear picture of what is exactly happening. Very low or very high factors will be drowned by averages …"* (T1-A) (see Appendix 14).

Some of the comments made by the teachers might be an indication that although they are willing to implement SSE, they feel that the process is time consuming as they have other work to do. Their comments indicate that they are positive that the SSE process itself can be followed but that they do not have enough time to dedicate to the process. Some specifically indicated that the evaluation team cannot complete the process since they have other duties to do and also that it was time consuming.

If there is to be any meaningful school improvement, this should be informed by SSE outcomes (MacBeath, 1999, 2006; The Scottish Office Education and Industry Department, 1996). If schools are not aware of their quality of education, improvement may be random and this might affect quality of education. Schools should, however, try to evaluate the quality of their education for effective improvement to take place. The third prototype reflected participants' views on the time factor of the evaluation process as there is an indication that if schools feel that the process may be time consuming, they may focus on a few indicators at a time (see Appendix 15) rather than to completely ignore the SSE exercise. Literature also advocates that schools may evaluate a few indicators at a time if they cannot take the broader view of the quality of education in the school (The Scottish Office Education and Industry Department, 1996).

The Evaluation Report

All participants agreed that the suggested format of the evaluation report contains sufficient information which may help schools to improve their performances (see Appendix 14). This was clearly demonstrated by the TIC from primary school A as she said that,

> "*The format of the evaluation report's information is sufficient to help schools to improve their performances. It emphasises that strengths and weaknesses identified during the evaluation process should be highlighted which will pave way for improvement to take place …"* (TIC-A) (see Appendix 14).

Another teacher at primary school B also shared the same views and indicted that, "*I agree with the format of the evaluation report; it covers what was evaluated; the findings and areas that need improvement which will help to improve quality* [of education]" (T1-B) (see Appendix 14). Similar observations were made by another teacher from the same school who also commented, "*It contains areas of improvement, hence making it easier for schools to improve. It should also contain suggested methods or ways and activities to be done for such improvement …"* (T2-B) (see Appendix 14). From the participants' perspectives, it seems that the evaluation report is essential in improving quality of education in schools. This is consistent with literature which advocates that after the evaluation process, a report should be produced, which will be used to help schools continue to improve (South Africa Department of Education, 2002). The participants agreed that the information contained in the evaluation report format was sufficient to help schools improve their performances.

The School Improvement Plan

Responding to the extent to which the proposed formats of the school improvement plan has the necessary components to improve the quality of education in schools; all participants expressed satisfaction with the suggested format (see Appendix 14). A teacher at primary school A indicated that,

> "*The format of the school improvement plan has the necessary components to improve the quality of education. It offers things to be improved and also the timeframe for this to be done. It offers the immediate evaluation and also the way forward …"* (T3-A) (see Appendix 14).

Reiterating the same sentiments, another teacher had this to say, "*It has the necessary components. It spells out what should be done and what it should contain for effective improvement to take place …"* (T1-B) (see Appendix 14).

Another teacher, whilst agreeing that the proposed format of the school improvement plan has the necessary components to improve the quality of education in schools, suggested that individual teachers should also devise their improvement plans. The participant commented that, "*The components are well structured in such a way that the improvement plan will be sequentially followed. Individuals may also be asked on what they think can be their own improvement plans …"* (T2-B) (see Appendix 14). These

comments indicate that school improvement plans are essential, and should be explicitly defined by all if meaningful improvement of quality of education is to be realised in schools. Therefore, if well-implemented by all and within specified time frames, effective school improvement plans should naturally lead to school, district, provincial, and national improvement of the quality of education. The suggestion that teachers should also be asked to think about their improvement plans was incorporated in the development of the third prototype (see Appendix 15).

6.8 Conclusion and Implications for Subsequent Design

Generally, school administrators' and teachers' opinions about the second SSE framework prototype revealed that they were positive about the need for schools to self-reflect on their conditions, processes and outputs in order to improve the quality of education. The draft SSE framework allowed teachers and school administrators to increase their understanding and awareness that effective improvement can be realised through engaging in SSE processes. In addition, the fact that they were being consulted on how the SSE framework should be developed gave them a sense of ownership of the SSE framework, which may help to increase its acceptability (MacBeath, 2006). Although there was an observation that implementing the SSE framework may be time consuming, teachers and school administrators felt that if well implemented, it may help to improve the quality of education in schools.

The results obtained from the evaluation of the second prototype implied that some of the factors had to be modified in the design of the third prototype. School administrators and teachers recommended the following in order to improve the quality of the prototype:

- the inclusion of various education stakeholders in the evaluation team for example, Education Officers, school inspectors, teachers from neighbouring schools;
- selecting the school evaluation team from the infant, junior and senior grades;
- evaluating the portfolio of evidence in relation to the actual work done;
- avoiding calculating averages in the evaluation process for very low or very high quality factors may be drowned by averages;
- too many items to focus on, process is time consuming;
- there is too much paperwork which may end up producing fake results;

- school improvement plan should also contain suggested methods/ways and activities to be done for such improvement;
- the SSE framework should vary due to the type of school and also its location;
- school improvement plan should also focus on how to motivate teachers;
- individuals should also be asked to come up with their own improvement plans; and
- teachers' salaries and conditions of service should also be added to the SSE framework's indicators.

  (see Appendix 14 for details).

Concerning the issue of varying the SSE framework because of the different school types found in Zimbabwe, it was considered that since the SSE framework was meant for improvement purposes, it may be used in all school types. Given the one framework, per school and per school type, different accents and or priorities can be addressed during an SSE process. On the motivation and salaries of teachers, it was thought that this was not the main focus of this study and these were not included in the development of the third SSE framework prototype. All the other suggestions were incorporated in the development of the third prototype of the SSE framework (see Appendix 15). The following Chapter 7 focuses on the development and formative evaluation of the third and fourth prototypes.

CHAPTER 7

ESTABLISHING THE CHARACTERISTICS OF THE SCHOOL SELF-EVALUATION (SSE) FRAMEWORK (PROTOTYPES 3 AND 4)

7.1 Introduction

Chapter 5 focused on the needs analysis conducted in Zimbabwean primary schools on the current quality of education, and its monitoring and evaluation processes. In Chapter 6, which was part of the development of prototypes of the SSE framework, the focus was to establish the components and quality indicators of the SSE framework. This chapter is a continuation of the prototyping phase and aims at establishing the characteristics of the SSE framework. It also examines how the SSE framework can be used in schools' self-evaluation of the quality of education. This Chapter focuses on the design and formative evaluation of prototypes 3 and 4 of the SSE framework. Educational design research guided the development of the prototypes and their formative evaluation. As previously stated, the aim of this study is to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. As an orientation to the Chapter, the design and development of the third prototype is presented (7.2). This is followed by formative evaluation of the third prototype (7.3). Conclusions and implications for the improvement of the third prototype are discussed in Section 7.4. Section 7.5 describes the design and development of the fourth prototype, while the formative evaluation of the prototype is presented in Section 7.6. The outputs of this research are deliberated on in 7.7 with a conclusion for the chapter drawn in 7.8.

7.2 Design and Development of the Third Prototype

The third prototype was developed by the researcher in consultation with the practitioners. The design of the third prototype was based on the outcomes of the evaluation of the second prototype, which revealed certain aspects that needed to be reviewed, in order to improve the quality of the SSE framework. These aspects are briefly discussed below.

The evaluation team: While the proposed composition of the evaluation team was found by the participants to be adequate enough to make judgments about the quality of education in schools, the following suggestions were made:

- there was a need to include teachers from all the levels of primary education, that is, from the infant, junior and senior grades;
- various stakeholders in education should also be included in the evaluation team as they may contribute in the improvement of the quality of education in schools; and
- including externals in schools' self-evaluation processes since what locals may think is good quality may be relatively below the standards of other regions or schools.

The portfolio of evidence: Participants felt that the suggested sources of the portfolio of evidence were adequate enough to be used in making judgements about the quality of education in schools. However, they noted with concern that the portfolio of evidence may be available but some teachers have a tendency of updating records whenever they are needed without having done the actual work reported in their records. To this effect, participants recommended that when evaluating the quality of education in schools, there was a need to evaluate the portfolio of evidence in relation to the actual work done.

The evaluation instrument: Participants felt that the SSE framework's instrument was consistent with Zimbabwe's needs for improving the quality of education. However, they observed that the instrument's indicators of quality were too many to be focused on at once.

The evaluation process: While the evaluation process was said to be clear enough to be followed, participants observed that:

- it was going to be time consuming;
- the process can be easily done if the team gathers information over a period of time and the results compiled for the once-off evaluation process cannot be completed as the team has other duties to do; and
- calculating averages will not bring out a clear picture of what is exactly happening as very low or very high factors will be drowned by averages.

The evaluation report: The format of the evaluation report's information was said to be sufficient enough to help schools to improve their performances. However, some were of the views that it should also contain suggested methods or ways and activities to be done for such improvement.

The school improvement plan: Whilst it was observed that the proposed format of the school improvement plan had the necessary components to improve the quality of education in schools, some of the participants made the following suggestions:

- the school improvement plan should contain methods and activities to be applied for such improvement; and
- individual teachers should also be asked about their own improvement plans.

(see Appendix 14 for details).

In designing and developing prototype 3, all the suggestions, except the one on the SSE framework's quality indicators which were found to be too many, were incorporated in the development of the subsequent prototype (see Appendix 15). It was considered essential that if schools are to have a broader view of their quality of education (The Scottish Office Education and Industry Department, 1996), they need to focus on all aspects in the SSE framework. Nonetheless, schools may choose to focus on a few indicators if they feel they cannot focus on all the indicators at once. The issue of involving teachers from all the levels of the primary schools was considered important because these teachers could bring their expertise from their particular grade levels to the evaluation process which may help them to effectively evaluate the quality of education. On the issue of the portfolio of evidence, participants felt that the portfolio of evidence should be evaluated against the actual work done by the teachers. This is essential because, if, for example teachers' records are not evaluated in relation to what actually transpired, this may present a wrong picture of the quality of education in the school. On the school improvement plan, suggestions were made that individual teachers should also make their own improvement plans. This was regarded as vital, for if everyone in the school is to come up with an improvement plan, this would provide varied views of how education standards may be improved in the school. These suggestions were incorporated in the development of prototype 3 (see Appendix 15).

7.3 Formative Evaluation of the Third Prototype

The formative evaluation of the third prototype was aimed at determining the expected practicality of the SSE framework for evaluating the quality of education in Zimbabwean primary schools. Expected practicality in this context means that SSE framework is expected to be usable in the settings for which it has been designed and developed. The evaluation was done through the conduct of the self-evaluation process by six school practitioners from one school during the try-out and through questionnaires. Due to

the busy schedules of the teachers because of the grade 7 public examinations that were written during the time of the data collection, it was not possible to interview the teachers. The questionnaires complemented the observation. The focus was, thus, to determine how schools use the SSE framework and to identify obstacles they may face in implementing it. Therefore, questionnaires aimed to establish how the SSE framework could be used in the Zimbabwean context and to inform further improvement of the SSE framework. In this Section, the research design is discussed (7.3.1), followed by data collection methods and strategies (7.3.2). Lastly, the procedure followed (7.3.3) is also elaborated on.

7.3.1 Research Design

In this sub-section, the research design is discussed. Sample and sampling procedures are discussed followed by data collection strategies and finally data analysis is conversed.

Aim and Research Questions

The aim of the try-out of the third prototype was to evaluate the practicality of the SSE framework prototype (see 4.3). Practicality was determined through the instrument's ability to meet the criteria of cost effectiveness in the implementation process and ease of use when evaluating the quality of education in Zimbabwean primary schools. While practicality of the SSE framework was the main focus of this phase, the other quality criteria of relevance, consistency, and effectiveness (Nieveen, 2009) (see 4.3), were not ignored. This phase of the study was effectively guided by the following questions:

- Please describe your general impression on the relevance of the SSE framework in schools' self-evaluation processes?
- Which indicators would you like to have added to the SSE framework?
- What general comment can you make about using this SSE framework in evaluating the quality of education in schools?
- What problems did you/can be encountered in using this SSE framework?
- What is your impression of the structure of the SSE framework?
- What is your impression of the clarity of the SSE framework?
- How do you compare the SSE framework's strategy of evaluating the quality of education in schools with the manner it is normally done?
- In general, would you use this SSE framework and process in evaluating quality of education in your school?
- Would you recommend using this SSE framework to other schools and teachers? and
- In general, how would you like this SSE framework to be used when evaluating Mathematics teaching and learning in classrooms?

(see Appendix 16 for details).

The development of the SSE framework was a continuous, cyclic, iterative process involving stakeholders such as Education officials, school administrators, teachers and parents at different levels of the development. The third SSE prototype was an improvement of the first two prototypes. The ultimate goal was to implement the fourth version of the SSE framework in more than one school in order to establish its effectiveness.

Sampling

In this phase of the study, one primary school in Masvingo province was purposively sampled to participate in the try-out of prototype 3. The school is a rural District Council school. The sample was small since the goal was to identify information-rich cases that will allow studying a case in depth (Mertens, 2010). The criteria used for purposive sampling were: the school administrator's willingness to support the study and teachers' willingness to participate in the study. Since it was a try-out, it was considered that enough information on the expected practicality of the prototype for improvement purposes would be obtained from this sample. This school also participated as school B in the formative evaluation of prototype 2; (see its description in see 6.7). Thus, it was considered that the participants now had a better understanding of the phenomenon under study.

Six participants from this sampled primary school were also purposively sampled to take part in the study. These included one deputy school head, two TICs and three teachers and some of the participants were in Mathematics subject committee. They were all asked to try-out the intervention in the school. Purposive sampling was used to select willing teachers to advance insight into the improvement of the practicality of the SSE framework, as well as to understand the dynamics of SSE. The background information for the teachers and the school administrators involved in the study and their codes, which ensured their anonymity, are presented in Table 7.1.

Table 7.1: Background information and codes of the participants for prototype 3 appraisal

Participant's position	Code	Age	Gender	Number of years in present position	Level of education
Deputy school head	D/SH	56	Male	19	Diploma in Education
Teacher-in Charge	TIC 1	46	Male	15	Bachelor of Education
Teacher-in Charge	TIC 2	32	Male	8	Diploma in Education
Senior Teacher	T1	36	Male	10	Diploma in Education
Senior Teacher	T2	34	Female	6	Diploma in Education
Senior Teacher	T3	49	Female	17	Diploma in Education

From the table, it can be seen that all the participants are well qualified for their jobs. It is evident that most teachers' highest level of education is a Diploma in Education, except for one TIC who holds a Bachelor of Education degree (see Table 7.1). During the needs analysis conducted in some Zimbabwean primary schools, the background information of the participants revealed that teachers in urban areas have higher levels of education, with most of them having Bachelor of Education degrees, compared to their rural counterparts (see Table 5.2). This could be due to the fact that most highly qualified teachers do not want to teach in rural schools owing to poor working conditions. Moreover, most rural school teachers have less access to support services than their urban colleagues, and fewer opportunities for professional development. As a result, after graduating with a Diploma in Education from Teachers' College, most rural school teachers do not have opportunities to further their studies since there are no amenities like libraries and other higher education facilities. On the contrary, such facilities are amply available in urban areas, which may be a contributory factor to the higher educational qualifications of teachers in these areas.

All participants in this phase of the study were well-experienced. The numbers of years they had spent in their present positions indicate that they have been in the teaching field for a long time. Most of them were senior teachers, TICs, or deputy school head, which meant that they were involved in the school administration issues. Hence it was thought that their inclusion in the study would shed some light on the practicality of the SSE framework for they were involved in the monitoring of quality of education in the school. Their ages also show that they were mature enough to understand education quality-related issues in schools and how these should be effectively evaluated. The sample consisted of both female and male participants, (see Table 7.1) which meant that all gender related views concerning the implementation and practicality of the SSE framework would be well represented. All the administrative posts in the school

were occupied by males (see Table 7.1), confirming Hoyt's (2010) assertion that a few influential management positions in most sectors of the economy are held by women.

7.3.2 Data Collection Methods and Strategies

This phase of the study aims at collecting data about the intended practicality of the developed SSE framework. Data was triangulated through collecting it from multiple sources so as to establish convergence of evidence among various sources. The use of various sources in the collection of data aims to overcome the inherent weaknesses of using a single source, as well as reducing ambiguity in data interpretation (Creswell & Miller, 2000; Patton, 2002). Since SSE is a new concept in the Zimbabwean context, it was considered essential to have a workshop with the teachers on how to carry out SSE. During the workshop, participants had the opportunity to ask questions regarding the implementation of the SSE framework and these were clarified throughout the workshop. The methods used to collect data in this phase of the study are described below.

Observation

In this phase, observation was used as a data collection strategy. A record of activities and notes of what was observed during the try-out of the SSE prototype was kept. Field notes on observation of participants' interaction with the SSE intervention during the try-out process were kept. Notes on the observed processes teachers engaged in during the use of the SSE prototype in evaluating the quality of education were also kept. Observations are suitable for obtaining comprehensive representations of the dynamics of a situation Fink (2005). Teachers conducted the SSE process in two days, and this facilitated observation of teachers' evaluation activities. Notes on the general observed responses of teachers carrying out the SSE process and the difficulties they encountered were also recorded.

Questionnaires

At the end of the try-out process, all the participants were asked to complete a questionnaire which sought their views on the practicality and other aspects of the SSE framework. The questions were meant to improve the quality of the SSE prototype (see Appendix 16). The questionnaire had open-ended questions which sought the views of the participants on the quality, content, format and practicality of the SSE framework in the evaluation process. Open-ended questions have the advantage that they encourage authentic responses (Bryman, 2004) unlike a yes or no answer sought by closed-ended questions, which do not promote a two-way communication process. Since closed-ended questions restrict participants on the type of responses, they were not suitable for this study for the study sought participants' views on how to develop and implement an SSE framework. Such opinions could not have been obtained through

questions requiring a yes or no answer. Since it was not possible to conduct interviews with the teachers because of their busy schedules due to the grade 7 public examinations which were being written, they were given questionnaires on which to provide written answers (see Appendix 17). However, the teachers had the opportunity to discuss the aims of the research with the researcher and could also ask for clarification of some questions as well as discussing their answers to open-ended questions.

7.3.3 Procedure

All the respondents who participated in the try-out of the SSE framework first received some form of training on how to use it. This was essential, in order to facilitate easy understanding and to enable uniform implementation of the SSE framework by the participants. Training was carried out a day before the implementation process so that participants could have enough time for conceptualisation. The respondents were given the SSE framework during the training session. The training session took about two hours and was conducted at the selected school in the afternoon when lessons were over. This also provided the participants some professional development which can be seen as one of the outputs of design research (Plomp, 2009).

During the try-out of the third prototype, it was essential to observe the process and take down notes of everything that took place. Through observation, one may experience the problems which may happen and may also hear the suggestions which the users may propose for improvement during the use of the intervention (Nieveen, 2009). Each participant evaluated the quality of education for the school and two classes. When each had completed the evaluation for the school and for the allocated classes, they had to come together and gave an overall judgement of the quality of education for the school level and classrooms. At the end of the evaluation process, the respondents completed a questionnaire to reflect on how they perceived the practicality and their general impression of the SSE framework prototype (see Appendix 17). This was done through written answers since the participants had no time for interviews due to their busy schedules since it was examination time. The findings of the try-out are presented in the subsequent section.

7.4 Findings of the Try-out

Semi-summative evaluation, an evaluation process used to conclude whether the solution intervention meets the pre-determined specifications (Plomp, 2009), was used to evaluate prototype 3 of the SSE framework. This resulted in recommendations for improvement of the SSE framework (see Appendix

17). Data collected from the semi-summative evaluation of prototype 3 by the participants are presented in Appendix 17. This section describes the results of the try-out of the SSE framework prototype used to monitor and evaluate the quality of education in a selected Zimbabwean primary school with a particular focus on Mathematics. The focus of the evaluation was on the participants' general impression of the intervention. The main aim of the try-out was to improve the general quality of the prototype, as well as to ascertain its practicality. The other aim was also to find out how best it can be used in evaluating the quality of education in Zimbabwean primary schools. In this Section, the results of the try-out based on participants' experiences with the intervention during try-out are presented (7.4.1). Observations made during the trial are also deliberated on (7.4.2). An overview of the participants' views of the third prototype is presented in Appendix 17.

7.4.1 Participants' Experiences with the Intervention

Participants' views on their experiences with the SSE prototype are discussed based on the following themes:

- **relevance of the SSE framework;**
- **improvement in teaching and learning;**
- **standardisation of quality of education in schools;**
- **comprehensive evaluation of quality of education,**
- **teachers' motivation in using the SSE framework; and**
- **transparency of the evaluation process**

These are briefly discussed below.

Relevance of the Framework

All the participants were impressed by the SSE framework. Most of them felt that it was very relevant to Zimbabwean primary schools' self-evaluation processes. One participant said that,

> *"It is quite relevant in the school self-evaluation process. It covers a lot of aspects of the school as an organisation, which, when effectively evaluated, will help to improve quality of education …"* (D/SH) (See Appendix 17).

Echoing the same sentiments that the instrument was relevant for improving the quality of education, another participant made this observation, "*It is relevant to Zimbabwe because right now schools do not have a standard instrument to evaluate quality of education which makes improvement of quality of education challenging …"* (T3) (see Appendix 17). Still on the same issue, another participant indicated that, "*The instrument is quite relevant in schools' self-evaluation processes because of the spectrum covered …"* (TIC 1) (see Appendix 17). What emerges from the participants' comments is that since there

is currently no standardised instrument used to evaluate the quality of education in schools (see 5.3); the participants hoped that the introduction of such an SSE framework may help them to effectively evaluate quality of education. Literature indicates that for SSE to be effective there should be in place instruments for such exercises (MacBeath, 2006). Participants, therefore, felt that the intervention was relevant for use in evaluating the quality of education in schools. They believed that it contained the necessary indicators of quality of education.

On the usefulness of the SSE framework in evaluating the quality of Mathematics teaching and learning in schools, participants said that they found it very helpful. One participant indicated that,

> ***"****The instrument was very useful in evaluating Mathematics teaching and learning because all the aspects needed in bringing about quality Mathematics teaching and learning are covered in the evaluation process …"* (T2) (see Appendix 17).

Another participant was of the opinion that the SSE framework was useful for it touched on the teaching methods which apply in Mathematics (TIC 2, Appendix 17). Similarly, another teacher noted that, "*The instrument is very useful; it covers all aspects of Mathematics teaching and learning that is, breadth and depth of Mathematics curriculum coverage …"* (T3) (see Appendix 17).

The deputy school head indicated that the SSE framework is useful in evaluating Mathematics teaching and learning in schools because it pays attention to pupils' understanding of concepts, such as whether they are able to follow procedures and the way they reason out in solving mathematics problems (D/SH) (see Appendix 17). From such comments, one could assume that the current way of the evaluation of quality of education may not be effective. Such an assumption found support from the comments made by one participant who specified that, "*The instrument is very useful in evaluating the quality of Mathematics teaching and learning in schools; it is a transformational tool which will bring about quality of education in schools …"* (TIC 1, see Appendix 17**)**. However, this same participant (TIC 1) recommended that the SSE framework should also evaluate various methods used in the teaching and learning of Mathematics. Such observations by participants show that they understand that Mathematics makes sense to pupils who have a conceptual understanding of the field. Such an understanding might help pupils not only to know how to apply mathematics skills, but also to realise when and why they should be applied. Literature indicates that for students to see Mathematics as useful in life, they need to have the ability to reason rationally, carry out procedures precisely and understand Mathematics concepts which will enable them to solve problems (Kilpatrick, Swafford, & Findell, 2001).

Improvement in Teaching and Learning

Following an analysis of participants' responses on the SSE framework's potential to improve teaching and learning processes, the following themes emerged:

- **standardisation of evaluation processes in schools throughout the country;**
- **comprehensive evaluation of the quality of education in schools;**
- **facilitation of feedback; and**
- **transparency of the evaluation process**

(see Appendix 17).

Standardisation of Evaluation of Quality of Education in Schools

In order for quality of education to be effectively improved in all schools, there is a need for schools to have a common understanding of the indicators of quality of education. Such an understanding is only possible if there is a common SSE framework used in the evaluation of quality of education in schools. Currently, in Zimbabwe, schools are required to design their own evaluation instruments as there is no common tool for use to evaluate and monitor the quality of education in primary schools (see 5.3). Given the complexity of developing educational interventions (Plomp, 2009), schools may have different versions of instruments to evaluate the quality of education. As a result, the evaluation and monitoring of the quality of education in Zimbabwean primary schools may not be standardised (see 5.3). Results on the quality of education in schools obtained through the use of such instruments may be unreliable. Participants, therefore, felt that the developed SSE framework may help to standardise the evaluation of quality of education in schools. One of them asserted that, *"The instrument makes a comprehensive tool of evaluation of quality of education in schools; all schools will now use the same instrument, so the evaluation of quality of education will be standardised …"* (D/SH) (see Appendix 17). Another participant also made similar comments and said that, *"This will help to improve quality of education in schools for they will have the same instrument to evaluate quality* [of education] …" (T1, Appendix 17). These views by participants find support in literature, which emphasises the essence of having a standardised instrument in the evaluation of quality of education for effective improvement purposes (The Scottish Office Education and Industry Department, 1996). The developed SSE framework, therefore, aims to standardise self-evaluation processes in Zimbabwean primary schools so as to make SSE more systematic and objective.

Comprehensive Evaluation of Quality of Education

All the participants concurred that the developed intervention was designed in such a way that many aspects of quality of education would be evaluated using this SSE framework. Unlike in the past where

various tools were used to evaluate different aspects of the quality of education in schools (see 5.3), the developed SSE framework contains a more comprehensive list of indicators of quality of education in schools as observed by one participant, "*All the areas in the instrument cover all the aspects needed in bringing about quality* [of education] *…"* **(**TIC 2) (see Appendix 17). Another participant had this to say, "*It left no stone unturned …"* (TIC 1, see Appendix 17). These sentiments show that the participants viewed the SSE framework as having the necessary quality indicators to effectively evaluate the quality of education in schools. MacBeath, (2006) indicates that when some aspects are missing in an SSE framework, the results obtained may not help schools to improve. Therefore, it is the aim of this study to understand the characteristics of effective SSE frameworks in order to develop one that would be holistic in nature. Rather than using different instruments to evaluate different aspects of quality of education which may present a disjointed picture of quality of education in schools, the SSE framework to be developed in this study aims to provide a single package framework which can be used to evaluate different aspects of quality of education in schools and classrooms.

Teachers' Motivation in Using the SSE Framework

Findings herein reveal that currently, the evaluation of quality of education in schools is done by education officials and school administrators (see 5.3). Asked to compare the developed SSE framework prototype's strategy of evaluating quality of education in schools with the manner it is normally done, participants were confident that the SSE framework may help to improve the way quality of education is being evaluated in schools. Participants felt that the inclusion of various stakeholders in the evaluation process, particularly the teachers, will motivate teachers to improve quality of education in schools. One participant affirmed that, *"This instrument has more information and its strategy is different from the way it is normally done; it involves teachers which will motivate them to improve quality of education in schools …"* (T2) (see Appendix 17). Similar sentiments were also echoed by another participant who observed that, "*It is transparent and systematic; everyone is involved in the process which will encourage everyone, particularly the teachers, who used to be left out in the process, to improve the identified areas of weaknesses"* (T3, Appendix 17). In agreement, TIC 1 averred that,

> *"It considers almost all the aspects in the school and in classrooms while the usual way concentrates on records and results leaving out teachers who are most important in the improvement of quality of education in schools and classrooms …"* (see Appendix 17).

The deputy school head also felt that the inclusion of teachers in the evaluation process will motivate them to improve quality of education in schools as he indicated that, "*It is more systematic and wide-ranging and involves teachers in the process which will improve their impetus in using the instrument to improve quality of education in schools …"* (D/SH, see Appendix 17).

What can be concluded from the participants' comments is that, since the evaluation of quality of education in Zimbabwean primary schools is currently the duty of education officials and school administrators only (see 5.3), the inclusion of teachers may help them to actively engage in school improvement processes. This may help in the improvement of quality of education in schools, for research has shown teachers to be the most important resources in schools (Hopkins & Stern, 1996). Processes which do not involve teachers in the monitoring and improvement of the quality of education in schools may be futile.

Transparency of the Evaluation Process

Asked whether they would use the SSE framework and its process in evaluating quality of education in schools, all the participants were positive. They indicated that the SSE framework provides a new platform on which quality of education should be understood and evaluated which was previously lacking. Participants felt that the developed exemplar SSE framework is transparent to everyone, and that there is going to be a common understanding of quality of education in schools, which will help both its evaluation and improvement. One participant stated that, *"The instrument is transparent to all and it focuses on all aspects of schools and of teaching and learning processes in classrooms which helps people to identify where they are not performing well so that they may improve …"* (T3, see Appendix 17). Echoing the same sentiments, another participant said that, *"This instrument is open to everyone and contains all the basic requirements and the process is easy to follow …"* (T2, see Appendix 17). Moreover, TIC 2 had this to say, "*It has some interests in the upbringing of the learners and it shows its commitment in the transformation of society in that it involves everyone and is transparent to all …"* (see Appendix 17).

A closer look at the comments made by the participants reveals that the current way of evaluating the quality of education in schools is not transparent. This is also supported by findings from the needs analysis conducted in some Zimbabwean primary schools, which revealed that teachers were not aware whether there was an instrument used to evaluate quality of education in schools and were not actively in the evaluation of the quality of education in schools (see 5.3). This lack of transparency in the evaluation of quality of education in schools may hinder effective improvement. MacBeath (2006) emphasises the importance of an evaluation instrument, the purpose of the evaluation, criteria, the process and the audience for which the evaluation is intended, and the product, in order for effective SSE to take place. Failure to have any one of these aspects in place may result in not having an accurate picture of the quality of education in schools.

Participants viewed the developed SSE framework as comprising a comprehensive list of quality indicators needed to efficiently evaluate the quality of education in schools. This could be because the development of the exemplar SSE framework was a joint effort of the researcher, experts (both in terms of knowledge and practice) and parents through design research (refer to Chapters 5 to 7). The prototyping process involved in design research (Nieveen, 2009), helped to capture most of the necessary indicators of quality of education which the instrument should contain, in order to effectually evaluate quality of education in Zimbabwean primary schools. Moreover, the development of the SSE framework made use of information from exemplary frameworks used in the evaluation of quality of education in schools in other developed countries, for example, 'How good is our school framework' (The Scottish Office Education and industry Department, 1996); School Self-Evaluation in the Netherlands: Development of the ZEBO-Instrumentation (Hendriks, Doolard & Bosker, 2001); and The School Portfolio Toolkit, (Bernhardt, 1999).

Participants also promised to recommend the use of the developed SSE framework to other schools and teachers. Most of the participants were of the views that using the instrument in the evaluation of quality of education in Zimbabwean primary schools may help to improve quality of education. One participant said that, "*I would recommend using this instrument to other schools and teachers to improve the teaching and learning processes in Zimbabwean schools…"* (TIC 2) (see Appendix 17). Commenting on the same issue, T3 indicated that, "*I would recommend the instrument's use in schools because it is an eye opener to how quality of education in schools and classrooms should be evaluated, it is very transparent to everyone …"* (see Appendix 17). Another participant viewed the SSE framework as a good platform where quality of education in schools may be compared. The participant stated that, "*I would recommend the use of the instrument to other schools and teachers so that we will be able to compare our performance with other schools …"* (T2) (see Appendix 17). TIC 1 indicated that, "*I would recommend the use of the instrument to other schools because the schools in the country are guided by the same Ministry and same government visions and missions* [on education] …" (see Appendix 17). These comments by the participants indicate their trust that the use of the developed exemplar SSE framework may help to improve the quality of education in all Zimbabwean primary schools. Since there is currently no common instrument used to evaluate the quality of education in Zimbabwean primary schools, (see 5.3) participants might have thought that the developed one would be a good platform on which quality of education may be evaluated.

7.4.2 Implementation Challenges

The introduction of an intervention in any field may face problems, the main one being that of implementing it. This is particularly the case with interventions developed without the involvement of its intended users. In this study, the development of the SSE framework in collaboration with practitioners and experts was meant to identify implementation problems during the development process and to find the best possible ways of rectifying them. The intention of trying-out the SSE framework, in this study, was to identify challenges which could affect its effective implementation.

Participants reported encountering some problems during the trial of the exemplar SSE framework. The major one had to do with the time it took to use the whole intervention. Generally, all participants, while acknowledging the importance of the intervention, were of the views that the quality indicators of the SSE framework could not be focused on all at once. In the development of the third prototype, it was indicated that schools may choose to focus on a few aspects at a time in their self-evaluation processes. This proposal is in line with literature which advocates that when schools are not able to have a broader view of how well they are performing, they may choose a few indicators to focus on (The Scottish Office Education and Industry Department, 1996).

Participants perceived the SSE framework as easy to implement in the evaluation of quality of education in schools. However, they noted, with concern, that when evaluating, particularly Mathematics teaching and learning, there was a need to pay attention to whether pupils understood all concepts before proceeding to learn new ones. Participants reported that it was difficult to find out from teachers' record books whether pupils actually understood the concepts taught since some of the records may not be a true reflection of what actually happens in the classrooms. This issue was also raised during the formative evaluation of the second prototype where one participant felt that some records may be forged (see 6.7). For this reason, participants suggested that the evaluation team should evaluate teachers' records together with what pupils have actually learnt.

The other implementation challenge reported by the participants was that, even if they choose to focus on a few items at a time, the process itself was time-consuming and could not be completed since they will have other duties to do. This was true because during the try-out, each evaluation team member had to do the evaluation of some classes and for the school, and thereafter, they would then come together to agree on the overall quality of the school and the classrooms. So, the participants suggested that the process

should be done after lesson time so as not to disturb the teaching and learning processes. Some of the participants also suggested that this could be done towards the end of the year when most of the people are doing revision with their pupils, after having completed the syllabi.

7.4.3 Observations made during Try-out

The observations done during the try-out process of prototype 3 enabled the collection of first-hand information of teachers' experiences during the evaluation process. Observations were based on the evaluation team's activities during the evaluation process, knowledge of evaluation, and how teachers were awarding the rating levels.

The Evaluation Team's Activities

Members of the evaluation team were kept busy during the entire evaluation process. They scrutinised all the available portfolio of evidence which included records of teachers, pupils and school administrators so as to make judgements about the quality of education. Besides analysing the presented portfolio of evidence, the team also observed other things in the classrooms such as furniture, charts, textbooks and other teaching and learning materials. This observation of classrooms, together with the information they obtained through analysing other records enabled them to make informed conclusions of the classroom quality of education. School administrators' reports on teachers' lesson observations were also used to evaluate the quality of teaching and learning processes in the classrooms and none of the members of the evaluation team conducted lesson observations. The evaluation team made a thorough examination of all the available sources of evidence to help them make a judgement of the level of quality of education for each class or for the school before awarding a rating.

Knowledge of School Self-Evaluation

When the idea of SSE was first presented to the school, both teachers and school administrators were not well versed with it. At first, school administrators and teachers were equally confused because they thought the evaluation of quality of education should be left entirely to school administrators. However, after explanation that the evaluation of quality of education should be a joint effort among school administrators, teachers and other stakeholders, they began to appreciate the idea. It was indicated to the participants that the idea was not for school administrators to monitor the quality of education in classrooms, but for everyone to find out how good the school is (The Scottish Office Education and Industry Department, 1996) for effective improvement purposes. At first, teachers and school administrators did not know how to go about evaluating their school and classrooms for quality. After

training on how to conduct SSE, they understood the process. Thus, teachers and school administrators' knowledge of SSE improved during the process of conducting the SSE.

Awarding of Rating Levels

SSE information is used to inform appropriate school improvement strategies (Hopkins, 1989; Nevo, 1995). When SSE is done in a disorganised manner, the information collected might not be reliable or valid. Such information may misdirect improvement efforts, which may, in turn, negatively affect the quality of education in schools. During the completion of the SSE instrument, all members of the evaluation team were observed making thorough analysis of the records and other observables in the school and in classrooms before they could award a rating for each indicator. This was essential, for it enabled the team to identify and confirm the strengths and weaknesses within the school and in classrooms. Such information enabled them to make clear recommendations for improvement purposes.

After each team member had awarded a performance rating score for the school and the classrooms, they had to come together to give the overall quality of both the school and classroom levels. This was easy for the team because they had to simply find the averages of their overall levels and agree on the overall quality of the school and the classrooms. The participants expressed satisfaction that the evaluation process was easy to follow and that it enabled them to effectively evaluate the quality of education in their school. However, it was observed that some members of the evaluation team were constantly consulting others during the process. Asked about their consultations, the participants said that they were discussing issues of SSE and how to award performance ratings, an indication that further training of the evaluation teams was needed before the introduction of the SSE framework in Zimbabwean primary schools.

7.5 Conclusions and Implications for Subsequent Design

It can be concluded that the overall opinions of teachers and school administrators about the try-out process were positive. The evaluation activities in this phase of the study addressed the validity and practicality of the exemplary SSE framework. The try-out generated information which indicated that the SSE framework prototype was practical in the sampled school. Both teachers and school administrators found the prototype version of the intervention very beneficial and used the SSE framework as a guide to their self-evaluation of quality of education in their school. The prototypical SSE framework gave the participants a clear idea of how schools and classrooms should be evaluated for quality. Both teachers and school administrators stated that they achieved more in evaluating quality of education through the SSE

framework's strategy than in the manner it is normally done. Everyone hailed the idea of the inclusion of various stakeholders in the evaluation of quality of education. They viewed it as helpful in ensuring that everyone worked towards the improvement of the identified weaknesses.

Teachers, especially, welcomed the idea of their inclusion in the evaluation process and expressed hope that through the use of this SSE framework, quality of education in schools is bound to improve. The teachers stated that, since they are the ones at the helm of improving quality of education in schools and classrooms, their inclusion in identifying strengths and weaknesses in the quality of education in schools will compel them to work even harder. They indicated that since they would be the ones who would have identified areas for improvement during the evaluation process, they would make sure that all aspects of quality of education are achieved to their maximum levels an indication that they were likely to be more dedicated to what they construct themselves. Teachers, therefore, felt that quality of education in schools and classrooms will improve because they will be in charge of evaluating and improving it.

Although the participants were positive about the usefulness of the exemplar SSE framework in evaluating and monitoring the quality of education in schools, comments made during the use of the framework in evaluating aspects of Mathematics teaching and learning indicate that there is a need for more training in SSE processes. The evaluation team had difficulty in ascertaining whether pupils' work met the appropriate curriculum depth. It was also observed that participants had problems in making meaningful judgements of quality in aspects related to instructional effectiveness and support for pupils with special needs, that is, those needing remedial and extension work.

The conclusion that can be drawn from this data is that the exemplary SSE framework was practical in the evaluation of quality of education in the sampled Zimbabwean primary school. This was demonstrated through participants' use of the prototypical framework at the initial stage of the trial. Although participants exhibited a positive desire to use and recommend the use of the SSE framework to other teachers and schools, they needed more support in using it to effectively evaluate the quality of education. The evaluation team needed assistance on how to award rating levels that would facilitate effective evaluation of quality of education. Although the participants experienced some minor implementation challenges, they were positive of the relevance and practicality of the SSE framework in Zimbabwean primary schools. They viewed the problems to be within their control and expressed their satisfaction with the developed intervention. The draft SSE framework allowed teachers and school administrators to increase their understanding and awareness of the fact that effective improvement of education quality may be realised through engaging in self-evaluation processes both at the school level and in classrooms

level. It also increased their understanding that effective evaluation and improvement of quality of education in schools may be realised as a team rather than by school administrators only. In addition, the fact that they were being consulted on how the SSE framework should be developed gave them a sense of ownership, which may help to increase its acceptability (MacBeath, 2006). Although there was an observation that implementing the SSE framework might be time consuming, teachers and school administrators felt that if well-implemented, the framework may help to improve the quality of education in schools.

The results obtained from the formative evaluation of the try-out of prototype 3 implied that some of its aspects had to be adjusted. Participants suggested the following, in order to improve the quality as well as use of the SSE prototype:

- focusing on a few indicators at a time,
- when evaluating Mathematics, focus should be on whether pupils understood previously taught concepts;
- appropriateness of the various teaching methods need to be evaluated;
- the evaluation process to be done annually so as to keep everyone aware of areas they are doing well and those they need to improve on; and
- teachers' interpretation of the syllabus needs to be evaluated

  (see Appendix 17 for details)

These suggestions made by the participants were amalgamated in the development of the fourth prototype (see Appendix 18). The next section focuses on the development and semi-summative evaluation of the fourth prototype.

7.6 Design and Semi-Summative Evaluation of the Fourth Prototype

This section focuses on the design and semi-summative evaluation of the fourth prototype. Semi-summative evaluation was done to conclude whether the developed SSE framework meets the pre-determined stipulations. Since this phase may also result in recommendations for improvement of the intervention, it is called a semi-summative evaluation phase (Plomp, 2009). In this section, the design of the fourth prototype is discussed (7.6.1). This is followed by a discussion on the focus of the semi-summative evaluation of the forth prototype (7.6.2) and the research design (7.6.3). Thereafter, data collection and analysis strategies (7.6.4) as well as findings from the semi-summative evaluation of prototype four (7.6.5) are discussed.

7.6.1 Design of the Fourth Prototype

This sub-section focuses on the design of the fourth prototype. The design of the fourth prototype was made after a try-out and formative evaluation of the third prototype by the school practitioners. The fourth prototype was developed by the researcher in collaboration with the teachers and school administrators from the school that was involved in the evaluation of the third prototype. This was done based on the suggestions made by the participants about improving the third prototype. Although the participants viewed the SSE framework as practical, they, however, noted some aspects that needed improvement. Formative evaluation of the third prototype highlighted some changes which needed to be done, in order to improve the exemplar SSE framework. Adaptations and additions made to accommodate the suggestions from the appraisers included the following:

***Length of instrument**:* Participants noted that the indicators were too many to be focused on at a time. It was indicated that schools may choose to focus on a few indicators.

Focusing on whether pupils understood previous concepts: In the third prototype, it was highlighted that when evaluating quality of education focusing on a specific subject like Mathematics, in the evaluation of quality of education, attention should be paid to whether pupils understood previously taught concepts.

Evaluating teaching methods: It was indicated that the appropriateness of the various teaching methods needs to be evaluated for quality.

Conducting SSE regularly: It was recommended that schools should conduct SSE regularly, in order to understand their conditions and processes for improvement purposes. As a guide, it was suggested that schools should choose to carry out the evaluation process annually, although they were free to choose their own convenient times.

These suggestions were incorporated in the development of the fourth prototype (see Appendix 18).

7.6.2 Focus of the Semi-Summative Evaluation of the Fourth Prototype

This was the final phase of the study. The phase integrated what has been learnt from all the previous phases, in order to evaluate the functioning of the SSE framework intervention. After development, the fourth prototype was subjected to appraisal and field-test by knowledge experts and users respectively. The aim of the semi-summative evaluation of prototype four was to further ascertain its relevancy, practicality, consistency as well as to establish its effectiveness (Nieveen, 2009) when used in different school environments in Zimbabwe. The semi-summative evaluation was conducted through the following: a field-test of the fourth prototype, reports from knowledge experts in terms of monitoring and evaluation of education in schools, and a questionnaire for the school users.

7.6.3 Research Design

This sub-section presents the data collection sources and instruments used. In this sub-section, the aim and research questions, sample and sampling procedures, data collection and analysis strategies and are discussed.

Aim and Research Questions

The fourth prototype was field-tested to evaluate the criterion of practicality and effectiveness of the SSE framework (Nieveen, 2009) as discussed in subsection 4.3. The semi-summative evaluation phase was guided by the following questions:

- What is your general impression of this SSE framework in schools' self-evaluation processes?
- How consistent is this SSE framework's indicators in evaluating quality of education in your school?
- What general comment can you make about using this SSE framework in evaluating quality of education in Zimbabwean primary schools?
- How do you compare this SSE framework's strategy of evaluating quality of education in Zimbabwean primary schools with the manner it is normally done?
- In general, would you recommend the use of this SSE framework and process in evaluating quality of education in Zimbabwean primary schools? If yes why, if no why not?
- What difficulties do you think may be encountered in implementing this SSE framework in schools?
- Was the SSE framework effective in evaluating quality of education with a particular focus on Mathematics in your school?
- Are there any other comments or suggestions you would like to recommend so as to improve the quality of this SSE framework?

(see Appendix 19 for details)

The development of an SSE framework in this study was a continuous cyclic iterative process, which involved various stakeholders at different levels of the development. The fourth prototype was an improvement of the previous three prototypes, and it was intended to be implemented in the actual field so as to establish its effectiveness as well as its practicality. The practicality of the intervention was based on actual practicality (Nieveen, 2009) (see 4.3). In this study, practicality of the SSE framework was tested in four schools with Mathematics as the subject which was focused on. The effectiveness of the intervention included both the perceived effectiveness as observed by the knowledge experts, as well as the actual effectiveness as informed by the users after field-test.

Sampling

In this phase of the study, four primary schools were purposively sampled to participate in field-test of prototype four. A total of nineteen participants were purposively sampled and took part in the study. These included four participants from each of the four primary schools, one school inspector, one Deputy Provincial Education Director and a university professor.

A total of four primary schools from two provinces, Harare and Masvingo were involved in this phase of study. Two of the primary schools, school A from Masvingo and school C from Harare had participated in the earlier phases of the study and the participants were well versed with the phenomenon under investigation. The sample was small since the aim was to identify information-rich cases that would allow studying a case in depth (Mertens, 2010). The criteria for purposively sampling the schools were at least one of the following: private, city council, rural district council and church schools. Moreover, school administrators' willingness to support the study and teachers' willingness to participate in the study were also taken into account in sampling of participants.

The Schools

School A, a Rural District Council primary school from Masvingo Province, is located in Bikita rural district and it serves pupils from under-privileged socio-economic backgrounds. The school had seventeen teachers including the school head and the deputy school head. The school buildings at this school were in a bad state for most of the classrooms had no window panes and doors. Moreover, the classrooms were not adequate for the 748 pupils at the school and as a result, there was hot sitting. It was estimated that the teacher-pupil ratio was 1: 46. The school grounds were not fenced and since it was in a rural area, cattle and goats could be seen in the school grounds and the grounds were untidy. About 15% of the pupils were considered to be from middle to upper homes. As a result, parents could not afford to provide their children with everything needed at school, for example, school uniforms. Some parents were said to be unable to pay tuition fees for their children. The school head said they sometimes sent pupils who would not have paid tuition fees back home to collect the fees, which he admitted that it affects the teaching and learning processes. In the classrooms, there were some posters on the walls although these were said to be constantly blown off by the winds since most classrooms had no windows. There were also some textbooks donated by UNICEF, which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). Parents are expected to buy books for the other subjects such as; Religious and Moral Education, Social Studies, Environmental Science and Social Studies which were not part of the UNICEF donations. Most parents in this school could not afford to do so and hence, there was a shortage

of textbooks in these subject areas. This school was a low performing school as evidenced by the grade 7 public examinations results of 2012 where it attained a 40.81% pass rate.

School B, a city council primary school, was located in a high density urban area of Harare province. This school served pupils mainly from under-privileged socioeconomic backgrounds. The school had thirty-three teachers including the school head and the deputy school head. There were nice school buildings which were well painted. All the windows had window panes and there were lockable doors on all the classrooms. The school had 1398 pupils and there was a shortage of classrooms resulting in the school having hot sitting. It was estimated that the teacher-pupil ratio was 1: 45. The school grounds were well fenced and the school was neat and tidy. About 47% of the pupils were considered to be from privileged families. Some parents could afford to provide their children with school uniforms, textbooks and paying their tuition fees. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). The school had a shortage of textbooks which were not part of the UNICEF donation, (that is, Religious and Moral Education, Social Studies, Environmental Science and Social Studies). The school had a library with various books. This school was average performing as evidenced by its pass rate in the grade 7 public examinations of 2012 where it attained a 52% pass rate.

School C was a Roman Catholic primary school was located in a medium density suburb in Harare. The school has very good school buildings and adequate resources. The school had thirty-five teachers including the school head and the deputy school head. All the school buildings were well painted and the windows had window panes and burglar bars. There were lockable doors on all the classrooms. The classrooms were adequate for the 992 pupils at the school and there was no hot sitting. It was estimated that the teacher-pupil ratio was 1: 30. The school grounds were walled and the school was neat and tidy. About 99% of the pupils were considered to be from privileged homes. Parents could afford to provide their children with the needed things at school, for example, textbooks, school uniforms and paying of tuition fees for their children. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). The school had adequate textbooks in these subjects: Religious and Moral Education, Social Studies, Environmental Science and Social Studies. The school had a big library with many books some of which were said to have been donated by other countries as well as by former pupils. The school was high performing as evidenced by its pass rate in the grade 7 public examinations of 2012 where it attained a 99.8% pass rate.

Primary *School D* was a private school, located in a low density urban area of Masvingo. The school served pupils from privileged socio-economic backgrounds. The school had twenty-four teachers including the school head and the deputy school head. The school had very nice school buildings and they were nicely painted with window panes on all the windows and doors on all the classrooms. The school had 677 pupils and there were adequate classrooms and there was no hot sitting. It was estimated that the teacher-pupil ratio was 1: 30. The school had a wall around the school grounds and it was neat and tidy. Almost all the pupils were considered to be from privileged homes. Most parents could afford to provide their children with the needed things at school, for example, school uniforms and paying of tuition fees for their children. All the classrooms had some textbooks donated by UNICEF which are mainly for the core subjects (Mathematics, English, and Shona/Ndebele). Some teachers reported that they had a shortage of books in subjects like Religious and Moral Education, Social Studies, Environmental Science and Social Studies. There were also some other textbooks which were not part of the UNICEF donation for the other subjects in the classrooms which were bought by the school. There were also some nice posters on the classroom walls. All the classrooms had nice tables and chairs for all pupils. The school has a library with various books. This school was high performing as evidenced by its pass rate in the grade 7 public examinations of 2012 where it attained a 98.9% pass rate.

Participants

A total of nineteen participants took part in this phase of the study. These included three knowledge experts, namely, one professor in Mathematics Education from a university in Zimbabwe, a deputy Provincial Education Director (PED) and a school inspector, as well as sixteen school practitioners, with four being drawn from each of the four sampled primary schools. The school participants were selected from those who were in the Mathematics committees as well as form other subject committees. The selection of school participants from the Mathematics committee was essential since the SSE framework developed in this study will be operationalised using Mathematics as an example. On the other hand, the inclusion of school participants from other subject areas was also vital because the ultimate goal is to use the SSE framework developed in this study across the primary school curriculum. Background information for primary school participants is presented in Table 7.2, while information for the experts involved in this phase is presented in Table 7.3.

Table 7.2: Background information and codes of school practitioners for prototype 4 appraisal

Participant's position	Code	Province	School	Age	Gender	Number of years in present position	Level of education
School Head	S/H-A	Masvingo	School A	60	Male	18	Certificate in Education
Teacher 1	T1-A	Masvingo	School A	36	Male	10	Diploma in Education
Teacher 2	T2-A	Masvingo	School A	46	Male	21	Bachelor of Education
Teacher 3	T3-A	Masvingo	School A	35	Female	8	Diploma in Education
School Head	S/H-B	Masvingo	School B	55	Male	16	Certificate in Education
Teacher 1	T1-B	Masvingo	School B	56	Male	18	Diploma in Education
Teacher -in -charge	TIC-B	Masvingo	School B	49	Male	9	Diploma in Education
Teacher 2	T2-B	Masvingo	School B	47	Female	12	Diploma in Education
Deputy School Head	D/SH-C	Harare	School C	56	Female	7	Bachelor of Education
Teacher 1	T1-C	Harare	School C	47	Female	10	Bachelor of Education
Teacher 2	T2-C	Harare	School C	45	Female	12	Bachelor of Education
Teacher 3	T3-C	Harare	School C	32	Male	8	Bachelor of Education
School Head	SH-D	Harare	School D	58	Male	16	Diploma in Education
Teacher 1	T1-D	Harare	School D	47	Female	16	Bachelor of Education
Teacher 2	T2-D	Harare	School D	41	Male	11	Diploma in Education
Teacher 3	T3-D	Harare	School D	39	Male	12	Bachelor of Education

From the Table 7.2, it is a clear that all the school participants are well educated and have vast experience in education. Although all teachers are well-educated for their jobs, the information shows that many teachers in urban areas have higher levels of education than their rural counterparts (see Tables 7.2). This may be due to the fact that in urban areas, there are many social amenities like libraries and higher institutions of learning, which teachers can utilise to advance their education after teacher training, unlike in rural areas. All the participants' ages also indicate that they are mature enough in the field of education to understand issues of quality of education and its evaluation in schools. Given their experiences (see Table 7.2), it was expected that these participants would have adequate knowledge of issues related to education, its provision, management and ways it is evaluated, in order to ensure its quality in schools.

Table 7.3: Background information of experts for prototype 4 appraisal

Participant	Age	Gender	Level of education	Position	Number of years in present position	Area of expertise
Expert A	44	Male	PhD	Professor	6	Mathematics Education
Expert B	59	Female	MED	Deputy Provincial Education Director	3	Education Administration
Expert C	60	Male	MED	School Inspector (Primary)	12	School inspection

From information in Table 7.3, it can be seen that all experts are well educated and have experience in education. Their areas of expertise also indicate that they have knowledge in quality of education and its evaluation in schools. Each expert's area of proficiency is briefly described below.

Expert A: A Professor of Mathematics Education at a university in Zimbabwe. He has vast experience with Zimbabwean education, its management and evaluation.

Expert B: A Deputy Provincial Education Director with extensive experience in education. She is an expert in Educational Administration at the national level of education in Zimbabwe. She has vast knowledge in education, its provision and management to ensure its quality in schools.

Expert C: An expert in the field of primary school education inspection. He is involved in the inspection of education in primary schools in Zimbabwe. He has vast knowledge of the evaluation of quality of education in primary schools, both for accountability and improvement purposes.

7.6.4 Data Collection Methods and Strategies

This phase of the study seeks to collect data on the effectiveness of prototype four of the SSE framework. This is intended to gain information which would help to further improve the SSE framework. Data for this phase of the study was collected through multiple sources which included teachers, education administrators and experts in the field of education. The collection of data was triangulated, in order to find out the convergence of evidence from different sources of data and the different methods used in the collection of data. Data triangulation has the advantage of minimising uncertainty in the interpretation of data (Creswell & Miller, 2000; Patton, 2002). The data collection methods used in this phase of the study is described below.

Questionnaires

In this phase of the study, questionnaires were used as one of the data collection methods. All the participants were asked to complete a questionnaire which sought their views about the practicality, as well as the effectiveness of the fourth prototype of the SSE framework. School practitioners were asked to field-test the prototype first before they could complete the questionnaires since they had no time for interviews because of their busy schedules. Experts were expected to use their knowledge to appraise the prototype for its practicality as well as its effectiveness in evaluating the quality of education in Zimbabwean primary schools. The questionnaires had open-ended questions, and it aimed at finding out participants' general impression of the prototype in terms of its clarity, consistency, relevancy practicality and effectiveness in evaluating the quality of education in Zimbabwean primary schools (see Appendix 19). The questions also sought participants' views on the quality of the prototype, its content, format and language used.

Observation

During field-test, participants were observed while conducting the evaluation process. A record book was kept so as to record all the activities and observation notes related to the use of the SSE prototype. Focus was on areas where teachers seemed to experience problems during the implementation of the prototype. Notes were also kept on the observed activities of the teachers, how they evaluated the quality of education, how they awarded rating levels and their general interaction with the SSE framework. All the school participants who contributed in this phase of the study were observed when conducting the

evaluation of quality of education using the exemplar SSE framework. It was essential to observe teachers implementing the intervention because this would help to provide an overall picture of the situation (Fink, 2005). Participants at each school conducted the evaluation process in two days which enabled interaction with the participants. During the implementation process, any implementation problems were noted.

Procedure

School practitioners, who participated in the field-testing of the intervention, first underwent some form of training on how to conduct SSE. The training was essential, in order to equip the evaluators with knowledge of how to carry out the SSE process. Training of the evaluators involved an explanation of the records needed to carry out the evaluation, what to look for during the evaluation process, and how to award performance ratings.

Training was given by the researcher and was carried out two days before the actual field-test so that participants could have enough time to reflect on the process before they could engage in the actual evaluation process. Each training session lasted about two hours and the training sessions were carried out at the respective schools after lessons. All the school participants were given the SSE framework and could use the supplied sources of evidence to make judgements of the quality of education for the assigned classes, as well as for the school. After that, they had to come together to give an overall quality judgement for the school and the classroom. At the end of the evaluation process, each of the participants completed a questionnaire focusing on his/her experiences with the exemplar SSE framework (see Appendix 19). All participants' views about the intervention are presented in Appendix 20. The participants' responses were grouped and analysed using thematic content analysis.

7.6.5 Findings from Semi-Summative Evaluation of Prototype 4

In this sub-section, the findings from expert evaluators are first presented, followed by a discussion of school practitioners' experiences during field-test of the SSE intervention prototype. Thereafter, design guidelines for the development of SSE frameworks are presented. Finally, a conclusion for the Chapter is drawn.

Findings from Expert Evaluators

The overall semi-summative evaluation of prototype 4 of the SSE framework by the knowledge expert evaluators was positive. The three experts consulted expressed their satisfaction that the developed

intervention is consistent and may help in the improvement of quality of education if it is to be adopted and effectively used in schools.

Overall impression about the SSE framework

All the experts were impressed by the developed SSE framework. The following quotes illustrate the positive attitudes of the experts towards the developed SSE framework:

> *The instrument is an excellent piece of work. I want to thank the researcher for opening up a new area in the administration of the education system in Zimbabwean primary schools (Expert A, Mathematics Education, see Appendix 20).*

> *I would like to commend the researcher for coming up with such a comprehensive instrument which may go a long way in improving quality of education if effectively used in schools (Expert B, Education Administration, see Appendix 20)*

> *This is a comprehensive instrument which, if used in schools may help to improve education quality. The instrument may also help school inspectors in evaluating quality of education in schools (Expert C, School inspector, see Appendix 20).*

Some recommendations concerning different components of the intervention were, however, made by the experts. The recommendations were related to aspects of the SSE framework, the evaluation team, the evaluation report and the school improvement plan. The recommendations are summarised below and were incorporated in the development of the final SSE framework for evaluating and monitoring the quality of education in Zimbabwean primary schools (see Appendix 21).

The evaluation instrument

Although all the experts were of the views that the SSE framework can easily be used in schools, one of them noted that there may be some challenges in judging the performance indicators because of the subjective use of some words used to judge the performance indicators, for example, few, many and good. The expert felt that such words may be open to several interpretations and may make it difficult to judge (Expert 1, Mathematics Education) (See Appendix 20).

The evaluation team

The experts were of the opinions that the suggested evaluation team was well-composed to make a comprehensive judgement of the quality of education in schools. However, the following suggestions were made:

> *After having implemented SSE for some time, teachers who have performed well should be the ones who should be in the evaluation team from the levels specified in this document. The school administrators should not be part of the evaluation team for objectivity's sake (Expert 1, Mathematics Education, see Appendix 20).*

I think pupils, through evaluating the teaching and learning processes, and non-teaching staff should form part of the evaluation team (Expert 2, Educational Administration, see Appendix 20).

I think the suggested team is enough because it includes various stakeholders. I think it can be expanded to include even pupils (Expert 3, School Inspector see Appendix 20).

The evaluation report

Experts viewed the format of the evaluation report as fine. Nevertheless, one of them made the following suggestion:

> *"I think the suggested format is fine. However, I suggest that after gathering information about SSE, only three members out of the evaluation team should be left to analyse the results and draw up the evaluation report and the school improvement plan to allow for objectivity. They should not consult anyone from the administration on what should be included. If there is a need to include stakeholders, there should be at least two teachers from neighbouring schools, one parent representative and the School Development Association chairperson. Teachers from the visiting schools should be responsible for the write-up of the evaluation report and the school improvement plan so as to enhance objectivity. One of them may write the evaluation report while the other writes the school improvement plan …" (Expert A, Mathematics Education)* (see Appendix 20).

The school improvement plan

Although the experts agreed that the format of the suggested school improvement plan was clear and easy to follow, one of them had a feeling that, *"Only the evaluation team should be the one that identifies areas that need improvement and people responsible for coordinating the school improvement work" (Expert A, Mathematics Education)* (See Appendix 20).

Feedback from experts about the semi-summative evaluation of the fourth prototype was complemented by data obtained from field-test of the fourth prototype by the school participants. Data were gathered through the evaluation questionnaires. The findings from the primary school participants are discussed next.

Findings from Primary School Practitioners' Field-Test of Prototype 4

The findings from primary school practitioners' views about prototype 4 are discussed in relation to the following aspects:

- their general impression of the SSE framework;
- sufficiency of the indicators in evaluating quality of education;
- problems encountered/likely to be encountered during the evaluation process; and
- effectiveness of the intervention.

General impression of the SSE prototype

All the participants were positive that the developed SSE framework was useful, user-friendly and relevant to Zimbabwe. All the participants from the four schools were in agreement that if used effectively in schools, the SSE framework may help to improve the quality of education in Zimbabwean primary schools (see Appendix 20). However, there was a general feeling by one of the participants that the SSE framework might not work in some schools due to the different types of schools in Zimbabwe because the schools do not have equal resources (S/H-C) (see Appendix 20). Such an assumption may be based on the fact that perhaps the participant viewed the SSE framework as intended for finding 'how good the quality is' rather than on evaluating the present conditions, processes and outputs of schools and classrooms for purposes of improvement. Literature is consistent that SSE is mainly for improvement purposes (The Scottish Office Education and Industry Department, 1996). Since the concept of SSE is still new in Zimbabwe, people may view the process as intended to compare schools, which is not the case. For this reason, one participant commented that, "*There is a need to make it absolutely clear that the evaluation report is not a witch hunt to weed out poor performers but to try and see how best schools can be supported …"* (S/H-D) (see Appendix 20).

Another participant also suggested that, "*The evaluation team should find possible causes of weaknesses through interviewing teachers* ..." He went on to recommend that, "*Pupils should also be asked how teaching and learning took place because records can be cheated …" (T3-A)* (see Appendix 20).

Although all participants were of the opinions that the intervention is relevant and very useful to Zimbabwe, some felt that the time intervals between the SSE should not be long. Some participants made the following recommendations:

- *"I have a feeling that 3 years may be too long a time since findings* [of a school or classrooms' weaknesses] *need to be redressed in a shorter time, say, two years and below…" (TC-2).*
- *"Process should be done yearly to see how the school is progressing…" (T3-A)*
- *"Is 3 years not too long a time to carry out the evaluation? The stakeholders might relax. Annually would keep them on their toes…" (S/H-C)*

(see Appendix 20)

On the issue of the school improvement plan, some participants proposed that:

- *"teachers* [should] *be asked to put forward their suggested improvement plans…" (T1-D)*
- *"pupils should be involved in the school improvement plan as well…" (T2-C)*
- *"should also focus on improving community awareness and strategies on how they can be made to fully support the education system in Zimbabwean primary schools especially in the marginalised rural areas.." (T3-C)* (see Appendix 20).

Sufficiency of the quality indicators in evaluating the quality of education

The primary school practitioners who participated in field-test of the fourth prototype felt that the developed intervention's indicators of quality were sufficient enough to make sound judgement of quality of education in Zimbabwean primary schools. Participants expressed satisfaction that the indicators looked at both the school and classroom levels, thereby making it a holistic instrument for use in evaluating the quality of education in schools (See Appendix 20). Some of the participants, however, thought the following may be added to the indicators' observable list of portfolio of evidence:

- *"school grounds…"; and*
- *"sports fields…" (S/H-C)* (See Appendix 20).

Problems encountered/likely to be encountered during the evaluation process

While all participants expressed satisfaction that the SSE framework was easy to understand and to use, some of them noted the following:

- *"time may be a limiting factor…" (S/H-D);*
- *"lack of resources and expertise may hamper the use of the instrument…" (T1-D); and*
- *"lack of resources and commitment…" (T1-A)*

(see Appendix 20).

Effectiveness of the SSE framework

All the participants indicated that they expected the intervention to be effective in evaluating the quality of education in primary schools. The participants specified that, if well implemented, quality of education in primary schools may be fully evaluated and monitored using this developed SSE framework. Participants admitted that the developed SSE framework is comprehensive and more encompassing than what is currently used to monitor and evaluate the quality of education in primary schools (S/H-D; T2-C; T3-B; Expert 3; Expert 1) (see Appendix 20). This may be an indication that the design principles in the SSE framework resulted in a good quality of portfolio of evidence, the evaluation process, the evaluation report and the school improvement plan as judged by the experts in both knowledge and practice (see Appendix 20).

Participants from all the primary schools indicated that they would like to use the SSE framework in the monitoring and evaluation of the quality of education in their schools. All school participants and experts also indicated that they would recommend the use of the SSE framework to other schools. The reasons they gave for recommending of the use of the SSE framework to other schools included: its overall

effectiveness, its comprehensiveness, its inclusive approach, its clarity and its unique approach to evaluating the quality of education in schools by schools themselves.

Overall, the SSE intervention was positively evaluated by all participants. Primary school participants felt that the use of the intervention provides prospects for professional development. Some participants viewed the intervention as opening new doors of how to evaluate and monitor the quality of education in schools (T2-C), while others complimented the researcher for opening up a new area in the administration of the education system in Zimbabwean primary schools (Expert 1) (See Appendix 20). Recommendations by both the experts and practitioners were utilised in the development of the final SSE framework for Zimbabwean primary schools which was one of the outputs of this research (see Appendix 21).

7.7 The Outputs of this Research

As stated earlier, this study was based on design research. In line with design research, this research culminates in a two-fold yield, firstly, the practical yield which is the SSE framework developed in this study and secondly, the theoretical yield which is a set of design principles generated in this study. The latter may be used by others who may want to develop such frameworks in their own contexts. In this section, the outputs of this research are discussed in terms of the SSE framework developed in this study (7.7.1) and in terms of the design principles for SSE frameworks (7.7.2).

7.7.1 The School Self-Evaluation Framework Developed in this Study

This sub-section presents the structure of the SSE framework that was developed in this study and how it can be used by schools for their self-evaluation of the quality of education. During the development process, literature was consulted so as to have an insight into the development of the intervention based on international best practices. Various practitioners (such as teachers, school administrators, Education Officials), experts and parents took part in the development and evaluation process of the SSE framework. This resulted in an SSE framework with various components and quality indicators and how it may be implemented as briefly described below and presented in detail in Appendix 21.

Structure of the SSE framework

The SSE framework developed in this study is composed of the following components:

- **Aims and objectives;**

- **The evaluation team;**
- **Portfolio of evidence;**
- **The evaluation report;**
- **The school improvement plan;**
- **Performance ratings;**
- **The evaluation instrument; and**
- **The evaluation process**

These components are briefly described below.

Aims and objectives

The main aim of the SSE framework developed in this study is to help schools to evaluate their quality of education so as to:

- help them to recognise their key strengths and weaknesses for improvement purposes;
- identify areas where good quality of education needs to be maintained or where improvement is desirable;
- provide feedback on the quality of education to all relevant stakeholders (who include parents) as a means of achieving continuous school improvement;
- identify aspects of excellence within primary schools which will serve as models of good practice;
- identify the characteristics of effective schools in Zimbabwe and improve a general understanding among members of the public of what constitutes quality of education; and
- help schools to draw up their improvement plans and implement them effectively

(see details in Appendix 21).

For the purposes of this study, the developed SSE framework will be tried out using Mathematics as an example but the eventual goal is to use the intervention to evaluate the quality of education in all subjects in Zimbabwean primary schools.

The evaluation team

SSE should not be an individual activity. Schools should form SSE teams to carry out the evaluation process. The team should comprise teachers from all the levels of primary school grades, that is, infant, junior and senior levels. The Evaluation team members should be selected from teachers in the Mathematics committee and should also include teachers from other subject committees. This is particularly essential in this study since the SSE framework will be tested using Mathematics as an example. The inclusion of teachers from other subject committees is vital because the ultimate goal of this

study is to use the SSE framework in different subjects across the curriculum. The number of members of the evaluation team will depend on the size of a school. The SSE team should select one member to be the leader. This leader will have the responsibility of sharing with the school the procedure that will be followed by the evaluation team during the evaluation process, and will also be responsible for reporting the findings. Where possible and if necessary, a parent representative, either from the SDC or from the SDA; and at least two staff members from their school clusters may be included in the evaluation team so as to enhance objectivity in the process. (see details in Appendix 21).

Portfolio of Evidence

A Portfolio of evidence should be a comprehensive collection of everything done in the school and in the classrooms and it should be presented to the evaluation team so as to enable sound judgements of quality of education to be made. Important sources of portfolio of evidence may include such things as (if available):

- all administrative records including an analysis of pupil achievement results in the grade 7 public examinations for the previous year, cluster examination results analysis, school examination results analysis;
- teachers' records which include scheme books, plan books, individual record books, class registers, test record books, remedial record books, extension work record books and inventory books;
- a sample of pupils' work which should include daily written exercises, morning work, homework and tests; and
- Some observables in the school which may include classrooms in the school, furniture, toilets; textbooks, charts in classrooms, pupils' work displays, school grounds and other inputs by parents.

(see Appendix 21 for details).

Evaluation process

In evaluating quality of education in schools, the SSE team may use the following process:

- begin with assuring that all team members understand the SSS framework and process.
- compose portfolio of evidence (this includes all relevant records from the administration, teachers and from students)
- analyse the portfolio of evidence for comprehensiveness and in relation to the actual work done and other observables in the school and in classrooms

- Request any teacher in the school to attend an evaluation interview in the case that the evaluation team may want the teacher to clarify certain issues in the portfolio of evidence presented to the evaluation team.
- draw conclusions about the quality for each performance indicator or area of performance for the school based on the available evidence
- report on the quality of what has been observed by awarding a rating ranging from levels 1 to 4 depending on the level of performance for each indicator
- produce an SSE report which may include the focus of evaluation, context, and the findings (indicating strengths and areas for improvement)
  (see Appendix 21 for details).

Performance Ratings

The quality of what will be observed within each performance indicator may be judged against four levels of performance. Level 4 indicates the highest level of performance where all requirements are met and fully implemented whilst level 1 signifies the lowest level of performance where almost all requirements are not met. The school improvement plan may also be guided by these performance ratings to be used in the evaluation process.

The Evaluation Report

SSE should result in a written report presented to the intended audience. This may normally include findings from the evaluation process and recommendations on how a school or a class might improve its practice. The SSE report should point out all the strengths and weaknesses of a school or a class and should recommend the way forward for purposes of improvement. The evaluation report may comprise the following:

- a brief account of the school context;
- purpose of evaluation and aspects focused on;
- the evaluation findings; and
- a summary of strengths and areas the school or class needs to prioritise for improvement

(see Appendix 21 for details).

School Improvement Plan

After the evaluation team has presented the evaluation report, it should devise a school improvement plan. A school improvement plan is a roadmap that spells out changes that a school or class needs to make, in order to improve its quality of education. It should also state the people responsible for implementing the changes and the period of time required for such changes to be done, in order to improve the work of the school or class.

In drawing up a comprehensive school improvement plan, the following actions may be utilised:

- Analyse evaluation information for successes, limitations and mitigations;
- Identify areas that need urgent improvement;
- Plan for school improvement;
- Implement school improvement work;

(see Appendix 21 for details).

The SSE Framework's Quality Indicators

The quality indicators of the SSE framework were identified at both the school and the classroom levels as follows:

School Level Indicators

- School Mission and Vision on Education;
- Student Achievement;
- Leadership and Administration;
- School Curriculum Quality;
- School Infrastructure; and
- School Ethos

Classroom Level Indicators

- Student Achievement;
- Teaching and Learning;
- Teacher Quality;
- Student Quality;
- Instructional Materials; and
- Class Size

(see Appendix 21 for details).

The design guidelines generated for the development of SSE frameworks are presented in the following discussion.

7.7.2 Design Principles for School Self-Evaluation (SSE) Frameworks

This subsection provides principles which may be utilised by the national, provincial and district education officials, schools, responsible authorities and researchers to design and develop SSE

frameworks for use in evaluating and monitoring the quality of education in primary schools. The design principles were derived from the literature review (see 3.5), the needs analysis (see 5.3) and revised and refined on the basis of the formative and semi-summative evaluation of the developed prototypes (see 6.4; 6.7; 7.3 & 7.6). It is important to note that the SSE framework that has been developed in this research is exemplary for how the design principles can be operationalised and concretised into a framework specific for the context of certain schools. The following are the design principles generated for the development of an effective SSE framework for classroom quality that has been the focus of this study:

Identify and engage all relevant stakeholders in the development of the SSE framework
Agree on the need for the SSE framework initiative
Agree on aims and objectives of the SSE framework in context
Identify indicators of quality of education in context
Develop the structure of the SSE framework
Accomplish the characteristics of the SSE framework
Include steps to be followed in the evaluation process

Identify stakeholders and engage relevant stakeholders in the development of the SSE framework
The starting point is to identify key stakeholders in education. The principle assumption here in the development of SSE frameworks is that all stakeholders, irrespective of their roles, have the ability to reflect, learn, inform and work to improve the SSE framework (MacBeath, 2006). Typical examples of stakeholders here may include the government, the school heads, teachers, teacher associations, support staff, parents, experts, researchers and NGOs involved in education policy and funding. Stakeholder participation at the outset of the SSE framework development process is critical to ensure everyone's commitment towards the initiative. The development of an SSE framework for evaluating the quality of education in schools should not be an individual effort. All stakeholders in education should be involved in the development process since they have an ability to inform and improve the SSE framework regardless of their roles.

Agree on the need for the SSE framework initiative: Before the development of the SSE framework, all stakeholders should agree that there is a need for an SSE intervention. This means that everyone should first understand that there is a problem, and, in order to solve the identified problem in education, an intervention should be in place. Agreeing on the need for an SSE framework by various stakeholders is essential as this may help to enhance its acceptance by the users (MacBeath, 2006). If some stakeholders

do not see the need for the SSE initiative, this might negatively affect the SSE framework's acceptance and in turn, the quality of education in schools and classrooms.

Agree on aims and objectives of the SSE framework in context: For an SSE framework to be effective, all contextual factors should be taken into account. This involves stakeholders agreeing on the aims and objectives of the SSE framework taking into account their own contexts.

Agree on the indicators of quality of education in context to be included in the SSE framework

For an SSE framework to be effective in evaluating quality of education, the indicators of quality of education should be identified and contextualised. Although there may be some general indicators of quality of education (The Scottish Office Education and Industry Department, 1996), stakeholders should also think of other indicators particular to their contexts which will enable effective evaluation of quality of education.

Accomplish the characteristics of the SSE framework

For any educational intervention to be effective, it should have certain characteristics. In developing an SSE framework, stakeholders should agree on the characteristics they would want for their SSE framework and ensure that they are accomplished.

Include steps in the evaluation process

After developing an SSE framework, stakeholders should include steps to be followed during the evaluation process. Including steps to be followed in the process of evaluating the quality of education is essential so as to guide those carrying out the evaluation process. It is also important to indicate those responsible for carrying out the evaluation, the documents they will require and how they will report the findings (The Scottish Office Education and Industry Department, 1996).

7.7.3 Characteristics of an Effective SSE Framework

The summary of the findings of this study culminate in an overview of the characteristics of an effective SSE framework. As previously indicated, all the sub-questions were meant to answer the main research question for the study which was formulated as follows:

What are the characteristics of an effective SSE framework for improving classroom quality in Zimbabwean primary schools?

In this study, the development of an SSE framework was considered as an essential strategy for improving evaluation processes in Zimbabwean primary schools. As previously indicated, the development of the prototypes was iteratively done in collaboration with practitioners and other stakeholders in education (see Chapters 5-7). Successive formative evaluation was done at the end of each cycle. Feedback from participants was integrated into the redesign and development of subsequent prototypes, so as to eventually come up with an SSE framework that would improve both the evaluation processes and the quality of education in Zimbabwean primary schools. The Preliminary phase of the study examined the characteristics of ideal SSE frameworks documented in literature (see 3.5). A review of the related literature was conducted and some international SSE frameworks were examined. The following characteristics were identified from both the review of the related literature and the results of this research on the standard SSE frameworks:

- **The SSE framework should have a clear purpose;**
- **The SSE framework should be context specific;**
- **The SSE framework should focus on what is essential;**
- **The SSE framework should specify an evaluation team;**
- **The SSE framework should specify portfolio of evidence;**
- **The SSE framework should have an evaluation process;**
- **The SSE framework should guide an SSE report;**
- **The SSE framework should guide a school improvement plan**

These characteristics are explained below.

- **The SSE framework should have a clear purpose**

An effective SSE framework should have a clear purpose so that it will guide those doing the evaluation and why they are doing it. SSE frameworks may have more than one purpose but schools should try to bring the various purposes together so as to have an all-encompassing purpose which is in line with their mission and vision. Literature indicates that an effective SSE framework should specify why people are doing SSE (MacBeath, 2006).This would help to maximise the use of the SSE framework.

- **It should be context-specific**

For an SSE framework to be effective, it should be specific to an intended group of users. The quality indicators to be included in the SSE framework should be suitable for that group otherwise it may not be effective. In order to achieve this, there is a need to include various stakeholders in the development of the SSE framework so that they can help in defining the quality indicators to be included for the framework to be context specific.

- **It should focus on what is essential**

An effective SSE framework should evaluate all aspects of schools and classrooms. It should comprise indicators which focus on the evaluation of main functions of schools and classrooms. Therefore, an effective SSE framework should have indicators which assess all the schools' conditions, processes and outputs. An analysis of the available SSE frameworks indicates that when conducting an SSE process all school and classroom inputs, processes and outputs should be evaluated for quality (Bernhardt, 1999; Hendriks, Doolard, & Bosker, 2001). Therefore, an effective SSE framework should have essential indicators upon which quality of education should be judged.

- **The SSE framework should specify an evaluation team**

For an SSE framework to achieve its objectives of evaluating the quality of education in primary schools, it should be effectively implemented. This requires representative from all levels of the primary school grades to be involved in the implementation of the SSE framework. Therefore the team to be involved in the evaluation of quality of education should be specified in the SSE framework. Although the evaluation team may be chosen from the school, it may also be possible to include external evaluators in order to enhance the objectivity of the process (Carlson, 2000).

- **The SSE framework should specify portfolio of evidence needed for the evaluation process**

For SSE to be effective, those carrying out the evaluation should be supplied with relevant documents upon which they will judge the quality of education in schools. These documents or a portfolio of evidence should clearly be specified in the SSE framework so that everyone knows what is needed before the evaluation process so as to allow smooth evaluation of quality of education. The portfolio of evidence should be presented to the evaluation team so as to enable sound judgments about quality of education to be made. A portfolio of evidence enables the evaluation team to understand how the school and the classrooms are performing (The Scottish Office Education and Industry Department, 1996).

- **The SSE framework should have a process**

For an SSE framework to be effectively used by those doing the evaluation, a process to be followed during the evaluation should be specified (MacBeath, 2006). This includes specifying the time after which the evaluation should be carried, particularly when all the necessary portfolio of evidence has been gathered.

- **The SSE framework should guide an SSE report**

For an SSE framework to be effective, it should guide the writing of an SSE report. In order for SSE to help in the improvement of quality of education in schools, it should result in a report presented to the intended audience. This should include findings from the evaluation process and recommendations on how a school might improve its practice. Literature indicates that reporting evaluation findings the intended audience is vital for planning and practice and may help to improve teaching and learning processes (MacBeath, 2006).

The SSE framework should guide a school improvement plan

SSE may not be complete without specifying an improvement plan for the identified problems in a school. After the evaluation team has presented their findings to the intended audience, a school improvement plan should be devised. This is a roadmap that spells out changes a school needs to make in order to improve its quality of education. The improvement plan should contain some recommendations of how a school may improve its practice (1995). It should also state people responsible people for implementing the changes and should also specify the period of time required for such changes to be done in order to improve the work of the school. All this should be clearly specified in the SSE framework for it to be effective.

7.8 Conclusion

This chapter focused on establishing how the developed SSE framework should be used in schools for self-evaluation of the quality of education. It involved a try-out and field-test of prototypes 3 and 4, respectively. Both formative and semi-summative evaluation of prototypes 3 and 4 respectively were realised through expert evaluation and user appraisal. Overall, the evaluation of the SSE framework was optimistic. The outputs of this research study were highlighted in the Chapter. Some design principles identified following the review of related literature, and appraisal of prototypes three and four were also underscored. Although the participants in this study were positive about the effectiveness of the

developed intervention, more data collection is needed on the effects of the SSE process to check, for example, after a year, how the improvement plan has been realised. The next Chapter 8 reflects on the study and discusses its main findings. Recommendations for further research are made in that chapter.

CHAPTER 8

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Introduction

Many countries have made remarkable efforts towards achieving Education for All since the Universal Declaration of Human Rights avowed in 1948 that elementary education should be free and compulsory to all children in all countries (UNESCO, 2004). Zimbabwe is among the countries which moved closer to the achievement of Universal Primary Education after independence (Gatawa, 1998) (see 1.2). Providing quality of education is now at the heart of many education systems. Although effort has been made in Zimbabwe to increase enrolment since 1980, the quality of education remains a major challenge (Mazise, 2011; Ncube, 2004). Central to issues of quality of education are ways in which education is evaluated and monitored for improvement purposes. It is believed that school inspections have the potential to improve the quality of education in schools through the top-down pressure they exert on schools (MacBeath, 2006). However, in some countries, information from school inspection may not be effective for the improvement of quality of education in schools for some may feel that changes being recommended may be an imposition on them on top of the fact that it is now regarded as being expensive (Ibid, 2006). This is felt in most developing countries, and particularly in Zimbabwe, where there are limited resources (see 1.3 & 2.2). School Self-Evaluation (SSE) is now being used in many countries in conjunction with school inspection to evaluate and monitor the quality of education in schools. SSE is vital for evaluating the quality of education in schools because of its improvement, accountability and economic logics (MacBeath, 1999).

For SSE to be effective, it needs to be supported by an appropriate SSE framework. There is an abundance of such tools in most developed countries (MacBeath, 2005) while very few have been developed for use in developing countries. Additionally, in some developing countries, there is a lack of awareness of the need for schools to do self-evaluation of the quality of education for purposes of improvement. Such is the case with Zimbabwe which has not taken up the SSE initiative. Although there are some quality-related measures to ensure quality of education in schools, this move needs to be

supported through the supply of SSE frameworks which can be used to monitor and evaluate the quality of education.

In addition to the fact that there is a lack of awareness of the need to do a self-reflection of the quality of education in Zimbabwean primary schools; there is also the problem of lack of an SSE framework for use in the Zimbabwean context. Although SSE frameworks may be adopted or adapted from the developed countries where they are abundantly available for use in some developing countries, literature has shown that if schools are to feel ownership of the SSE framework, they should be engaged in designing and developing SSE frameworks for use in their own contexts (MacBeath, 2006). Moreover, adopting or adapting SSE frameworks for use in contexts other than those they were developed for may fail to account for other contextual factors which may affect the evaluation of quality of education. It is against this background that this study aimed at identifying and understanding the characteristics of and requirements for an effective SSE framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. This Chapter 8 concludes the research for this study. In this final chapter, a summary of the study is presented in Section 8.2. This is followed by a reflection and a discussion of what can be learnt from the research (8.3). Thereafter, conclusions drawn from the study are presented (8.4). The chapter ends with recommendations for policy, practice and research (8.5).

8.2 Summary of the Research

The aim of this study was to identify and understand the characteristics of and requirements for an effective SSE framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. In this sub-section, the research context is summarised (8.2.1). This is followed by a summary of the research questions and process in 8.2.2. After this, the main findings of this research (the SSE framework and the design principles) are summarised in 8.2.3.

8.2.1 Research Context

This study was carried in Zimbabwe, a Southern African country. Although effort has been made to increase access to education in Zimbabwe (Ministries of Education, Sport and Culture & Ministry of

Higher and Tertiary Education, 2004), the major education challenge now is that of poor quality of education (Mazise, 2011; Ncube, 2004; Nyagura, 1991). This has been evidenced in the Grade 7 and 'O' level results where the pass rates has been very low (see 5.3). One of the problems with the education system in Zimbabwe is that of weak supervisory, evaluation and monitoring instruments (Ministry of Education, Sport, Arts and Culture & Ministry of Higher and Tertiary Education, 2008). Due to lack of resources, school inspection is not done regularly in Zimbabwe (see 5.3). Although some countries complement school inspection with SSE, this concept has not been taken up in Zimbabwe. Moreover, there are no SSE frameworks in the country which schools can use to evaluate and monitor the quality of education (see 5.3). It is within this context of poor quality of education, lack of awareness for schools to do self-evaluation of their quality of education and the absence of an SSE framework in schools that this study was undertaken.

8.2.2 Summary of the Research Questions and Research Process

As previously indicated, the aim of this study was to identify and understand the characteristics of and requirements for an effective SSE framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. The study utilised design research, a systematic study of designing, developing and evaluating educational interventions as solutions for complex problems in educational practice, which also aims at advancing our knowledge about the characteristics of these interventions and the processes of designing and developing them (Plomp, 2009) as the appropriate research design (see 4.3).

There are basically three phases and various cycles in design research, which were followed in this study which are:

Preliminary Phase: This phase aimed at understanding the problem in context and to define the design principles based on the review of related literature as well as the needs analysis which would help in the development of the SSE framework.

Prototyping Phase: The phase comprised iterative research and design cycles, where prototypes one and two of the SSE framework were designed, developed, implemented and formatively evaluated (see 6.4; 6.7 & 7.3).

Assessment Phase: This is a semi-summative evaluation phase which examined the practicality and effectiveness of the third and fourth prototype (see 7.6). The semi-summative evaluation of the developed intervention was conducted through practitioners' questionnaires, as well as reports from expert evaluators (see 7.6). The overview of the research methodology for the study is discussed in Chapter 4.

A conceptual framework for the study was developed based on existing institutional frameworks for quality of education (Howie, 2002; Scheerens, 2004) (see 3.6). The conceptual framework for quality of education in schools was based on an input, process, output approach and these were specified at every level of education, namely, the national, pre-school, tertiary and school levels to show responsibilities of each (see 3.6). The framework for quality of education in schools assumed a systems approach to education where the pre-school, primary and secondary schools and tertiary education levels, work together with their associated classrooms, in order to achieve systemic educational goals (Banathy & Jenlink, 2004; UNESCO, 1979).

Design research was considered as a suitable research design for this study because it aims at pursuing new, novel and socially constructed solutions to problems, through generating design principles, which are both theoretically supported and practically tested (De Villiers, 2005). Through design research, the problem of a lack of an SSE framework in Zimbabwean primary schools was solved (see Appendix 21). The study generated and validated some design principles for designing and developing SSE frameworks for use in evaluating and monitoring the quality of education in Zimbabwean primary schools, thereby contributing to the body of scientific knowledge (see 7.7).

The central research question for the study was formulated as follows:

What are the characteristics of an effective SSE framework for improving classroom quality in Zimbabwean primary schools?

To address this question, the study adopted a two-fold research approach. The first was a needs analysis intended to gain an insight into the evaluation practices and instruments used at present in Zimbabwean primary schools (see 5.3). The second was an intervention study aimed at improving the evaluation practices and instruments used thereof. To answer the central research question, a number of sub-questions were drawn up (see 1.4), as follows:

a) **What is the current state of quality of education in Zimbabwean primary schools?**

The findings of this study revealed mixed feelings about the current quality of education in schools with some expressing satisfaction with the current quality of education while others expressed dissatisfaction (see 5.3). Those who were satisfied with the current quality of education cited improvement in the grade 7, ‘O’ and ‘A’ level public examinations pass rate as indications of good quality of education in schools (see 5.3). However, this improvement was insignificant considering the statistics given (see 5.3).

b) How do Zimbabwean primary schools currently evaluate quality of education?

A survey conducted in the five sampled schools revealed that school administrators are the ones responsible for evaluating the quality of education in classrooms (see 5.3). The school administrators indicated that they are given a format for developing their own instruments for use in evaluating quality of education in classrooms. Nevertheless, they expressed concern that they are not competent enough to develop such instruments. Their concerns were justified taking into account the complexity of designing and developing educational interventions (Plomp, 2009). Some were of the views that their current ways of evaluating and monitoring quality of education was haphazard and they expressed the need for a common instrument to be used in schools (see 5.3). Moreover, there was no meaningful evaluation of quality of education at the school level taking place except for class lesson observations and book inspections done by school heads and their deputies.

c) How can the School Self-Evaluation (SSE) framework contribute to the improvement of the quality of education in Zimbabwean primary schools?

For an SSE framework to contribute to the improvement of the quality of education, it has to be designed based on state-of-the-art knowledge (Plomp, 2009). It was indicated that for the SSE framework to contribute to the improvement of quality of education in schools, it should be used to evaluate and monitor all inputs, processes and outputs of schools and classrooms (see 5.3). Through the use of an SSE framework, schools will become aware of their strengths and weaknesses which will guide them to make informed school improvement plans based on the information obtained to improve education in schools.

d) Which dimensions and measures of school and classroom quality are needed to design a relevant, effective and consistent SSE framework for improving the quality of education in Zimbabwean primary schools?

The establishment of the dimensions of quality of education of the SSE framework was done throughout all the three phases of the design research process (see 3.3; 3.5 & 3.6). Some dimensions of the SSE framework were also identified (see 7.7). Quality indicators were identified at both the school and classroom levels. The SSE framework with its components and a list of quality indicators and their descriptions is presented in Appendix 21. The SSE framework developed in this study had various components; in addition to the quality indicators (see Appendix 21).

e) How can the SSE framework for evaluating classroom quality be used in Zimbabwean primary schools?

This question was addressed in the prototyping phase of the study by finding out how the sampled school would like the SSE framework to be used when evaluating quality of education (see 7.4). Questionnaires and observations were employed to examine the actual and expressed use of the SSE framework. The participants liked the idea of involving various local stakeholders in the evaluation process as they said that this may enhance the chances of finding various ways of solving the identified problems (see 7.4).

f) How consistent is the SSE framework in evaluating quality of education across different environments in Zimbabwean primary schools?

The aim of establishing the consistency of the SSE framework was to find out whether it was logically designed and developed. The participants thought that the SSE framework was systematically designed as it focuses on aspects necessary to improve the quality of education in schools and classrooms, and that it was clear and easy to use (see 7.4 & 7.6). This observation coincides with what literature suggests that for an educational intervention to be of high quality, it should be logically designed and developed (Nieveen, 2009).

g) How effective is the SSE framework in improving the quality of education in Zimbabwean primary schools?

This question was addressed in the prototyping phase, as well as in the semi-summative evaluation phase. The question related to both the expected and the actual effectiveness of the SSE framework (Nieveen, 2009). The results from both the try-out and the field test showed that participants were impressed by the SSE framework's clarity and strategy of evaluating quality of education in schools. They also indicated that the information obtained from the evaluation process was vital for informing planning and practice. Overall, practitioners agreed that the SSE framework is expected to be effective in evaluating the quality of education at both the school and classroom levels (see 7.4 & 7.6).

The summary of the findings of this study culminate in the overview of the characteristics of an effective SSE framework. All the sub-questions were meant to answer the main research question for the study which was formulated as follows:

What are the characteristics of an effective SSE framework for improving classroom quality in Zimbabwean primary schools?

As previously indicated, the development of the exemplar SSE framework was iteratively done in a number of cycles in collaboration with practitioners and other stakeholders in education (see Chapters 5-7). Successive formative evaluation was done at the end of each cycle (see 6.4; 6.7; 7.4 & 7.6). Feedback from the participants was integrated into the redesign and development of subsequent prototypes, so as to eventually come up with an SSE framework that would improve both the evaluation and monitoring processes and the quality of education in Zimbabwean primary schools. The Preliminary phase of the study examined the characteristics of ideal SSE frameworks documented in literature (see 3.5). Nieveen (2009) argues that a completed design intervention should satisfy certain quality criteria relevance, consistency; practicality and effectiveness (see 4.3). The following characteristics for good SSE frameworks were identified in this study:

- **The SSE framework should have a clear purpose;**
- **The SSE framework should be context specific;**
- **The SSE framework should focus on what is essential for education;**
- **The SSE framework should specify an evaluation team;**
- **The SSE framework should specify portfolio of evidence;**
- **The SSE framework should have an evaluation process;**
- **The SSE framework should guide an SSE report; and**
- **The SSE framework should guide a school improvement plan**

(see 7.7 for details).

8.2.3 Design Principles for SSE Frameworks

During the process of designing and developing an SSE framework, in this study, a number of design principles were generated (see 7.7). Basically, the following design principles about the development of SSE frameworks were generated from this study, as well as from the literature review:

- ***Identify and engage relevant stakeholders in the development of the SSE framework***
- ***Agree on the need for the SSE framework initiative:***
- ***Agree on aims and objectives of the SSE framework in context:***
- ***Agree on the indicators of quality of education in context to be included in the SSE framework***
- ***Accomplish the characteristics of the SSE framework***
- ***Include steps to be followed in the evaluation process***

(see 7.7 for details).

8.3 Research Reflections and Discussion

There are various areas which need reflection and discussion in this study. This section presents some reflections about the study. Methodological reflection is presented in (8.3.1) with substantive reflections in 8.3.2. Scientific reflection is presented in 8.3.3 and reflection on the researcher's role is discussed in 8.3.4. Finally, a reflection on the conceptual framework for the study is presented 8.3.5.

8.3.1 Methodological Reflections

As stated in Chapter 1 (see 1.1), the aim of this study was to identify and understand the characteristics of and requirements for an effective SSE framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. This study was situated within the pragmatic knowledge claim (see 4.2). The study applied design research as the research design appropriate for the study (see 4.3). The study comprised three phases, namely the preliminary phase where a needs analysis was conducted in Zimbabwean primary schools (see 5.3), the prototyping phase where various prototypes were developed and formatively evaluated in collaboration with the participants (see 6.4; 6.7 & 7.4), and the semi-summative evaluation phase where the developed SSE framework was evaluated to ascertain its practicality, consistency, relevance and effectiveness (Nieveen, 2009) (see 7.6). In the preliminary phase of the research, a survey approach was used in order to investigate the current quality of education and to find ways in which education is monitored and evaluated in Zimbabwean primary schools. This was accomplished through a needs analysis (see 5.3). As indicated in 5.2, the aim of the needs analysis was to understand the current quality of education and instruments used in its monitoring and evaluation in Zimbabwean primary schools. The information from the needs analysis was essential for developing an effective SSE framework in order to improve the practices.

Data for the study were collected through various data collection instruments such as questionnaires and semi-structured interviews from school administrators, teachers, education officials, experts and parents (see Appendices 5-8; 10; 13; 17 & 20). Qualitative and descriptive quantitative methods were used to analyse the data. Triangulation of data collection sources and instruments helped to explore views of different participants concerning the current quality of education in schools, its evaluation and monitoring as well as instruments used in its evaluation (see 5.3). Therefore, it was thought that through triangulation

of data sources and methods, information on the current quality of education in schools and how it is monitored and evaluated, may be obtained.

The use of various data collection methods posed some limitations during the study. At times, there were some differences in the responses given by the participants to the questionnaires and in the interviews. Perhaps, this was due to the fact that the instruments were piloted in one province (Masvingo) and in one primary school, whilst some of the sampled primary schools were in the Harare province. Some participants seemed unfamiliar with some of the concepts being explored. Although this was not problematic, the lesson that can be learnt from this is that additional efforts must be made in order to minimise differences between subject characteristics of the pilot study and those of the actual research.

A cyclic approach of design, evaluation and revision (Van den Akker, Branch, Gustafson, Nieveen & Plomp, 1999) was used in the second phase of the study (see 4.3). The design research approach allowed the users to implement and evaluate the developed prototypes (see 6.4; 6.7; 7.4). Experts were also involved in the evaluation of the developed prototypes. Therefore, everyone was involved in the development process of the SSE framework. The educational design research approach applied in this study allowed the SSE framework to be developed within the context of the Zimbabwean problem, and this enabled the generation of design principles for the design of such frameworks (Van den Akker, 1999). The implementation and evaluation of the prototypes led to the approximation of the ideal intervention for the specific context. The inclusion of the practitioners in the design and development of the intervention ensured that most implementation problems would be identified and rectified in advance before the intervention could be used. Moreover, it also guaranteed a sense of ownership of the SSE framework (MacBeath, 2006), thus enhancing its acceptability.

One limitation of this study is its lack of statistical generalisability to other schools in other districts and provinces in Zimbabwe. The sample size for the study was only representative of the various stakeholders in education and not representative of the population. The schools sampled for the study, although they represented the various school types found in the Zimbabwean context, were too few for the findings to be statistically generalised. Although no statistical generalisation of the findings is possible from the sample involved in the study to the population of Zimbabwean primary schools, yet this study strives to generalise the findings to the broader theory underlying the design and development of SSE frameworks. There is a need, therefore, for design principles to be tested in more cases with the intention of obtaining the same results through replications of the findings (Plomp, 2009), before the results may be acknowledged in a larger Zimbabwean context. Therefore, generalisation in this study can only be

analytical generalisability (Yin, 2003) where those who will have the opportunity to read the study's findings may decide for themselves whether the knowledge generated can be transferred to their own settings through applying 'replication logic' (Yin, 2003). Through replication of the findings, the results might be accepted for a much larger number of similar contexts.

8.3.2 Substantive Reflection

It was stated earlier on that Zimbabwe is one of the countries which managed to make strides in the provision of access to education (see 1.2). Although much has been done on the quantity side of education, focus should now be on the quality of education provided in schools. In order to ensure that pupils receive good quality of education in schools, education quality should constantly be evaluated and monitored. Literature has indicated that evaluation of quality of education in schools may be done by school inspectors and by school communities through SSE (see 1.2). School inspection has, however, been shown to be expensive, and that it provides static pictures of the quality of education in schools due to the fact that it is not an on-going process (MacBeath, 2006) (see 1.2). The overarching problem that was stated at the beginning of this study was that in Zimbabwe, there is a lack of awareness of the need for schools to evaluate the quality of their education (see 1.2). Furthermore, there is no standard instrument for use to evaluate the quality of education. The Ministry of Education, however, expects schools administrators to design their own instruments and monitor the quality of education in classrooms. This might, however, be a difficult task as evidenced through the needs analysis (see 5.3).

This study intended to make a substantive contribution by seeking a solution to lack of an SSE framework through identifying and understanding the characteristics of and requirements for an effective SSE framework to evaluate the quality of education in primary schools and classrooms in Zimbabwe in order to design and develop a specific SSE framework based upon state of the art knowledge and design principles for appropriate and effective use in this context. Most studies on SSE have emphasised school improvement (Hofman, Dukstra & Hofman, 2005; McNamara & O'Hara, 2005; Plowright, 2007) while others have highlighted its importance in student achievement (Herselman & Hay, 2002; Schildkamp, Visscher & Luyten, 2009). None of these studies has, however, focused on the development of SSE frameworks. This study is distinct in that it has resulted in a concrete SSE framework and generated suggestions to improve the evaluation of quality of education in Zimbabwean primary schools through the development of an SSE framework in collaboration with practitioners who took part in the study as both designers and users of the SSE framework.

8.3.3 Scientific Reflection

As previously indicated in Chapter 3 (see 3.5), there are no studies on SSE in general, and on the development of frameworks for SSE in Zimbabwe. Although there are various SSE frameworks for use in monitoring and evaluating the quality of education in schools in most developed countries (see 3.5), issues surrounding how they were developed are not elucidated on. This study is the first one of its kind to try and come up with design principles on the development of SSE frameworks. Moreover, this is the first study to design and develop an SSE framework in the context of a developing country and to prove its practicality and expected effectiveness (see Appendix 21). The formative evaluation activities took place in natural settings. The iterative approach of design and formative evaluation of the SSE prototypes enabled the observation of characteristics of the SSE framework, and to suggest informed improvement. It was possible to get insight into various issues related to the time needed to carry out the evaluation process and the practicality of the intervention. Although the SSE framework was used in evaluating the quality of education using Mathematics as an example (see Appendix 21), it is assumed that it is possible to transfer such teachers' skills to other subject areas. Moreover, the collaboration of various stakeholders in the development process of the SSE framework in different stages of the study (see 6.4; 6.7; 7.3 &7.6) enabled the accommodation of everyone's needs which helped in improving the SSE framework (see Appendix 21).

8.3.4 Reflection on the Researcher's Role

There are several roles to be assumed during the design research process which were observed during this study. These include that of a designer-developer of the intervention, an SSE facilitator, as well as that of an evaluator. At the beginning of the research process, the role of a designer-developer was taken up in the development of data collection instruments as well as the development of the first prototype. Since the concept of SSE is still new in the Zimbabwean context, the practitioners had to be facilitated on how to implement the SSE framework. Observation was the main activity during practitioners' try-out and field-test of the prototypes. This was done in order to take note of any implementation problems as this information would help to improve the quality of the SSE framework.

Assuming multiple roles in one study had both advantages and disadvantages. The advantage of this was that there was an opportunity to intermingle with practitioners who have a better understanding of the problems associated with the evaluation of quality of education in Zimbabwean primary schools. One of the problems encountered involved whether to help the participants who seemed to experience some implementation problems or to remain as an observer during the implementation of the SSE framework. Efforts were made to be sensitive, adaptable and responsive to changing circumstances, and to remain as a

non-participant observer (Patton, 1990) in the last phase of the study. This was essential, in order to avoid influencing the outcome of the study.

8.3.5 Reflection on the Conceptual Framework

The conceptual framework for quality of education in schools guided the investigation of how quality of education should be evaluated in Zimbabwean primary schools and in classrooms. The framework for quality of education in schools (see Figure 8.1) was developed following a review of related literature on quality of education, SSE, school effectiveness, school improvement and frameworks used in the evaluation of quality of education (see 3.4; 3.5). The conceptual framework for quality of education in schools drew heavily from the systems theory approach, which postulates that different parts of a system interact to achieve specified objectives (Banathy & Jenlink, 2004; UNESCO, 1979) (see Figure 8.1). In the conceptual framework for quality of education in schools (see Figure 8.1), it was assumed that different levels of the education system have roles to play in the provision, evaluation; realisation and improvement of education quality (see Figure 8.1).

The conceptual framework for quality of education in schools consists of the national, pre-school, tertiary and the school levels of education as well as the classroom which are vital for the realisation of quality of education (see Figure 8.1). In the conceptual framework for quality of education in schools (see Figure 8.1), higher levels of the education system conditions facilitate lower level conditions (Scheerens & Bosker, 1997). There are various inputs; both human and material, which are given to schools by both the context and the national level (see Figure 8.1) which should be gainfully utilised through effective processes, in order to produce good output. In the conceptual framework for quality of education in schools, details of the inputs, processes and outputs for the pre-school and the tertiary levels are not provided (see Figure 8.1) because these levels were not the focus for quality improvement in this study.

It was indicated that in order for the education system to realise quality of education, some quality assurance processes have to be embedded at both the higher level of the education system and at the school level (see 3.4). At the higher level of the education system in Zimbabwe, it was found that resources and tools for quality assurance processes to be implemented in schools, in order to enhance quality of education are currently scarce (see 5.3). As such, the responsibility was placed on schools to ensure that pupils receive education of good quality. Although schools make efforts to evaluate the quality of education, school heads indicated that the national education level does not provide them with instruments to use in monitoring and evaluating the quality of education (see 5.3). As a result, the school heads indicated that their efforts to effectively monitor and evaluate the quality of education for

improvement purposes are being hampered by lack of a standardised evaluation instrument. As reflected in the conceptual framework for the study (see Chapter 3, and also Figure 8.1), one of the obligations of the national education level is to supply lower levels with the necessary inputs, among them, self-evaluation frameworks. Such an assumption is logical, considering the complexity of designing and developing such an educational intervention. If schools are supplied with evaluation instruments, they may regularly monitor and evaluate their education quality so as to identify their strengths and weaknesses which could guide their improvement plans.

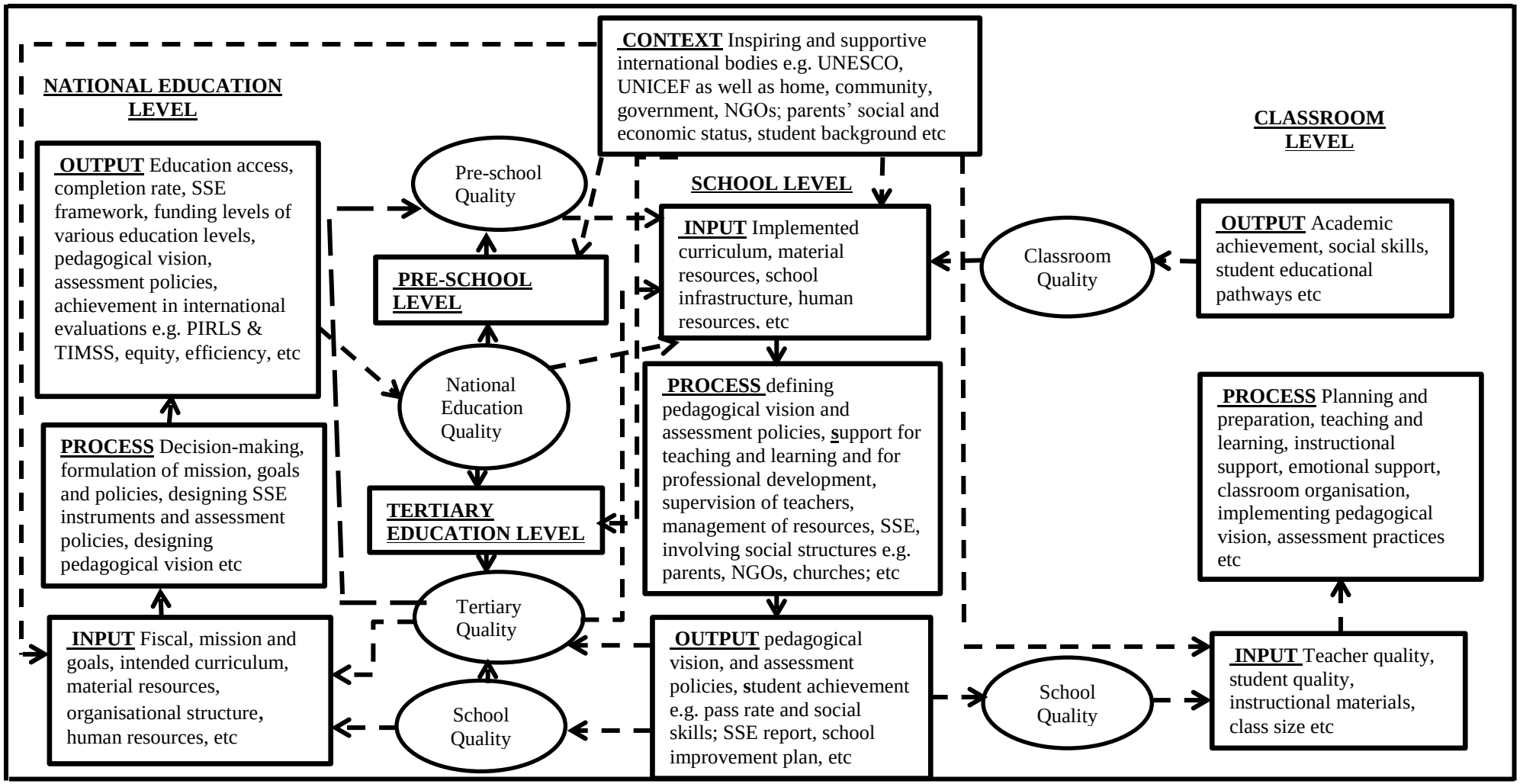

Figure 8.1: Framework for Quality of Education in Primary Schools

The conceptual framework for quality of education in schools turned out to be good that during the research process no adaptations were needed. Nevertheless, as the research led to further insights into quality of education and its evaluation in Zimbabwean primary schools, it is possible to further map other processes that may enhance the quality of education onto the initial conceptual framework for quality of education in schools. In the conceptual framework for quality of education in schools (see Figure 8.1), it was conceptualised that defining pedagogical vision, support for teaching and learning, supervision of teachers, management of resources, support for professional development, school self-evaluation and the involvement of social structures with interest in education were some of the main processes at the school level although there is room for additional processes (see Figure 8.1).

Reflecting on the conceptual framework for quality of education in schools, it was considered that at the school level, management and allocation of resources is an essential process. If resources are properly managed and allocated equitably among the classes, this may enhance the teaching and learning processes in the classrooms. In the conceptual framework for quality of education in schools, it was also indicated that SSE was an important process at the school level in order for schools to realise and improve the quality of education (see Figure 8.1). After carrying out the evaluation process, it is an essential process at the school level to ensure that an evaluation report, pointing out the school's and classrooms' strengths and weaknesses, is prepared. This report will form the basis for improvement. Another essential process at the school level is to prepare a school improvement plan based on the evaluation report, which will be a roadmap to guide the school and classrooms in their improvement of quality of education. All these and other school processes may also be mapped onto the conceptual framework shown in Figure 8.1. However, the figure already has a high density of information and therefore should not become too complex and too detailed; these details cannot be placed in the figure.

At the classroom level, some more processes may also be done in order to realise and improve the quality of education other than the ones listed on the initial conceptual framework. In the conceptual framework for quality of education in schools, it was conceptualised that teaching and learning, instructional support, emotional support, planning and preparation of lessons, implementing pedagogical vision, supplying portfolio of evidence were some of the main processes at the classroom level (see Figure 8.1). On reflection, it was also thought that more processes may be added under these main processes. For example, under teaching and learning processes, time on task, which is the percentage of class time in which pupils are actually engaged in curriculum related activities (Hollingsworth, Fowler & Ybarra, 2006) may be added. Moreover, breadth and depth of curriculum coverage are also important aspects to

be considered in the teaching and learning processes. Instructional effectiveness is also essential in order realise quality of education (Pianta & Hamre, 2009) and may also be added to the list in the conceptual framework.

It was also considered that monitoring of pupils' progress was a vital process to be included in the conceptual framework at the classroom level. This may be done through giving pupils daily written exercises as well as tests where pupils will receive feedback on their performances and be helped accordingly by the teachers. Giving morning work and homework to pupils are crucial aspects of teaching and learning which may also be added to the classroom processes. Effective use and management of instructional materials are indispensable aspects of the teaching and learning processes and may also be included in the framework for quality of education in schools (see Figure 8.1).

The input component at every level may remain open in order to accommodate some more inputs other than the ones conceptualised in the framework for quality of education in schools (see Figure 8.1). This will depend on the resources which may be available at the higher education levels. The inputs given to the lower levels also depend on the economy of a country. In countries where the economy is stable, all levels of the education system will receive adequate inputs unlike in impoverished countries. The output components at every level may also accommodate other factors, for example, at the classroom level, pupils' attitudes and aspirations (Howie, 2002) may also be included. However, in line with the findings of this study, the inputs, processes and outputs should be evaluated in order to identify where improvement may be needed in order to improve education in Zimbabwean primary schools.

8.4 Conclusions of the Study

Based on the findings of this study, the following are the main conclusions that were generated:

- **There is a lack of awareness of the need for schools to evaluate the quality of education in Zimbabwean primary schools.**

The findings of this study revealed that Zimbabwean primary schools are not aware that they should do self-evaluation of the quality of their education (see 5.3). Although school inspectors have the responsibility of ensuring that education standards are maintained in schools, they do not do this on a continuous basis. For this reason, school inspections are considered to provide a snapshot of the quality of education in schools, which should be complemented by SSE (MacBeath, 2006; 1999). Although many education systems have taken up SSE as an essential process for improving education quality (Hendriks,

Doolard, Bosker, 2001; The Scottish Office Education and Industry Department, 1999), this concept is still new in the Zimbabwean context. As there is a lack of awareness of the need and possibilities for schools to evaluate the quality of education, self-evaluation (including procedures and instruments for it) should be actively promoted by the government, and it should become part of teacher education and in-service professional development programmes.

- **There are no clear policy and guidelines for schools to engage in the self-evaluation of quality of education**

Since the concept of SSE is new in Zimbabwe, there is no clear policy which regulates schools to engage in the self-evaluation of the quality of education. As such, most schools do not practise SSE of education quality (see 5.3). The results of this study indicate that teachers were not aware whether there was a policy for schools to engage in self-evaluation of education quality or not. This means that teachers are not involved in the evaluation process of education quality in schools (see 5.3). Although school administrators indicated that schools were expected to evaluate their education quality (see 5.3), there were no guidelines on how they should conduct SSE. If schools are just required to carry out self-evaluation exercises without proper guidelines, this will result in inappropriate implementation of the process in schools, and this in turn, may do little to improve the quality of education. As most schools do not actively monitor and evaluate the quality of their education, there is a need for a clear policy and guidelines for schools to engage in the self-evaluation of the quality of education.

- **Self-evaluation of the quality of education practices in Zimbabwean primary schools is not up to standard when compared to international standards**

The way evaluation of quality of education is conducted in Zimbabwean primary schools, as discussed in Section 5.3, is not up to standard. The findings of this study indicate that it is the duty of school administrators only to evaluate the quality of education in schools. The school administrators who were said to be evaluating quality of education in schools were found to be concentrating on the evaluation of the classroom process (see 5.3). The findings of this study revealed that school administrators do some lesson observations and book inspections as a way of evaluating the quality of education in schools. There is very little focus on the evaluation of the quality of education at the school level (see 5.3). Since self-evaluation of quality of education practices in Zimbabwean primary schools is not up to standard when compared to international standards, it is important to provide schools with clear standards, as well as practical and effective instruments for this.

- **SSE can be useful in evaluating quality of education in resource-constrained countries**

One of the most challenging problems faced by the Zimbabwean education system is that of lack of resources for its inspectorate to fully evaluate and monitor the quality of education in schools (see 5.3). Currently, in Zimbabwe, there is a shortage of school inspectors due to poor salaries (see 5.3). As a result, the available school inspectors are finding it difficult to cope with the large numbers of schools they are allocated to, in order to effectively evaluate and monitor quality of education. This problem is further exacerbated by lack of vehicles for use by school inspectors to visit schools for inspection (see 5.3). In most countries, SSE is being used in conjunction with school inspection to evaluate quality of education (MacBeath, 2006). SSE is a cost-effective measure of ensuring quality of education in schools because it does not involve transport costs to conduct the evaluation process. Although schools may consider involving critical friends in the evaluation process (Carlson, 2009), this should not involve a lot of transport costs, as is the case with school inspection. Since SSE is a useful process of monitoring and evaluating the quality of education, it should be encouraged in most developing countries where resources are limited.

- **Achievement of education quality in schools requires joint efforts of all stakeholders**

Although schools are responsible for the education of pupils, they may not entirely be responsible for the achievement of quality of education. In its definition of quality of education, UNICEF (2000) recognises a number of factors which are essential, in order for quality of education to be realised. These include teachers, school administrators, parents, the community, as well as pupils (Ibid, 2000). As such, all these people have various roles to play for quality of education to be achieved in schools. The findings of this study show that quality of education in schools may be improved through the provision of adequate resources in schools, improving salaries and working conditions of teachers, effective teaching and learning processes, supplying schools with self-evaluation frameworks, as well as through effective leadership (see 5.3). Although schools are accountable for the quality of education, some of the factors which influence quality of education are beyond their control. Since achievement of quality of education in schools is not the job of teachers and school administrators alone, all stakeholders (who include parents, teachers, school administrators, education officials and students) should work together, in order for quality of education to be realised.

- **A standard SSE framework is feasible in Zimbabwe and is supported by all stakeholders involved in this research.**

The findings of this study have shown that there is no standard instrument for use in evaluating the quality of education in Zimbabwean primary schools (see 5.3). Participants who took part in this study

welcomed the idea of having an SSE framework for evaluating the quality of education in Zimbabwean primary schools (see 5.3; 6.4; 6.7 7.4 & 7.6). They indicated that they would recommend the use of the developed SSE framework to other schools. Since a standard SSE framework is feasible and supported by all stakeholders who were involved in this research study, it should be introduced in Zimbabwean primary schools so that they can realise and improve the quality of education.

8.5 Recommendations

Conclusions of this study based on the research findings have highlighted important issues to be addressed, in order for Zimbabwean primary schools to realise and improve the quality of education. An important step to be taken towards this direction is to create an awareness of the need for schools to practice self-evaluation of quality of education for improvement purposes. Without such awareness, efforts to realise and improve quality of education may be in vain. It is against the background of this assumption that the following recommendations are made for policy (8.5.1), practice (8.5.2) and further research (8.5.3).

8.5.1 Policy

The following are policy recommendations in order to improve the quality of education in Zimbabwean primary schools:

- ***The Ministry of Education, Sport, Arts and Culture should make SSE a key focus to the realisation and improvement of quality of education.***

In Chapter 1 (See 1.3), it was noted that, currently, in Zimbabwe, evaluation systems aimed at assisting schools with self-evaluation processes do not exist. This situation may hamper schools' efforts to achieve quality of education. In order for schools to accomplish quality of education, methods which may assist them to find out their strengths and weaknesses in order to improve should be identified. Thus, it is recommended that the Ministry of Education, Sport, Arts and Culture should put in place systems which will make SSE a vital method for the realisation and improvement of quality of education in schools. This may help to complement school inspection processes of ensuring quality of education in schools.

- ***Create an awareness of the need for schools to evaluate their quality of education***

The findings of this study indicated that in Zimbabwe, there is currently a lack of awareness of the need for schools to evaluate their quality of education (see 1.3). For schools to engage in self-evaluation processes, school practitioners and other stakeholders should be educated on its objectives and importance

in the realisation and improvement of quality of education. Since this concept is still new in the Zimbabwean context, it is recommended that the Ministry of Education should organise workshops to create an awareness of the need for SSE among the school practitioners and other stakeholders. This emphasis on promoting schools' self-evaluation might inspire practitioners to see its importance which may help them to value and practice it in order to realise and improve quality of education. Combined with school inspection, SSE may provide a more balanced approach to quality of education evaluation and monitoring in schools than to rely on external evaluation only.

- ***Develop the coordination between self-evaluation and school inspection***

It was pointed out that school inspection provides static pictures of the quality of education in schools because it is not done regularly (see 1.2). It is recommended that the Ministry of Education should establish improved ways in which school inspection may be complemented by SSE, in order to improve the quality of education in schools.

- ***Improve the consistency of evaluation of quality of education across schools***

In Chapter 5 (see 5.3) a concern was raised that, currently, in Zimbabwe, there is no consistency in the way in which quality of education is evaluated in schools. Each school is responsible for establishing the way it wants to evaluate the quality of education, thus evaluation practices and procedures may differ. Moreover, the quality indicators focused on may also be different. To improve the consistency in which quality of education in schools is evaluated, it is recommended that the Ministry of Education should provide schools with an SSE framework which can be used in self-evaluation of quality of education. The SSE framework developed in this study may be a good example of this.

- ***Improve ways of informing the general public about the quality of education in schools.***

It was noted during the needs analysis that people get to know about the quality of education mostly through the media which releases the ranking of schools based on their performance in public examinations (see Appendix 23). It is recommended that the Ministry of Education should seek ways in which it can inform the general public about the quality of education in different schools. Such information may help parents, who are an important stakeholder in education, to make informed decisions as to where they may send their children for learning.

- ***Developing suitable subject-specific tests to assess pupil learning***

In the SSE framework it was presented that pupils should be able to perform their grade specific tasks (see Appendix 21, item B1). In order to ensure that pupils are competent in their grade-specific tasks, it is

recommended that the Ministry of Education should develop subject-specific tests which cover the Zimbabwean curriculum for all of Bloom's knowledge levels for all grades to be used to assess pupils' learning. These grade-specific tests may help to provide indicators of quality of education with a focus on each subject offered in primary schools.

- ***Developing suitable diagnostic tests for all subjects in primary schools***

In the SSE framework, item B2 (see Appendix 21), a quality indicator for diagnostic tests used in classrooms, was presented. Although schools are expected to develop and administer these school tests to pupils at the beginning of the year in order to understand their knowledge levels and to appropriately plan for their learning, they should be supported in the development of such tests. It is recommended that the Ministry of Education, in conjunction with the Curriculum Development Unit (CDU) should develop diagnostic tests in all subjects per grade, which will be used in schools.

8.5.2 Practice

The following are recommendations for practice:

- ***Strengthen competencies of SSE in schools***

In Chapter 7 (see 7.4) it was observed that schools are not competent in SSE processes. Currently in Zimbabwe, schools are not well-versed in self-evaluation processes since the concept is still new. The processes and practices of the evaluation of quality of education currently in place in schools are not up to standard. It is, therefore, recommended that schools should constantly practice self-evaluation of education quality in order to enhance their competencies. This may require the joint efforts of the Ministry of Education and researchers so as to train teachers on how to conduct SSE. This should become a topic to be addressed in teacher education programmes.

- ***Create networks of practitioners on SSE***

For quality of education to be realised and improved, there should be an exchange of ideas between schools. This may involve exchanging ideas on how schools evaluate quality of education. Currently, in Zimbabwe, there are no such exchanges of ideas. It is therefore recommended that schools should create networks of practitioners on SSE of quality of education. This might require the involvement of others who may have a sincere interest in education. This might help to improve both the competencies of schools in evaluation processes and the quality of education.

8.5.3 Research

The following are recommendations for further research:

- ***Further research to validate the findings***

This study utilised design research as it was considered appropriate for addressing the research question (see 4.3). The sample size (number of schools and participants) was small. This was appropriate for this study for it was exploratory in nature. However, if inferences are to be made in terms of design principles for SSE frameworks and how the intervention works across contexts, then further research should be undertaken in order to validate the research findings. It is recommended that the Ministry of Education should work in partnership with researchers to develop SSE frameworks with reliable indicators of quality of education, which may be used in Zimbabwean primary schools to help improve the quality of education.

- ***Developing self-evaluation frameworks across the education system***

It has been observed through this study that currently, in Zimbabwe, there is no standard instrument for use in the evaluation of quality of education in primary schools (see 5.3). Similar trends do exist across the entire education system. In this study, an SSE framework for use in Zimbabwean primary schools was developed, although further development and research is needed. It is therefore recommended that research, which will inform the development of similar frameworks for evaluating quality of education for ECEC, secondary schools and institutions of higher learning which include teachers' colleges, universities and other institutions of learning be conducted. Although some quality indicators of the SSE frameworks may be similar to the ones identified in the development of the SSE framework in this study, there is a need for frameworks to be developed for each specific sector of education for effective evaluation of quality of education to be realised at each level.

- ***Establishing the validity of teacher-reported information***

It has been established through this study that much of the information on the quality of education at the classroom depends on reported information by teachers through their records (see 5.3). It is, therefore, recommended that research should be carried out to develop approaches to obtain valid and reliable teacher-reported information regarding aspects like breadth and depth of content coverage, time on task; instructional effectiveness and the general quality of education in classrooms.

- ***Establishing how to evaluate student achievement in non-academic skills***

In the SSE framework, items A2 and B1 (see Appendix 21); a quality indicator of student achievement is presented. It was indicated that student achievement should not only be thought of in terms of

achievement in academic subjects but also in knowledge (cultural heritage); social skills (societal trends and needs) and personal development (educational needs and personal needs) (Thijs & van den Akker, 2009). While student academic achievement may be easy to evaluate using the developed SSE framework, evaluation of achievement in non-academic aspects may not be easy. Therefore, there is a need for further research to establish how these could be evaluated.

- ***Develop a centre to coordinate research on the quality of education and its evaluation***

There is limited research on the quality of education and its evaluation in Zimbabwe. Therefore, research has to be done in this area. It is, therefore, recommended that a National Centre of Excellence in Assessment and Quality Assurance in Education and Training be established in a few of the universities in Zimbabwe to coordinate research on quality of education and its evaluation. The current study is a result of individual initiative. It would make sense if there were some units in a few of the universities in Zimbabwe to conduct research on the quality of education, a topic that is now at the centre of attention in every education system in the world. Such a National Centre of Excellence on Quality of Education will have a specific mandate to co-ordinate and facilitate the pooling of existing expertise at various Zimbabwean institutions, in order to engage in meaningful research on quality of education. This may provide a platform for educators at various levels of the education system to acquire the necessary knowledge and skills, through offering courses, seminars and contributing to workshop themes that will be organised under the auspices of the centre. Such a National Centre of Excellence on Quality of Education may promote interaction and collaboration among researchers, practitioners and the Ministry of Education, Sport, Arts and Culture on how quality of education should be evaluated in schools and other levels of the education system.

8.6 Concluding Remarks

The aim of this study was to identify and understand the characteristics of and requirements for an effective School Self-Evaluation (SSE) framework in order to design and develop a specific SSE framework for appropriate and effective use in the Zimbabwean context. Through this research, the possibilities of what such a framework could mean for Zimbabwean primary education presented themselves. For the SSE framework to work, a good foundation to the SSE process has to be provided. Since it has been noted that the number of students has grown rapidly world-wide and the demand for the provision of education at all levels has increased (Keeves, Lietz, Gregory & Darmawan, 2006), it is essential to constantly evaluate and monitor the quality of education in schools for improvement purposes. The research presented here is a first step towards a long journey Zimbabwe has to travel so as

to reach world-class quality of education. In the view that students should be provided good quality of education, schools should redefine and broaden their roles in order for quality of education to be realised. Therefore, improvement in quality of education requires a sustained effort to change school and classroom processes from within the schools rather than from outside and hence, school self-evaluation is one of the ways in which this may be achieved.

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APPENDIX 1: ETHICAL CLEARANCE

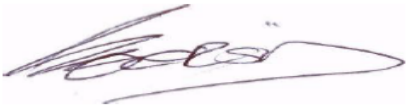
UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Faculty of Education

RESEARCH ETHICS COMMITTEE

CLEARANCE CERTIFICATE	**CLEARANCE NUMBER :** SM 11/03/03
DEGREE AND PROJECT	PhD The development of a school self-evaluation framework for classroom quality in Zimbabwean primary schools
INVESTIGATOR(S)	Elizabeth Garira
DEPARTMENT	Science, Mathematics and Technology Education
DATE CONSIDERED	3 September 2014
DECISION OF THE COMMITTEE	APPROVED

Please note:
For Masters applications, ethical clearance is valid for 2 years
For PhD applications, ethical clearance is valid for 3 years.

CHAIRPERSON OF ETHICS COMMITTEE Prof Liesel Ebersöhn



DATE 3 September 2014

CC
Jeannie Beukes
Liesel Ebersöhn
Prof Sarah Howie
Prof Tjeerd Plomp

This ethical clearance certificate is issued subject to the following condition:

1. It remains the students' responsibility to ensure that all the necessary forms for informed consent are kept for future queries.

Please quote the clearance number in all enquiries.

APPENDIX 2: LETTER FROM MINISTRY OF EDUCATION, SPORT, ARTS AND CULTURE

all communications should be addressed to
"The Secretary for Education Sport and Culture"
Telephone: 734051/59 and 734071
Telegraphic address : "EDUCATION"
Fax: 794505

ZIMBABWE

Ministry of Education, Sport, Arts and Culture
P.O Box CY 121
Causeway
Zimbabwe

30 May 2011

ELIZABETH GARIRA
90B NAPIER AVENUE
HILLSIDE
BULAWAYO.

RE: PERMISSION TO CARRY OUT RESEARCH IN THE MINISTRY OF EDUCATION, SPORT, ARTS AND CULTURE.

Reference is made to you application to carry out research in the Ministry of Education, Sport, Arts and Culture institutions on the title:

The development of a School Self-Evaluation framework for classroom quality in Zimbabwean primary schools.

Permission is hereby granted. However, you are required to liaise with the Provincial Education Director responsible for the schools which you want to involve in your research.

You are also required to provide a copy of your final report to the Ministry since your study is instrumental in the development of education in Zimbabwe.

Mashanyare I

For: **SECRETARY FOR EDUCATION, SPORT, ARTS AND CULTURE**

MINISTRY OF EDUCATION SPORT AND CULTURE
21 JUN 11
MASVINGO REGION
P.O. BOX 67 MASVINGO

DEO BIKITA
Please assist the bearer who intends to carry out her research in primary schools in your district
for PED: MASVINGO

APPENDIX 3: LETTER FROM MASVINGO PROVINCE

All communications should be addressed to
"The Provincial Education Director for Education
Sport and Culture"
Telephone: 263383/264331
Fax: 039 263361

ZIMBABWE

Reference:

Ministry of Education Sport and Culture
P.O Box 89
MASVINGO

12 July 2012

To Whom It May Concern:

RE: PERMISSION TO CARRYOUT RESEARCH :ELIZABETH GARIRA: PH D STUDENT: UNIVERSITY OF PRETORIA

The above matter refers.

The bearer, Elizabeth Garira, a PHD student at the University of Pretoria, has been granted permission to carry out her research in primary schools in Masvingo District of Masvingo Province.The schools are :

- Shakashe Primary School
- Victoria Junior

The title is : The development of a School Self- Evaluation framework for classroom quality in Zimbabwean primary schools.

Please do assist her wherever possible.

for D. MANDIUDZA
ACTING PROVINCIAL EDUCATION DIRECTOR: MASVINGO

APPENDIX 4: LETTER FROM HARARE PROVINCE

All communications should be addressed to
"THE PROVINCIAL EDUCATION DIRECTOR"

Telephone : 792671-9
Fax : 796125/792548
E-mail :
moeschre@yahoo.com

ZIMBABWE

REF: G/42/1
Ministry of Education,
Sport and Culture
Harare Provincial Education Office
P. O. Box CY 1343
Causeway
Zimbabwe

16-07-2012

E. Chiwira of
University of
Pretoria South Africa

RE : PERMISSION TO CARRY OUT RESEARCH IN SOME SELECTED SCHOOLS

Investigation research in the development of a school-self-evaluation framework for classroom quality in Zimbabwean Primary Schools

Reference is made to your letter dated 30 05 2012

Please be advised that the Provincial Education Director grants you authority to carry out your research on the above topic. You are required to supply Provincial Office with a copy of your research findings.

M Mkombe

For Provincial Education Director

Harare Metropolitan Province

16-07-2012

APPENDIX 5: INTERVIEW SCHEDULES FOR EDUCATION OFFICIALS

INTERVIEW SCHEDULES FOR PROVINCIAL EDUCATION OFFICERS

1) **What can you say about the current quality of education offered in schools in the Province at present?**

- How do you currently find out about the quality of education in primary schools in your Province?

2) **a) What policies are currently in place in your Province to address the quality of education in primary schools?**

b) In your opinion, to what extent are these policies adequate to ensure quality education?

- Do you think there is need to do more?

3) **How does the Provincial Office evaluate the quality of education in schools?**

- Do you have a specific evaluation tool or checklist which you use to evaluate the quality of education?

4) **What is your experience of evaluating the quality of education in schools in the Province?**

- What kind of challenges do you encounter in evaluating the quality of education in the Province?

5) **What do you think is important when evaluating schools and classrooms for quality?**

- Which aspects of quality should be focused on when evaluating schools and classrooms for quality?

6) **What do you think would assist you to evaluate the quality of education in schools in the Province most effectively?**

7) **What do you think about the idea of having a standardised framework to monitor the quality of education in schools?**

- How do you view a standardised framework in terms of its contribution to the improvement of the quality of education in schools in general and particularly the quality of educational provision in classrooms?

INTERVIEW SCHEDULE FOR DISTRICT EDUCATION OFFICERS

1) **What can you say about the current quality of education offered in schools in the District at present?**

- How do you currently find out about the quality of education in primary schools in your district?

2) What policies are currently in place in your District to address the issue of quality of education in primary schools?

- **In your opinion, to what extent are these policies adequate to ensure quality education?**
- Do you think there is need to do more?

3) **How does this District Office evaluate the quality of education in schools?**

- Do you have a specific evaluation tool or checklist which you use to evaluate the quality of education?

4) **What is your experience of evaluating the quality of education in schools in the District?**

- What kind of challenges do you encounter in evaluating the quality of education in the District?

5) **What do you think is important when evaluating schools and classrooms for quality?**

- Which aspects of quality should be focused on when evaluating schools and classrooms for quality?

6) **What do you think would assist you to evaluate the quality of education in schools in the District most effectively?**

- Could this assistance be in the form of a standardised framework?

7) **What do you think about the idea of having a standardised framework to monitor the quality of education in schools?**

- How do you view a standardised framework in terms of its contribution to the improvement of the quality of education in schools in general and particularly the quality of educational provision in classrooms?

APPENDIX 6: INTERVIEW SCHEDULES FOR SCHOOL HEADS

1) **What can you say about the current quality of education offered in this school at present?**

- How do you currently find out about the quality of education in classrooms in your school?

2) **What policies are currently in place in your school to address the quality of education in classrooms?**

- Do you think there is need to more?

3) **What does this School Office use to evaluate the quality of education in classrooms?**

- Do you have a specific evaluation tool or checklist which you use to evaluate the quality of education?

4) **What is the role of a school head in evaluating classrooms for quality?**

- Tell me how you go about evaluating classrooms for quality.

5) **What is your experience of evaluating the quality of education in classrooms in the school?**

- What kind of challenges do you encounter in evaluating the quality of education in the classrooms?

6) **What do you think is important when evaluating schools and classrooms for quality?**

- Which aspects of quality should be focused on when evaluating schools and classrooms for quality?

7) **What do you think would assist you to evaluate the quality of education in classrooms in the school most effectively?**

- Could this assistance be in the form of a standardised framework?
- Do you think there is need for training for school heads on how to evaluate classrooms for quality?
- Do you think teachers should also be trained on how to evaluate classrooms for quality?

8) **What do you think about the idea of having a standardised framework to monitor the quality of education in the classrooms?**

- How do you view a standardised framework in terms of its contribution to the improvement of the quality of education in schools in general and particularly the quality of educational provision in classrooms?

APPENDIX 7: INTERVIEW SCHEDULE FOR TEACHERS

1) **What can you say about the current quality of education offered in your classroom at present?**

- How do you currently find out about the quality of education in your classroom?

2) **What policies are currently in place in your classroom to address the quality of education?**

- Do you think there is need to do more?

3) **What does your school use to evaluate the quality of educational provision in classrooms?**

- Is there a specific evaluation tool or checklist which is used to evaluate the quality of education in classrooms?

4) **What is your experience of the evaluation of the quality of education in classrooms in the school?**

- Are you sometimes involved in the evaluation of the quality of educational provision in classrooms?
- What kinds of challenges are encountered in evaluating the quality of education in classrooms in the school?

5) **What do you think is important when evaluating schools and classrooms for quality?**

- Which aspects of quality should be focused on when evaluating schools and classrooms for quality?

6) **How do you feel when evaluation is conducted in your classroom by people from outside, the school head or deputy school head?**

7) **What assistance would benefit teachers to ensure quality of education?**

8) **What do you think would assist in the evaluation of the quality of education in school in general and classroom quality in particular most effectively?**

- Could this assistance be in the form of a standardised framework?

9) **What do you think about the idea of having a standardised framework to monitor the quality of education in schools and classrooms?**

- How do you view a standardised framework in terms of its contribution to the improvement of the quality of education in schools in general and particularly the quality of educational provision in classrooms?

APPENDIX 8: INTERVIEW SCHEDULE FOR PARENTS

1) **What do you understand by quality of education?**
2) **What can you say about the current quality of education offered in schools at present?**

- How do you currently get to know about the quality of education in schools?

3) **Do you think schools are doing their work properly in educating your children?**

- What makes you think so?

4) **Are you satisfied with the quality of education that your children receive in schools?**

- What makes you satisfied or not about the quality of education that your children get from schools?

5) **What do you think is important when evaluating schools and classrooms for quality?**

- Which aspects of quality should be focused on when evaluating schools and classrooms for quality?

6) **What do you think should be the role of the District and Province in ensuring quality of education in schools?**
7) **How can education be improved?**

APPENDIX 25: CERTIFICATE OF LANGUAGE EDITING

EDITOR DECLARATION

I, Dr Bevelyn Dube, of the Communication and Applied language Studies Department at the University of Venda declare that I edited and proofread the Doctor of Education thesis *"The development of a school self-evaluation framework for classroom quality in Zimbabwean primary schools"* written by Garira, E.

22/08/2014

Dr BEVELYN DUBE: BA, Grad CE, BA Hons (English), MA (English) University of Zimbabwe, DPhil (SU)
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