The Quality Education Question in Satellite Schools of Zimbabwe

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DEDICATION

I dedicate this book to advocates of quality education in small rural schools.

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I wish to express my sincere gratitude and appreciation to the editors and publishers of this book.

BOOK SYNOPSIS

The Fast-track Land Reform Programme implemented by the Government of Zimbabwe in 2000 resulted in the emergence of unregistered satellite primary schools in former White-owned large-scale commercial farming areas, providing education to the children of the fast-track land reform beneficiaries. While existing research has primarily focused on contextual and resource input factors affecting educational quality in these schools, this book addresses a critical knowledge gap regarding the nature and quality of pedagogical and management processes. Based on a qualitative multiple case study conducted at four satellite primary schools in the Makonde District of Zimbabwe, data were generated from four Teachers in Charge and 16 teachers through in-depth and focus group interviews and analysed thematically. The findings reveal that Teachers in Charge, who head the schools, juggle multiple administrative roles alongside full teaching loads, leaving them with limited time to teach and supervise curriculum implementation effectively. Despite the prevalence of multi-grade classes, neither the Teachers in Charge nor the teachers are trained in multi-grade pedagogy, and they do not receive support from Cluster Heads or School Inspectors, who also lack professional training in this area. This pedagogical disjuncture results from a "multi-grade blind" primary school curriculum and teacher development programs. Due to a lack of government funding, these schools suffer from poor infrastructure, with a severe shortage of classrooms and instructional materials. Some schools have adopted a double-session schooling system to address the lack of teaching space. However, this creates time management challenges that force teachers to prioritise examinable learning areas and content over a holistic curriculum. Large class sizes, high teacher turnover, and infrequent supervision visits by School Inspectors further hinder the quality of education in the schools. The book concludes that a combination of pedagogical and

management deficiencies complicates the provision of quality education in these settings. A concerted effort from stakeholders at all levels is essential to implement comprehensive reforms that support both teachers and learners, ensuring that quality education is accessible to all learners in multi-grade settings. The book offers new insights into the complexities and prospects of achieving quality education in small rural schools in general and satellite primary schools in particular.

Keywords:
Quality education, satellite school, pedagogical process, management process, Teacher inCharge, Multi-grade Teaching.

TABLE OF CONTENTS

ABBREVIATIONS

ARTUZ	Amalgamated Rural Teachers' Union of Zimbabwe
BSPZ	Better Schools Programme Zimbabwe
CBC	Competence-Based Curriculum
CCA	Constant Comparative Analysis
CRC	Cluster Resource Centre
CSA	Closed Systems Approach
DFA	Dakar Framework of Action
DS	Double-sessioning
DSIR	District Schools Inspector's Report
ECD	Early Childhood Development
EFA	Education for All
ESAP	Economic Structural Adjustment Programme
ESR	Effective Schools Research
ETF	Education Transition Fund
FGI	Focus Group Interviews
FTLRP	Fast-track Land Reform Programme
FTLRRAs	Fast-track Land Reform Resettlement Areas
GoR	Government of Rhodesia
GoZ	Government of Zimbabwe

ICT	Information and Communication Technology
ILO	International Labour Organisation
LRRP	Land Reform and Resettlement Programme
LSCFAs	Large Scale Commercial Farming Areas
MGT	Multi-grade Teaching
MoESAC	Ministry of Education, Sports, Arts and Culture
MoPSE	Ministry of Primary and Secondary Education
MSFS	Minimum Schools Functionality Standards

NTSHs	Non-teaching School Heads
OECD	Organisation for Economic Cooperation and Development
OST	Open Systems Theory
PCIET	Presidential Commission of Inquiry into Education and Training
PED	Provincial Education Director
PoZ	Parliament of Zimbabwe
PSC	Public Service Commission
PTUZ	Progressive Teachers' Union of Zimbabwe
SDC	School Development Committee
SDCs	School Development Committees
SDG	Sustainable Development Goal
SEM	School Effectiveness Model
SER	School Effectiveness Research
SIG	School Improvement Grant
SIGs	School Improvement Grants
SIR	School Improvement Research
STEM	Science, Technology, Engineering and Mathematics
TA	Thematic Analysis
TIC	Teacher in Charge

TICs	Teachers in Charge
TQM	Total Quality Management
TRF	Teacher Recruitment Freeze
UNICEF	United Nations Children's Emergency Fund
VPA	Visual and Performing Arts
ZIMSEC	Zimbabwe Schools Examinations Council
ZIMTA	Zimbabwe Teachers' Association

CHAPTER 1 THE EMERGENCE OF THE SATELLITE SCHOOL TYPE

The Government of Zimbabwe (GoZ) implemented the Fast-track Land Reform Programme (FTLRP) in the year 2000 to redress a colonial land ownership pattern in the country that was skewed in favour of Whites (Matondi, 2012; Mutema, 2012). The land ownership pattern reconfigured because of the FTLRP. Over 700 million hectares of land, previously owned by only 4,000 White commercial farmers, were rapidly redistributed to over 300,000 indigenous Zimbabwean households (Moyo, 2011; Mutema, 2012). In a very short period, the former White-dominated Large Scale Commercial Farming Areas (LSCFAs) were transformed into Fast-track Land Reform Resettlement Areas (FTLRRAs) for the fast-track land reform beneficiaries. The resettlement of the land beneficiaries in former White-owned LSCFAs where schools were very few presented the government with an urgent need to establish schools for the children of the land beneficiaries (Chakanyuka, Chung & Stevenson, 2009; Parliament of Zimbabwe [PoZ], 2012; Mutema, 2014). The GoZ implemented the FTLRP when it was reeling from the effects of economic sanctions imposed by Britain and her allies in the year 2000 over the FTLRP, and a decade of economic meltdown that commenced in 2000 (Sadomba, 2011; Zhou & Zvoushe, 2012). Consequently, the government had neither the capacity nor resources to establish conventional schools and other social amenities in FTLRRAs. For expediency and as a stopgap measure, the government allowed the land beneficiaries to convert old farmhouses and tobacco barns into temporary school infrastructure and promised to construct conventional schools within 10 years (Chakanyuka *et al.,* 2009; PoZ, 2012). The unconventional and unregistered schools are officially known as satellite schools in Zimbabwe's education system.

The unplanned and hastily executed FTLRP inadvertently culminated in the mushrooming of satellite schools in Zimbabwe's FTLRLAs.

There are 1,855 satellite schools in Zimbabwe, comprising 839 satellite secondary schools and 1,016 satellite primary schools (Ministry of Primary and Secondary Education [MoPSE], 2017). **Table 1.1** shows the distribution of satellite schools in Zimbabwe by province. In comparative terms, Mashonaland West Province has the highest number of satellite schools in the country at primary and secondary school levels.

Table 1.1: Number of Satellite schools in Zimbabwe by Province (MoPSE, 2017:4)

Province	Primary schools	Secondary schools
Bulawayo	5	4
Harare	4	5
Manicaland	72	134
Mashonaland Central	108	98
Mashonaland East	88	105
Mashonaland West	236	181
Masvingo	173	94
Matebeleland North	132	77
Matebeleland South	67	39
Midlands	131	102
Grand Total	1,016	839

As shown in **Table 1.1**, Mashonaland West Province has 417 satellite schools comprising 236 and 181 primary and secondary schools, respectively. Satellite schools are quite prevalent in this province because it was a predominantly commercial farming area that had the largest number of White-owned large-scale commercial farms before the FTLRP in 2000 (MoPSE, 2015).

Satellite schools do not meet the Minimum Schools Functionality Standards (MSFS), which are prerequisites for registration with the

MoPSE (PoZ, 2012). Consequently, satellite schools are unregistered institutions. The MSFS are the minimum benchmarks expected of each school to provide quality education (Ministry of Education, Sports, Arts and Culture [MoESAC], 2013b). These standards represent the basic quality requirements that a primary or secondary school in Zimbabwe must meet to qualify for registration with the MoPSE.

To qualify for registration, a school must have at least one standard administration block, a standard teacher's house, and a standard classroom block (PoZ, 2012; MoESAC, 2013b). Additional preliminary requirements include a safe source of drinking water within 500 meters of the school campus and adequate ablution facilities for both staff and learners (PoZ, 2012; MoESAC, 2013b). Over 1,800 satellite schools in the country remain unregistered due to their failure to meet these preliminary MSFS. This raises significant concerns about the quality of education provided by satellite schools.

For purposes of paying salaries to teachers, the MoPSE attaches each satellite school to a nearby registered school officially known, as the 'mother school' (PoZ, 2012). The school head of the 'mother school' is the substantive head of the satellite school (Chakanyuka *et al.,* 2009; PoZ, 2012). This effectively makes the satellite school an extension or appendage of the 'mother school' in terms of learner enrolment, staffing, and administration. The MoPSE also appoints a Teacher in Charge (TIC) to head each satellite school (PoZ, 2012; Mangwaya, Jeko & Manyumwa, 2013). The term TIC refers to a teaching head of a satellite school in Zimbabwe's education system.

Although satellite schools were established as a stopgap measure to allow the government to establish conventional schools (Chakanyuka *et al.,* 2009; PoZ, 2012), they are still operational two decades after the commencement of the FTLRP in 2000. Thousands of learners in FTLRRAs experience their whole school careers under unconventional

teaching and learning conditions in satellite schools (Chakanyuka *et al.,* 2009; PoZ, 2012). Several researchers raised concerns about the quality of education in satellite schools. Studies by Chakanyuka *et al.* (2009), Hlupo and Tsikira (2012), PoZ (2012), Jenjekwa (2013), Mangwanya *et al.* (2012), Mavhunga and Mazodze (2014), and Tarisayi (2015). consistently indicate that the satellite school type provides the lowest quality of education in Zimbabwe. The studies attribute the poor quality of education in satellite schools to poor infrastructure, inadequate instructional resources, long distance to school, negative parental attitudes towards education, and poor living conditions for teachers. Learners in satellite schools, like all other learners in the country, have constitutional and inalienable rights to quality education.

Quality education is a multi-dimensional phenomenon comprising the context, inputs, transformation process, and outputs dimensions (Tikly, 2011; Lunenburg & Ornstein, 2012). A close analysis of the existing studies of satellite schools reveals that they focused on the impact of context and resource input factors on the provision of quality education in the schools. This has created a knowledge gap on the nature and quality of the transformation processes in satellite schools. The transformation process dimension of quality education comprises the teaching, learning, and management processes (Ballantine & Hammack, 2012; Lunenburg & Ornstein, 2012).

The scholarly silence on the nature and quality of pedagogical and management processes in satellite schools is continuing in recent studies. A qualitative study by Sithole (2017) explored factors affecting the motivation of teachers in satellite schools. The study focused on factors in the context and input dimensions of quality education. Tarisayi (2017) conducted a qualitative study on how fast-track land reform beneficiaries utilise social capital to construct teaching and learning infrastructure in satellite schools. A multiple case study by

Tarisayi and Manbibi (2017) analysed the relations between satellite schools and their 'mother schools'. Mwiinde and Muzingili (2020) carried out a qualitative study of satellite schools in the Binga District of Zimbabwe. The authors found that the poor quality of education in the schools is a consequence of dilapidated infrastructure, lack of funding from parents and the government, and the long distance that learners walk to school. These complexities to the provision of quality education fall under the context and inputs dimensions of quality education. There is a knowledge gap regarding the prospects and complexities of quality education in satellite primary schools, particularly in the context of pedagogical and management processes. The knowledge gap is addressed in this book.

The thesis on which this book is based sought to address the following main research question: How can the prospects and complexities of quality education in satellite primary schools be adapted to enhance the provision of quality education? The main research question was sub-divided into the following sub-questions that were also used as interviewing questions:

1. What is the nature and quality of pedagogical processes in satellite primary schools in the provision of quality education?
2. How is the nature and quality of management processes in satellite primary schools implemented during the provision of quality education?
3. How are the prospects and complexities of quality primary education in satellite schools currently managed?
4. How can quality education be improved in satellite primary schools?

Definition of Terms:

Quality education: Cheng (2003) defines quality education as the character of the set of elements in the context, inputs, transformation process, and outputs of the education system that provides services that completely satisfy both internal and external strategic

stakeholders by meeting their expectations. In the context of this book, the term quality education refers to a relevant and holistic education that equips learners with both cognitive and non-cognitive skills to enable them to function effectively and productively in their society.

Fast-track Land Reform Programme (FTLRP): It entails the unplanned, rapid, and phenomenal distribution of White-owned farms to landless indigenous Zimbabweans that started in the year 2000 (Matondi, 2012; Mutema, 2012).

Fast-track Land Reform Resettlement Areas (FTLRRAs): These are the former White-owned commercial farming areas that were allocated to landless indigenous Zimbabweans following the FTLRP that commenced in the year 2000 (Moyo, 2011; Mutema, 2012).

Satellite school: An unregistered school type established in FTLRLAs following the FTLRP in 2000 to provide education to the children of fast-track land reform beneficiaries (Munjanganja & Machawira, 2014; Tarisayi & Manik, 2017).

Small rural school: A rural school headed by a teaching head, characterised by an enrolment below the national average and few teachers (Ngcobo, 2016).

'Mother school': A registered primary school to which a satellite school is attached for management and administrative support (PoZ, 2012; Munjanganja & Machawira, 2014).

Teacher in Charge (TIC): A term used to refer to the teaching head of a satellite school in Zimbabwe (Chakanyuka *et al.,* 2009; PoZ, 2012).

Multi-grade class: It occurs when one teacher is responsible for teaching learners belonging to at least two different grade levels in a single classroom (Joubert, 2010; Taole, 2017).

Multi-grade Teaching (MGT): The teaching of learners of different grade levels by one teacher at the same time in a single classroom (Pridmore, 2007; Joubert, 2010).

Pedagogical processes: Teaching and learning techniques, approaches, methods, and strategies (Ballantine & Hammack, 2012).

Management processes: They involve planning, organising, controlling, leading, supervising, and supporting school activities to accomplish set goals (Lunenburg & Ornstein, 2012; Hoy & Miskel, 2013).

Double-Sessioning (DS): A school practices DS if it caters to two separate groups of learners during the school day using the same buildings, equipment, and other facilities (Bray, 2008).

The book comprises six chapters, organised as follows: Chapter 1 articulates the research problem and outlines its context. It also presents the main research questions and sub-questions, definitions of terms, and the demarcation of the chapters.

Chapter 2 is the first of the two literature review chapters of this book. This chapter reviews the literature on the conceptual and theoretical framework of quality education. It covers the following issues: The elusive concept of quality education; Models of quality education; School effectiveness research; Theoretical framework; and Rationale for quality education.

Chapter 3 is the second and final literature review chapter. It examines the literature on quality education in small rural primary schools, offering historical and contextual background to the quality education question in satellite primary schools. Additionally, the chapter reviews the quality education initiatives implemented by the Government of Zimbabwe to enhance primary and secondary education in the country.

Chapter 4 describes and justifies the interpretive-qualitative research methodology that was adopted to generate data for this book. It covers

the following methodological issues: Research paradigm; Research approach; Research design; Population and sampling procedures; Data generation; Data analysis; Trustworthiness; and Ethical issues.

Chapter 5 presents an analysis and discussion of the findings on which the book is based. The findings are presented, analysed and discussed in the context of sub-questions, the reviewed literature, and the theoretical framework.

Chapter 6 gives a summary of the findings, conclusions, and recommendations. The chapter also discusses areas for further research.

This chapter articulated the quality education question in satellite primary schools and its background. It established that existing studies explored the quality of education in satellite schools in terms of contextual and input factors. There is a knowledge gap on the nature and quality of pedagogical and management processes in satellite primary schools that the book fills. These processes fall under the transformation process dimension of quality education. The chapter also presented the main research question, sub-questions, definitions of terms, and demarcation of chapters. The next chapter reviews the literature on the conceptual and theoretical framework of quality education.

CHAPTER 2 CONCEPTUAL AND THEORETICAL FRAMEWORK OF QUALITY EDUCATION

Chapter 1 presented the quality education question in satellite primary schools and its context. This chapter reviews quality education literature. It commences by conceptualising quality education. However, there is no coherence in the way quality education is conceptualised because it is a multi-faceted and contested concept (Tikly, 2011; Tawil *et al.,* 2012). The purpose of this chapter is not to propose a standard definition or model of quality education, but to review and clarify an array of existing quality education definitions. Clarifying what quality education entails provides insights into quality education's context, inputs, transformation process, and outputs dimensions. The chapter also reviews the literature on models of quality education and school effectiveness. Based on the nature of the literature and research problem, the book adopted the OST as its theoretical lens. The chapter ends by discussing the rationale for quality education.

Quality education is a multi-dimensional, relative, elusive, and dynamic concept that is difficult to define universally (Tikly, 2011; Tawil *et al.,* 2012; Sanyal, 2013). There is no standard definition of quality education in quality assurance literature. Even if quality equality education it is elusive concept, there is often agreement globally that it is a central goal of education (UNESCO, 2004; UNESCO, 2015; MoPSE, 2015). An understanding of the concept of quality education is indispensable for the effective analysis of the nature and quality of pedagogical and management processes in satellite primary schools.

Several scholars have attempted to define the concept of quality education. The United Nations Children's Emergency Fund (UNICEF) (2012) defines quality education from a human rights-based perspective as education that works for every child and enables all

learners to achieve their full potential. However, this definition does not specify the dimensions of quality education, making it less useful for assessing the nature and quality of pedagogical and management processes in satellite primary schools.

Cheng (2003) defines quality education as the characteristics of the elements within the context, inputs, transformation process, and outputs of the education system that deliver services satisfying the expectations of both internal and external strategic stakeholders. This definition identifies four dimensions of quality education: context, inputs, transformation process, and outputs. Cheng's definition also links quality education to the concept of fitness for purpose, which involves meeting the expectations of strategic stakeholders such as policymakers, parents, learners, and teachers. This perspective aligns with Nsubuga's (2011) condition that local stakeholders should have a voice and participate in defining quality education. A major limitation of this definition is that the expectations of strategic stakeholders are often relative, making them difficult to meet.

To Sayed and Ahmed (2011), quality education encompasses the interaction between what learners bring to school which is the learner characteristics; what happens in the learning space such as school or classroom setting also called enabling inputs; what happens to individuals because of education or outcomes; and the context within which the activity takes place. It is a broader definition that captures most of the dimensions of quality education. Tikly and Barret (2011) argue that the definition is limited because it does not emphasise the non-quantifiable indicators of quality education such as inclusivity, equity, relevance, attitudes, and skills. Definitions that ignore the non-quantifiable aspects of quality education are narrow in scope (Tilky, 2010; Tikly & Barret, 2011). They do not provide a comprehensive conceptual framework for analysing the quality of education in satellite schools.

There is growing support for the conceptualisations of quality education that incorporate the qualitative goals of education (Tikly & Barret, 2011; UNESCO, 2010). In line with this view, Tikly (2010) says good quality education enables learners to realise the capabilities they require to become economically productive, develop sustainable livelihoods, contribute to peaceful and democratic societies, and enhance well-being. The learning outcomes at the end of the basic education cycle include threshold levels of literacy and numeracy skills and awareness and prevention of disease. Good quality education must also be inclusive, relevant, and democratic (Tikly, 2010; Tikly & Barret, 2011). This definition reflects both the quantitative and qualitative dimensions of quality education. Therefore, it is comprehensive. Definitions that attend to both the quantitative and qualitative dimensions of quality education enable us to have a holistic understanding of the prospects and complexities of quality education in satellite primary schools.

The notion that an education system is of good quality if it meets the socio-economic needs of society in the 21st century is rising in the quality education discourse. Expressing this view, Ng (2015) says quality education emphasises holistic development and equips learners with knowledge and skills for the future. In other words, quality education entails the relevance of content to the present and future needs of society. An education system is of good quality if it is responsive to society's current and future socio-economic needs.

A close analysis of the definitions reviewed in the preceding paragraphs reveals that quality education is indeed a multi-faceted concept that is conceptualised differently by different scholars. Regardless of the lack of consensus on a standard and universal definition of quality education, the UNESCO EFA Global Monitoring Report (GMR) 2005 identifies two basic principles that underpin all the conceptualisations of quality education. The first principle emphasises

the cognitive development of learners with high scores in national examinations as the primary indicator of high quality of education (UNESCO, 2004). Quality education scholars have criticised the efficacy of test scores as the sole indicator of quality education. The focus on examination scores is detrimental to the quality of the pedagogical process as teachers tend to resort to rote pedagogy or transmissive approaches to prepare learners for examinations (Sifuna & Sawamura, 2010). Rote pedagogy is a barrier to quality education because learners may fail to apply memorised facts to solve real-life problems in their communities and society.

The second principle relates to education's role in developing learners' values and attitudes, nurturing their creative skills and emotional development, and promoting inclusivity, equity, democracy, human rights, peace, and security (UNESCO, 2004; Tikly & Barret, 2010). These qualitative indicators are not only difficult to measure, but also open to different interpretations in different contexts (UNESCO, 2004; UNESCO, 2010; Tikly, 2011). By implication, we can only develop a comprehensive understanding of quality education if we conceptualise it regarding both its quantifiable and non-quantifiable dimensions.

The relevance of education to the socio-economic developmental needs of society in the new millennium characterised by globalisation and Information and Communication Technology (ICT) is becoming central to the understanding of quality education in virtually all contemporary societies (Ng, 2015). In this regard, the third principle of quality education is at this moment proposed. An education system is of good quality if it adequately equips learners with the requisite knowledge, skills, and values to become productive and acceptable members of their society in the new millennium. Therefore, in the context of this book, quality education is conceptualised as a relevant and holistic education that equips learners with both cognitive and non-cognitive skills to function effectively and productively in their society.

To understand the complex nature of quality education and develop strategies for evaluating and improving it, it is essential to review different models of quality education. These models articulate the dimensions and determinants of quality education and provide insights on improving educational quality in school organisations, including satellite primary schools.

The Goal Model, rooted in the school effectiveness paradigm from the 1960s, asserts that school organisations have specific, enduring, and normative goals to achieve (Cheng & Tam, 1997; Cheng, 2003), with the provision of quality education being a primary objective. A school is considered to deliver quality education if it meets or exceeds its stated goals using available resources; conversely, failure to achieve these goals may indicate poor educational quality. This model is effective for assessing quality education when organisational goals are clear and accepted by all stakeholders, suggesting that a lack of quality may arise if goals are shaped solely by powerful stakeholders rather than the broader community. Although organisational goals can vary, schools often prioritise academic achievement in public examinations as the sole indicator of quality (Cheng, 2003). Consequently, the Goal Model falls short of providing a comprehensive assessment of quality education, particularly neglecting the process dimension, which has been overlooked in studies of satellite primary schools in Zimbabwe.

The Resource Inputs Model, which emerged from the school effectiveness movement in the 1960s, asserts that quality resource inputs are fundamental determinants of quality education (Adams, 1993; Cheng & Tam, 1997; Cheng, 2003), with indicators such as high-quality student intake, qualified staff, superior facilities, low teacher-student ratios, competitive salaries, and substantial financial support. In this framework, quality education is seen as a natural outcome of these high-quality inputs. However, the model tends to focus excessively on inputs while neglecting the transformation process and contextual factors that influence educational quality. Studies of satellite

primary schools have similarly prioritised contextual and resource input factors. To achieve quality education, dynamic interaction among resource inputs, transformation processes, and contextual factors is crucial (Fuller, 1986). Thus, while resource inputs are necessary, they are insufficient for improving quality education.

Emerging in the 1980s, the Process Model emphasises that quality education cannot be defined solely by inputs and outputs; it focuses on the transformation processes within educational institutions (Riddell, 2008). These processes encompass management, teaching, and learning. The UNESCO Global Monitoring Report 2005 corroborates the significance of classroom dynamics and teaching methods in enhancing learning outcomes and overall quality (UNESCO, 2004). Echoing this perspective, Cheng (2003) asserts that a high-quality educational institution is characterised by effective internal functioning. The model emphasises that management, teaching, and learning are central to determining educational quality. However, the quality of transformation processes in satellite primary schools remains under-researched, highlighting the need for a more thorough examination of how pedagogical and management practices influence educational outcomes.

The Outputs Model, rooted in the school efficiency movement of the 1970s, measures quality education based on the outcomes achieved (Scheerens, Luyten & Ravens, 2011). Key quality indicators include learner achievement, completion rates, and transition rates (Cheng, 2003; Scheerens *et al.,* 2011). Proponents argue that measuring educational outputs is the primary method for assessing quality. However, this model's exclusive focus on cognitive outputs overlooks the social and affective dimensions of education (Creemers & Reynolds, 1996; Scheerens *et al.,* 2011). Relying solely on outputs for quality assessment is not holistic. A comprehensive understanding of educational quality must also consider context, inputs, and processes.

The Value Addition Model, emerging from the transformative school movement of the 1990s, interprets quality as a measure of change (Cheng, 2003; Stephens, 2003). This change is assessed by examining how the school system impacts learners, specifically focusing on the skills, knowledge, and attitudes that enable them to become productive members of society (Reddy, 2007). The model suggests that higher-quality education fosters valuable attributes in learners. However, it has been criticised for its narrow focus on change, neglecting the inputs, processes, and contextual factors that influence the change (Adams, 1993). Additionally, the challenges of assessing value addition both qualitatively and quantitatively limit the model's effectiveness in understanding the quality of pedagogical and management processes in satellite primary schools.

The Absence of Problems Model posits that the non-existence of internal and external challenges signifies high-quality education (Cheng, 2003). In this view, a lack of defects or deficiencies within a school organisation correlates with quality education, with some scholars referring to this as the "zero defects" approach. The model implies that the presence of problems indicates low educational quality. However, the relative nature of problem absence makes this model an unreliable tool for assessing the quality of pedagogical and management processes in satellite primary schools.

The Satisfaction Model asserts that a school provides high-quality education if it meets the needs of its stakeholders, including administrators, teachers, parents, learners, and education authorities (Cheng, 2003). Quality is considered high when outcomes align with stakeholder expectations and low when they do not (Cheng & Tam, 1997; Cheng, 2003). This model closely relates to Adams' (1993) notion of quality as reputation. However, stakeholder satisfaction is often subjective and difficult to quantify, as what satisfies one stakeholder

may not satisfy another. This variability limits the model's effectiveness in evaluating the transformation processes of satellite primary schools.

The Equity Model, gaining traction in educational literature, emphasises that personal or social circumstances should not obstruct access to education (OECD, 2012). In this framework, equality of opportunity serves as the primary indicator of quality education. The model underscores that quality depends on the fair distribution of resources and educational processes among learners with diverse needs (OECD, 2012). Schools that fail to address these diverse needs are considered low quality (Leu & Price-Rom, 2006; OECD, 2012). This model is particularly relevant in developing countries like Zimbabwe, which has adopted Inclusive Education policies in all schools, including satellite primary schools.

The Organisational Learning Model posits that internal processes and environmental factors influence the provision of quality education (Cheng & Tam, 1997; Cheng, 2003). This model advocates organisational learning as a means to address the internal and external challenges that hinder educational quality. It considers both internal and external factors to enhance educational provision. Existing literature has documented the impact of resource input and environmental factors on quality education in satellite primary schools (Mavhunga & Mazodze, 2014; Tarisayi, 2015), highlighting the need to explore internal processes to improve the quality of educational provision.

The Legitimacy Model recognises the increasing parental choice of educational institutions, creating a competitive market environment (Cheng & Tam, 1997; Cheng, 2003). Schools compete for clients by offering quality education to survive in this landscape, with

institutions attracting more clients often perceived as high quality. However, Fuller (1986) argues that legitimacy is frequently judged solely by academic achievement, neglecting other dimensions of quality. Consequently, the Legitimacy Model may not provide a comprehensive analysis of educational quality in satellite primary schools.

The Relevance of Education Model is gaining traction in the quality education discourse. Cheng (2003) argues that even if stakeholders are satisfied with the quality of education, it is deemed "useless" and of poor quality if its aims, content, practices, and outcomes do not align with current and future local needs. Quality education extends beyond the satisfaction of strategic stakeholders and the provision of resource inputs; it must also be relevant to local contexts (Tawil *et al.,* 2010; Tikly & Barrett, 2011). In other words, education is considered of good quality if it is pertinent to the learner's social, cultural, political, and economic environment. In line with this perspective, Zimbabwe replaced the bookish and Eurocentric curriculum inherited from its former coloniser with a Competence-Based Curriculum in 2015 (MoPSE, 2017). The nature and quality of pedagogical and management processes in satellite primary schools were explored through the lens of the Competence-Based Curriculum.

The Total Quality Management (TQM) Model conceptualises quality education as education that completely satisfies strategic constituencies in terms of context, inputs, process, and output variables (Cheng, 2003). The model underscores the need for the management of context, inputs, processes, and outputs to obtain a holistic understanding of quality education in school organisations. It shifts attention away from the quality of the context, inputs or outputs to all the dimensions of quality education (Hoy & Miskel, 2013; Hoy, 2019). Like the Organisational Learning Model reviewed above, the

TQM Model looks at the internal and external quality education aspects of the school organisation. Therefore, the model provides a holistic picture of quality education in school organisations. Research studies on satellite schools in Zimbabwe (PoZ, 2012; Mavhunga & Mazodze, 2014; Tarisayi, 2015; Sithole, 2017; Mwiinde & Muzingili, 2020) generally ignored the process dimension. This is why the book focused on the nature and quality of pedagogical and management processes in satellite primary schools.

The quest to establish factors that enhance the provision of quality education in school organisations led to the development of a large body of literature referred to as School Effectiveness Research (SER). School effectiveness is conceptualised by Cheng (1996 in Botha, 2010) as the extent to which a school adapts to its internal and external constraints and achieves its set goals. According to Botha (2010), school effectiveness entails the state in which the school functions and effectively attains its goals. The main goal of SER is to identify the characteristics of effective schools and recommend them for the improvement of quality education. There are three strands of SER: School Effects Research; Effective School Research (ESR); and School Improvement Research (SIR). This section also reviews Heneveld and Craig's (1996) School Effectiveness Model (SEM). The literature provides hints on how to improve the quality of education in satellite primary schools.

School Effects Research emerged in the mid-1960s as a reaction to the Coleman Report (1996) and the Plowden Report (1967) that concluded that schools had little effect on learners' outcomes in comparison to their ability and socio-economic backgrounds (Reynolds, Sammons, De Fraine, Townsend & Van Damme, 2011). School Effects Research seeks to establish the school-based factors that influence learner outcomes. Proponents of School Effects Research adopt the input-output model

and focus on the impact of resource inputs on learner outcomes (Teddlie & Reynolds, 2000). Fuller and Heyneman (1989) conducted School Effects Research and identified the following resource input factors that affect learner outcomes: the length of the instructional programme; expenditure per pupil; the availability of textbooks and instructional materials; school library activity; teacher training; and pupil feeding programmes. School Effects Research studies conclude that resource inputs are the primary determinant of quality education (Fuller & Heyneman, 1989; Riddell, 2008; Reynolds *et al*., 2011).There is a close relationship between School Effects Research and the Resource Inputs Model. Like the Resource Inputs Model, School Effects Research has been criticised for exclusively focusing on the impact of resource inputs on learning outcomes at the expense of context and process factors. Resource inputs are not the sole determinant of learner outcomes, context and transformation process factors also influence learner outcomes (Teddlie & Reynolds, 2000; Stephens, 2003; Reynolds *et al.,* 2011). In essence, the context, inputs, and transformation process of a school system interact in influencing learner outcomes.

In line with School Effects Research, existing studies on satellite schools in Zimbabwe (PoZ, 2012; Jenjekwa, 2013; Mangwaya et al., 2013; Mavhunga & Mazodze, 2014; Mwiinde & Muzingili, 2020) focused on the contextual and resource input dimensions of quality education. This has created a knowledge gap on the nature and quality of transformation processes in satellite primary schools.

The Effective Schools Research (ESR) emerged in school effectiveness literature in the early 1970s as a reaction to Schools Effects Research. The ESR moved away from the input-output model and instead focused on the process variables that influence learner outcomes (Riddell, 2008). This model of school effectiveness attempts to understand quality education in terms of educational processes at both

school and classroom levels (Stephens, 2003; Riddell, 2008). It rejects the narrow focus on school inputs and outputs and a lack of attention to school and classroom processes associated with School Effects Research. The ESR puts pedagogical and school management processes at the centre of the quality education discourse (Riddell, 2008; Botha, 2010). It concurs with the Process Model that the transformation process of a school organisation is the primary determinant of quality education. More so, the ESR expanded the definition of outputs to include social and affective outcomes (Teddlie & Reynolds, 2000). The ESR and the Process Models have been criticised for ignoring the context and input dimensions of quality education. The impact of context and input variables on the provision of quality education in satellite primary schools is well documented in Zimbabwe (Chakanyuka *et al.*, 2009; Hlupo & Tsikira, 2012; PoZ, 2012; Jenjekwa, 2013; Mangwaya *et al.*, 2013; Mavhunga & Mazodze, 2014; Tarisayi, 2015). What is missing is the nature and quality of the pedagogical and management processes of the satellite primary school during the provision of quality education.

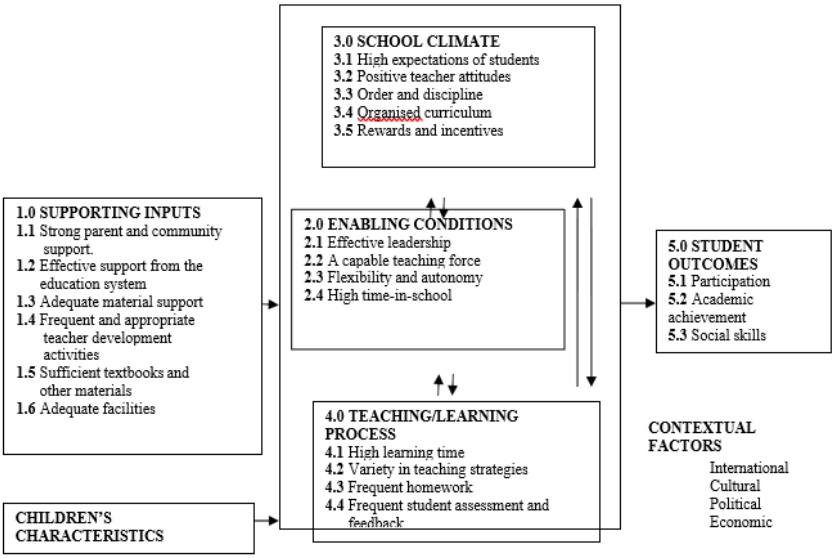
The SIR Model emerged in the quality education discourse in the late 1980s. School improvement refers to the systematic and sustained effort aimed at changing learning conditions in schools to enhance learner outcomes (van Velzen, 1985, cited in Stephens, 2003). Proponents of the SIR, such as Edmonds (1979), are not merely interested in identifying and describing the characteristics of effective schools; they aim to create effective schools (Teddlie & Reynolds, 2000). The focus of SIR is to improve the quality of education in school organisations. This strand of school effectiveness research is relevant to this study as it provides insights into strategies that education stakeholders can adopt to enhance the quality of education in satellite primary schools.

Proponents of the SIR model emphasise that a complex web of factors influences learner outcomes and quality education. These factors are rooted in the context, inputs, and process dimensions of quality education (Riddell, 2008). Achieving quality education in school organisations requires the unrestricted interaction of context, resource inputs, and process factors (Fuller, 1986). The SIR model aligns with the TQM and Organisational Learning Model in advocating a holistic approach to providing quality education in school organisations. However, this book focused on the nature and quality of pedagogical and management processes, addressing a knowledge gap in the discourse on quality education in satellite primary schools.

Teddlie and Reynolds (2000) observe that school improvement is unique to each school since each school's context is unique. Hence, there is a need to involve local stakeholders in designing school improvement programmes because externally imposed school improvement programmes may fail to meet local requirements. Following the counsel of Teddlie and Reynolds (2000), strategies for improving the quality of education in satellite primary schools were generated from the perspectives of the teachers and TICs who are local stakeholders.

Heneveld and Craig (1996) synthesised research findings from School Effects Research, Effective Schools Research, and School Improvement Research into one School Effectiveness Model (SEM). As depicted in **Figure 2.2**, the SEM comprises an interrelated network of four broad factors that influence school effectiveness and learner outcomes. The factors are supporting inputs from outside the school, enabling conditions, school climate, and the teaching and learning process. The SEM monitors and assesses both the qualitative and quantitative indicators of school effectiveness and learner outcomes.

Figure 2.1: School Effectiveness Model



Source: Heneveld and Craig (1996:20)

Supporting inputs are the first set of factors in the model. According to Heneveld and Craig (1996), supporting inputs that are vital for the provision of quality education include strong parental and community support, effective support from the government or responsible authority, and adequate facilities. The other supporting inputs are appropriate teacher development programmes and sufficient curriculum materials. Cheng and Tam (1997) corroborate that the availability of resource inputs is indispensable for the provision of quality education. Thus, the inadequacy of supporting inputs can be a barrier to school effectiveness and the provision of quality education. There is a close relationship between the variables of the dimension of the supporting inputs and those of the Resource Inputs Model.

Enabling conditions for school effectiveness are the second set of factors in the model. According to Heneveld and Craig (1996), enabling

conditions include effective school leadership, a capable teaching force, flexibility and autonomy, and adequacy of time spent in school. Effective school leadership entails adequate support to teachers in terms of curricula materials and infrastructure, the pursuit of high instructional standards, and regular horizontal and vertical communication (Heneveld & Craig, 1996). The variables of a capable teaching workforce include content mastery, teaching experience, and the extent to which the teaching staff is full-time (Heneveld & Craig, 1996). The model emphasises high time in school as a prerequisite for quality education and learner achievement. A study conducted by Abadzi (2009) in Mali, Honduras, Nigeria, Zambia, and the Middle East corroborates and elaborates that limited instructional time because of Double-Sessioning, teacher absenteeism, and learner absenteeism impacts negatively on learner outcomes. The implication is that enabling conditions are critical for school effectiveness and the provision of quality education.

The third set of school effectiveness factors is referred to as school climate. The elements of school climate include positive teacher attitudes and expectations, order and discipline, an organised curriculum, and a system of rewards and incentives (Heneveld & Craig, 1996). The nature of the school climate has a bearing on the provision of quality education. For instance, negative teacher attitudes and expectations can negatively affect the behaviour and achievement of learners. A system of rewards and incentives for teachers is very important in the context of Africa, where the living and working conditions of teachers remain largely unsatisfactory (Chinapah et al., 2013; International Labour Organisation [ILO], 2016). Such living and working conditions can create a school climate that is not conducive to school effectiveness and the provision of quality education. Overall, a positive school climate enhances the provision of quality education.

The teaching and learning process is the fourth factor of the SEM that determines school effectiveness. The variables of the teaching and learning process include high student learning time, learner-centred teaching methods, frequent homework, and continual student assessment and feedback (Heneveld & Craig, 1996). Other quality assurance scholars (Cheng & Tam, 1997; Cheng, 2003; Alexander, 2008) corroborate the positive relationship between a healthy teaching and learning process and quality education. The teaching and learning process variables are quite useful in exploring the nature and quality of the pedagogical processes in satellite schools.

The final factor that influences school effectiveness is the external environment of the school organisation. Heneveld and Craig (1996) state that, the four factors that determine school effectiveness are embedded in a cultural, political, and economic context. The authors underscore that the school interacts with its environment in providing quality education. Lotz-Sisitka (2013) and Tikly (2011) acknowledge the role of the external environment in enabling or constraining the provision of quality education. The four factors identified by Heneveld and Craig (1996) provide a holistic picture of the determinants of school effectiveness and quality education.

Despite its comprehensiveness, the SEM has received criticism. Reddy (2007) and Mbayo (2011) agree that the model has limitations for application in developing countries, as most of its supporting evidence was drawn from developed nations. In short, the model is not rooted in the African context. In response to this criticism, Heneveld and Craig (1996) revised the model by incorporating research findings from African countries such as Tanzania, Uganda, Mozambique, and Madagascar. They emphasise that "strategies for improving the quality of primary education need to recognise the potential understanding and insight that come from local experience" (Heneveld & Craig, 1996:10). Guided by this advice, data for the book were generated from

TICs and teachers with local experience regarding the nature and quality of pedagogical and management processes in satellite primary schools.

The literature reviewed in the preceding sections identifies the context, inputs, process, and output dimensions of quality education. Guided by the reviewed literature and the research problem, the Open Systems Theory (OST) was adopted as the theoretical framework of the book. Among other dimensions of quality education, the OST articulates the transformation process dimension that existing studies of satellite schools ignore.

Ludwig von Bertalanffy, an Austrian Biologist developed the OST (Owens & Valesky, 2011; Ballantine & Hammack, 2012; Hoy & Miskel, 2013). The theory originated in the Natural Sciences in the 1950s and subsequently spread to the Social Sciences in the 1960s (Koskinen, 2013). It was further developed by Boulding (1956); Katz and Khan (1966); Buckley (1967); Litterer (1969); and Kast and Rosenzweig (1972) among other scholars (Scott & Davis, 2007; Ballantine & Hammack, 2012; Hoy & Miskel, 2013). The philosophy of Holism associated with the German philosopher Hegel informs the OST. Holism entails that a social system is made up of integrated and interdependent parts that, when put together, make the behaviour of the organisation different and distinct from the behaviour of its components (Mele, Pels & Polese, 2010). The crux of Holism is that the whole is greater than the sum of its parts. In tandem with the philosophy of Holism, the OST studies the school organisation taking into consideration the interrelationships among its sub-systems in the provision of quality education.

The OST developed in reaction to the rational and natural systems theories that employ a Closed Systems Approach (CSA) to the study of

organisations (Scott & Davis, 2007; Hoy & Miskel, 2013). Exponents of the CSA perceive organisations as self-contained entities that are not interactive with their external environments (Lunenburg & Ornstein, 2012; Hoy & Miskel, 2013). They focus on the internal functioning of organisations with no attention to the influence of external environmental factors. Expressed differently, proponents of the CSA assume that organisational behaviour can be isolated from external environmental forces. The major limitation of the CSA is that it fails to consider how organisations are dependent on their external environments for survival (Lunenburg & Ornstein, 2012; Hoy & Miskel, 2013; Hoy, 2019). The OST argues that there is a symbiotic relationship between the school organisation and its external environment. School organisations import resource inputs from their external environments for their survival and the provision of quality education (Ballantine & Hammack, 2012; Hoy & Miskel, 2013). The Resource Inputs Model reviewed earlier corroborates that quality education is the product of high-quality resource inputs the school imports from its environment. Therefore, the context and resource inputs are critical determinants of quality education.

The interdependence of the organisation and its environment receives primary attention in the OST. Rather than overlooking the environment as closed systems theories do, "the open systems perspective stresses the reciprocal ties that bind and interrelate the organisation with those elements and flows that surround and penetrate it" (Scott, 1987:9 as cited in Hoy & Miskel, 2013:22-3). Katz and Khan (1978) acknowledge the primacy of the external environment in the OST. The authors argue that open systems move towards incorporating within their boundaries the external resources essential for survival. This also applies to satellite primary schools where the external environment is the source of resource inputs that are vital for organisational effectiveness and the provision of quality education.

Open systems theorists perceive school organisations as open systems. The concept of an open system refers to a set of interdependent parts that relate to the accomplishment of an overall goal (von Bertalanffy, 1968). It entails a set of integrated and interacting organisational elements deliberately set up to attain specific goals. Hoy (2019) contends that school organisations are open systems that adapt to changing external conditions to be effective and, in the long term, survive. Bush (2011) concurs and adds that there is a two-way interactive relationship between the school organisation and its external environment. The view that the school organisation is an open system continues to enjoy popularity in Educational Management, and Sociology of Education literature (Lunenburg, 2010; Owens & Valesky, 2011; Ballantine & Hammack, 2012; Lunenburg & Ornstein, 2012). Therefore, for one to understand the satellite primary school they must view it as an open system. True to the nature of open systems, school organisations are open and dynamic systems existing in and interacting with their environments. On whether the school organisation is an open or closed system, Meyer (1978:18 cited in Hoy & Miskel, 2013:9) argues, "The issue of open versus closed school system is closed on the side of openness." Echoing similar sentiments, Lunenburg (2010) says it is virtually impossible to envisage a school that is not interactive with its environment. In line with this view, the satellite primary school was studied as an open system.

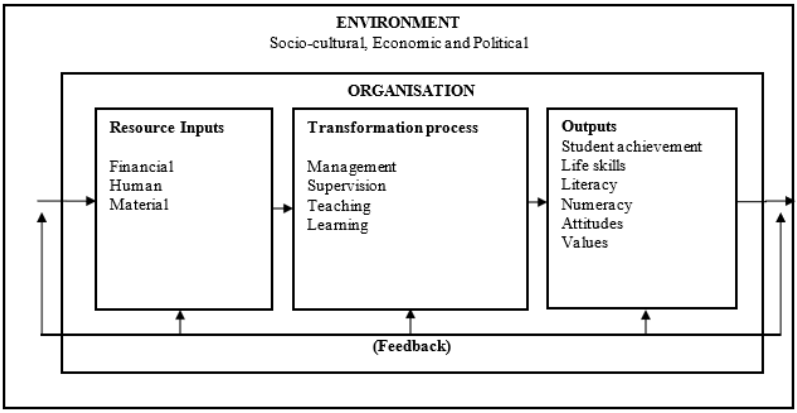
The OST posits that school organisations are goal-seeking open social systems that move towards goal attainment (Rao & Narayana, 2008; Lunenburg & Ornstein, 2012). The previously reviewed Goal Model supports the idea that school organisations are open systems striving to achieve specific objectives. One of the central goals of most education systems is to provide quality education to all learners. Zimbabwe's education system is goal-oriented, as reflected in the Mission Statement of the MoPSE, which commits all schools "to

provide equitable, quality, inclusive, relevant, and competence-driven infant, junior, secondary, and non-formal education" (MoPSE, 2015:5). School organisations set goals that reflect their purpose (Tripon & Dodu, 2011), addressing the needs of the school's strategic stakeholders (Rao & Narayana, 2008; Owens & Valesky, 2011). This indicates that school organisations do not function in isolation from their external environments, as proposed by the CSA.

From the perspective of the OST, organisational goals are indispensable to organisational effectiveness and the provision of quality education. They enhance organisational effectiveness by stipulating the purpose of the organisation; directing the decision-making process; and influencing the formal organisational structure (Hoy & Miskel, 2013; Hoy, 2019). Organisational goals also specify organisational tasks; guide the allocation of resources; and provide the benchmarks for assessing the quality of an organisation's products and services (Rao & Narayana, 2008; Hoy & Miskel, 2013). Arguably, schools without well-defined goals are not only purposeless and chaotic but also deficient in terms of quality education.

According to von Bertalanffy (1968), an open system consists of five integrated and interdependent elements, namely the external environment, resource inputs, transformation process, outputs, and feedback (Lunenburg, 2010; Ballantine & Hammack, 2012). **Figure 2.1** depicts the five elements of an open system. The literature on Models of quality education and School effectiveness research reviewed in the preceding sections identifies the same elements as the main dimensions of quality education. The OST identifies feedback as another critical element and dimension of quality education.

Figure 2.2: Open Systems Theory



Source: Ballantine and Hammack (2012:22)

As depicted in **Figure 2.1**, an open system acquires resource inputs from its external environment, transforms them into outputs, and discharges the outputs into the environment (Lunenburg, 2010;Owens & Valesky, 2011). The OST emphasises the interdependence among the basic elements of a school organisation in the provision of quality education. If one element of an open system is mal-functional or deficient, a ripple goes through the whole school system, affecting the quality of the outputs (Ballantine & Hammack, 2012; Hoy & Miskel, 2013). The book establishes the nature, quality, and impact of transformation processes in satellite primary schools on the provision of quality education.

School organisations, including the satellite primary school, do not exist in a vacuum. They are located in a particular setting or environment. The organisation's external environment refers to the social, political, and economic forces outside the boundaries of the organisation that can either enhance or impinge on organisational stability and efficiency (Scott & Davis, 2007; Lunenburg & Ornstein, 2012). The external environment refers to everything that surrounds the organisation and influences it in some way. The OST argues that the

school organisation's external environment not only provides resources for the organisation but also creates constraints and opportunities (Lunenburg, 2010; Ballantine & Hammack, 2012). This implies that the school organisation's external environment can enhance or impede the provision of quality education. Existing studies by Chakanyuka *et al.* (2009); Hlupo and Tsikira (2012); PoZ (2012); Jenjekwa (2013); Mangwaya *et al.* (2013); and Mavhunga and Mazodze (2014) among others covered the impact of context and resource input factors on the provision of quality education in satellite primary schools. This book fills the knowledge gap on the impact of pedagogical and management processes on the provision of quality education in the same school type.

Organisations have system boundaries that separate them from their external environments. The concept of a system boundary is conceptualised by Hoy and Miskel (2013) as the demarcation line for the admission of resource inputs into the system. The system boundary can either foster or hinder the interaction between the organisation and its external environment. In a closed system, the boundaries are impermeable, and the system is isolated from its surrounding environment (Scott & Davis, 2007; Ritzer, 2015). In contrast, open systems have boundaries that are open to flows, inflows, and outflows of matter energy and information (Owens & Valesky, 2011; Ballantine & Hammack, 2012). Schools are open systems with permeable boundaries that allow them to import resource inputs from their external environments for the provision of quality education.

The OST observes that schools are open systems that acquire resource inputs from their external environments. The concept of resource inputs entails the materials, information, and energy flowing into the organisation from the external environment (Lunenburg, 2010; Hoy & Miskel, 2013). School organisations utilise four kinds of inputs, namely:

human resources, financial resources, physical resources; and information resources. According to Ballantine and Hammack (2012), human resources include school administrators, teachers, learners, and non-teaching staff. Financial resources refer to the funds the school organisation utilises to finance its operations. Physical resources encompass the equipment, facilities, raw materials, and infrastructure that the school organisation acquires from its environment. Information resources include knowledge, government mandates, curricula, goals, values, and other kinds of information used by the school organisation. To proponents of the OST, the quality of a school organisation's resource inputs determines the quality of its outputs (Lunenburg, 2010; Owens & Valesky, 2011; Lunenburg & Ornstein, 2012). The Resource Inputs Model reviewed earlier holds the same view. Thus, resource inputs have a bearing on the quality of education a school provides. As noted earlier, existing studies on satellite schools in Zimbabwe adequately covered this area. The thrust of this book is on the nature and quality of pedagogical and management processes in satellite primary schools during the provision of quality education that existing studies are silent about.

Another element of an open school system that the OST identifies is the transformation process. Ballantine and Hammack (2012) state that the transformation process entails those organisational functions that convert resource inputs into outputs. In school organisations, management, teaching, and learning processes make up the transformation process. These processes transform learners into acceptable members of their society by equipping them with the knowledge, skills, and attitudes that enable them to contribute meaningfully to national development (Lunenburg, 2010; Ballantine & Hammack, 2012). The OST emphasises that the quality of the transformation process of a school organisation is the central determinant of quality education (Ballantine & Hammack, 2012; Lunenburg & Ornstein, 2012). The Process Model and ESR in the

preceding sections corroborate that quality transformation processes are the critical determinants of quality education. However, existing studies in Zimbabwe (PoZ, 2012; Jenjekwa, 2013; Mutema, 2014; Tarisayi, 2017; Tarisayi & Manik, 2017) are generally silent about the nature and quality of the transformation process of the satellite primary school type in the provision of quality education. This book intends to plug the knowledge gap.

The OST notes that the school organisation processes the resource inputs that it acquires from its environment into outputs or outcomes. Outputs are the organisation's products and services (Ballantine & Hammack, 2012; Hoy & Miskel, 2013). In school organisations, outputs include student knowledge, achievement, skills, dropout rates, transition rates, and attitudes and values (Lunenburg, 2010; Ownes & Valesky, 2011; Lunenburg & Ornstein, 2012). Proponents of the OST regard outputs as indicators or benchmarks for assessing the quality of education a school organisation provides. The Outputs Model reviewed earlier concurs and argues that measuring the outputs of education is the only significant way of assessing the quality of education. Existing studies (Chakanyuka *et al.,* 2009; Hlupo & Tsikira, 2012; PoZ, 2012; Jenjekwa, 2013; Mangwaya *et al.,* 2013; Mavhunga & Mazodze, 2014; Tarisayi, 2015) focused on how contextual and resource inputs variables are militating against the provision of quality education in satellite primary schools. This book is different, it plugs the knowledge gap on the nature and quality of pedagogical and management processes in satellite primary schools, and their impact on the provision of quality education.

According to the OST, the school organisation receives feedback about the quality of education it provides to its clients. Feedback entails the information that the organisation receives from its stakeholders concerning the quality of its services and products (Hoy & Miskel, 2010; Lunenburg & Ornstein, 2012). The feedback can be positive or

negative. Information feedback of a negative kind assists the school organisation to correct its deviations from the set goals (Lunenburg, 2010; Lunenburg & Ornstein, 2012; Hoy, 2019). It provides the school organisation with self-correcting opportunities that enable it to adapt to the changes and demands in its external environment (Lunenburg, 2010; Ballantine & Hammack, 2012). In this way, the school can attain its goal of providing quality education. This book is a form of feedback intended to stimulate societal awareness of the knowledge gap regarding the nature and quality of the pedagogical and management process in satellite primary schools. It is for this reason that the findings and recommendations of the book were generated from the perspectives of the research participants using open-ended interview questions.

Quality assurance scholars have recognised the utility of the OST in organisational analysis. It helps educators conceptualise the school organisation, understand how its components fit together, and identify which elements do not align (Ballantine & Hammack, 2012). This holistic approach to organisational analysis addresses the issue referred to by Rao and Narayana (2008) as the "components mentality", which focuses on some subsystems rather than the organisation as a whole to ensure quality education. Tripon and Dodu (2011) agree that the OST allows for a comprehensive assessment of the entire school organisation, identifying its needs and the demands of its stakeholders, and recommending strategies to enhance quality education. Feedback facilitates a holistic evaluation of quality education, considering the context, inputs, processes, and outputs (Hoy & Miskel, 2013; Hoy, 2019). Despite the holistic nature of the OST, this book aims to address the knowledge gap regarding the nature and quality of pedagogical and management processes in the provision of quality education in satellite primary schools.

Lunenburg and Ornstein (2012) recommend the adoption of the OST for analysing organisational effectiveness. The authors argue that the OST enables stakeholders to study all the elements of a school organisation in their four broad categories of environment, resource inputs, transformation process, and outputs. Ballantine and Hammack (2012) agree and add that the OST contributes to the quick and accurate diagnosis of quality assurance problems, focusing the educator's efforts on those dimensions that require change and innovation. This book focused on the nature and quality of pedagogical and management processes in satellite primary schools so that they are adapted to enhance the provision of quality education in this school type.

Despite the potential benefits of the OST, it has its limitations. Owens and Valesky (2011) argue that the OST does not provide a way forward when constituents of a school organisation are mal-functional in the provision of goods and services to customers. Lunenburg (2010) concurs that the OST does not specify what to do when organisational analysis establishes factors militating against the provision of quality education. This implies that the OST gives little direct guidance regarding the actual improvement of quality education in schools. The book overcame this limitation by proposing recommendations for enhancing the quality of pedagogical and management processes in satellite primary schools from the perspectives of the research participants. In the context of the OST, recommendations from the research participants are a form of feedback.

In recent years, the provision of quality education has become the overarching goal of virtually all developing countries, including Zimbabwe. The priority given earlier to educational expansion and access is being replaced by policies that are calling for quality education (Reddy, 2007; Chinapah, Cars & Grinberg, 2013; UNESCO, 2015). Quality education is now the single most important factor that

makes the difference between socio-economic development and underdevelopment in the 21st century (Steyn, 2001; Grant, 2017). Chinapah *et al.,* (2013), aptly express the concern for quality education in Africa. They argue that it is only by providing quality education for all as a fundamental human right and striving towards attaining desired levels of mastery for all that the African continent can meet the challenges of the next century and take its rightful place in the international arena. Quality education has become the centre of focus in the education discourses of both developed and developing countries. Several factors have helped to place quality education on the priority list of the African education agenda. The factors discussed in turn below provide insights into the need to provide quality education in school organisations.

Quality education became a central focus globally in the late 1990s when the quest for quality education gained prominence at the international level (Alexander, 2008; Nsubuga, 2011; Chinapah *et al.,* 2013). For most African countries emerging from colonialism between the 1960s and 1980s, the primary emphasis was on the quantitative expansion of educational provision to give Blacks access to education that had been restricted during the colonial era (Nsubuga, 2011; Shizha & Kariwo, 2011). In the context of Zimbabwe, Gatawa (1988) notes that educational reforms in the early post-colonial period prioritised educational expansion and access over the quality of education in the political and educational agenda. This focus on expansion and access was further reinforced by the Jomtien World Declaration on EFA in 1990, which committed all nation-states, including Zimbabwe, to ensure universal access to and completion of primary education for all learners by the year 2000 (UNESCO, 2004). The emphasis remained on educational access rather than on the quality of education.

By 1990, Zimbabwe had achieved the EFA targets for universal access to primary education, with a literacy rate of 92%, the highest in Africa

at that time (MoPSE, 2015). The then President of Zimbabwe, Robert Gabriel Mugabe, commented on this high literacy rate, stating, "Yes, we are some 90% up there regarding literacy rate, but…it is not just literacy rate that we are aiming for…we would like to get the essence of what they call education at its highest level [quality education]" (MoPSE, 2015:1). The country should not focus solely on achieving high literacy rates, as literacy is merely a quantitative indicator of quality education. There is a need for Zimbabwe and other developing countries to shift their focus from quantity to the quality of education.

Since the 1990 Jomtien World Declaration on EFA, the EFA debate has witnessed a broad shift of focus from exclusive preoccupation with access, enrolment, and retention to a greater interest in the quality of education (Alexander, 2008; Chinapah et al., 2013; Munene, 2015). Quality education as compared to access to education was relatively ignored in the EFA agenda (UNESCO, 2004; Nsubuga, 2011; Shizha & Kariwo, 2011). The UNESCO GMR 2005 argues that just getting learners into school or educational access is not enough because the quality of education also warrants attention (UNESCO, 2004). Focusing on educational access at the expense of quality education creates what Gatawa (1988) terms, the 'quality-quantity dilemma'. There is a growing realisation that educational access and quality education are complementary rather than sequential elements (Nsubuga, 2011). While quality education is impossible without access, educational access without quality is often meaningless to those for whom access is made possible (Ginsburg, Moseley & Pigozzi, 2010; Pigozzi, 2010). Henceforth, quality education is a necessary complement to enrolment, access, and retention. Developing countries, including Zimbabwe, must strive to maintain the quality of education in their quest to expand educational access.

The UNESCO GMR 2013-2014 also raised the concern with quality education. It reports that of the 21 out of 85 developing countries that

were studied, half the children were not learning the 'basics' (UNESCO, 2014). This suggests that 21 developing countries are not providing quality education. The report also reveals huge urban-rural disparities in learning with quality education skewed in favour of urban areas (UNESCO, 2014). The same scenario was also noted in Zimbabwe where satellite primary schools located in FTLRRAs are providing the lowest quality of education in the country (Jenjekwa, 2013; Mangwaya *et al.,* 2013; Mavhunga & Mazodze, 2014; Tarisayi, 2015; Mwiinde & Muzingili, 2020). Quality education should be accessible to all, not just to children of the elites or those in towns. Indeed, it is for the poor and disadvantaged that quality education is required to enhance their upward social mobility and living standards (UNESCO, 2011).

The rising concern with quality education was strongly reflected in the protocols of the Dakar Framework for Action (DFA) 2000 and the Education 2030 Framework for Action. The DFA emphasises the need to address universal access to education and the quality of education simultaneously. Two of the goals of the DFA explicitly address the qualitative dimension of education. Goal number two aimed at ensuring that by 2015 all children, particularly girls, children in different circumstances and those belonging to ethnic minorities have access to free and compulsory primary education of good quality (UNESCO, 2005). Goal number six focused on improving all aspects of the quality of education and ensuring excellence for all so that recognised and measurable learning outcomes are achieved by all; especially in literacy, numeracy, and essential life skills (UNESCO, 2005). The DFA expired in 2015.

The expiry of the DFA in 2015 culminated in the Education 2030 Framework for Action that builds on and continues the Education for All (EFA) movement. The Education 2030 Agenda focuses on increased and expanded access, inclusion, equity, quality, and learning outcomes,

giving everyone an equal opportunity, and leaving no one behind (UNESCO, 2015). Sustainable Development Goal(SDG) number four of the Education 2030 Framework for Action commits all nations to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" (UNESCO, 2015:4). The thrust of the Education 2030 Framework for Action is on inclusion and equity in the context of universal access and quality education.

Similarly, Zimbabwe's MoPSE in its Vision Statement seeks "to be the lead provider of inclusive quality education for socio-economic transformation by 2020" (MoPSE, 2015:1). From the Vision Statement, it is apparent that Zimbabwe has identified quality education as one of the determinants of its socio-economic transformation agenda. The prominence of quality education in international education discourse since 2000 is a reaction to the quantitative vision that prevailed during the 1990s when the emphasis was predominantly placed on expanding access to education (Tawil *et al.,* 2012). Quality education is attracting unprecedented levels of interest in developing countries primarily because of countries' efforts to reverse the decline of quality in the context of the quantitative expansion of educational provision (Leu & Price-Rom, 2006; Ginsburg *et al.,* 2010). The GoZ and the MoPSE must adapt to the prospects and complexities of quality education in satellite primary schools to enhance the provision of quality education in this school type.

Quality education is regarded as one of the determinants of socio-economic development. According to UNESCO (2011), quality education develops cognitive skills such as literacy, numeracy, and critical thinking that contribute to economic growth. It facilitates higher rates of innovation, production, and adoption of new technology by the labour force (Hanushek & Wößmann, 2010; Hanushek & Woessmann, 2012; Grant, 2017). This makes quality education an irreplaceable ingredient for socio-economic development,

particularly in Third World countries that are generally underdeveloped. Expanding educational provision and improving school attainment has not guaranteed socio-economic development in many developing countries (Hanushek & Wößmann, 2010; UNESCO, 2011). What has been missing is attention to the quality of education (Hanushek & Wößmann, 2010; Hanushek & Woessmann, 2012; Munene, 2015). In the same purview, the Presidential Commission of Inquiry into Education and Training (PCIET) (1999) argues that the Eurocentric and academic curriculum that Zimbabwe inherited after the attainment of independence in 1980 led to the over-production of employment seekers rather than employment creators. Zvobgo (1999) concurs and adds that the rapid and phenomenal expansion of educational provision in Zimbabwe following the attainment of independence in 1980 outpaced economic growth, creating the problem of educated unemployed youths. An educational system that produces graduates who are not relevant to national development is devoid of quality. More so, it is a form of wastage in education.

There is growing realisation in developing countries, including Zimbabwe, that quality rather than quantity of education is a critical determinant of socio-economic development (Sifuna & Sawamura, 2010; Chinapah *et al.,* 2013). The former President of Zimbabwe Robert Gabriel Mugabe recommended the development of a new primary and secondary school curriculum framework with an emphasis on Science, Technology, and Entrepreneurship to stimulate socio-economic transformation in the country (MoPSE, 2015). Following this recommendation, Zimbabwe developed the Competence-Based Curriculum (CBC) for primary and secondary education in 2015. The CBC has a bias towards Science, Technology, Engineering, and Mathematics (STEM) (MoPSE, 2015). The research studies conducted in both developed and developing countries found that the quality of the labour force as measured by average scores in Mathematics and Science has a strong correlation with national economic growth rates

(Hanushek & Wößmann, 2010; Hanushek & Woessmann, 2012). The MoPSE (2015) agrees and underscores that STEM education that is part of the CBC, inculcates skills that are vital for socio-economic development.

A causal nexus exists between quality education and wage earnings. In a study conducted in South Africa, Mocan (2014, cited in Biyase & Zwane, 2015) found that an increase in the quality and level of education leads to a corresponding rise in an individual's wage rate. International research corroborates that there is a positive correlation between quality schooling, higher lifetime incomes, increased productivity, and economic growth (UNESCO, 2004; Hanushek & Wößmann, 2010; Hanushek & Woessmann, 2012; Grant, 2017). This observation underscores the importance for developing countries to enhance the quality of education they provide. Quality education is essential for improving the incomes, living standards, and economic status of people residing in FTLRRAs, helping to elevate their livelihoods above the level of cheap farm labour.

The integration of technology in education is one of the prerequisites for socio-economic development in the 21st century (Blignaut, Hinostroza, Els & Brun, 2010; Nikoloski, 2016). The ability of a nation to maintain a competitive edge in the 21st century depends mainly on the extent to which it utilises Science and Technology (Blignaut et al., 2010). The absence of technology in an education system results in an inadequate and non-transformative education system (Jenjekwa, 2013). An education system that is deficient regarding the utilisation of ICT is of poor quality. Such an education system has a high risk of producing technologically, irrelevant and redundant graduates. To avert this problem, Zimbabwe developed a CBC framework in 2015 that has a bias towards STEM (MoPSE, 2015). STEM education incorporates ICT that has become one of the benchmarks of quality education in both developed and developing countries. The availability and adequacy of

ICT facilities and equipment were considered in the exploration of the nature and quality of pedagogical and management processes in satellite primary schools.

There is mounting evidence that quality education determines learner retention, improved attendance patterns, and universal completion of primary education (Gershenson, 2016; Brown &Kurzweil, 2018). There is also evidence of a positive correlation between the poor quality of education and high learner attrition rates (Hanushek & Wößmann, 2010; Ginsburg *et al.,* 2013). The poor quality of education can influence learners to drop out and parents to withdraw their children from school. Olaniyan and Okemakinde (2008, cited in Sandvik, 2011) confirm this trend. They report that parents in many developing countries believe that education increases their children's chances of getting high-paying jobs. In other words, some parents regard their children's education as an exit route out of poverty. If education fails to guarantee formal employment, some parents withdraw their children from school, leading to high attrition rates and low enrolments (Olaniyan & Okemakinde 2008 cited in Sandvik, 2011). The improvement in the quality of education contributes to a reduction in repetition and dropout rates, and transition and completion rates at all levels of schooling (UNESCO, 2004; Gershenson, 2016; Brown & Kurzweil, 2018). Hence, quality education is a prerequisite to the universal completion of a full course of primary education by all learners. It becomes imperative to address the challenges in the transformation process of the satellite primary school so that learners enrolled in this school type complete a full course of quality primary education.

This chapter reviewed the literature on quality education. It looked at definitions and models of quality education, and school effectiveness research. Quality education is a relative and multi-dimensional concept that is difficult to define in universal terms. The chapter

operationalised quality education as relevant and holistic education that equips learners with both cognitive and non-cognitive skills to function effectively and productively in their society. From the literature, it emerged that there are four main dimensions of quality education, namely context, inputs, process, and outputs. However, existing studies concentrated on the impact of context and input factors on the provision of quality education in satellite primary schools. Henceforth, there was a need to explore the nature and quality of pedagogical and management processes in satellite primary schools during the provision of quality education. Guided by the literature and the quality education question in satellite primary schools, the OST was adopted as the theoretical lens of the book. The chapter ends by discussing the rationale for quality education at the global level in general and Zimbabwe in particular.

CHAPTER 3 QUALITY EDUCATION IN SMALL RURAL SCHOOLS

The preceding chapter conceptualised quality education and presented the OST as the theoretical framework informing the book. This chapter reviews the literature on the quality of education in small rural schools. Most satellite primary schools in Zimbabwe fall under the category of small rural schools (PoZ, 2012; MoPSE, 2017). The literature provides a historical and contextual background to the development of satellite schools. It also sheds light on the nature and quality of pedagogical and management practices in small rural schools. The literature covers the following themes: the notion of small rural schools; the quality of education in farm schools in colonial Zimbabwe; and the quality of education in satellite schools; pedagogical and management practices in small rural schools; and quality education initiatives in Zimbabwe.

Small schools are a common phenomenon in both developed and developing countries. Although there is consensus among researchers that most small schools are located in rural areas, there are contested views about their size (Edwards, 2016; Preston, Jakubiec & Kooymans, 2013). Edwards (2016) aptly expresses this problem when he says, what is considered a small school in one country may be regarded as an average or even a large school in another country. Dinham, Anderson, Caldwell and Weldon (2011) report that in Australia a small primary school is one with an enrolment of 100 learners or less. However, in some jurisdictions in Canada, a small primary school refers to one with an enrolment of 200 full-time learners or less (Edwards, 2016). This means that different countries have dissimilar benchmarks of small primary school size. The different benchmarks suggest that the notion of a small rural school is relative.

According to Ngcobo (2015), in South Africa, small rural schools are characterised by enrolments that are below the national average, few

teachers, and teaching heads. This definition captures the nature of the satellite school type that is the focus of this study. The PoZ (2012) states that most satellite primary schools are mainly located in sparsely populated FTLRRAs in rural Zimbabwe. A satellite school is typically characterised by low enrolments, few teachers, and a Teacher in Charge (TIC), and is an appendage of a nearby registered school (PoZ, 2012; Munjanganja & Machawira, 2014). As noted earlier, the term TIC refers to the teaching head of a satellite primary school in Zimbabwe.

The satellite school type emerged in former White-owned LSCFAs following the FTLRP in 2000. Before the FTLRP, the only form of educational provision in LSCFAs was sub-standard and unregistered small farm schools built by white farmers to provide education to the children of their African farmworkers (Khadhani & Riddell, 1981; Sithole, 1996). The literature on farm schools provides the historical and contextual background to the prospects and complexities of providing quality education in satellite primary schools.

During the colonial era in Zimbabwe, many White farmers opted not to register their schools to have more control over resource allocation, curriculum standards, and the hiring of teachers (PCIET, 1999; Auret, 2000). The unregistered farm schools provided sub-standard education to the children of African farm labourers (The Human Rights Watch, 2003). These unregistered farm schools did not receive support from the government in the form of per capita grants in aid, qualified teachers, teachers' salaries, teaching resources, and supervision of curriculum implementation (Loewenson, 1991; PCIET, 1999) and as a result provided sub-standard education. The Tate Commission assessed the quality of education in farm schools in 1925 and described the schools as the least efficient part of the colonial education structure (Atkinson, 1972). Three decades later, the Judges Commission of 1962 characterised registered farm schools as sub-standard and unregistered ones as being of no educational value (Government of Rhodesia [GoR],

1962). The findings of the two Commissions testify that unregistered farm schools provided the lowest quality of education in colonial Zimbabwe.

The unavailability of standard infrastructure at most unregistered farm schools negatively affected the provision of quality education. Auret *et al.* (2000) report that before 1980, farm school buildings were often renovated tobacco barns or sheds. Auret (2000) agrees and elaborates that in extreme cases, school buildings served a dual purpose as a school and beer hall on weekdays and weekends, respectively. A school that functions as a beer hall during weekends cannot be expected to provide quality education. Farm schools were also characterised by a lack of equipment, facilities, books, stationery, laboratories, libraries, and standard classrooms (Loewenson, 1991; Sithole, 1996; PCIET, 1999). The teaching and learning process was held in poorly lit and poorly ventilated make-shift classrooms (Loewenson, 1991; Sithole, 1996). The make-shift classrooms and chronic shortage of instructional materials made the unregistered farm school an unfavourable context for the provision of quality education. In tandem with the policy of separate development, the colonial government established boarding schools for White learners in LSCFAs (Atkinson, 1972; Challiss, 1982). In comparative terms, White learners received a superior quality of education in LSCFAs than Black learners.

One of the subtle strategies employed by White farmers to ensure that Africans received only a lower level of education was to provide more lower primary schools than upper primary schools in mining areas and LSCFAs. Most farm schools for African learners offered no more than five years of schooling, and the facilities were substandard (Auret et al., 2000). Summers (2002) corroborates that a large percentage of farm schools in colonial Zimbabwe only extended to grade four or five. As a result, many African learners "finished school" as young as 10 or 12, with work on the farm as the only available alternative (Auret,

2000; Auret *et al.,* 2000). This strategy ensured a continuous supply of semi-literate farm labourers for White commercial farmers.

Several factors militated against the provision of quality education in farm schools. There was a critical shortage of trained teachers for all levels of formal African education in colonial Zimbabwe (Zvobgo, 1997; Nhundu & Makoni, 1999). For instance, in 1977 there were 1,195 untrained teachers in African schools, and most of them were teaching in farm schools located in White commercial farming areas (Khadhani & Riddell, 1981). The UNICEF (2004, cited in Murisa, 2010) observed the same trend and reported that during the colonial era in Zimbabwe, 33% of the teachers in farm schools were untrained compared to a national average of only 8%. The predominance of untrained teachers in farm schools compromised the provision of quality education.

The living and working conditions of teachers in registered farm schools and registered African rural schools were different. The government grants in aid towards teachers' salaries in registered farm schools were half that paid to teachers in registered African rural schools (Auret, 2000). Teacher turnover was very high in farm and mine schools mainly because of the poor living and working conditions (Challiss, 1982; Auret, 2000). However, the existing studies did not explore the impact of high teacher turnover on the provision of quality education in farm schools during the colonial era. Among other pedagogical processes, this book discusses the impact of high teacher turnover on the provision of quality education in satellite primary schools.

Another barrier to the provision of quality education in farm schools was the phenomenon of multi-grade classes. According to Loewenson (1991), multi-grade classes were a consequence of low learner enrolments coupled with inadequate classrooms and teachers. A single teacher would teach as many as three grades in the same classroom.

Summers (2002) agrees that most African learners attended rudimentary multi-grade farm schools. One limitation of these studies is that they did not establish how Multi-grade Teaching (MGT) affected the provision of quality education in farm schools. This book is different because, among other pedagogical processes, it explores the ramifications of MGT on the provision of quality education in satellite primary schools.

There were very few primary schools in White-owned LSCFAs before 1980, making the distance to school very long. According to Auret *et al.* (2000), some African learners in the former White-owned LSCFAs walked over seven kilometres to and from the nearest school. The learners arrived late for lessons and missed many concepts that affected their academic progress. The fatigue from walking long distances negatively affected the learners' concentration and participation in learning. Existing research studies (Chakanyuka *et al.*, 2009; PoZ, 2012) also identify the long distance to school as one of the factors affecting the provision of quality education in satellite primary schools.

The satellite school type emerged in Zimbabwe's former White-owned LSCFAs following the FTLRP that commenced in 2000. Several Zimbabwean scholars have defined the concept of a satellite school. According to Hlupo and Tsikira (2012), a satellite school is a budding school located in fast-track resettlement areas, operating under the auspices of a registered school. The satellite school provides education to the children of the fast-track land reform beneficiaries. According to Munjanganja and Machawira (2014), a satellite school is an unregistered school attached to a 'mother school' for administrative purposes. Tarisayi and Manik (2017) concur that a satellite school is an unregistered school that caters for the educational needs of the children of fast-track land reform beneficiaries in FTLRRAs. It is part of a nearby registered school in terms of learners, staff, and administration.

From the definitions provided, we can identify three characteristics of a satellite school. Firstly, this type of school emerged in FTLRRAs and serves the children of fast-track land reform beneficiaries. Secondly, it fails to meet the Minimum School Functionality Standards (MSFS) required for registration with the MoPSE. Thirdly, it operates as an appendage of a nearby registered school in terms of learners, staff, and other administrative functions. In the context of this study, the term satellite school refers to an unregistered primary school established in FTLRLAs following the FTLRP in 2000 to provide education for the children of fast-track land reform beneficiaries.

The satellite school type emerged in the former White-owned LSCFAs of Zimbabwe in 2000. According to the PoZ (2012), Zimbabwe's FTLRP that commenced in 2000 was unplanned and hastily implemented, culminating in the emplacement of over 170,000 Black Zimbabwean households in former White-owned LSCFAs. In the former White-owned LSCFAs, schools and other social amenities for Africans were historically very few or non-existent. There was a dire shortage of schools for African learners in previously White-owned LSCFAs because White Commercial farmers did not regard it as their obligation to build schools for the children of their African farmworkers (PCIET, 1999; PoZ, 2012; Mavhunga & Mazodze, 2014). The massive and rapid emplacement of land beneficiaries in FTLRRAs where schools were inadequate presented the GoZ with an urgent problem of how to provide education to the children of the fast-track landreform beneficiaries.

The GoZ implemented the FTLRP in 2000 when the country was going through a decade of an economic meltdown that commenced in the year 2000 and ended in 2009 (Sadomba, 2011; Zhou & Zvoushe, 2012). Consequently, the government had no financial resources to construct conventional schools in FTLRRAs. Faced with this situation, the government did not have many options at its disposal, but to 'fast-

track' the provision of schools in FTLRRAs. The government authorised the use of make-shift teaching and learning infrastructure and promised to construct conventional schools within 10 years (Chakanyuka *et al.,* 2009; PoZ, 2012). Existing infrastructure in the FTLRRAs such as farmhouses, tobacco barns, farmworkers' houses, storerooms, offices, garages, horse stables, and even pigsties was converted into teaching and learning infrastructure (PoZ, 2012). Where no infrastructure existed, the land beneficiaries erected pole, dagga, and grass-thatched structures so that their children could carry out their learning activities in some form of shelter (PoZ, 2012; Mutema, 2014; Mavhunga & Mazodze, 2014). These measures culminated in the establishment of 1,016 satellite primary schools, and 839 satellite secondary schools, totalling 1,855 satellite schools in Zimbabwe (MoPSE, 2017). Although satellite schools ensure educational access for the children of the land beneficiaries, there are concerns about the quality of education this school type provides.

The GoZ allowed the land beneficiaries to establish satellite schools in FTLRRAs as a stopgap measure to enable it to construct standard schools within 10 years (PoZ, 2010). The schools do not meet the MSFS to qualify for registration with the MoESAC (MoESAC, 2013b) now the MoPSE. The MSFS stipulate that for a school to qualify for registration it should have at least two standard teachers' houses, a standard administration block, a standard classroom block, and adequate ablution facilities for teachers (MoESAC, 2013b; PoZ, 2012). The other preliminary registration requirements are sufficient toilet facilities for learners in the ratio of one squat hole: 20 girls and one squat hole: 25 boys, and a safe water source within 500 metres of the school campus (PoZ, 2012; MoESAC, 2013b). However, two decades after the commencement of the FTLRP in 2000, over 1,800 satellite schools are yet to qualify for registration with MoPSE (MoPSE, 2017). The schools are failing to meet the preliminary MSFS. This raises concerns about the quality of education the schools are providing. Unregistered

schools are not entitled to per capita grants in aid from the government (Mavhunga & Mazodze, 2014), henceforth, satellite schools are disadvantaged schools. In the absence of financial support from the government, satellite schools experience infrastructural and instructional resource challenges that hamper the provision of quality education.

According to the PoZ (2012), for purposes of providing management support and paying salaries to teachers, the MoPSE attaches each satellite school to the nearest registered school that acts as the 'mother school' or 'parent school'. With this arrangement, the staff and learners at the satellite school become part of the 'mother school'. This effectively makes the satellite school an extension or appendage of the 'mother school'. The MoPSE also appoints a TIC for each satellite school to ensure effective school leadership and management (Mangwanya *et al*., 2012; PoZ, 2012). The TIC doubles as the head of the satellite school and the class teacher of one of the classes at the school. Scholars are generally silent about the impact of this type of school leadership and management structure on the provision of quality education in satellite schools. It is for this reason that this book sought to establish the nature and quality of management processes in satellite primary schools during the provision of quality education.

There are several indicators of quality education. According to Mavhunga and Mazodze (2014), the primary output indicator of quality education in Zimbabwe's education system is high pass rates in public examinations. In line with this view, a school provides quality education if it registers high pass rates in national school examinations such as Grade 7, Ordinary Level, and Advanced Level. This is in tandem with the Outputs Model of quality education reviewed earlier. Available literature indicates that examination pass rates are very low in satellite schools. Chakanyuka *et al.* (2009) carried out a national survey of the quality of primary and secondary education in

Zimbabwe. The survey revealed that the Grade 7 pass rate for remote primary schools and satellite primary schools in Matabeleland North Province of Zimbabwe was 10.5% in 2006 and 24% in 2007. Jenjekwa (2013) reports that the Ordinary Level pass rate for satellite secondary schools in Masvingo Province ranged from 0% to 10% from 2004 to 2010. The PoZ (2012) conducted a national survey of the quality of education in satellite schools and found out that in most provinces of Zimbabwe, the Grade 7 pass rate for satellite primary schools ranged from 0% to 10%. The low pass rates suggest there are unique factors militating against the provision of quality education in satellite schools.

Hlupo and Tsikira (2012) compared the Grade 7 pass rates of six satellite schools and their respective 'mother schools' in the Mwenezi District of Zimbabwe. **Table 3.1** presents the pass rates as percentages.

Table 3.1: Grade 7 Examination pass rates for 'mother schools' and their satellites (Hlupo & Tsikira, 2012:607)

School	'Mother School'	Satellite School
A	44	16
B	36	18
C	50	45
D	46	24
E	40	17
F	34	24

Table 3.1 shows that the Grade 7 Examination pass rates for both 'mother schools' and their satellites are low. However, the pass rate of each 'mother school' is higher than that of its satellite. While the pass rates of 'mother schools' range from 34% to 50%, those of satellite

schools range from 16% to 45%. Although the pass rates are low in both settings, they are worse off in satellite schools. By implication, there are unique factors contributing to the very low Grade 7 Examination pass rates in satellite primary schools.

Hlupo and Tsikira (2012) attribute the low Grade 7 Examination pass rates in satellite schools to poor infrastructure, lack of resources, and the low morale of teachers. They also associate the low pass rates with the long distances that learners walk to and from school and the generally negative attitudes of parents towards education. Mangwanya *et al.* (2012) argue that the Grade 7 Examination pass rates are very low, mainly due to inadequate instructional materials, particularly textbooks. The PoZ (2012) reports that the pass rates are low because of negative parental attitudes towards education, make-shift teaching and learning infrastructure, long distance to school, learner absenteeism, and inadequate instructional resources. Munjanganja and Machawira (2014) concur and add that, most satellite schools do not qualify as Grade 7 Examination centres. As a result, learners sit for national examinations at another school that is an examination centre. They argue that the long distances that the learners travel to the examination centres and the change in environment negatively affect their performance (Munjanganja & Machawira, 2014).

The factors contributing to low Grade 7 pass rates in satellite schools reviewed in the preceding paragraph mainly fall under the context and resource input dimensions of quality education. There is a knowledge gap on the nature and quality of the transformation process of the satellite school and its impact on the provision of quality education. The transformation process incorporates the pedagogical and management processes of a school organisation. To plug this knowledge gap, this book explored the nature and quality of pedagogical and management processes in satellite primary schools and their impact on the provision of quality education.

Available literature indicates that several context and resource input factors militate against the provision of quality education in satellite schools. These factors include lack of funding, teacher qualifications and experience, nature of classrooms, nature of accommodation for teachers, provision of instructional materials, provision of furniture, provision of water and sanitation facilities, long distance to school, and availability of social amenities.

One factor that militates against the provision of quality education in satellite schools is the lack of funding. According to Gonese and Makura (2003), from 1980 to 1991, the GoZ financed the establishment of resettlement infrastructure and support services before the emplacement of land beneficiaries under the Land Reform and Resettlement Programme (LRRP). The government established water and sanitation facilities, access roads, schools, clinics, and accommodation for teachers and nurses before resettling land beneficiaries (Gonese & Makura, 2003). The adoption of the Economic Structural Adjustment Programme (ESAP) by the GoZ in 1992 marked a radical shift in the implementation of the LRRP. In line with the dictates of ESAP, the government cut expenditure on social services, including education (Zvobgo, 1999). It is for this reason, according to Gonese and Mukora (2003), that the government resettled the fast-track land reform beneficiaries in FTLRRAs before the establishment of basic social services such as water and sanitation facilities, access roads, schools, and clinics. The government promised to provide the basic infrastructure and support services within 10 years.

The GoZ transferred the burden of establishing schools and other social services in FTLRRAs to land beneficiaries as a cost-cutting measure (Zvobgo, 1999). This saw the emergence of School Development Committees (SDCs) on Zimbabwe's educational landscape. The government expects the land beneficiaries under the leadership of their SDCs to pull resources together and construct

standard schools for their children. However, the PoZ (2012) reports that the FTLRP beneficiaries cannot afford to establish standard school infrastructure for their children in FTLRRAs because they are living in abject poverty. Tarisayi (2015), who argues that the state expects resettled communities to fund the construction of standard schools, but such communities are scratching for a living, expresses similar sentiments. The land beneficiaries do not have the financial and material resources to establish standard schools for their children.

The economic meltdown that Zimbabwe went through from 2000 to 2009 further constrained the government's capacity to fund the construction of satellite schools. The government budgeted for the construction of satellite schools from 2007 to 2009, but hyperinflation eroded the funds to the extent that they were insufficient to construct even a single classroom block (PoZ, 2012). As for the 2010 budget, the salary bill for parastatals under the MoPSE took up 91% of the government's allocation to education and a paltry 3% remained to fund infrastructural development (PoZ, 2012). The amount allocated to infrastructural development was too little to ensure the development of over 1,800 satellite schools in the country into standard schools. For this reason, most satellite schools do not have proper infrastructure and adequate instructional resources two decades after their establishment in 2000.

Most teachers in both primary and secondary satellite schools are holders of the Diploma in Education (Chakanyuka *et al.,* 2009; PoZ, 2012). Hence, they are suitably qualified to provide quality education. While primary school teachers are suitably qualified, most of them are newly qualified (PoZ, 2012). Parents are concerned that the majority of the teachers in satellite primary schools are newly qualified with little teaching experience (Hlupo & Tsikira, 2012; PoZ, 2012). The limited teaching experience can have a negative bearing on the teachers' effectiveness during the provision of quality education.

Make-shift classroom infrastructure is also militating against the provision of quality education in satellite schools. The PoZ (2012) conducted a national survey on the quality of education in satellite schools and found out that most of the schools use dilapidated tobacco barns, vandalised farmhouses, and huts made of poles, dagga, and grass thatch as teaching and learning infrastructure. Existing literature indicates that the make-shift classrooms create serious complexities to the provision of quality education in the schools. Mavhunga and Mazodze (2014) conducted a case study of a satellite school in the Midlands Province of Zimbabwe and found that the make-shift classrooms at the school were too small, dimly lit, and poorly ventilated. Classroom infrastructure of this nature can expose teachers and learners to asthma, tuberculosis, and the dreaded COVID-19. Such a state of teaching and learning infrastructure is not ideal for the provision of quality education.

Hlupo and Tsikira (2012) carried out a study of satellite schools in the Mwenezi District of Zimbabwe and found that some satellite schools use the farmhouses of former white farm owners as teaching and learning venues. The rooms of the farmhouses that the schools use as classrooms are very small and pose challenges like overcrowding and poor ventilation that make teachers and learners susceptible to airborne diseases including COVID-19. Jenjekwa (2013) corroborates the problem of poor ventilation in his study of satellite schools that utilise disused tobacco barns as classrooms in Masvingo Province of Zimbabwe. The PoZ (2012) reports that, at some satellite schools where classrooms are non-existent, teachers conduct lessons in the shade of trees, exposing the learners to cold, windy, rainy, and hot weather conditions that make it difficult for them to concentrate on learning. In the shade of the trees, noise from the local environment also distracts the learners' concentration on learning (PoZ, 2012). Overall, the make-shift classrooms are not conducive to the provision of quality education.

In the absence of government funding, fast-track land reform beneficiaries are not able to provide standard accommodation for teachers. A national survey of satellite schools conducted by PoZ (2012) reveals that teachers reside in huts made of poles, dagga, and grass thatch; vandalised farmhouses; former farmworkers' houses; disused tobacco barns; and farm storerooms. In his study in Masvingo Province, Jenjekwa (2013) reports that teachers are accommodated in vandalised and dilapidated farmhouses with broken doors and windowpanes. Chakanyuka *et al.* (2009) carried out a rapid assessment of the quality of primary and secondary education in Zimbabwe and reported cases of teachers residing in huts without roofs and doors in remote rural schools and satellite schools. They also report instances of two or more teachers sharing very small single rooms. Such living arrangements are neither decent nor favourable for the provision of quality education. Hlupo and Tsikira (2012) rightly observe that there is high teacher turnover in satellite schools due to poor living conditions. The deplorable state of accommodation is not ideal for the retention of teachers and the provision of quality education.

Accommodation for teachers is non-existent at some satellite schools, resulting in parents offering the teachers accommodation in the local community (PoZ, 2012; Mutema, 2014). Consequently, the teachers walk long distances to and from the local community to the school daily (PoZ, 2012; Mutema, 2014). By the time the teachers reach the school premises, they will be exhausted, which negatively affects the quality of their instruction and the quality of education they provide. There is a need for the government to provide adequate standard accommodation for teachers in satellite schools to enhance the provision of quality education.

Available literature indicates that instructional materials are in short supply or non-existent at some satellite schools. Chakanyuka *et al.* (2009) report that, in most provinces of Zimbabwe, the textbook-learner ratio is 1:15 for most satellite schools. Such a very high

textbook-learner ratio makes it impossible for learners to have individual access to a textbook. Chakanyuka *et al.* (2009) also reported instances of classes in schools that lack even a single textbook for any subject. They observed that, at some schools, most learners do not have exercise books on writing assignments. At one satellite school, teachers take their learners outside so that they can practice writing on the ground because they do not have exercise books (Chakanyuka *et al.*, 2009). It is very difficult for teachers to identify and address the learning needs of learners when they do not have exercise books for written assignments and continuous assessment.

Mangwanya *et al.* (2012) conducted a study of satellite schools in the Midlands Province of Zimbabwe and reported cases of acute shortages of textbooks in all subject areas for both learners and teachers. At some schools, there is not even a single textbook for some subject areas. In the same province, Mutema (2014) notes that at some satellite schools, there is a critical shortage of textbooks to the extent that it is the teacher only who is privileged to have a textbook. If there is only one textbook for both teachers and learners, the teachers usually deprive the learners of individual exposure to the textbook for fear that it can be torn or stolen (Mutema, 2014). The severe shortage of textbooks denies learners opportunities for independent reading and content enrichment. The teacher becomes the only source of knowledge for the learners, a set-up that is not favourable to the provision of quality education.

In a study carried out in Masvingo Province, Tarisayi (2015) reports that teaching materials such as stationery, syllabi, and textbooks are deficient among satellite secondary schools. The absence of syllabi documents and textbooks limits the teacher's content depth of a learning area or subject. The satellite schools that Jenjekwa (2013) studied in the same province have no libraries or computer laboratories because textbooks and computers are respectively non-existent. The inadequacy and unavailability of instructional materials

create complexities in the provision of quality education in satellite primary schools.

Another impediment to the provision of quality education in satellite schools is the unavailability of furniture. Hlupo and Tsikira (2012) observe that at some satellite schools, the teaching and learning process is conducted while learners are sitting on dusty floors owing to a lack of desks and chairs. The learners do written assignments while sitting on dirty floors. The PoZ (2012) also reports cases of satellite schools where there is no furniture. The teachers hold lessons while learners are sitting on bricks, timber blocks or the floor. Similarly, Chakanyuka *et al.* (2009) report that in most provinces of Zimbabwe, the problem of furniture at satellite schools is so acute that learners sit on planks set on stones or the floor. The authors conclude that the absence of furniture hampers the provision of quality education in satellite schools. Mutema (2014) laments the use of logs, bricks,and the floor as sitting places for learners at the satellite schools he studied in Masvingo Province. At some satellite schools, furniture is only adequate for Grades 4 to 7 learners, and all the other learners, that is, from ECD A to Grade 3 sit on the floor (Mavhunga & Mazodze, 2014). The pain from sitting on the floor distracts learners' attention from learning and becomes a barrier to the provision of quality education.

The problem of water and sanitation also militates against the provision of quality education in satellite schools. Chakanyuka *et al.* (2009) report cases of satellite schools where there are no toilets, and both teachers and learners use the bush. In a separate study, Mavhunga and Mazodze (2014) report a case of a satellite school where both the learners and teachers use only two almost full latrines. This setup poses a health threat to teachers and learners. It also creates an unfavourable school environment for the provision of quality education.

Findings from the literature show that safe sources of drinking water are non-existent at some satellite schools. The PoZ (2012) reports cases of satellite schools where there are no reliable sources of drinking water, and learners bring safe drinking water from home. The teachers at the schools walk 15km to 25km to the nearest safe water source. There are also cases of satellite schools where teachers and learners drink unprotected water from dams and streams (Hlupo & Tsikira, 2012; Jenjekwa, 2013). Drinking unsafe water makes the teachers and learners vulnerable to a host of water-borne diseases such as typhoid, cholera, and bilharzia. A school that is deficient in basic water and sanitation facilities cannot be expected to provide quality education.

Most satellite schools are not centrally located, a situation that forces some learners to walk long distances of up to 20km to and from school daily (Chakanyuka, *et al.,* 2009; PoZ, 2012). When learners walk long distances to school, they get exhausted before the commencement of lessons (Hlupo & Tsikira, 2012). The fatigue they experience impacts negatively on their concentration on learning, participation in class, and academic achievement. The problem of the long distance to school has culminated in cases of prolonged learner absenteeism in satellite schools (PoZ, 2012). The long periods of absenteeism have a negative bearing on learners' academic achievement and progress. Thus, the problem of the long distance to school is one of the daunting barriers to the provision of quality education in satellite schools.

The GoZ resettled beneficiaries of the fast-track land reform into FTLRRAs before establishing social amenities (Gonese & Mukora, 2003). As a result, some satellite schools are situated in sparsely populated remote areas lacking access to roads, clinics, police stations, and shopping centres (PoZ, 2012; Hlupo & Tsikira, 2012). Teachers in remote schools often experience isolation from the social and professional support necessary for delivering quality education. The PoZ (2012) reports instances of teachers in satellite schools in the Mwenezi District of Zimbabwe who walk 80 kilometres to reach the

nearest road network leading to the shopping centre. Similarly, Jenjekwa (2013) notes cases of teachers in satellite schools in Masvingo Province who trek long distances to access the main road that leads to nearby Growth Points for essential services like healthcare and shopping. These challenging living and working conditions contribute to chronic teacher absenteeism and high turnover rates in satellite schools (PoZ, 2012; Hlupo & Tsikira, 2012). The poor living conditions and resulting high teacher turnover negatively impact the quality of education in satellite primary schools.

As noted earlier, the satellite school type falls under the category of small rural schools. The available literature on the pedagogical and management practices in small rural schools provides insights into the nature and quality of pedagogical and management processes in satellite primary schools and their ramifications on the provision of quality education. The review covers the following issues: the phenomenon of teaching heads, MGT, Double-Sessioning, and teaching and managing large classes.

Studies by du Plessis (2014), Kgomo (2016), and Pendola and Fuller (2018), show that in most developing countries, small rural schools with multi-grade classes are headed by teaching heads. A teaching head entails a teacher who has a full teaching load in addition to school leadership and management responsibilities (du Plessis, 2014). According to Clarke and Stevens (2009), a teaching head is a school head who has dual roles in teaching and school administration. The term entails a full-time teacher who also performs school leadership and management duties. In Zimbabwe, satellite schools are headed by teaching heads officially known as TICs. They double as the heads of satellite schools and full-time teachers (PoZ, 2012; Mangwanya *et al.,* 2012; MoPSE, 2017). The impact of the TIC's role in the provision of quality education in satellite schools has not received attention in Zimbabwe. This knowledge gap is explored in this book.

The school leadership and management roles of teaching and Non-Teaching School Heads (NTHs) are similar in many countries (Davids, 2011; Preston *et al.,* 2013). In Zimbabwe, NTSHs and TICs or teaching heads perform the same school leadership and management roles. Vacancy Announcement No. 18 of 2019 spells out the duties and responsibilities of school heads in Zimbabwe (Public Service Commission [PSC], 2019). The central role of a school head that applies to the TIC, is to provide overall management and operation of the school (PSC, 2019). The TIC performs this premier role concurrently with a full teaching load. The dual role of the TIC has a negative bearing on the quality of pedagogical and school management processes in satellite primary schools.

The PSC (2019) classifies the duties and responsibilities of school heads in Zimbabwe into four basic categories. The first category is the administrative role that involves organising or planning activities to ensure the effective and efficient running of the school. The administrative roles of the school head include developing the strategic plan, vision, mission, and goals of the school; preparing and implementing annual school budgets; and developing school timetables and calendars in consultation with staff members. The school head attends meetings; develops and implements orientation and induction programmes for teachers and learners; enrols learners, and assigns duties to teachers. Since TICs are full-time teachers, the instructional time for their classes is lost when performing school leadership and management roles. This raises concerns about the quality of education in the classes taught by TICs.

Curriculum management is another principal role of the school head. According to PSC (2019), curriculum management involves interpreting and implementing curriculum syllabuses. The other curriculum management responsibilities are classroom teaching, conducting lesson observations, tracking learner progress, and

providing early intervention to learners with learning difficulties. Teaching heads have to balance classroom teaching with multiple school management responsibilities. A study conducted by Titus (2002 cited in Brown, 2010) in South Africa reports that teaching heads are pushed more into managerial and entrepreneurial roles than instructional role. Expressed differently, teaching heads spend more time performing school management responsibilities than teaching their classes. The limited time that teaching heads spend in their classes, has a negative bearing on curriculum coverage and the provision of quality education.

Some duties and responsibilities of the school head fall under the supervision and management role. The PSC (2019) states that the school head is obliged to supervise both staff and learners; organise and supervise national examinations; and monitor the general cleanliness of school grounds and buildings. The school head also evaluates and manages the performance of learners and teachers; serves as an ex-officio member of the School Development Committee (SDC); and maintains school records. All these roles add to the workload of the TIC and compromise the quality of pedagogical and school management processes in satellite schools.

Another role of the school head is human and material resource management. According to PSC (2019), this role involves managing and utilising available human and material resources in the school. The school head ensures the safety and welfare of staff members and learners. It is the responsibility of the school head to coordinate and manage staff development programmes; offer professional advice to staff members; guide and counsel learners and staff members; and foster good relations among staff members (PSC, 2019). These roles may also leave TICs with little or no time to teach their classes.

In addition to official roles, there are emerging responsibilities of school heads, particularly in rural settings. Some of the emerging responsibilities are attending community functions, grief counselling, and the pastoral role (Kgomo, 2016; Pendola & Fuller, 2018). These responsibilities also cut into the teaching head's institutional and instructional time, militating against the quality of pedagogical and management processes in small rural schools.

Teaching heads confront several challenges that impact negatively on their management role and in turn the provision of quality education. One of the challenges is heavy workloads. This problem is aptly expressed by Dinham *et al.* (2011) who say leading a small rural school is not a straightforward matter because the small school is not a miniature version of a large school. Multiple and conflicting roles that cannot be executed thoroughly due to a lack of adequate time for any task overwhelm the teaching heads (Preston *et al.,* 2013; Pendola & Fuller, 2018). The teaching heads experience work overload because they perform the teaching and school management roles simultaneously. Preston *et al.,* (2013) note that while heads of large schools often delegate and share management tasks, this option is not afforded to teaching heads. They lack administrative support staff such as deputy heads, heads of departments, secretaries, and bursars to enable them to delegate some responsibilities (Preston *et al.,* 2013; Pendola & Fuller, 2018). Teaching heads experience work overload by performing the dual role of teaching and school management.

The heavy workloads of teaching heads have debilitating effects on the quality of pedagogical and management processes in small rural schools. Kgomo (2016) explored the impact of teaching heads' heavy workloads on learner performance in small farm schools located in the Limpopo District of South Africa. It emerged from the study that due to multiple administrative duties, teaching heads are always absent from their classrooms. Consequently, they fail to complete the syllabuses of

their classes and the academic achievement of the learners is affected. Kgomo (2016) also found that teaching heads have limited time to effectively assess learners and offer individualised support. This challenge also leads to poor learner achievement in the classes taught by teaching heads. The study further reports that teaching heads experience stress and burnout due to heavy teaching workloads and administrative overloads. Newton and Wallin (2013) concur that teaching heads experience stress and tensions related to conflicting role demands and workload intensification. The stress, burnout, and tensions affect the teaching head's effectiveness in performing teaching and school management roles. In a study conducted in Namibia, Haingura (2014) found that teaching heads find it difficult to supervise and support teachers because they have full-time classes to teach. The inadequate supervision of teachers has negative repercussions on the quality of education in small rural schools.

Studies by Mangwanya *et al.* (2012) and PoZ (2012) agree that teaching heads who are officially referred to as TICs head satellite schools in Zimbabwe. However, the studies focused on how contextual and resource input factors affect the quality of education in satellite schools. There is a dearth of studies on the impact of the TIC role on the nature and quality of pedagogical and management processes in satellite schools.

Existing literature (Clarke & Stevens, 2009; Clarke & Wildy, 2010; Preston *et al.,* 2013) indicates there is a lack of professional school head preparation programmes in many developed and developing countries. According to Bush and Oduro (2006), in most African countries, there are no preparation programmes for new school heads. Ministries of education and other responsible authorities often appoint successful teachers as school heads without any professional training or induction in school leadership and management. In the opinion of Bush and Oduro (2006), there is an assumption that effective and successful

teachers will be good school heads even without professional training in school leadership and management. Murdock (2009) also noted the lack of professional preparation programmes for school heads in a study of teaching heads of small rural schools in Australia. The teaching heads who participated in the study conducted by Murdock (2009) indicated that they did not receive any professional training or induction in school leadership and management. Therefore, new school heads acquire school leadership and management skills on the job by trial and error rather than through formal professional training (Clarke & Stevens, 2009; Clarke & Wildy, 2010). The lack of professional training limits the teaching head's ability to spearhead the provision of quality education in small rural schools.

To enhance the quality of school leadership and management in both small and large schools, some countries have introduced preparatory programmes for new school heads. The preparatory programmes equip the new school heads with the knowledge and skills they require to effectively lead and manage schools (Bush & Oduro, 2006; Clarke & Wildy, 2010; Edwards, 2016). A study by Clarke, Wildy, and Styles (2011) in Turkey and Western Australia reveals that preparatory programmes for new school heads last for only two to three days. The duration of the preparatory programmes is too short to provide the new school heads with all the requisite school leadership and management knowledge and skills to lead schools effectively.

Furthermore, Clarke *et al.* (2011) observe that the programmes only focus on school leadership and management issues such as financial management, the duty of care, and occupational health and safety. They do not cover other critical skills such as leading and managing a school and handling a class (Clarke *et al.*, 2011). Most school leadership and preparatory management programmes are very general and not targeted to the unique leadership dynamics of a small school (Murdock, 2009; Clarke & Wildy, 2010). School leadership and

preparatory management programmes of this nature do not provide new teaching heads with adequate knowledge and skills to effectively lead and manage small rural schools.

Developed countries such as the United States of America, England, and Scotland have more formal, extensive, and comprehensive school head preparatory programmes (Edwards, 2016). The programmes adequately equip new school heads with the theoretical and practical aspects of leading and managing a school. In England and Scotland, all new school heads must complete the headship preparatory programme before they are appointed (Edwards, 2016). The two countries present a model of school leadership and preparatory management programmes that African countries can adopt in their quest to improve the quality of education in small rural schools.

There is a dearth of literature on school leadership and management programmes for school heads and TICs in Zimbabwe. The existing literature on satellite schools generally highlights the criteria used for appointing TICs. A national survey of satellite schools in Zimbabwe carried out by PoZ (2012) reveals that the first teacher deployed to a satellite school usually assumes the role of TIC without induction into school leadership and management. In a separate study of satellite schools in the Mwenezi District of Zimbabwe, Hlupo and Tsikira (2012) report cases of the MoPSE appointing the teacher who would have stayed the longest at the school as the TIC. There is a need for school leadership and preparatory management programmes for school heads and TICs in Zimbabwe to engender the provision of quality education in schools.

Teaching heads often fail to complete their instructional and institutional itineraries because of frequent interruptions (Starr & White, 2008; Kgomo, 2016). Therefore, teaching heads should carefully plan and manage their time so that they effectively execute teaching

and school management roles simultaneously. In a study of teaching heads in South Africa, Kgomo (2016) reports that parents and other visitors who approach the school head with school-related matters frequently disrupt the teaching activities of school heads. The teaching head's daily schedules are interrupted to attend to learners' disciplinary problems that teachers would have failed to resolve. Hallinger and Murphy (2013) corroborate and add that, those teaching heads who begin the morning intending to conduct class observations often find themselves waylaid by learners, teachers, and parents with urgent problems that need their attention. Under such circumstances, the teaching head fails to teach their classes and supervise teachers effectively. The inevitable result is the poor quality of education in small rural schools.

The phenomenon of MGT is prevalent in small rural schools across the world (Little, 2005; Brown,2010; Kivunja, 2014), and satellite schools in Zimbabwe are no exception (PoZ, 2012). The term MGT refers to a setting where a single teacher is responsible for teaching learners of different grade levels at the same time in the same environment (Joubert, 2010). This is like the definition proffered by Pridmore (2007), who contends that MGT is a situation in which one teacher teaches learners of two or more grade levels during one time-tabled period in the same classroom. Similarly, Mulryan-Kyne (2005 cited in Brown, 2010) conceptualises MGT as a case where one teacher at the same time teaches learners who are in different grade levels in one class. To Taole (2017), MGT describes the set-up where teachers teach simultaneously in the same classroom, learners in different grades. These definitions emphasise that MGT occurs in one classroom where a single teacher is responsible for teaching learners of two or more grades simultaneously. In the context of this book, MGT refers to the teaching of learners of two or more different grades in one classroom at the same time by a single teacher responsible for the grades.

The MGT pedagogical approach is a common phenomenon in both developed and developing countries. It is often associated with small rural schools located in remote and sparsely populated communities where there may be one, two, or three teachers offering a complete cycle of primary education (Little, 2005; Berry, 2010). Research has identified conditions or factors that influence education systems in various parts of the world to adopt MGT. Little (2005) classifies the conditions into two broad categories, namely necessity and choice. This means that MGT can be adopted either as a pedagogy of choice or necessity. The two conditions have a bearing on the quality of pedagogical transactions in multi-grade classes.

Available literature suggests that most developed countries adopt MGT as a pedagogy of choice. MGT is a pedagogy of choice when education stakeholders deliberately select it owing to the pedagogical advantages that it provides (Vithanapathirana, 2006). Little (2005 as cited in Brown, 2010) concurs that MGT is a pedagogy of choice when learners are organised in multi-grade classes rather than mono-grade classes for pedagogical reasons and as part of an education system's curriculum or pedagogic reform. Developed countries such as England (Little, 2006a) and Finland (Brown, 2010) have adopted MGT as a pedagogy choice to implement learner-centred pedagogical approaches. Little (2005) argues that if teachers in consultation with parents adopt MGT as the pedagogy of choice, then the pedagogical transactions in multi-grade classes are likely to be of good quality. The nature and quality of pedagogical transactions in multi-grade classes are one of the under-researched areas in the discourse of quality education in satellite schools.

Most developing countries adopt MGT out of necessity to ensure educational access to all children. According to Tambulukani (2004, as cited in Brown, 2010), in Africa, the adoption of MGT is mainly out of the necessity to increase access to education in less populated areas and

understaffed schools. Juvane and Joubert (2010) corroborate that in the African context, MGT is often implemented as a necessity to address teacher shortages in rural hard-to-reach communities with small school enrolments. Berry (2010) shares similar sentiments. He states that in much of Africa, the major rationale for MGT is to increase access to a full cycle of primary education to learners in remote and sparsely populated areas. Tambulukani (2004) and Kivunja (2014) concur that Zambia established multi-grade classes to extend ample primary educational opportunities to low-population areas. In Zimbabwe, the FTLRP that commenced in 2000, compelled the government to open satellite schools in FTLRRAs despite their low enrolments, resulting in the formation of multi-grade classes (PoZ, 2012). It is clear from the existing literature that most African countries adopted MGT out of necessity to attain universal access to primary education and the EFA goals. Vithanapathirana (2006) argues that in education systems where MGT is utilised as a pedagogy of need or necessity, multi-grade pedagogical practices are often of poor quality. Little (2005) concurs that if school organisations adopt MGT out of necessity, the pedagogical transactions in multi-grade classes are unlikely to be of good quality.

Brown (2010) claims that a large proportion of primary school teachers worldwide are involved in teaching several grade levels in one classroom throughout the school year. This suggests that MGT is prevalent in the educational systems of both developed and developing countries. Little (2006a) provides statistics on the prevalence of MGT in some developed countries. The author states that 25.4% of all primary education classes in the year 2000 in England were multi-grade classes, 29% in France, and 34% in Norway. Little (2006a cited in Brown, 2010) further states that 42% of primary school classes in Ireland were multi-grade classes in 2001. Therefore, MGT teaching is prevalent in developing countries.

The MGT pedagogical approach is also a common phenomenon in African countries. The Centre for Multi-grade Education reports that approximately 7,000 South African schools used MGT in 2009 (Joubert, 2010). Haingura (2014) reports that 40% of Namibian schools have multi-grade classes. The phenomenon of MGT is also prevalent in schools located in remote areas of many other Sub-Saharan African countries such as Zambia, Uganda, the Democratic Republic of Congo, South Sudan, and Sierra Leone (Kivunja, 2014). In Zimbabwe, the PoZ (2012) acknowledges the existence of MGT in satellite schools, but there are no statistics on multi-grade classes in the country. There are generally insufficient published statistics on the prevalence of multi-grade classes in most African countries (Brown, 2010). This makes MGT an invisible pedagogical approach at the administrative level in many African countries (Little, 2006a as cited in Brown, 2010). The invisibility of MGT at the administrative level in some African countries, including Zimbabwe, has negative ramifications on the quality of education in multi-grade classes.

Numerous barriers militate against the effective implementation of MGT in several developing countries including Zimbabwe. One of the barriers to the effective implementation of multi-grade pedagogy in most developing countries is the absence of policies and curricula to support and guide teachers in multi-grade settings. Little (2005) reports that regardless of the prevalence of multi-grade classes in many developing countries, national school policies and curricula are produced for the mono-grade classroom. Textbooks, teachers' guides, and other instructional materials are prepared for mono-grade classes. This means that teachers teaching multi-grade classes rely on policies and curricula designed for mono-grade classes. Joubert (2010), who notes that the policy documents of South Africa's Department of Education make no mention of multi-grade schools, expresses similar sentiments. Taole and Mncube (2012) corroborate that a national multi-grade curriculum for primary and secondary education is non-existent

in South Africa's education system. Therefore, in South Africa, multi-grade classes and their teachers are dealt with within the confines of the mono-grade curriculum framework.

The absence of multi-grade pedagogy in national school policies and curricula to guide and support the implementation of multi-grade pedagogy is not unique to South Africa. Even in Zambia, where MGT was formally introduced in several schools, the only curriculum available is the national primary school curriculum designed for mono-grade classes (Tambulukani, 2004; Kivunja, 2014). The same scenario exists in Namibia, where Haingura (2014) reports that the primary school curriculum is planned, organised, and implemented according to the mono-grade curriculum regardless of the existence of multi-grade classes. The implementation of a mono-grade curriculum in multi-grade settings can affect the quality of education in multi-grade classes. Taole and Mncube (2012) urge departments of education to produce curricula specifically designed for multi-grade classes to improve the quality of education in multi-grade classes.

Another barrier to the effective implementation of MGT in most countries is the absence of multi-grade pedagogy in teacher development programmes. Existing literature suggests that this problem is quite prevalent in African countries. Titus (2004) reports that in many parts of Africa, most teachers teaching in multi-grade settings are either untrained or only trained in mono-grade pedagogy. Little (2006b) concurs that most African countries continue to train mono-grade teachers despite the prevalence of multi-grade classes in their educational systems. Similarly, Joubert (2007) notes that MGT is not specifically addressed in the teacher development programmes of most African countries. African governments tend to focus on preparing mono-grade teachers, leaving the development of multi-grade teachers to local initiatives such as workshops and other *ad hoc* sessions (Little, 2006b; Joubert, 2007). As a result, mono-grade teachers

are not professionally prepared to teach and manage multi-grade classes.

According to Joubert (2010), most teachers teaching multi-grade classes in South Africa are only trained in mono-grade pedagogy. In a study conducted in Uganda and Zambia, Kivunja (2014) also notes that the teachers teaching multi-grade classes lack professional training in MGT. Haingura (2014) observed the same trend in Namibian primary schools. The pre-service training that the teachers undergo, does not provide them with the requisite skills and knowledge to teach and manage multi-grade classes (Lingam, 2007). During their pre-service training, the teachers are neither exposed to the theoretical nor practical aspects of multi-grade pedagogy, hence mono-grade teachers are not professionally prepared to teach and manage multi-grade classes.

There is a taken-for-granted assumption that mono-grade teachers can adapt to multi-grade pedagogy without necessarily undergoing pre-service or in-service training in multi-grade pedagogy (Taole & Mncube, 2012). By implication, ministries of education and other teacher development stakeholders expect mono-grade teachers to adapt to MGT on their own without pre-service or in-service training. Kivunja and Sims (2015) refute this assumption and argue that MGT is a specialised pedagogy with a demanding conceptual architecture that requires intensive pre-service or in-service training for teachers. Kivunja and Sims (2015) emphasise that mono-grade teachers experience challenges in coping with multi-grade classes owing to a lack of professional training in multi-grade pedagogy. For mono-grade teachers to be effective in their teaching tasks, they need professional training in multi-grade pedagogy (Brown, 2010). A shift from a single focus on preparing all teachers for mono-grade teaching to developing versatile teachers who can handle both mono-grade and multi-grade classes is required in African countries with multi-grade classes.

According to Little (2005), another barrier to the implementation of MGT stems from the fact that national primary school curricula in most countries are premised on a mono-grade structure. This compels teachers in multi-grade settings to adapt mono-grade curricula to the needs of multi-grade classes. Existing literature indicates that teachers who are not professionally trained in multi-grade pedagogy experience challenges in adapting mono-grade curricula to multi-grade settings (Nawab & Baig, 2011; Taole, 2014c; du Plessis & Subramanien, 2014). Mono-grade teachers need professional training in strategies for adapting mono-grade curricula to multi-grade settings.

One curriculum adaptation strategy that teachers can utilise to adapt mono-grade curricula within multi-grade settings, is the quasi-mono-grade approach (Brown, 2010). In this approach, the teacher prepares separate teaching plans for each grade constituting the multi-grade class and teaches the grades separately in the same classroom (Juvane, 2005; Brown, 2010). The quasi-mono-grade approach poses challenges to teachers who lack training in multi-grade pedagogy. The teachers complain that producing separate lesson plans for each grade is not only time-consuming and exhausting, but also results in ineffective teaching and learning (Ames-Romello, 2002 as cited in Brown, 2010). As a result, most mono-grade teachers in multi-grade settings plan and teach the curriculum content of one grade (Mansoor, 2011; Taole & Mncube, 2012; Haingura, 2014). Consequently, the curriculum content of the other grade or grades is not covered, and the learners are disadvantaged.

Several studies corroborate that teachers teaching multi-grade classes usually prepare one lesson plan based on the curriculum content of one grade. In their study of MGT in South Africa, Taole and Mncube (2012) report that in multi-grade settings, most teachers have single lesson plans and focus on the curriculum content of one grade level. A study by Haingura (2014) in Namibia also reveals that teachers

teaching multi-grade classes only plan for one grade. In a study in Pakistan, Mansoor (2011) also verifies that teachers who lack professional training in multi-grade pedagogy teach the curriculum content of one grade in the multi-grade class. It is quite clear from the reviewed studies that most mono-grade teachers teaching multi-grade classes plan and teach the curriculum content of one grade at the expense of the other grade or grades. There is a need to explore how this pedagogical approach affects learners and the provision of quality education in multi-grade settings.

The other curriculum adaptation strategy that is mainly utilised by teachers in multi-grade settings is the differentiated whole-class approach. In this approach, the teacher plans and presents lessons with the same general topic or theme to all grades simultaneously, considering the competency outcomes of each grade when assessing the learners (Brown, 2010). Taole (2014a) concurs that the differentiated whole-class approach involves the teacher identifying broad areas of similarity in curriculum content that they teach to all the grades at the same time. Available literature indicates that teachers who are not trained in multi-grade pedagogy experience challenges in implementing the differentiated whole-class approach. In a study conducted by Taole (2017) in South Africa, teachers indicated that the approach is challenging because it requires the teacher to know the curriculum content of all the grades they will be teaching. The knowledge of the content of both grades is necessary to enable the teacher to identify similar and different curriculum content across the grades. Teachers also experience the problem of how to plan and teach curriculum content that is peculiar to each grade (Taole, 2017). A study conducted by Haingura (2014) in Namibia notes similar challenges. These challenges compel teachers who are not trained in multi-grade pedagogy to plan and teach the curriculum content of one grade in a multi-grade setting (Haingura, 2014; Taole, 2017; Siririka, 2018), disadvantaging the other grade.

Small rural schools with multi-grade classes are often located in remote and difficult-to-reach areas. As a result, teachers teaching in such settings usually receive little or no support from school inspectors (Berry, 2010). Studies carried out in South Africa consistently indicate that teachers and teaching heads in multi-grade schools do not receive any support on MGT from curriculum advisors (du Plessis & Subramanien, 2014; Taole, 2014b; Gichuhi, 2015; Mulaudzi, 2016). This problem is not peculiar to South Africa. It was also noted in Namibia (Haingura, 2014; Siririka, 2018) Uganda, Senegal, and The Gambia (Mulkeen & Higgins, 2009). Without support from education officials, teachers and TICs in multi-grade contexts fend for themselves regarding multi-grade pedagogy.

Existing literature reveals that during school inspections and workshops, school inspectors often focus on assisting mono-grade teachers, leaving out multi-grade teachers (Mulkeen & Higgins, 2009; Mulaudzi, 2016). The school inspectors are reluctant to assist mono-grade teachers in multi-grade settings because they also lack professional training in multi-grade pedagogy (Mulaudzi, 2016). Hence, there is no one to guide teachers and teaching heads in multi-grade settings on the implementation of MGT. Due to a lack of support, the teachers get frustrated, and the quality of their instruction is affected negatively (Mulkeen & Higgins, 2009; Mulaudzi, 2016). For children to learn effectively in multi-grade contexts, teachers need to be well-trained and supported, well-resourced and hold positive attitudes towards MGT (Little, 2005). This is only possible if teachers, teaching heads, and school inspectors receive professional training in multi-grade pedagogy.

Research studies in Zimbabwe reveal that school inspectors do not frequently visit satellite schools due to the unavailability of vehicles, financial constraints, and inaccessible roads (Jenjekwa, 2013;PoZ, 2012). For instance, Jenjekwa reports that school inspectors had not supervised the satellite schools that he studied for two years. The main

limitation of these studies is that they did not explore how the lack of supervision militates against the provision of quality education in schools. To address this knowledge gap, this book focused on the nature and quality of pedagogical and management processes in satellite primary schools during the provision of quality education.

One of the roles of teaching heads is to provide pedagogical and class management support to teachers in multi-grade settings. Gasa (2016) observes that multi-grade teachers need support regarding planning, classroom management and organisational skills, and teaching strategies. Expressing similar sentiments Haingura (2014) says, the support that the teachers need ranges from ordinary advice on how to implement MGT effectively to staff development workshops on multi-grade pedagogy. The multi-grade teaching support that the teaching heads offer to the teachers in multi-grade settings is often in the form of class visits accompanied by feedback (Brown, 2010; Haingura, 2014). The support improves the confidence and effectiveness of mono-grade teachers in handling multi-grade classes. However, available literature indicates that the teachers who teach multi-grade classes generally lack MGT support from teaching heads. The teaching heads are usually not able to offer support to multi-grade teachers because, in addition to administrative duties, they are full-time classroom practitioners (du Plessis, 2014; Mulaudzi, 2016). Another factor that makes it difficult for teaching heads to support teachers who teach multi-grade classes is that they also lack professional training in multi-grade pedagogy (Lingam, 2007; Gasa, 2016). The lack of professional training in multi-grade pedagogy on the part of school inspectors, teaching heads, and teachers is a barrier to the effective implementation of MGT in small rural schools.

Research studies in Zimbabwe (Chakanyuka et al., 2009; Hlupo & Tsikira, 2012; PoZ, 2012; Jenjekwa, 2013; Mangwaya et al., 2013; Mavhunga & Mazodze, 2014; Tarisayi, 2015) did not explore whether TICs offer MGT support to teachers. The main reason for this knowledge gap is that the existing studies primarily focused on the

impact of contextual and resource input challenges on the provision of quality education in satellite schools. This has created a knowledge gap on the nature and quality of MGT in satellite schools.

Timetabling for multi-grade classes presents a significant challenge for teachers lacking professional training in multi-grade pedagogy. Existing literature indicates that in some countries, multi-grade classes adhere to the same teaching timetables prescribed for mono-grade classes. Studies in Namibia by Haingura (2014) and Siririka (2018) confirm that the duration of a single lesson is similar for both mono-grade and multi-grade classes. Taole and Mncube (2012) and du Plessis and Subramanien (2014) report the same situation in South Africa, noting that teachers allocate the same lesson time used in mono-grade classes to teach different grades. Consequently, teachers must divide the time allocated for one lesson in a mono-grade class among the various grades in a multi-grade class. Overall, the timetables are structured in a way that does not accommodate multi-grade pedagogy, leading teachers to teach multi-grade classes as if they were mono-grade classes.

The equal allocation of teaching and learning time in mono-grade and multi-grade classes creates complexities in the implementation of MGT. One challenge that multi-grade classes experience is insufficient teaching and learning time. Due to time constraints, some subjects are not allocated their requisite teaching time while others are not taught (Haingura, 2014). This compromises curriculum coverage in multi-grade classes (Taole & Mncube, 2014). Owing to time constraints, some teachers fail to attend to the individual needs of learners (Haingura, 2014; Gasa, 2016). In a study conducted in Uganda and Zambia, Kivunja (2014) corroborates that time constraints make it difficult for teachers to cover the curricula for the different grades in multi-grade classes. As a result, some teachers teach examinable learning areas only, denying learners access to the full curriculum. Therefore,

timetabling for multi-grade classes is another area that needs attention in the discourse on the nature and quality of MGT in satellite schools.

Available literature (Lingam, 2007; Kivunja, 2014; Taole, 2014b) shows that some grade combinations in multi-grade classes pose complexities to the provision of quality education. A study conducted by Taole (2014b) in South Africa identifies two problematic grade combinations. One combination was of Grade R learners who learn informally through play and Grade 1 learners who should be taught formally. This creates problems for teachers because the Grade R curriculum cannot be integrated with the Grade 1 curriculum (Taole, 2014b). The participants in Taole's (2014b) study also indicated that they are failing to handle the combination of Grade 3 and Grade 4 learners who are taught using different languages. Grade 3 learners are taught in their home language, while Grade 4 learners are taught in English. Such grade combinations create complexities in the provision of quality education, particularly for teachers who lack professional training in multi-grade pedagogy.

Kivunja (2014) identified another problematic grade combination in his study of multi-grade teaching in Uganda. He reported that Grade 5 and Grade 6, which are non-examinable, are combined with Grade 7, which is examinable. The combination of an examinable and non-examinable grade is corroborated by Lingam (2007) in a study of MGT in Fiji. Kivunja (2014) and Lingam (2007) agree that examination pressure forces the teacher to focus on teaching the curriculum content of the examination class. Consequently, the curriculum content of the non-examinable grade is not covered. This pedagogical practice creates learning gaps among learners in non-examinable grades that compromise their mastery of concepts and academic achievement.

Existing studies on satellite schools in Zimbabwe (Chakanyuka et al., 2009; Hlupo & Tsikira, 2012; PoZ, 2012; Jenjekwa, 2013; Mangwaya *et*

al., 2013; Mavhunga & Mazodze, 2014; Tarisayi, 2015) did not focus on grade combinations in multi-grade classes and their impact on the provision of quality education. This is another grey area that the current study covered in its exploration of the prospects and complexities of the provision of quality education in satellite primary schools.

The quality of MGT also depends upon the utilisation of effective instructional strategies by the teachers. Brown (2010) states that effective instructional strategies in multi-grade settings are those that increase the level of student independence and cooperative group work. Scholars identify three effective MGT instructional strategies. These include peer tutoring, where learners act as teachers for one another; cooperative group work, which involves small groups engaging in collaborative tasks; and individual learning programmes that encourage self-study (Kyne, 2005, as cited in Brown, 2010). Mulkeen and Higgins (2009), who recommend self-managed learning, small group learning, and peer support as effective instructional strategies in multi-grade contexts, express similar sentiments. The recommended multi-grade instructional strategies are learner-centred. Berry (2010) posits that learner-centred multi-grade pedagogical approaches change the role of the teacher from being the 'giver of information' to the facilitator of learning. Learner-centred pedagogical approaches are emphasised in multi-grade settings. They ensure that the time learners spend away from the teacher when the teacher utilises the quasi-monograde approach is spent productively (Berry, 2010; Brown, 2010). Therefore, learner-centred pedagogical approaches are critical for effective teaching and learning in multi-grade classes.

Lingam (2007) conducted a study in Fiji and found that the lack of training in multi-grade pedagogy influences teachers in multi-grade contexts to employ transmissive approaches, particularly the lecture method. The same challenge was noted in Uganda and Zambia

(Kivunja, 2014), and South Africa (Mulaudzi, 2016). The reviewed studies concur that the lack of professional training in MGT approaches compels teachers to employ teacher-centred strategies that are not ideal for the provision of quality education in multi-grade classes. There is a need to establish the pedagogical approaches utilised by teachers in multi-grade settings of the satellite primary school and their impact on the provision of quality education in multi-grade classes.

Successful MGT depends on adequate supplies of instructional materials that support individual and group-based learning (Little, 2005). Instructional materials of this nature are essential in multi-grade contexts where learners spend more time in individual and group tasks than in teacher-directed learning activities. Adequate instructional materials enable multi-grade teachers to spend more time working with some groups while other groups work alone, in pairs or small groups (Little, 2005; Mulkeen & Higgins, 2009). Textbooks or workbooks with a self-study element and a self-correction key are more suitable for multi-grade settings (Little, Pridmore, Bajracharya & Vithanapathirana, 2007; Berry, 2010). It is worth noting that the instructional materials recommended for multi-grade classes are learner-centred and interactive to facilitate individual and group-based learning practices.

Instructional materials for multi-grade settings in most countries are premised on mono-grade pedagogy. According to Berry (2010), the instructional materials utilised in multi-grade settings are written for the mono-grade classroom. They are produced as grade-level textbooks designed to be delivered to the learner by the teacher. The mono-grade teachers in multi-grade settings experience challenges in adapting the mono-grade instructional materials to multi-grade settings.

In a study carried out in South Africa, Taole and Mncube (2012) reveal that learners in multi-grade classes use the same textbooks used in

mono-grade classes. Similarly, none of the schools studied by Siririka (2018) in Namibia had textbooks suitable for MGT. In the context of Zimbabwe, researchers note that there is an acute shortage of textbooks in satellite schools (PoZ, 2012; Mangwanya *et al.,* 2012; Mutema, 2014). However, the researchers did not establish the suitability of the available textbooks for multi-grade classes. Further research is required on the nature of the textbooks and their impact on the provision of quality education in multi-grade classes.

Literature indicates that mono-grade teachers experience challenges in assessing learners in multi-grade classes. The national learner assessment and record-keeping systems in most countries are designed for mono-grade classes (Hargreaves 2001, as cited in Brown, 2010). Teachers who lack professional training in multi-grade pedagogy must adapt learner assessment and record-keeping systems designed for mono-grade classes to multi-grade classes. The teachers should engage in multi-level assessment of learners' progress against prescribed syllabus outcomes and maintain separate assessment records for each grade (Taole, 2017). Hargreaves (2001 as cited in Brown, 2010) echoes similar sentiments. The authors concur that multi-grade settings lend themselves to assessment systems that recognise individual differences in learning, rather than treating all learners as if they are at the same level. They emphasise the need for separate learner assessment tasks and record books for the different grades constituting a multi-grade class.

A study of MGT conducted by Taole (2014a) in South Africa found that multi-grade teachers assess learners according to the stipulated learning outcomes of their grade levels and maintain separate assessment records for each grade. Mulaudzi (2016) conducted a study in the same country and corroborated this practice. Participants in Mulaudzi's study indicated that assessing learners separately and maintaining separate records is not only time-consuming but also increases the teacher's workload (Mulaudzi, 2016). There is also a need

to establish the learner assessment and record-keeping practices employed by multi-grade teachers in satellite schools and their impact on the provision of quality education.

Available literature in developing countries suggests that the perceptions of teachers towards MGT are generally negative. Suzuki (2004 in Brown, 2010) found that 50 out of 56 teachers with experience of MGT in Nepal hold negative perceptions towards such classes. The teachers indicated that multi-grade classes present them with more pedagogical challenges than mono-grade classes. From the study, Suzuki (2004 in Brown, 2010) concludes that the lack of professional training in multi-grade pedagogy influences teachers to perceive MGT as more demanding than mono-grade teaching. A study by Little (2005) in the Peruvian Amazon, reveals that mono-grade teachers in multi-grade settings regard the mono-grade class as the desirable norm and the multi-grade class as a 'second class' necessity. The study concludes that the lack of professional training in multi-grade pedagogy influences mono-grade teachers to hold negative attitudes towards multi-grade classes. The negative perceptions that mono-grade teachers take to the multi-grade settings affect the quality of their instruction (Brown, 2010) and, in turn, the provision of quality education.

The perceptions of mono-grade teachers towards MGT are generally negative in the African context. Mulkeen and Higgins (2009) report that in Uganda, Senegal, and The Gambia, the perception that MGT is more demanding and stressful than mono-grade teaching influences teachers to hold negative perceptions towards multi-grade classes. Joubert (2010) found similar findings in a study of MGT in South Africa. The author emphasises that teachers perceive MGT as demanding and complex because it requires greater effort regarding planning, curriculum adaptation, and class management. Joubert (2010) adds that the remoteness of multi-grade schools in South Africa, coupled with a lack of pedagogical resources and poor living

conditions, contribute to negative teacher attitudes towards MGT. For the same reasons, most teachers in South Africa view mono-grade teaching as the 'normal' way of organising classes and MGT as an unavoidable 'nuisance' (Berry, 2010). Such attitudes can have a negative bearing on teachers' quality of instruction in multi-grade classes. There is also a need to establish the attitudes of mono-grade teachers in satellite schools towards multi-grade classes and the impact of those attitudes on the provision of quality education.

Support from parents is one of the pre-conditions for the provision of quality education. Small rural schools with multi-grade classes are usually located in remote rural areas where they highly depend on parental support for their financial, resource, and infrastructural needs (Mulkeen & Higgins, 2009). By implication, for the small schools to be successful, they must be supported by parents. Findings from the literature, however, show that small rural schools often receive little or no support from parents. Some researchers hold the view that parents tend not to support small rural schools in their communities because they do not see the value of education for their children (Berry, 2010; PoZ, 2012; Mutema, 2014). Other researchers reject this view. According to du Plessis and Subramanien (2014), poverty, long working hours, low wages, and low levels of education force some parents not to support their schools. Kivunja (2014) corroborates and elaborates that small rural schools are usually located in poor communities where parents are too busy earning a living, resulting in them not having time or money to support the school. From the reviewed studies, it appears as if the lack of parental support is more associated with poverty and time constraints owing to long working hours than negative attitudes towards education.

Researchers also identify negative parental attitudes towards MGT as another factor that influences parents to be reluctant to support small rural schools with multi-grade classes. Parents may not support the presence of MGT in schools in their communities because they

perceive MGT as a 'second-rate' or the inferior option to mono-grade teaching (Kivunja, 2014; Siririka, 2018). UNESCO (2015) concurs and adds that some parents regard multi-grade classes as a stopgap measure that they should move away from as quickly as possible by constructing more classrooms and recruiting more teachers or closing small schools. If small schools are closed, learners are forced to walk very long distances to large schools in their local community and other communities. The long distance to school has a negative bearing on learners' concentration on learning, participation in class, and academic achievement (Hlupo & Tsikira, 2012). In their study in Uganda, Senegal, and The Gambia, Mulkeen and Huggins (2009) found that if schools make efforts to explain the nature and purpose of MGT to parents, they accept and support it. There is a need for a concerted effort by all education stakeholders to raise parents' awareness of MGT so that they appreciate and support it.

The provision of quality education in small rural schools is also complicated by Double-Sessioning (DS). Sagyndykova (2013) reports that the DS schooling system is a common pedagogical and management practice in small rural schools and large urban schools with inadequate classrooms and teachers. In the context of Zimbabwe, DS exists in satellite schools (Hlupo & Tsikira, 2012) and urban primary and secondary schools (Singadi, Goronga, Gatahwi & Mutangirwa, 2014; Kurebwa & Lumbe, 2015). Existing literature illuminates the nature and quality of pedagogical and management processes in small rural schools with DS.

According to Bray (2008), a school with DS caters for two separate groups of learners during the school day using the same buildings, equipment, and other facilities. One group of learners attends the morning session often from early morning to mid-day while the other group attends the afternoon session, usually from mid-day to late afternoon. Bray (2008) reports that in countries with adequate

supplies of teachers, there are different teachers for each session. However, in countries with shortages of teachers, the same teachers teach learners in both sessions. Some double-session schools have separate heads for each session, while others only have one head (Bray, 2008; Sagyndykova, 2013). There are various models of DS, making it challenging to define the concept in universal terms.

Sagyndykova (2013) defines DS in the context of Mexico as one in which a school uses the same buildings and academic curriculum for two different cohorts of learners. One cohort attends the morning session while the other cohort attends the afternoon session. This definition has two limitations. Firstly, it is not clear whether each session has its head, or one head leads both sessions. Secondly, the definition does not specify whether each session has its teachers or whether the same teachers teach in both sessions.

According to Bray (2008), in Botswana, the term DS entails a school that has different learners in the morning and afternoon sessions. The learners in each session are taught by different teachers and have the same number of classroom hours as learners in a single-session school. What is not clear in this definition is whether each session has its head or one head for both sessions. Botswana's model of DS is almost similar to the one used in Zimbabwe. Kurebwa and Lumbe (2015) state that, Zimbabwe's model of DS comprises two separate groups of learners who use the same classrooms, equipment, and facilities. The two groups of learners have different teachers and are managed by a single school head. This model of DS is unofficially known as 'hot-seating' in Zimbabwe. The term 'hot-seating' entails that school seats are not given the time to cool down before the next session begins (Bray, 2008; Singadi *et al.,* 2014).

Several conditions influence developing countries, including Zimbabwe, in adopting DS. According to Bray (2008), many developing countries face serious budget constraints that hinder their

ability to provide educational access to all school-age children. The governments of these countries resort to DS to double the supply of school places without building additional infrastructure. Sagyndykova (2013) corroborates that most developing countries adopt DS to increase the supply of school places while avoiding serious strain on the budget. Thus, the lack of financial resources to construct adequate schools influences some developing countries to adopt DS. Bervell, Sam and Boadu (2013) identify three conditions that necessitate the adoption of DS by developing countries in general and African countries in particular. The conditions are high teacher-learner ratios; inability to construct adequate schools; and shortage of trained teachers (Bervell *et al.,* 2013). This suggests that budgetary constraints to construct adequate schools and a shortage of qualified teachers have necessitated the adoption of DS by some developing countries.

Zimbabwe adopted the DS schooling system to cater to the high demand for education after the attainment of independence in 1980. The new Black government adopted the policy of EFA to ensure educational access to all learners, regardless of race (PCIET, 1999; Kanyongo, 2005; Shizha & Kariwo, 2011). Education was declared a basic human right to every Zimbabwean child,and primary education was made free and compulsory (Zvobgo, 1997; Shizha & Kariwo, 2011). These measures culminated in the phenomenal and unprecedented quantitative expansion in the provision of education in Zimbabwe. The learner enrolment figures at the primary school level rose significantly from 819, 586 in 1979 to 2, 274 178 in 1989, a growth of 177% (Zvobgo, 1999; GoZ, 2009). The sudden phenomenal expansion of educational provision while teaching and learning infrastructure was in short supply led to the adoption of DS as a stopgap measure (Kapfunde, 1999). Thus, the shortage of schools is one of the major factors that influenced the GoZ to adopt DS.

The FTLRP that the GoZ implemented in 2000, also culminated in the adoption of DS by some satellite schools that emerged in FTLRRAs.

Under the FTLRP, the government resettled land beneficiaries in FTLRRAs before the establishment of schools and other social amenities (Gonese& Makura, 2003; PoZ, 2012). Some land beneficiaries failed to construct adequate classrooms in their schools and adopted DS as a stopgap measure to ensure that their children have access to education (Hlupo & Tsikira, 2012). The DS schooling system has helped many countries address the issue of educational access and move towards universal primary and secondary education (Bray, 2008).

Regardless of ensuring educational access, DS has its challenges. Researchers have identified general conditions in double-session schools that militate against the provision of quality education. These conditions provide insights into how DS is creating complexities in the provision of quality education in satellite schools with DS. One such condition is the inadequacy of classrooms. Bray (2008) observes that in most African countries, learners in the morning session use classrooms while those in the afternoon session conduct lessons in the shade of trees waiting for their turn to use classrooms. Goronga, Dozva and Muchenje (2013) acknowledge this problem in their study of DS in Zimbabwe. They found that the teaching and learning process under the shade of trees is prone to distractions and disturbances that result in a lack of concentration by learners. Goronga *et al.* (2013) also note with concern that in the shade of trees, there are no special sitting and writing places for learners. Learners sit on the ground, stones, bricks, and timber logs. The absence of proper sitting and writing places makes it extremely difficult for effective teaching and learning to occur (Bray, 2008; Goronga *et al.,* 2013).

Bad weather conditions pose complexities to the implementation of DS. Bray (2008) states that when it rains, learners in the morning and afternoon sessions find shelter in the available classrooms. The classrooms become so congested that it is not possible to conduct lessons. Goronga *et al.* (2013) corroborate that on rainy school days,

classrooms become overcrowded, and lessons are stopped even if it rains the whole day. The instructional time that is lost during rainy school days compromises the provision of quality education in double-session schools.

Hot weather also militates against the provision of quality education in schools with DS. Bray (2008) and Katjaita (2011) concur that in warm weather, excessive heat makes it extremely difficult for learners who attend afternoon sessions of double-session schools to concentrate on learning. Sagyndykova (2013) agrees and adds that some learners who attend afternoon sessions perform domestic chores or engage in child labour to supplement family income before coming to school. By implication, the learners commence lessons when they are already exhausted. Such a set-up can negatively affect the academic achievement of the learners. One solution to this problem is to alternate morning and afternoon sessions on a weekly, monthly, or termly basis (Bray, 2008). In countries such as Senegal, where teachers can teach in both sessions, it was observed that teacher effectiveness declines in the afternoon session due to fatigue (Bray, 2008; Sagyndykova, 2013). This problem complicates the provision of quality education in the afternoon sessions. Bray (2008) advises countries in this predicament to train adequate teachers so that each teacher teaches in one session only.

Bray (2008) and Katjaita (2011) corroborate that in schools with DS, pedagogical resources such as buildings, furniture, and textbooks are only adequate for one session. Two different groups of teachers and learners use the resources. Hence, the rate of deterioration is faster than in single-session schools. The inadequate resources are further depleted, culminating in higher maintenance costs for pedagogical resources in double-session than in single-session schools (Bray, 2008; Katjaita, 2011). The higher maintenance costs can have a negative bearing on the capacity of double-session schools to procure adequate pedagogical resources for the provision of quality education.

The sharing of classrooms is another source of complexities in the provision of quality education in double-session schools. According to Bray (2008), when teachers share one classroom under DS, they often fear that learners in the other session may tamper with or destroy the instructional media they display in the classroom. This creates a sense of lack of ownership of the classroom by both sets of teachers and learners. The result is that the teachers become reluctant to display instructional media such as posters, charts, and artefacts that create a favourable classroom context in the provision of quality education (Bray, 2008; Mapolisa, Khosa, Ncube & Tshabalala, 2015). Displaying learners' work and instructional media that supplement lesson content, is one of one of the pre-conditions for effective teaching and learning (Bray, 2008). If teachers do not display instructional media, the provision of quality education is compromised.

Evidence in the literature suggests that instructional time is generally shorter in double-session than in single-session schools. Linden (2001) reviewed available literature across the world and found that in most countries, double-session schools have less instructional time than single-session schools. Bray (2008) also reviewed official data on the instructional time of primary schools on DS in 13 countries. He found that in seven of the countries, instructional time is shorter in double-session than in single-session schools. In the other six countries, instructional time is similar in double-session and single-session schools. Based on these literature findings, it can be concluded that instructional time is generally shorter in double-session than in single-session schools. The shorter instructional time in double-session schools compromises the provision of quality education. Bray (2008) observes that when instructional time is short, the first casualty is non-examinable subjects. He stresses that when DS shortens instructional time, the teachers tend to focus on teaching examinable subjects at the expense of non-examinable ones. Linden (2001) notes the same problem and aptly expresses it as the 'narrowing' of the school

curriculum. The curriculum for double-session learners is 'narrowed' when teachers focus on teaching examinable subjects to contend with limited instructional time. The learners are exposed to an incomplete curriculum that limits their career opportunities and life chances.

The second casualty of limited instructional time in double-session schools is the provision of individualised support to learners. The reduced instructional time compels teachers to focus on fast learners at the expense of learners with learning challenges (Bray, 2008; Kurebwa & Lumbe, 2015). Learners with learning difficulties may fail to master some concepts, and their academic performance is adversely affected.

Ashong-Katai (2013) studied double-session schools in Ghana and found that instructional hours are between 4-5 hours per day in double-session schools and 7-8 hours in single-session schools. The disparity of three hours is so large that it can pose challenges to curriculum coverage in double-session schools. Ashong-Katai (2013) concurs with Bray (2008) that limited instructional time forces some teachers to focus on examinable subjects and neglect non-examinable subjects. A school that denies learners access to some prescribed learning areas cannot be said to be providing quality education. The limited instructional time associated with DS is one of the problems that forced the government of Ghana to abolish DS (Ashong-Katai, 2013). The decision by the government of Ghana to revert to the single-session schooling system was to provide learners with sufficient instructional time and reinvigorate the provision of quality education.

Although DS is prevalent in satellite, rural, and urban schools in Zimbabwe, most research studies focus on urban schools. Kurebwa and Lumbe (2015) studied double-session primary schools in Gweru Town and found that learners in both morning and afternoon sessions have less instructional time in the classroom than learners in single-session schools. As noted in other studies (Bray, 2008; Ashong-Katai,

2013), the teachers fail to cover all the subjects within the scheduled time and prioritise examinable subjects. They also fail to attend to learners with learning difficulties owing to instructional time constraints. Kurebwa and Lumbe (2015) also note that limited instructional time forces teachers to rush learners through the syllabus by teaching too much content in one lesson. If teachers overload learners with learning content or rush them through the syllabus, they may fail to grasp the content. These findings are corroborated by a study conducted by Goronga *et al.* (2013) in Chinhoyi Town, Zimbabwe. The authors note that insufficient instructional time makes it difficult for teachers to complete syllabuses on time for public examinations unless they employ the lecture method. Rote pedagogy is not ideal for the provision of quality education because it makes learners passive recipients of knowledge.

Bray (2008) believes that the impact of limited instructional time on the quality of education in double-session classes is not disastrous. He argues that effective teachers who are well equipped with curriculum resources can achieve more in a short time than ineffective teachers with few resources can achieve in twice the time. In other words, the effective implementation of DS requires well-trained and adequately resourced teachers.

The DS schooling system involves transitional periods whose management has a bearing on the quality of education a double-session school provides. The concept of a transitional period in the context of the double-session school entails the change-over period from the morning to the afternoon session. Bray (2008) advises that short interim periods of 20 to 30 minutes save instructional time and are often smooth. However, he notes that very short transitional periods are noisy and chaotic. By implication, very short or very long transitional periods can be detrimental to the nature and quality of pedagogical and management processes in schools with DS.

Research studies held in Zimbabwe (Singadi *et al.,* 2014; Kurebwa & Lumbe, 2015) acknowledge that transitional periods are chaotic and unmanageable. A lot of instructional time is lost during the transitional period. The learning time that is lost compromises curriculum coverage and the provision of quality education. Singadi *et al.* (2014) also report cases of double-session schools where there is no time set aside for the transitional period. The transition from the morning to the afternoon session is held during a timetabled lesson, and a lot of instructional time is lost. In a study of double-session schools in Namibia, Katjaita (2011) reports that classes are always dirty because there is no transition time to allow one session to clean the classroom before the next session commences. A messy classroom poses a health threat to teachers and learners, and is not ideal for the provision of quality education. These studies illuminate how the management of the transitional period can affect the nature and quality of pedagogical and management processes in satellite schools with DS.

Extra-curricular activities are one aspect of the school curriculum that ensures the holistic development of learners. Available literature indicates that the limited school day under DS leaves little or no time for extra-curricular activities (Sagyndykova, 2013). Bray (2008) expresses similar sentiments when he says, DS forces school authorities to cut back on extra-curricular activities. Katjaita (2011) observes that in some Namibian double-session schools, extra-curricular activities are held in the afternoon. Due to that arrangement, learners in the afternoon session do not get the opportunity to participate in the extra-curricular activities. In the absence of extra-curricular activities, the physical development of learners is compromised. Bray (2008) reports cases of sports players in the afternoon session of double-session schools that are made to miss lessons from time to time to participate in school sporting teams. The learning content that is missed by the learners militates against their progress and academic achievement.

Literature indicates that extra-curricular activities for learners in the morning session usually interfere with the teaching and learning process for learners in the afternoon session. A study carried out in Zimbabwe by Singadi *et al.* (2014) found that sporting activities for learners in the morning session are held from 2 pm to 4 pm. For learners in the afternoon session, they are held from 8 am to 10 am. The study by Singadi *et al.* (2014) corroborates earlier research by Bray (2008) that the noise from the sporting fields distracts the attention of learners in the afternoon session from concentrating on learning. This problem can be addressed by holding extracurriculars for both sessions at the same time on Saturdays.

The afternoon session of a double-session school is sometimes 'short-changed' by school inspectors and school heads in terms of supervision. Linden (2001) and Bray (2008) concur that some double-session schools are so large that it is difficult for school inspectors to supervise all the teachers adequately and effectively. The school inspectors often supervise teachers in the morning session and neglect those in the afternoon session. Most heads of double-session schools usually supervise teachers in the morning session and use afternoons for meetings both within and outside the school (Bray, 2008). School inspectors and school heads do not adequately supervise teachers in the afternoon session. Mapolisa *et al.* (2015) report the same problem in a study of urban double-session schools in Zimbabwe. By implication, the quality of education in the morning session is qualitatively superior to that in the afternoon session. There is also a need to establish the nature of supervision processes in satellite schools that practice DS and their impact on the provision of quality education.

One of the determinants of quality education in double-session schools is the attitudes of teachers towards DS. In most countries, teachers tend to perceive double-session schools as qualitatively inferior to single-session schools (Linden, 2001; Bray, 2008; Katjaita, 2011). The

negativity that clouds DS can affect the provision of quality education in this school type. Bray (2008) argues that if teachers accept DS, it is most likely to be successful. However, if they feel overwhelmed, inadequately compensated, and professionally frustrated by DS, then it is unlikely to be successful. Therefore, positive teacher perceptions towards DS are crucial for the provision of quality education in double-session schools.

The attitudes of parents towards DS are generally negative (Linden, 2001; Bray, 2008; Katjaita, 2011). If double-session schools are established as a temporary expedient to be replaced as soon as resources are available, parents often perceive them as inferior to single-session schools (Linden, 2001). This could be the situation in most countries, including Zimbabwe (Linden, 2001) and Namibia (Katjaita, 2011) where DS was adopted as a stopgap measure. If parents perceive double-session schools in this way, they may not support them financially. This can compromise the provision of quality education in the schools since in most African countries, including Zimbabwe; parents are the main financiers of their children's education.

Several developing nations are grappling with the problem of large class sizes because it undermines the provision of quality education (Yelkpieri, Namale, Esia-Donkoh & Ofosu-Dwamena, 2012). This problem is quite prevalent in urban areas of most developing countries (Marais, 2016; Wadesango, Hove & Kurebwa, 2016). Although small rural schools are associated with low enrolments, researchers are reporting cases of large class sizes in this school type (PoZ, 2012; Kivunja, 2014; Taole, 2014c; Gasa, 2016). However, there is a dearth of literature on the pedagogical and management practices in large classes in the context of small rural schools, including the satellite school type. As a result, the literature on the impact of large class sizes on the provision of quality education was mainly drawn from studies

on large urban schools. The literature provides insights into the nature and quality of pedagogical and management processes in large classes and their impact on the provision of quality education.

There is no consensus in education literature on the size of a large class (Bahanshal, 2013; Adu, Bayaga & Tella, 2014). This is because teacher-learner ratios and the notion of large classes vary in different countries. For instance, Shwandi (2017) reports that in Japan, the teacher-learner ratio of 1:50 is regarded as normal and not a challenge to teachers. In the United States of America and the United Kingdom, the teacher-learner ratio of 1:30 is considered large and problematic for teachers. The recommended teacher-learner ratios for primary schools in Zimbabwe are 1:20 at the Early Childhood Development (ECD) level and 1:40 for Grades 1 to 7 (MoESAC, 2013b). From this empirical evidence, it is apparent that the notion of large class size is relative. Mulryan-Kyne (2010) and Bahanshal (2013) agree that large classes are those with a specific number of learners that teachers cannot handle, and resources are not enough for effective teaching and learning to occur. In the context of this study, a large class entails one that exceeds the recommended teacher-learner ratio and poses challenges to effective teaching and learning.

Large classes are a common phenomenon in educational institutions of most Sub-Saharan African countries, including Zimbabwe. According to Mintah (2014), large classes are necessitated by rapid population growth and the global initiative for free and universal primary education. African governments implemented the policy of free and comprehensive primary education in the context of inadequate schools and teachers. This policy resulted in a phenomenal increase in learner enrolments that schools failed to accommodate. To accommodate all learners, governments had no option but to allow schools to have large classes (Yelkpieri *et al.,* 2012; Mintah, 2014).

Zimbabwe is also confronted with the problem of large class sizes. Zvobgo (1997) states that the colonial government in Zimbabwe denied Blacks equal access to education. After the attainment of independence in 1980, the Black government adopted the policy of EFA and free primary education to ensure educational access to Blacks. These measures resulted in learner enrolment figures at the primary school level rising significantly from 819, 586 in 1979 to 2, 274 178 in 1989 (Zvobgo, 1997). Wadesango *et al.* (2016) concur and point out that the sudden phenomenal expansion of educational provision when human, financial, and material resources were in short supply led to large class sizes. The teacher-learner ratio burgeoned from 1:40 to 1:60 in some primary schools (Wadesango *et al.,* 2016). Therefore, the phenomenon of large class sizes in most African countries is a consequence of inadequate school infrastructure and teachers to cater for increasing learner enrolments following the adoption of the policy of free primary education.

Zimbabwe is also grappling with the problem of large class sizes linked to the Teacher Recruitment Freeze (TRF) imposed by the PSC of Zimbabwe in 2015, citing the unavailability of financial resources to meet any increment in the civil service wage bill (PSC, 2016). The TRF entails that the government is not recruiting new teachers into the service to fill in vacant posts. This has resulted in acute understaffing and very high teacher-learner ratios in schools. The PSC reports that 8, 509 vacant teaching posts remain unfilled on account of the freeze, against a background of over 19, 000 unemployed teacher graduates in the country (Langa, 2017). In 2019, the MoPSE reported that the deficit of primary and secondary school teachers in the country increased from 12, 000 to 13, 000 due to the TRF (Tshili, 2019). The TRF has created an unfortunate situation where there are vacant posts and unemployed teachers. Still, the government cannot recruit the teachers due to a lack of funds to remunerate them. This set-up has inevitably created unsustainable teacher-learner ratios in Zimbabwe's public primary and secondary schools.

Teacher Unions in Zimbabwe have raised concerns about the problem of high teacher-learner ratios in the schools. The Zimbabwe Teachers' Association (ZIMTA) laments that the teacher-learner ratio has shot to 1: 55 at the ECD Level and 1: 60 from Grades 1 to 7 (Mugadzaweta, 2017). The teacher-learner ratios are far above the recommended MoPSE teacher-learner ratios of 1: 20 at the ECD level and 1: 40 from Grades 1 to 7, respectively (MoESAC, 2013b). The Amalgamated Rural Teachers' Union of Zimbabwe (ARTUZ) complains that the teacher-learner ratio has risen to unacceptable levels of 1:100 in rural areas (Murwira, 2018). The Progressive Teachers' Union of Zimbabwe (PTUZ) also reports cases of teachers who are teaching as many as 110 learners in one class (Murwira, 2018). There is a need to explore the effects of high teacher-learner ratios on the quality of pedagogical and management processes in schools, including satellite schools.

Large class size poses several pedagogical and management challenges to teachers. The challenges include methods of teaching, learner assessment, catering to the diverse needs of learners, and class management. These challenges emanate from the teachers' lack of professional training in handling large classes.

The initial challenge that confronts teachers teaching large classes is the lack of training in pedagogical and management skills for teaching large classes. Teacher training institutions tend to prepare teachers for teaching with the official teacher-learner ratios in mind (Kariuki & Guantai, 2005). Teachers are equipped with pedagogical and class management approaches for teaching and managing small or large classes depending on the official teacher-learner ratios in their country or community. Many African countries are grappling with the problem of large class sizes, but they prepare student teachers to teach official class sizes that are smaller than the classes they will teach as qualified teachers (Mintah, 2014). In other words, student teachers are not prepared to teach large classes. Teaching large classes is a pedagogical issue that is not covered in the teacher development programmes of

most African countries (Benbow, Mizrachi, Oliver & Said-Moshiro, 2007). In a study in South Africa, Marais (2016) corroborates that, teacher development institutions do not offer appropriate programmes for teachers to handle large classes. The institutions do not equip teachers with the theoretical and practical skills to deal with the unique challenges associated with large classes. Opoku-Asare, Agbenatoe and DeGraft-Johnson (2014) rightly observe that large classes pose overwhelming challenges to newly appointed teachers who lack exposure to teaching in large classes during their pre-service training. The nature and quality of pedagogical and management processes in large classes is a knowledge gap in the discourse of quality education in satellite schools that needs to be addressed.

Evidence in the literature suggests that class size has an impact on the teacher's choice of pedagogical approaches. In large, overcrowded classes, teachers usually employ rote pedagogical approaches due to a lack of space (Opoku *et al.,* 2014). Marais (2016) who says due to overcrowding in large classes, learner-centred pedagogy that promotes active participation by learners is hindered, echoes similar sentiments. The teacher-centred pedagogical approaches that the teachers utilise do not effectively provoke learners' thinking and the development of skills associated with quality education. These skills include critical thinking, application of knowledge in real-life situations, and problem-solving (Opoku *et al.,* 2014; Marais, 2016). In the same vein, Mupa and Chabaya (2011) argue that in large classes, teachers adopt teacher-centred pedagogical approaches that make learners passive recipients of knowledge. Generally, existing literature agrees that teachers teaching large classes employ teacher-centred strategies that are not ideal for the provision of quality education. This literature is relevant to the current study because it highlights the nature of pedagogical and management approaches utilised in large classes and their effects on the provision of quality education.

Available literature reveals that large classes overburden teachers with heavy marking loads. In their study in Zimbabwe, Wadesango *et al.* (2016) report that in large classes, teachers assign learners very few assignment tasks to avoid heavy marking loads. The inadequate assignment tasks limit learners' opportunities to practise and master new concepts. A study by Marais (2016) in South Africa reports that in large classes teachers are so overwhelmed with marking loads that they do not have time to review learners' assignments thoroughly. The errors that the teachers overlook militate against learners' progress and academic achievement. Mupa and Chabaya (2011) advise that feedback should be detailed, accurate and timely. Although it is a challenge in large classes, timeous feedback enables teachers to identify and rectify learners' challenges promptly.

Research has noted that teachers find it difficult to attend to the individual needs of learners in large classes. The problem emanates from the fact that it is hard to identify individual learners who need extra support in large classes (Adu *et al.,* 2014; Imtiaz, 2014; Marais, 2016). The same problem is noted by Mupa and Chabaya (2011) who say large class sizes make it difficult for teachers to facilitate a single channel of communication where they talk to learners as individuals. Teachers usually interact with the learners in groups rather than individually. The problem with this approach is that it does not provide teachers with detailed knowledge of the individual needs of learners. Resultantly, teachers concentrate on teaching fast learners at the expense of slow learners (Wadesango *et al.,* 2016). According to the Equity Model reviewed in Chapter 2, an education system that is insensitive to the diverse needs of learners is not of good quality.

Marais (2016) reports that in South Africa teachers find it difficult to cater to the needs of learners with physical, visual, and hearing impairments in large classes. Wadesango *et al.* (2016) corroborate that teachers neglect learners with special needs, particularly in large

inclusive classes. This amounts to the exclusion rather than the inclusion of learners with special needs. Taole (2014c) argues that small class sizes allow each learner to receive more attention from the teacher. Mulryan-Kyne (2010) agrees and underlines that if teachers work with fewer learners, they can provide personalised attention more than in large classes. In the final analysis, a large class size militates against the teacher's ability to provide effective individualised support to all the learners.

Large class size poses learner behaviour management challenges that impede effective teaching and learning and the provision of quality education. In a study of large classes in South Africa, Marais (2016) reports that learners are cramped together and engage in disruptive behaviours. The unruly behaviours include screaming, fighting, bullying others, pushing, and vandalising resources. Similar learner disruptive behaviours in large classes are noted in Saudi Arabia Bahanshal, 2023), Zimbabwe (Wadesango *et al.,* 2016) and Zambia (Shwandi, 2017). Disruptive learner behaviours in the classroom reduce the efficiency of lesson delivery (Marais, 2016). Bahanshal (2013) concurs and adds that learner misconduct in large classes minimises the quantity and quality of learning opportunities, lesson pace, and curriculum coverage. It is extremely difficult for teachers to identify and control disruptive learners in large classes (Bahanshal, 2013; Shwandi, 2017). This gives undisciplined learners the leeway to disturb those learners who want to learn. The result is that large classes become chaotic and unmanageable (Marais, 2016; Shwandi,2017). Such a classroom ambience is irrefutably not ideal for the provision of quality education.

High levels of noise also hamper effective teaching and learning in large and overcrowded classes. In a study conducted in South Africa, Marais (2016) reports that large classes are so noisy that it is impossible for learners who want to learn to focus on learning. Mustafa, Mahmoud,

Assaf, Al-Hamadi and Abdulhamid (2014) corroborate that in large classes, learners find it very difficult to concentrate on learning owing to noisy and restive classmates. Noise in large classes is a problematic issue that makes it hard for learners to hear the teacher and concentrate on learning (Bahanshal, 2013; Wadesango *et al.,* 2016). Therefore, noise is one of the barriers to the provision of quality education in large classes.

The management of learner behaviour reviewed in the preceding section has a bearing on time management and the provision of quality education in large classes. A study conducted by Imtiaz (2014) reports that large classes compel teachers to devote more time to managing learner behaviour than actual instruction. The same problem was noted by Marais (2016) in a study conducted in South Africa. He found that teachers teaching large classes spend a lot of instructional time getting learners to settle down and addressing disruptive behaviours at the expense of teaching. The teachers fail to complete lessons in the scheduled time owing to interruptions associated with unruly learner behaviours in large classes (Marais, 2016). In their study in Zimbabwe, Mapfumo, Mukwidzwa and Chireshe (2014) corroborate that addressing learner behavioural problems in large classes cuts deeply into instructional time. If teachers spend more instructional time on managing learner behaviour in large classes than teaching, curriculum coverage and the provision of quality education are compromised.

After the attainment of independence in 1980, the GoZ adopted the policy of EFA to afford Blacks equal access to education (PCIET, 1999; Kanyongo, 2005; Shizha & Kariwo, 2011). Following the implementation of the policy of EFA in 1980, there was a quantitative expansion of educational provision in the country. The emphasis was not so much on the quality and cost-effectiveness of the education system but on access to education (Kanyongo, 2005). Put differently, there was a focus on educational access rather than the quality of

education. As a result, in the late 1980s, the quality of education deteriorated, and the government realised that quantitative expansion of educational provision in the face of scarce resources compromises the quality of education (Gatawa, 1988; Kapfunde, 1999; Zvobgo, 1999). To promote the provision of quality education, the government shifted its educational policy from an emphasis on quantitative expansion to quality education (Kapfunde, 1999) and adopted several quality education initiatives to improve the quality of primary and secondary education in the country. These include the Minimum School Functionality Standards (MSFS), School Development Committees (SDCs), Better Schools Programme Zimbabwe (BSPZ), Education Transition Fund, and the Competence-Based Curriculum (CBC).

One of the pioneering quality education initiatives in post-independent Zimbabwe is the MSFS that refers to the benchmarks of quality education that all schools in Zimbabwe are expected to meet to be deemed fit for providing quality education (MoESAC, 2013b). These are the minimum pre-conditions that every school is mandated to meet to provide quality education. The MoESAC (2013b) stipulates the following MSFS for a school to be registered with the ministry: a standard administration block; at least one standard teacher's house; and at least one standard classroom block. More so, a school should have a safe source of drinking water within 500 metres of the school campus and adequate toilets for staff members and learners. The ratio of toilet holes to learners is set at 1:20 for girls and 1:25 for boys (MoESAC, 2013b). A total of 1,016 satellite primary schools in Zimbabwe are not registered with the MoPSE due to the failure to meet the MSFS (MoPSE, 2017). By implication, the quality of education in satellite primary schools is very poor.

After registration with the ministry, there are other MSFS that a school is expected to meet to be regarded as fit to provide quality education. The MoESAC (2013b) states that each school should have one textbook

per learner for each core subject, teachers' guides, syllabi for all learning areas offered by the school, a computer, and adequate furniture for learners and teachers. However, research studies in Zimbabwe (Mutema, 2014; Tarisayi, 2015) indicate that there is an acute shortage of textbooks and furniture in most satellite schools. The authors note that the inadequacy of textbooks and furniture creates complexities to the provision of quality education in satellite schools.

Regarding teacher qualifications, the MSFS states that the minimum academic and professional qualifications for primary school teachers are five Ordinary Level passes including Mathematics and English and a Diploma in Education (Primary) (MoESAC, 2013b). Existing studies (Hlupo & Tsikira, 2012; Jenjekwa, 2013) report cases of untrained teachers in satellite schools. However, a recent report by the PSC of Zimbabwe indicates that there are over 19,000 unemployed teacher graduates in the country (Langa, 2017). This may suggest that there are no longer cases of untrained teachers in satellite schools.

In Zimbabwe, the teacher-learner ratios are set at 1:20 at the ECD level and 1:40 from Grades 1 to 7 (MoESAC, 2013b). Nonetheless, most schools are grappling with the problem of large classes following the implementation of the TRF by the government in 2015. The TRF has led to high teacher-learner ratios of 1:55 at the ECD Level and 1:60 from Grades 1 to 7 (ZIMTA cited in Mugadzaweta, 2017). In line with the MSFS, teachers should employ learner-centred, participatory, and inclusive pedagogical approaches (MoESAC, 2013b). This book explores, among other pedagogical and management practices, how teachers in satellite schools are addressing large class sizes through various pedagogical approaches and their impact on the provision of quality education.

The MSFS stipulate that teachers should maintain a set of professional records, including the scheme of work, lesson plans, progress record, attendance register, test record, remedial record, social record, inventory record, and extension record (MoESAC, 2013b). Studies conducted by the PoZ (2012) and Mutema (2014) report cases of multi-

grade classes in satellite schools. There is a need to explore how teachers manage professional records in multi-grade classes. On the whole, the MSFS provide a yardstick to measure the extent to which satellite schools provide quality education in terms of pedagogical and management processes.

After the attainment of independence in 1980, the GoZ employed a centralised approach to funding education in which it solely funded education from pre-school to adult education. The government funding covered the construction of schools, salaries, and allowances for teachers and per capita grants for the procurement of teaching and learning resources (Zvobgo, 1997; Nyandoro, Mapfumo & Makoni, 2013). The government intended to accord Blacks access to education that was restricted during the colonial era. Towards the end of the first decade of independence, the huge government expenditure on education became unsustainable, and the quality of primary and secondary education deteriorated (Kapfunde, 1999; Zvobgo, 1999; Shizha & Kariwo, 2011). To reinvigorate the quality of primary and secondary education, the government introduced the notion of School Development Committees (SDCs) in 1991.

The government enacted the Education Amendment Act of 1991 that provides provisions for government-aided schools to establish SDCs (GoZ, 1991). Statutory Instrument 87 of 1992 stipulates that the SDC comprises five elected parents of learners enrolled in the school, the school head, the deputy head, a teacher at the school, and a representative of the responsible authority (GoZ, 1992). The SDCs paved the way for community involvement in funding and managing schools to enhance the provision of quality education. The responsibilities of the SDC include the following: charging and collecting levies from parents; constructing and maintaining school infrastructure; providing instructional resources; and catering for the welfare of learners (GoZ, 1992; MoESAC, 2010). The SDCs have the

mandate of developing schools in the best interests of learners, parents, and teachers. They are responsible for mobilising and managing the resources that the school requires to provide quality education. Through SDCs, the government shifted its responsibility of financing education to parents, a situation that has made parents the major financiers of their children's education in Zimbabwe.

As alluded to in Chapter 2, the government resettled fast-track land reform beneficiaries in FTLRRAs before the establishment of schools (Gonese & Makura, 2003; Chakanyuka, 2009; PoZ, 2012). The land beneficiaries established satellite schools with financial and management support from their SDCs. This makes the SDC part of the management process of a satellite school. Among other management processes, the book explores the nature and quality of the management support that SDCs provide in satellite schools.

The GoZ adopted the BSPZ in 1996 to improve the quality of its primary and secondary education (MoESAC, 2001). The BSPZ operates through a system of school clusters and Cluster Resource Centres (CRCs). A school cluster consists of a group of at least three schools located near each other that agree to work together to improve the quality of education they provide (MoESAC, 2001; Giordano, 2008). The schools share human, material, and financial resources to tackle their challenges and improve the quality of education in the cluster (Giordano, 2008; Maphosa, Mutekwe, Machingambi, Wadesango & Ndofirepi, 2013). School clustering entails inter-school collaboration, pulling together resources and sharing challenges and best practices among schools in the pursuit of quality education. In this way, a school receives management and pedagogical support from its cluster.

The schools in each school cluster pull resources together and establish a Cluster Resource Centre (CRC) that is equipped with educational

resources such as books, journals, computers, and internet facilities (MoESAC, 2001). School clustering creates platforms for schools to collaborate, share resources, and support each other in creating teaching and learning ambiences conducive to the provision of quality education. The activities of the school CRC are coordinated by a cluster resource teacher who is usually based at the CRC (MoESAC, 2001). To ensure the effective implementation of quality education programmes, the BSPZ has structures at national, provincial, district, cluster, and school levels (Mbudzi & Ndlovu, 2000). The bureaucratic administrative structure of the BSPZ enhances the effective implementation of school cluster programmes.

The BSPZ recommends the following school cluster activities to enhance the provision of quality education: making education responsive to local needs; drawing common school syllabi and schemes of work; setting and administering common examinations; and creating a research base that guides policy and educational practice at the cluster level (MoESAC, 2000; Maphosa *et al.,* 2013). The provision of quality education is also enhanced through conducting staff development workshops, on-site school supervision visits and demonstration lessons; organising cluster competitions in sports and other aspects of the curriculum; and monitoring and evaluating cluster activities regularly (MoESAC, 2000; Maphosa *et al.,* 2013). These activities address the main dimensions of quality education, namely: relevance; resource inputs; transformation process; outputs and feedback. Therefore, the BSPZ is a comprehensive quality education initiative.

Available literature acknowledges the utility of school clustering. In a study conducted in South Africa, Lock (2011) notes that school clustering offers opportunities for school heads to share and support each other on school leadership issues. School clustering also equips school heads who are vanguards of the quality education imperative

with transformational leadership skills to enable them to implement quality education initiatives effectively (Lock, 2011; Maphosa *et al.,* 2013). In their study in South Africa, Jita and Mokhele (2012) report that school clusters improve the pedagogical skills of teachers and the quality of education. School clustering has the potential to enhance the quality of pedagogical and management processes in satellite primary schools.

Regardless of the efficacy of school clustering discussed above, researchers have drawn our attention to some of its limitations. In their study of school clusters in South Africa, Jita and Mokhele (2012) report that lack of resources is a major factor militating against the effective implementation of school clustering in rural settings. Similarly, Makaye (2015) found that in rural Zimbabwe, school clusters are so poorly funded that teachers and school heads sustain cluster activities from their resources. These challenges create negative teacher attitudes towards school clustering that militate against the provision of quality education.

Zimbabwe experienced a decade of economic meltdown from 2000 to 2009 that culminated in hyperinflation and failure by the government to provide schools with per capita grants (MoPSE, 2016). The absence of school per capita grants from the government led to the reintroduction of user fees, acute shortage of teaching and learning resources, high learner dropout rates, deterioration of infrastructure, teacher migration, and mass closure of schools (MoESAC, 2013a). The economic meltdown eroded the qualitative gains the country achieved since 1980 (MoESAC, 2013a; Sadomba, Chigwanda & Manyati, 2015). To reinvigorate the quality of education in the country, the MoPSE with financial assistance from UNICEF and the international donor community implemented the Education Transition Fund (ETF) in 2009 (United Nations in Zimbabwe, 2012). The ETF was implemented in two phases. The first phase involved providing schools with stationery

and textbooks. In the second phase, schools received School Improvement Grants (SIGs).

According to the MoESAC (2013a), owing to the economic crisis from 2000 to 2009, the textbook-learner ratio was as high as 1:10 in 2009 with 20% of rural primary schools having no textbooks at all for core subjects such as English, Mathematics, Science, Shona, and Ndebele. The Zimbabwe Schools Examinations Council (ZIMSEC) Grade 7 pass rate plummeted from 53% in 1999 to as low as 33% in 2007 (MoESAC, 2013a). In a bid to improve the quality of education, the MoESAC in partnership with UNICEF and the international donor community rolled out the first phase of the ETF in 2009. According to the MoESAC (2013a), each learner in the country's 5, 575 primary schools was provided with stationery kits and a set of four core textbooks in Mathematics, English, Science, and Chishona or Ndebele. Following the disbursement of the textbooks and stationery kits, the textbook-learner ratio in core subjects declined significantly from 1:10 to 1:1. In separate studies of satellite schools in Zimbabwe, the PoZ (2012) and Mangwanya *et al.* (2012) confirm the availability of core textbooks donated by UNICEF in some satellite schools. For non-core subjects, they note that they were either not available, or it was the teacher only who had a textbook (PoZ, 2012; Mangwanya *et al.,* 2012). The ETF stationery and textbooks programme alleviated the dire shortage of textbooks in the schools.

The MoPSE with financial assistance from its partners implemented the SIG in 2013 as the second phase of the ETF. The goal of SIG is to provide financially constrained schools with grants to meet infrastructural and curriculum material needs (CfBT Education Trust, 2013; MoPSE, 2016). The SIG targeted financially constrained special schools; registered rural primary schools and satellite primary schools with an average annual income of less than $10,000; registered rural secondary schools and satellite secondary schools with an average annual income of less

than $15,000 (MoPSE, 2016). The SIG generally targeted poor small rural schools. According to UNICEF (2018), the grant caters for the fees and levies for Orphans and Vulnerable Children (OVC), teaching and learning materials and special needs provisions. It also covers school running costs, building materials, inputs for the school feeding programme, water and sanitary facilities, and maintenance costs. School heads and SDC members were trained in financial management to enable them to implement the SIG programme in line with government accounting principles (MoPSE, 2016). This ensured the effective and efficient implementation of the programme in the provision of quality education.

In a study on the efficacy of the SIG in satellite schools, Tarisayi (2015) reports that the programme enabled some satellite schools to complete the construction of their first standard classroom block projects that they had abandoned due to financial constraints. He also notes that satellite schools utilise the grant to construct standard toilets for learners and teachers (Tarisayi, 2015). Thus, the SIG is improving the quality of teaching and learning infrastructure in satellite schools.

One of the fundamental determinants of quality education is a relevant school curriculum that enhances a country's prospects of realising socio-economic development. According to PCIET (1999), the school curriculum that Zimbabwe inherited from the colonial regime after the attainment of independence in 1980, was too academic and Eurocentric. The PCIET recommended the country to review the school curriculum and align it to its socio-economic needs (PCIET, 1999). In response to this recommendation, the MoPSE implemented a Competence-Based Curriculum (CBC) in 2015 (MoPSE, 2015). The implementation of the CBC commenced while the study on which this book is based was being conducted. Therefore, the nature and quality of pedagogical and management processes in the satellite school type was assessed in the mirror of the CBC. According to MoPSE (2015), the central goal of the CBC

is to improve the quality of education in schools. MoPSE (2016) confirms that the CBC aims to enhance quality education through the curriculum, making it a quality education initiative.

The MoPSE (2015) outlines the following aims of the CBC: to develop a national identity, patriotism, tolerance, and *Ubuntu* in learners; to inculcate life, work, and entrepreneurial skills in preparation for life and work in a globalised and competitive society; and to cultivate relevant literacy, numeracy, and practical skills in learners. It also aims at fostering long-life learning to enable learners to adapt to the opportunities and challenges of the 21st-century knowledge society; preparing learners for participatory citizenship, peace and sustainable development; and orienting learners for voluntary service, participation and leadership (MoPSE, 2016). These aims incorporate the context, inputs, relevance, equity, process, and output dimensions of quality education. Therefore, the CBC is a holistic quality education initiative.

The CBC is organised on three levels, namely the Infant level, Junior level, and Secondary school level. According to the MoPSE (2015), the Infant and Junior levels constitute the primary education cycle that comprises nine years. The Infant level includes two ECD classes, that is ECD A and B, and Grades 1 and 2. The Junior level runs from Grades 3 to 7. At the end of the primary school cycle, learners take the ZIMSEC Grade 7 national school examinations. The transition to the secondary education cycle follows the formal completion of primary education. The secondary school cycle is in two levels: Forms 1 to 4 and Forms 5 and 6.

According to the MoPSE (2015), the learning areas at the Infant Level include Languages, Visual and Performing Arts (VPA), Physical Education, Mass Displays, Mathematics and Science, Family and Heritage Studies, and ICT. The learning areas for the junior classes are Languages, Mathematics, Heritage Studies and Life Skills Orientation Programme (LSOP), Science and Technology, Agriculture, VPA, ICT,

Physical Education, Sport and Mass Displays, and Family, Religion and Moral Education. The CBC has a bias towards STEM subjects to equip learners with scientific and entrepreneurial skills so that they thrive in a knowledge-based 21st-century society (MoPSE, 2015). This resonates well with the goal of the CBC framework of equipping learners with scientific and entrepreneurial skills so that they create employment for themselves and others.

As noted earlier, the MoPSE with financial assistance from UNICEF rolled out the ETF textbook and stationery programme for all schools in 2009. In 2017, the MoPSE implemented the CBC with some learning areas different from those of the old curriculum. This development has implications for the availability of textbooks in satellite schools and the provision of quality education.

This chapter reviewed the literature on the quality of education in small rural schools. It commenced by conceptualising the notion of a small rural school. This is followed by a review of the literature on the quality of education in farm schools in colonial Zimbabwe. Satellite primary schools are located in the same setting as former White-owned farm schools for the children of African farm labourers. Therefore, the literature on the quality of education in the farm schools provided a historical and contextual background to the prospects and complexities of quality education in satellite primary schools. The literature on the emergence of satellite schools and factors affecting the quality of education in this school type were also reviewed. Most satellite primary schools in Zimbabwe fall under the category of small rural schools. Hence, the literature on the quality of education in small rural schools provided insights into the nature and quality of pedagogical and management processes in satellite primary schools. The chapter ended by reviewing the quality education initiatives that the GoZ implemented to improve the quality of primary and secondary education in the country. The next chapter outlines and justifies the

interpretive-qualitative research methodology that was adopted for the study on which this book is based.

CHAPTER 4 RESEARCH METHODOLOGY

Chapter 3 reviewed the literature on the quality of education in small rural schools, providing insights into the nature and quality of pedagogical and management processes in satellite primary schools. This chapter presents and justifies the research methodology adopted to generate findings related to the quality of these processes, which form the basis of this book. An interpretive-qualitative research methodology with emphasis on the multiple case study design guided the data generation process. Methodological issues addressed include population and sampling procedures, site and participant selection, data generation methods, strategies for enhancing trustworthiness, and ethical considerations.

Research methodology in any field, whether natural or social sciences, is informed by a philosophical paradigm (Leavy, 2017; Denzin & Lincoln, 2018). For this book, data generation was informed by the interpretive research paradigm. Interpretivists argue that reality is socially constructed, and the researcher's role is to interpret this reality from the perspectives of the social actors involved in its construction (Mertens, 2010; Denzin & Lincoln, 2018). This research paradigm was adopted to understand the nature and quality of pedagogical and management processes in satellite primary schools from the viewpoints of teachers and TICs.

The ontological, epistemological, and methodological assumptions of interpretivism informed the data generation process. Ontological assumptions involve a philosophical belief system concerned with the nature of social reality (Taylor *et al.,* 2016; Leavy, 2017; Denzin & Lincoln, 2018). A fundamental question addressed in this book is, "What is the nature and quality of pedagogical and management processes in satellite primary schools in the provision of quality education?" Interpretivists reject the positivist notion of a pre-existing

and objective reality waiting to be discovered (MacMillan & Schumacher, 2010; Mertens, 2010; Denzin & Lincoln, 2018). Instead, they believe that humans construct reality through ongoing interactions with others, attaching meanings to these experiences (Neuman, 2014). Social researchers interpret social reality from the perspectives of the social actors involved in its construction (Mertens, 2010; Braun & Clarke, 2013). Guided by this view, data for the book were generated from teachers and TICs, who serve as key informants in implementing pedagogical and management processes in satellite schools. Interpretivism posits that multiple, fluid, and relative realities are socially constructed through social interaction (Braun & Clarke, 2013; Neuman, 2014). The diverse perspectives of research participants on the nature and quality of pedagogical and management processes in the selected schools were captured through FGIs and in-depth interviews.

Epistemology refers to the philosophical belief system regarding how we know about the world around us and what constitutes true knowledge (Neuman, 2014; Denzin & Lincoln, 2018). Interpretivists assume that knowledge is rooted in contexts and individuals distinct from the researcher (Mertens, 2010). Consequently, teachers and TICs were interviewed in their respective schools to understand the research problem *in situ*. This approach is essential because humans engage with their social world and make sense of it based on their cultural and historical contexts (Crotty, 1998; Creswell & Creswell, 2018). For interpretivists, knowledge is inductively gained through personal experience within the human community (Crotty, 1998; Taylor *et al.,* 2016; Creswell & Creswell, 2018). In other words, they believe that research findings are rooted in the data generated from the field. The nature and quality of pedagogical and management processes in the schools emerged from the data collected during this process. This concept aligns with what interpretivists refer to as grounded theory (Glaser & Strauss, 1967; Braun & Clarke, 2013; Cohen *et al.,* 2018). An inductive approach was utilised to understand the

nature and quality of pedagogical and management processes in the schools.

Methodological assumptions significantly influence how the inquirer gains knowledge about the social world (Cohen *et al.,* 2018). Interpretivists assert that understanding the subjective meanings of social actors occurs through personal interaction, negotiation, and the application of inductive research methodologies (Willig, 2013; Cohen *et al.,* 2018). During the data generation process for this book, personal interaction with research participants was achieved through in-depth interviews and FGIs. As noted by Mertens (2010), such interactions are hermeneutical and dialectical, allowing the researcher to obtain multiple perspectives on the research problem. Open-ended interview questions were employed to capture the diverse viewpoints of the teachers and TICs regarding the nature and quality of pedagogical and management processes in satellite primary schools. The more open the questioning, the better the multiple perspectives of respondents are captured (Creswell & Creswell, 2018). This approach not only enriches the findings but also strengthens the overall narrative of the book by providing a comprehensive understanding of the subject matter.

The qualitative research approach, informed by the interpretive paradigm, guided the data generation process. It is a form of inductive research, that focuses on understanding the subjective meanings that individuals or groups ascribe to social situations in their natural settings (Braun & Clarke, 2013; Creswell & Creswell, 2018; Denzin & Lincoln, 2018). The primary aim of qualitative research is to generate an insider's view of social reality. Given that the researcher was relatively unfamiliar with pedagogical and management processes in satellite primary schools, the qualitative approach was deemed particularly suitable for the data generation process, allowing for a deeper exploration of the context in which the pedagogical and management processes occur.

According to Taylor *et al.* (2016), the goal of qualitative research is to understand participants from their perspectives and voices. Throughout the data generation process, the researcher focused on learning about the nature and quality of pedagogical and management processes in satellite schools from the teachers and TICs. Utilising in-depth interviews and FGIs enabled the teachers and TICs to express their opinions in detail. This unstructured approach allowed for capturing multiple perspectives on the research problem, enriching the narrative of the book. The inductive nature of qualitative research means that insights, patterns, and themes emerge from the data rather than from preconceived hypotheses (Taylor *et al.,* 2016). Consequently, data were generated from teachers and TICs without beginning with a null hypothesis.

The importance of the natural setting in qualitative research cannot be overstated, as it profoundly influences social realities (McMillan & Schumacher, 2010). Mertens (2010) emphasizes that data and interpretations are rooted in context, not merely the researcher's constructs. Taylor *et al.* (2016) further argue that an explanation of social reality must account for its natural setting to be complete. Aware of this impact, the researcher conducted interviews in the participants' respective satellite schools, ensuring that contextual conditions affecting pedagogical and management processes were thoroughly explored.

Qualitative research also employs an emergent design, allowing for flexibility throughout the study (Creswell & Creswell, 2018). This adaptability enables researchers to learn from participants and adjust their approach as the data generation process progresses (McMillan & Schumacher, 2010; Braun & Clarke, 2013; Braun *et al.,* 2018). Initially, the researcher aimed to gather data from a broader range of stakeholders, including Heads of 'mother schools', learners, School Inspectors and parents. However, due to financial and time

constraints, the study ultimately focused on TICs and teachers. This experience underscores Creswell and Creswell's (2018) assertion that qualitative research processes cannot be rigidly predefined; adjustments often occur as data generation begins. Consequently, the interview guides were revised multiple times to reflect this flexible approach.

In qualitative research, there is a strong preference for rich narrative descriptions (Taylor *et al.,* 2016). These descriptions prioritise words or images over numbers, although some quantitative elements may be included (McMillan & Schumacher, 2010). As noted by Taylor and Bogdan (1984), cited in Chisaka (2013), presenting data in the participants' own words maintains the human aspect of the research. Accordingly, verbatim citations from participants were extensively used in Chapter 5 to present, analyse, and discuss the findings. These citations effectively capture the voices of the research participants regarding the nature and quality of pedagogical and management processes in satellite primary schools, allowing for a nuanced understanding of the research problem from their perspectives.

The multiple case study design guided the data generation process for this book. This approach involves studying two or more cases of the same phenomenon to deepen understanding (Stake, 2010; Yin, 2018). In the study that was conducted for this book, four selected satellite primary schools were examined in depth. The multiple case study design is particularly effective for generating insights that expand our understanding of a phenomenon as it manifests across different contexts (Willig, 2013). This design was deemed suitable for exploring the nature and quality of pedagogical and management processes in four satellite primary schools.

The logic of a multiple case study lies in the selection of cases that produce similar or contrasting results (Baxter & Jack, 2008; Leedy &

Ormrod, 2015). In this instance, the selected schools were similar in having multi-grade classes but differed significantly in their teaching and learning infrastructure. For example, School A utilised pole, dagga, and grass-thatched structures; School B relied on a non-standard classroom block and a shade; School C repurposed tobacco barns; and School D an incomplete standard classroom block, a shade, and a garage. These four cases were purposively selected to provide a wide spectrum of how pedagogical and management processes in satellite primary schools affect the provision of quality education.

Comparatively, the multiple case study design offers distinct advantages over a single case study. While a single case study allows for an in-depth understanding of one unique situation (Stake, 2010; Yin, 2018), a multiple case study facilitates the comparison of results across two or more cases (Starman, 2013; Yin, 2018). The findings from the four schools were compared to identify commonalities and differences in the nature and quality of pedagogical and management processes. With each new situation examined, the emerging theory was modified to account for all instances related to the phenomenon (Willig, 2013). This approach enriched the data, providing a more detailed understanding of how pedagogical and management processes in satellite primary schools influence the provision of quality education.

Despite its strengths, the multiple case study design also has limitations. Stake (2010) and Yin (2018) note that this design tends to generate large volumes of narrative data, which can be challenging to analyse. This challenge was addressed through the application of thematic analysis (TA) to ensure adequate data analysis and interpretation. Additionally, positivists often critique case study research for its low generalisability (Willig, 2013). However, this limitation did not deter the researcher from adopting the multiple case study design. The primary aim of this book is not to generalise findings but to illuminate how pedagogical and management

processes in satellite primary schools affect the provision of quality education. This focus ultimately enriches the narrative and findings presented in the book.

The population for this study consisted of 55 satellite primary schools in Makonde District, along with their 55 TICs and 709 teachers (DSIR, 2020). Given the impracticality of gathering data from the entire population, a purposive sampling procedure was employed to select the study sites and participants. Qualitative researchers often utilise purposive sampling to identify rich sites and informants relevant to the phenomenon under investigation (Mertens, 2010; Patton, 2015; Cohen *et al.,* 2018). This method involves selecting study sites and participants that provide the most insightful information about the research problem (McMillan & Schumacher, 2010; Kumar, 2011). While some positivists criticise purposive sampling for its limited representativeness and generalisability, it is advantageous for selecting information-rich sites and informants (Cohen *et al.,* 2018), on the nature and quality of pedagogical and management processes in satellite primary schools.

Based on the findings discussed in Chapter 3, it was assumed that satellite schools with multi-grade classes would serve as rich sites for exploring the research problem. However, the District Schools Inspector (DSI) indicated that most satellite schools in Makonde District employ multi-grade teaching. To address this challenge, the researcher requested the DSI's assistance in purposively selecting four satellite schools with the longest experience in MGT. This approach ensured the selection of sites that could provide valuable insights into the nature and quality of pedagogical and management processes in this school type.

The TICs of the four selected satellite primary schools were also purposively chosen to participate in the study. As noted by Patton (2015) and Schutt (2015), each element in purposive sampling is

selected for a specific purpose. The TICs were included to offer an administrative perspective on the nature and quality of pedagogical and management processes within the schools. Additionally, four teachers with the most extensive teaching experience in satellite schools were selected from each of the four schools, ensuring that the participants were rich informants regarding the research problem.

In qualitative research, samples are typically smaller due to the depth of information desired from the research sites and participants (Mertens, 2010). The purposively selected sample for this study comprised four satellite primary schools, four TICs, and 16 teachers (four from each school with the longest teaching experience in satellite primary schools). **Table 4.1** summarises the study sample.

Table 4.1: Summary of sample size

Cases	**Description**	**Number**	**Sampling procedure**
Schools	Satellite primary schools	4	Purposive
Teachers in Charge	Teaching heads of satellite primary schools	4	Purposive
Teachers	Four teachers from each school with the longest teaching experience in satellite primary schools	16	Purposive

In qualitative research, data are generated rather than merely gathered or collected (Chisaka, 2013). For this book, data were generated through in-depth interviews and FGIs with TICs and teachers, respectively. The generation methods were intentionally designed so that insights from in-depth interviews would be further explored in FGIs, and vice versa. This approach was essential for creating a holistic picture of the nature and quality of pedagogical and management processes in satellite primary schools during the provision of quality education.

As Jones (1985, cited in Cohen *et al.,* 2018) advises, understanding others' constructions of reality requires asking them in ways that reflect their terms rather than those imposed by the researcher. Heeding this counsel, the researcher utilised in-depth interviews to generate data from the TICs. In-depth interviewing involves face-to-face encounters aimed at understanding participants' experiences in their own words (McMillan & Schumacher, 2010; Taylor *et al.,* 2016). This method centres on exploring the lived experiences of participants (Seidman, 2013; Taylor *et al.,* 2016) regarding the nature and quality of pedagogical and management processes in satellite primary schools. An in-depth interview guide was crafted around the following sub-research questions of the study:

1. What is the nature and quality of pedagogical processes in satellite primary schools in the provision of quality education?
2. How are management processes implemented during the provision of quality education in satellite primary schools?
3. How are the prospects and complexities of quality primary education in satellite primary schools currently managed?
4. How can quality education be improved in satellite primary schools?

To minimise disruption to the teaching and learning process, interviews were conducted in the afternoons when TICs were not teaching. Each interview was conducted in English and lasted at least 45 minutes, recorded using a voice recorder, and later transcribed verbatim.

In-depth interviews feature open-ended questions that enable respondents to express their thoughts in detail and their own words (McMillan & Schumacher, 2010; Johnson & Christensen, 2014). Open-ended questions allowed TICs to express multiple perspectives on the nature and quality of pedagogical and management processes in their schools. This method also provided opportunities for the researcher to

probe for greater clarity and depth (Seidman, 2013; Johnson & Christensen, 2014), resulting in extensive and rich data.

After transcribing and analysing the initial interviews, follow-up interviews were conducted to seek clarification and additional details. During these follow-ups, the researcher worked to establish trust and rapport, which encouraged participants to provide more information regarding the nature and quality of processes in their schools. After three rounds of follow-up interviews, data saturation was reached, indicating that no new relevant information was emerging (Charmaz, 2014). This saturation served as a confirmation that adequate data had been generated for the book.

One major limitation of in-depth interviewing is that it can be time-consuming (Taylor *et al.,* 2016; Denscombe, 2014). Some interviews extended beyond the planned 45 minutes due to the detailed responses from TICs. However, the researcher viewed this as an opportunity to gather more detailed data rather than a drawback.

FGIs were conducted with teachers at each of the four satellite schools, using the same questions as those posed to the TICs to enhance the trustworthiness of the study. A focus group interview consists of a small group of interviewees brought together by the researcher to explore attitudes, perceptions, feelings, and ideas about a research topic (Denscombe, 2014). For this book, four focus groups were formed, one for each school, each consisting of four teachers. This structure aligns with the recommendation that focus groups should comprise no more than 6 to 8 participants to ensure maximum participation (Flower, 2009; Willig, 2013).

To promote open discussions, all focus groups were homogenous in composition, consisting solely of teachers. The TICs, who are teaching heads in the schools, did not participate in the FGIs. Homogeneity

helps to avoid power dynamics that can inhibit free expression (Willig, 2013).

FGIs thrive in a permissive, accommodating, and non-threatening environment (Chisaka, 2013). Before the interviews, the researcher established ground rules with the participants to create an atmosphere of trust, openness, and confidentiality. Participants agreed that discussions would remain confidential and respected each other's views, facilitating a productive dialogue.

In line with the naturalistic nature of qualitative research (Denzin & Lincoln, 2018), FGIs were conducted in the natural settings of the participants, that is at their respective schools. Each FGI lasted at least one hour, was conducted in English, and recorded for later transcription.

FGIs offer several advantages that were evident in this study. They generated a wider range of responses compared to individual interviews (Seidman, 2013; Denscombe, 2014; Cohen *et al.,* 2018), resulting in richer and more holistic data. During the FGIs, contributions from some discussants stimulated others to participate, leading to dynamic discussions. Participants often triggered each other's memories of specific events and facts (Taylor *et al.,* 2016), elaborating on and sometimes correcting each other's views. This reflects Willig's (2013) observation that focus groups can challenge and develop beliefs, enhancing the depth and credibility of the research findings. The FGIs were structured around open-ended questions, allowing the researcher to probe for more detail on the nature and quality of pedagogical and management processes in satellite primary schools.

Despite their benefits, FGIs also have limitations, such as the potential for some participants to dominate the discussion (Denscombe, 2014; Cohen *et al.,* 2018). To mitigate this, the researcher encouraged all

participants to engage actively, fostering lively discussions. While facilitating the interviews, it became clear that tactful encouragement was necessary to ensure balanced participation. In some FGIs, discussions occasionally veered off topic, but rather than interrupting, the researcher redirected the conversation with probing questions to maintain focus on the research problem.

The data generated from the in-depth interviews and FGIs were analysed using Thematic Analysis (TA). This method is essential for identifying, analysing, and reporting categories, patterns, or themes within the generated data (Braun & Clarke, 2013; Braun *et al.,* 2018). It involves examining all the data to identify recurring categories and themes that summarise the views of research participants concerning the research questions. TA operates on inductive logic, revealing categories and themes ingrained in the data (Willig, 2013). Consistent with this approach, the researcher did not begin the data analysis process with predefined themes or categories; instead, these were developed from the data itself. Braun and Clarke (2013) outline six stages of TA, which were followed in the analysis of the data.

The first stage of TA is organising the data, which involves compiling all case data into a computer database (Braun & Clarke, 2013; Marshall & Rossman, 2016). The researcher created a database for each of the four cases, transcribing verbatim the audio-recorded data from interviews with TICs and FGIs with teachers. Handwritten field notes and memos were also typed and included in their respective databases.

Following data organisation, the next stage is immersion in the data. This involves repeatedly reading transcripts and listening to audio recordings to gain a comprehensive understanding of the data before coding (Braun & Clarke, 2013; Braun *et al.,* 2018). The researcher immersed himself in the data by examining the transcripts of the four cases line by line and listening to recorded interviews multiple times.

This process familiarised him with the categories and themes within the data (Braun & Clarke, 2013). As he engaged with the data, he wrote reflective memos in the margins of the transcripts. Memoing, which began during data generation, continued throughout the analysis and discussion phases, capturing significant insights into the nature and quality of pedagogical and management processes in satellite primary schools.

The next stage involves generating codes for the data. In TA, a code is a word, phrase, or symbol identifying a segment of interest (Miles, Huberman & Saldaña, 2014; Saldaña, 2016). Coding the data requires a line-by-line review to label relevant segments according to the research questions (Willig, 2013; Saldaña, 2016). The researcher used phrases such as Multi-grade Teaching, management support from the SDC, and large class size for coding data segments. These inductive codes emerged from prolonged immersion in the data, making them data-driven rather than theory-driven (Braun & Clarke, 2013; Braun et al., 2018). The researcher carefully examined each data segment for suitability before assigning codes, reviewing them multiple times in relation to the study's sub-questions. In instances where segments had multiple themes, multiple coding was employed.

Generating categories is the fourth stage of TA, where data segments with similar codes are grouped (Braun & Clarke, 2013). A data category succinctly captures the essence of a data segment (Miles et al., 2014). This process involved extracting data segments with similar codes from the coded databases and consolidating them. Initial categories were created, and following Braun and Clarke's guidance (2013), these categories underwent several reviews, integrating relevant ones into higher-order categories, splitting broader categories, and eliminating those that did not align with the research questions. This iterative review process was consistent with the flexible nature of qualitative research.

The next stage involves generating themes, which includes three components: searching for themes, reviewing themes, and defining and naming themes. A theme captures significant aspects of the data concerning the research question (Braun & Clarke, 2013; Braun *et al.,* 2018). Searching for themes integrates the identified categories into overarching themes and sub-themes, discarding any that are irrelevant. The generated themes were reviewed multiple times, requiring the researcher to continually compare the evolving thematic map with the raw data (Braun & Clarke, 2013; Willig, 2013). This process included collapsing some themes and sub-themes and separating those that were overly broad.

The final stage of TA is producing the research report, which encompasses a comprehensive analysis and write-up that addresses the research questions (Braun & Clarke, 2013). This stage integrates relevant literature and the theoretical framework adopted for the study, culminating in the findings presented in this book.

One of the central concerns of qualitative research is to generate credible and authentic findings, making trustworthiness a critical issue. Trustworthiness refers to the extent to which research findings accurately represent the realities of the people or entities under study (Denzin & Lincoln, 2018). For the study conducted for this book, Lincoln and Guba's (1985) model of trustworthiness was adopted, identifying four key criteria: credibility, transferability, dependability, and confirmability.

Credibility pertains to the degree to which research findings approximate reality and are perceived by participants as true reflections of their lived experiences (Lincoln & Guba, 1985; Krefting, 1991). During the study on which this book is based credibility was enhanced through prolonged engagement, member checks, and triangulation.

The prolonged engagement involved conducting three rounds of interviews at each school, following Mertens' (2013) advice to spend sufficient time in the field and avoid premature closure. This approach was essential for building trust and rapport with participants, leading them to share sensitive information about the pedagogical and management processes in satellite schools. The engagement was concluded when emerging themes began to recur.

Member checks are considered the most critical technique for establishing credibility in qualitative research (Lincoln & Guba, 1985). They involve presenting data and interpretations back to participants for verification and further input (Patton, 2015; Creswell & Creswell, 2018). Participants were regularly asked to validate the accuracy of the findings, which helped eliminate misinterpretations and misrepresentations.

Triangulation, another strategy employed, involves using multiple methods, investigators, and data sources to generate corroborating evidence (Lincoln & Guba, 1985). During the study, in-depth interviews were triangulated with FGIs. This method allowed for cross-checking findings across different methods, providing a holistic view of the pedagogical and management processes in satellite primary schools. Additionally, data were generated from multiple sources, that are four satellite schools TICs and teachers, enhancing the richness of the findings and avoiding a narrow perspective.

Transferability refers to the applicability of research findings in other contexts with similar conditions (Lincoln & Guba, 1985; Bitsch, 2005). The transferability of findings was enhanced through purposive sampling and thick descriptions. Rich information sites and informants were deliberately chosen, and detailed contextual descriptions of the study sites, along with verbatim responses from participants, were provided. This comprehensive information enables readers to assess

the applicability of the findings to similar settings both nationally and internationally.

Dependability indicates the consistency and accuracy of research findings over time (Lincoln & Guba, 1985; Bitsch, 2005). A study is deemed dependable if it yields the same results when repeated in similar contexts with the same participants and procedures. The dependability of the study conducted for this book was bolstered through triangulation, member checks, thick descriptions, purposive sampling, and the mechanical recording of interviews. Following Krefting's (1991) guidance, the researcher maintained a detailed audit trail of the data generation, analysis, and interpretation processes, which included raw data, field notes, memos, and documents. This audit trail proved crucial for cross-checking the findings' accuracy.

Confirmability concerns the extent to which data and interpretations reflect the lived experiences of participants, free from the researcher's biases and value judgments (Lincoln & Guba, 1985). Krefting (1991) suggests researcher reflexivity as a strategy to enhance confirmability. Throughout the study, the researcher disclosed his assumptions regarding the research problem to participants, ensuring these did not interfere with the findings. Regular member checks further supported this goal, allowing for the incorporation of corrections and additional information into the research findings.

By employing these strategies, the study on which the book is based aimed to enhance the trustworthiness of its findings, ensuring they accurately reflect the realities of pedagogical and management processes in satellite primary schools.

Educational research inevitably involves ethical issues, as it generates data from and about people (Punch, 2014). Therefore, planning for educational research must identify and address these ethical concerns. The following ethical principles were considered during the study:

obtaining approval for conducting the study, voluntary informed consent, privacy, anonymity and confidentiality, and avoidance of harm.

Securing approval or permission to conduct a study is a fundamental starting point for ethical research practice. In educational settings, it is essential to obtain permission from the "gatekeepers", such as the principal, superintendent, or a designated committee (Cohen *et al.,* 2018). For this study, the researcher applied for an Ethical Clearance Certificate from the University of South Africa (UNISA) before data generation, which was granted. Additionally, permission was obtained from the MoPSE Head Office in Harare, the Provincial Education Director (PED) for Mashonaland West Province, and the District Schools Inspector (DSI) for Makonde District. The TICs of the selected schools also approved before data generation commenced.

Participants in research studies have the right to choose whether or not to participate (Kumar, 2011; Schutt, 2015). Therefore, obtaining voluntary informed consent is crucial. This principle stems from the human right to freedom and self-determination, requiring participants to consider the risks and benefits of the study and make informed decisions about their involvement (Neuman, 2014; Cohen *et al.,* 2018). TICs and teachers were informed about the study's nature, purpose, risks, and benefits, and it was emphasised that participation was voluntary. Participants were free to withdraw at any time, and all completed and signed informed consent agreement forms.

Maintaining privacy, anonymity, and confidentiality is a key ethical standard for protecting research participants, and the researcher's commitment to this standard was included in the informed consent agreement (Best & Khan, 2010; Denscombe, 2014). This ethical principle ensures that information provided by participants does not reveal their identities and remains accessible only to authorised

individuals (Kumar, 2011; Cohen *et al.,* 2018). To uphold this principle, participants were instructed not to disclose their names or those of their schools during interviews. The schools were identified in the book as Satellite School A, Satellite School B, Satellite School C, and Satellite School D. Furthermore, participant identities were protected in the book, with individuals referred to as TICs or teachers. The researcher ensured that unauthorised persons could not access the data by securely storing hard copies and protecting electronic files with passwords.

A fundamental concern in all research is to ensure that no participants are harmed as a result of their involvement (Denscombe, 2014; Schutt, 2015). The role of research should ultimately contribute to the welfare of individuals. Researchers must protect participants from any form of harm, including physical, social, psychological, and emotional risks (McMillan & Schumacher, 2010; Cohen *et al.,* 2018). In the study that was conducted for this book, the researcher prioritised the integrity and dignity of participants, upholding ethical principles to prevent harm.

This chapter presented and justified the research methodology adopted to address the sub-questions outlined in Chapter 1, guided by an interpretive-qualitative research approach that emphasised a multiple case study design. This methodology aligned with the researcher's aim to understand the nature and quality of pedagogical and management processes in satellite schools from the perspectives of the participants. A purposive sampling procedure was used to select rich information study sites and informants, while in-depth interviews and focus group interviews (FGIs) were employed to generate data from the TICs and teachers, respectively. The data were analysed thematically. The chapter also discussed strategies for enhancing trustworthiness and addressed the management of ethical issues throughout the research process. The next chapter will present an

analysis and discussion of the main findings that emerged from the study.

CHAPTER 5 DATA PRESENTATION, ANALYSIS AND DISCUSSION

The preceding chapter outlined and justified the interpretive-qualitative research methodology employed to generate data for this book. Data were generated through in-depth interviews and FGIs with TICs and teachers, respectively. This chapter aims to present an analysis and discussion of the findings that underpin this work. The primary research question addressed is: How can the prospects and complexities of quality primary education in satellite schools located in FTLRRAs in Makonde District be adapted to enhance the provision of quality education? The findings are presented, analysed, and discussed according to participants' responses to the following sub-questions:

a. What is the nature and quality of pedagogical processes in satellite primary schools in the provision of quality education?
b. How is the nature and quality of management processes in satellite primary schools implemented during the provision of quality education?
c. How are the prospects and complexities of quality primary education in satellite schools currently managed?
d. How can quality education be improved in satellite primary schools?

The study sample for this book comprised four satellite primary schools, four TICs, and 16 teachers (four teachers from each school). The TICs of the purposively selected satellite primary schools participated in the study. All TICs held a Diploma in Education (Primary), with one also holding a Bachelor of Education Honours Degree in Primary Education. They each had more than four years of teaching experience in satellite primary schools and a minimum of three years in the TIC role. The four TICs possessed relevant professional qualifications and adequate experience to articulate the nature and quality of pedagogical and management processes in their schools during the provision of quality education.

A total of 16 teachers were purposively selected as key informants, specifically the four teachers with the longest teaching experience at each of the four selected schools. All teachers held a Diploma in Education (Primary), with four specialising in Early Childhood Development (ECD). This diploma is the minimum professional qualification for primary school teachers in Zimbabwe. The teaching experience of these teachers in satellite school settings ranged from three to 12 years. They all had relevant qualifications and sufficient experience to effectively discuss the nature and quality of pedagogical and management processes in their respective schools.

The study that underpins this book was conducted at four purposively sampled satellite primary schools in Makonde District, Zimbabwe. To ensure privacy, anonymity, and confidentiality, the schools are coded as Satellite Schools A to D.

Satellite School A had an enrolment of 290 learners, including 50 ECD learners. Based on the MoPSE teacher-learner ratios outlined in Chapter 3, the school was entitled to eight teachers but only had five, including the TIC, resulting in an understaffing of three teachers. To manage nine grades, the school implemented MGT with the following multi-grade configurations: ECD A and B; Grades 2 and 3; Grades 4 and 5; and Grades 6 and 7. Enrolments in these classes were 50, 68, 61, and 56, respectively, while the only mono-grade class, Grade 1, had 55 learners. All classes exceeded the recommended MoPSE teacher-learner ratios, leading to large class sizes that complicated the provision of quality education.

The school had five pole, dagga, and grass-thatched classrooms, but there was a critical shortage of accommodation for teachers. The four teachers and the TIC shared only three single-roomed cottages. Additionally, the school had insufficient Blair toilets, with only eight squat holes for 290 learners and five staff members, instead of the

recommended 15. The nearest source of safe water was a borehole located 5 km away, leaving the school without safe water within the recommended distance of 500 meters.

Satellite School B had an enrolment of 347 learners, including 56 ECD learners. Although entitled to nine teachers, only six were in post, resulting in an understaffing of three. The six teachers managed nine grades through MGT, with multi-grade classes configured as ECD A and B; Grades 1 and 2; and Grades 5 and 6, enrolling 56, 63, and 65 learners, respectively. Mono-grade classes, Grades 3, 4, and 7, had enrolments of 58, 54, and 50.

The school utilised non-standard infrastructure, including a classroom block with three classrooms and an open-sided shade. The ECD classes used the shade, while the Grade 7 class had its own classroom. Seven grades shared the remaining two classrooms. Accommodation for teachers was inadequate, with a three-roomed cottage that housed only two teachers; the others commuted daily from Chinhoyi Town, 45 km away. The only drinking water source was an unprotected stream 200 meters from the school, posing health risks. The school had only 10 Blair toilet squat holes instead of the recommended 15.

Satellite School C enrolled 503 learners, including 74 ECD learners. Although the staff establishment was 13 teachers, only seven were in post, leading to an acute staffing deficit of six. The seven teachers managed 10 grades through MGT, with multi-grade classes configured as ECD A and B; Grades 3 and 4; and Grades 6 and 7, enrolling 74, 103, and 83 learners, respectively. Mono-grade classes, Grades 1, 2, 5A, and 5B, had enrolments of 68, 65, 54, and 56.

The school's only teaching infrastructure was a tobacco barn repurposed into seven classrooms. Teacher accommodation was inadequate, with very small rooms originally used as storerooms.

Although tap water was available, there was a critical shortage of ablution facilities, with only 10 Blair toilet squat holes for 503 learners and seven teachers instead of the required 14.

Satellite School D had an enrolment of 343 learners, including 57 ECD learners. The school was entitled to a staff establishment of 10 teachers but only had seven, resulting in understaffing. The teachers managed nine grades through MGT, with multi-grade classes configured as ECD A and B; Grades 3 and 4; and Grades 6 and 7, enrolling 57, 72, and 75 learners, respectively. Mono-grade classes, Grades 1, 2, and 5, had enrolments of 62, 64, and 70.

The school had an incomplete classroom block with two classrooms accommodating seven grades through double shifting. The ECD classes used an open-sided shade, while the Grade 1 class utilised the garage of the former white farm owner. The school had adequate ablution facilities and tap water available on campus, but teacher accommodation was deplorable, with all teachers living in a dilapidated and vandalised farmhouse. Each teacher occupied a single room.

Regardless of the existence of at least three multi-grade classes at each school, all the teachers and TICs staffing the schools were mono-grade teachers who lacked professional training in MGT. The teachers expressed desperation about teaching multi-grade classes without professional training in multi-grade pedagogy. One of the teachers commented,

> "You are just allocated a multi-grade class without pre-service or in-service training in multi-grade teaching, and there is no one to provide you with support or guidance."

Similar sentiments were echoed by another teacher who remarked,

> "I was trained to teach mono-grade classes, but I was assigned a multi-grade class. I don't have any idea how to teach this type of class. Even during

teaching practice, I didn't comeacross this type of class."

The teachers agreed that they were experiencing challenges in teaching multi-grade classes due to the lack of professional training in multi-grade pedagogy.

Zimbabwe's national primary school curriculum is based on mono-grade pedagogy and the teachers experience challenges in adapting the curriculum to multi-grade settings. One teacher remarked,

> "The MoPSE expects us to adapt the mono-grade primary school curriculum and policies to multi-grade settings without training in multi-grade teaching. We havetried it for over 10 years, but failed…"

Another teacher explained the problem in this way,

> "Scheme-cum-planning for multi-grade classes using syllabuses, resource books, textbooks, and policies designed for mono-grade classes is very tough for us…at college, we were only trained to scheme and plan for mono-grade classes. If there was in-service training it would have been better."

The term scheme-cum-plan book is used in Zimbabwe's education system to refer to a combination of the scheme of work and lesson plans into one record book. When probed, the participants revealed that they prepare separate scheme-cum-plan books and record books for each grade constituting a multi-grade class. One of the teachers commented,

> "We spend a lot of time scheme-cum-planning and maintaining record books for two or more grades constituting a multi-grade class, the workload is unbearable."

All the multi-grade classes in the schools follow mono-grade teaching timetables. In other words, the teaching timetables for multi-grade classes are based on mono-grade pedagogy. The teachers unanimously indicated that utilising mono-grade teaching timetables in multi-grade settings creates instructional time constraints. One teacher aptly expressed the problem in this way,

> "The time allocated to one lesson period in a mono-grade class is shared equally between the two grades in a multi-grade class. The instructional time is insufficient for effective teaching and learning to occur. Teachers

always fail to complete the syllabuses of multi-grade classes…"

Most teachers cope with the timetabling challenge by teaching the curriculum content of senior grades in multi-grade classes.

"This creates learning gaps in learners in the junior grades that affect their mastery of concepts in higher grades", explained another teacher.

Grade combinations in multi-grade classes were identified as the other challenge the teachers confront in teaching multi-grade classes. One teacher remarked,

"I'm having serious problems in teaching an ECD A and B multi-grade class…at college I was never trained to teach a multi-grade class…I attempted to teach the two grades separately, but how to control the other class was always a challenge…I'm teaching ECD B curriculum content to both grades."

Expressing similar sentiments another teacher commented,

"It's possible to combine ECD A and ECD B learners, but our problem is that we were only trained to teach mono-grade classes…because of lack of in-service training in multi-grade teaching we teach both grades ECD B curriculum content."

The teachers lacked both pre-service and in-service training in multi-grade pedagogy to teach multi-grade classes effectively.

The teachers were also worried about the Grade 2 and Grade 3 multi-grade class. One teacher complained,

"Grade 2 learners must be taught in their mother tongue Chishona…Grade 3 learners who are on the transition from their mother tongue to English must be taught in English. I'm forced to teach both classes in Chishona to cater to the Grade 2 learners. What do you expect me to do without training in multi-grade teaching…?"

Another teacher interjected,

"If Chishona is used as the language of instruction…the transition of the Grade 3 learners from mother tongue to English is impeded. The Grade 3 learners will fail to master concepts in higher grades where the language of instruction in all learning areas is English except for indigenous languages."

When asked which curriculum content she was teaching, the teacher responded by saying,

"Due to lack of training in multi-grade teaching, I'm teaching Grade 3 curriculum content to both grades."

This means that the whole Grade 2 curriculum is not covered, and the learners are taught the Grade 3 curriculum content that is above their level of cognitive development. The learning backlogs that are created among the Grade 2 learners, negatively affect their mastery of concepts as they progress with the spiral primary school curriculum.

Another challenging grade combination for teachers was Grade 6 and Grade 7, which are non-examinable and examinable grades, respectively. One teacher noted,

> "Because of examination pressure, teachers teach the Grade 7 curriculum content to both grades. As a result, they fail to complete the Grade 7 syllabus, leaving learners inadequately prepared for the exam."

This puts Grade 6 learners at a disadvantage. This pedagogical issue was highlighted during focus group interviews at all four study sites, indicating a need for in-service training in multi-grade pedagogy to equip teachers with the necessary skills for effectively teaching multi-grade classes.

Learner assessment in multi-grade classes emerged as the other challenge that confront mono-grade teachers in multi-grade settings. One teacher revealed,

> "I'm teaching a Grade 3 and Grade 4 multi-grade class. I teach both grades the Grade 4 curriculum content and assign them assignment tasks. I make sure that Grade 4 learners attempt more questions than Grade 3 learners."

When probed about the level of difficulty of the assignment tasks, the teacher indicated that the questions would be of the same level of difficulty. Further probing revealed that the teachers assign the learners similar assignment tasks because they teach them the same content.

Some teachers attempt to integrate curriculum content and differentiate assignment tasks in multi-grade classes. This became apparent when one teacher said,

> "I'm teaching an ECD A and ECD B multi-grade class. When I realise that the learning content is too complex for the ECD A learners, I try to differentiate both the learning content and assignment tasks, but the major challenge is that I lack induction or in-service training in multi-grade teaching."

The other teachers acknowledged that they occasionally attempt to differentiate content and assignment tasks, particularly on very challenging concepts. They emphasised that their main challenge is the lack of pre-service or in-service training in multi-grade pedagogy.

The teachers were very concerned that School Inspectors expected them to scheme-cum-plan separately for multi-grade classes, integrate the content when teaching, and then differentiate assignment tasks. One teacher complained,

> "This approach isn't practical at all…School Inspectors should demonstrate how it works in real practice…"

Another teacher argued that,

> "Content differentiation is a process that should start with scheming-cum-planning, not learner assessment…that's why most teachers teach the curriculum content of senior grades in multi-grade classes and assign all learners assessment tasks based on the same curriculum."

The teachers handle multi-grade classes as mono-grade classes in terms of learning content and assessment tasks owing to the lack of training in multi-grade pedagogy.

The practice of teaching learners in multi-grade classes the curriculum content of the senior grade disadvantages the learners in the junior grade in the end-of-term tests. This problem was clearly expressed by one teacher as follows,

> "Cluster Resource Centres prepare common end-of-term tests for schools in their clusters. The tests are based on the curriculum content of each grade level…"

The same teacher further went on to say,

> "Learners in the junior grades of multi-grade classes perform dismally in the tests because the curriculum content of their grade levels is not covered when teachers focus on teaching the content of senior grades."

This problem was raised during the FGIs at each of the four study sites.

The TICs authenticated the sentiments of the teachers that multi-grade classes are quite prevalent in satellite schools. One TIC explained,

> "Multi-grade classes have always been common in satellite schools due to low learner enrolments. Recently, these classes have increased significantly because of understaffing caused by the Teacher Recruitment Freeze implemented by the PSC in 2015."

The TICs reported that understaffing forces some satellite schools to continue with multi-grade classes regardless of class enrolments warranting all grades to be mono-grade classes. Therefore, understaffing associated with the TRF is one of the factors fuelling the prevalence of multi-grade classes in satellite primary schools.

All the TICs like the teachers are mono-grade teachers who lack in-service training in multi-grade pedagogy, hence they experience challenges in teaching multi-grade classes. One of the TICs complained,

> "I'm a mono-grade teacher who was appointed as a TIC without in-service training in multi-grade teaching…"

Another TIC lamented,

> "I was trained to teach mono-grade classes, but upon deployment to this school, I came across a multi-grade class for the first time…no one inducts you into multi-grade teaching…"

The other TICs corroborated that they were mono-grade teachers who lacked professional training in MGT. By implication, the TICs are not able to provide MGT support to the teachers in multi-grade settings, in the respective satellite primary schools that they lead.

The TICs also face challenges in adapting the mono-grade primary school curriculum to multi-grade settings. Concerning this challenge, one TIC remarked,

> "The ministry expects us to adapt the mono-grade primary school curriculum policies, syllabuses, timetables, and textbooks to multi-grade settings without in-service training in multi-grade teaching…we have tried it for two decades now…it's not working…"

The TICs expressed the concern that without in-service training in MGT, they find it difficult to adapt the mono-grade primary school curriculum to multi-grade settings. Another TIC sarcastically remarked,

> "The teachers expect us to induct them into multi-grade teaching when we never received such induction from the Heads of the 'mother schools' and School Inspectors."

If both the TICs and teachers lack pre-service and in-service training in MGT, the pedagogical transactions in multi-grade classes are unlikely to be of good quality.

When asked to mention the other challenges they face in teaching multi-grade classes, one recurring challenge was to adapt the mono-grade curriculum to multi-grade settings. One of the TICs responded by saying,

> "…integrating the curriculum content of multi-grade classes when scheme-cum planning is a problem in the whole district…this is the reason why the district policy is that we should prepare separate scheme-cum-plans for all the grades constituting a multi-grade class."

These sentiments were echoed by another TIC who went on to reveal,

> "Lack of content integration expertise is forcing most TICs and teachers to teach the curriculum content of senior grades in multi-grade classes."

Arguably, this pedagogical practice disadvantages learners in the junior grades of multi-grade classes.

All the TICs mentioned the problem of teaching timetables for multi-grade classes. One of the TICs complained,

> "For two decades we have failed to design multi-grade teaching timetables…we are using mono-grade teaching timetables. The problem with the mono-grade teaching timetables is that you share the time for one lesson period equally between two grades and you fail to complete the

syllabuses of both grades."

The same TIC went on to reveal that,

> "Teachers are avoiding this problem either by focusing on teaching examinable learning areas or teaching the curriculum of the higher grade to both grades."

Similar sentiments were expressed by another TIC who said that the mono-grade teaching timetables influence TICs and teachers to treat multi-grade classes as mono-grade classes in terms of learning content and assessment tasks. If the multi-grade class is treated as a mono-grade class, the curriculum content of one grade is not covered, and the learners at that grade level are disadvantaged.

The TICs verified the sentiments of the teachers that some grade combinations in multi-grade classes create challenges in teaching and managing the classes. One TIC identified the combination of Grades 6 and 7. This TIC emphasised that,

> "Grade 7 is an examinable class…it should not be combined with another grade…the teachers have the tendency of focusing on teaching the curriculum content of the examinable grade and ignoring the content of the junior grade."

The TICs agreed that ECD A and B, Grades 2 and 3, and Grades 6 and 7, are not supposed to be combined. When the researcher asked what determines grade combinations one of the TICs responded by saying,

> "There is no grade combination policy in place…the nature of the enrolment pattern is the major factor that influences schools to come up with grade combinations."

The other TICs agreed that there was no official grade combination policy in the district. They emphasised that each school combines grades according to its situation.

Most teachers hold negative attitudes towards multi-grade classes. This became apparent when one TIC revealed that,

> "I experience challenges when allocating classes to teachers. No teacher is

willing to be allocated a multi-grade class. They consider multi-grade classes as more demanding to teach than mono-grade classes."

The sentiments of this TIC were reiterated by another TIC who said,

"The burdenof teaching two curricula, maintaining two sets of professional record books, and marking two sets of termly tests influence teachers to hold negative attitudes towards multi-grade classes."

The negative teacher attitudes towards multi-grade classes can be traced to the lack of training in multi-grade pedagogy. Such attitudes affect the teacher's commitment and quality of instruction, compromising the provision of quality education in multi-grade classes.

Most teachers and TICs who participated in the study were either teaching large mono-grade classes or large multi-grade classes. The class sizes exceeded the recommended MoPSE teacher-learner ratios of 1:20 at the ECD level and 1:40 from Grades 1 to 7. When asked why the class sizes were large, one teacher responded by saying,

"The teacher-learner ratios are as high as 1:74; 1:83; and 1:103. What we regard as the smallest class has 54 learners."

The same teacher further continued to say,

"The classes are abnormally large due to the Teacher Recruitment Freeze that was implemented by the PSC in 2015. The recruitment freeze has resultedin severe understaffing and large classes."

Another teacher complained,

"I'm teaching an ECD A and ECD B multi-grade class of 57 learners instead of the recommended mono-grade ECD class size of 20 learners. My class is almost triple the recommended class size...I'm severely overwhelmed."

All the teachers complained that class sizes in the schools are too large for effective teaching and learning to occur.

The teachers proffered the pedagogical challenges they encountered when teaching large classes. They indicated that large class sizes result in overcrowded classrooms that are not ideal for displaying instructional media and establishing learning centres. One teacher complained,

"I teach 57 ECD A and ECD B learners in a small shade without side walls. I can't display charts and learners' work because there are no walls. The classroom is so small that there is hardly any space to establish learning centres."

Another teacher revealed that learners destroy classroom displays and learning centres in overcrowded classrooms. Most teachers are no longer displaying instructional media and establishing learning centres due to the lack of space in congested classrooms. When probed about the impact of a bare classroom environment on learners, one teacher responded by saying,

> "A classroom environment without charts and learning centres denies learners opportunities for independent learning and revision of learnt concepts."

Such a classroom environment is not ideal for the provision of quality education.

Zimbabwe's CBC framework stipulates that teachers should employ learner-centred pedagogical approaches. However, it emerged from the findings that congested classrooms compel teachers to use teacher-centred pedagogical approaches. Regarding this problem, one teacher said,

> "The classrooms are overcrowded, there is hardly any space to hold group discussions…the only available option is to employ teacher-centred methods…"

Echoing similar sentiments another teacher commented

> "Congested classrooms are not ideal for learner-centred approaches…there is limited space for learners to work in groups or pairs. Although the lecture method isn't encouraged by the MoPSE, it's the most viable teaching method under these circumstances."

Most teachers who participated in the FGIs reiterated the inapplicability of learner-centred approaches in overcrowded classrooms. When probed about the impact of teacher-centred pedagogical approaches on the provision of quality education, one teacher responded by saying,

> "Teacher-centred methods promote passive learning as opposed to active learning that promotes effective learning."

The other teachers concurred that if teachers utilise teacher-centred pedagogical approaches, learners are not actively involved in the

teaching and learning process, and they easily forget taught concepts. Another impediment to the provision of quality education in large classes that emerged in all the FGIs is the critical shortage of textbooks for the CBC. One teacher lamented,

> "In the core-learning areas of Mathematics, English, Shona and Science, most satellite schools received only one textbook per grade from their 'mother schools'…"

Another teacher revealed that textbooks for non-core learning areas of the CBC are not available in the schools. The teachers repeatedly mentioned the severe shortage of textbooks in large classes during the FGI sessions.

When asked how they teach core learning areas with only one textbook for each learning area per grade level, one teacher responded by saying,

> "The situation is pathetic. In most cases, the teacher only has a textbook. Learners have no opportunities to take textbooks home to study or do homework."

The same teacher further continued to say that, learners are denied opportunities to read for themselves, effectively making the teacher their only source of knowledge. The teachers complained about the problem of teaching reading and comprehension skills to 50 or more learners using only one English or Shona textbook. One teacher said,

> "It's impossible to effectively develop reading and comprehension skills in 103 learners with just one textbook.…"

The other teachers corroborated this challenge. They expressed the concern that a significant number of learners in satellite schools are non-readers, mainly because of the dire shortage of English and Shona textbooks.

The teachers were also asked how they teach non-core learning areas without textbooks. They replied by saying that meaningful learning

was not taking place in non-core learning areas owing to the unavailability of textbooks for both teachers and learners. In the words of one teacher,

> "Without textbooks, teaching guides, and access to the internet, the teacher's content depth in non-core learning areas is very limited."

Another teacher concurred that the content knowledge of teachers in non-core learning areas is shallow because the syllabus is their sole source of teaching and learning content. The unavailability of textbooks makes it extremely hard for the teachers to teach new learning areas of the CBC such as VPA, Mass Displays, and ICT.

> "Teachers skip unfamiliar content in new learning areas owing to the unavailability of textbooks",remarked one teacher.

If some concepts are not covered, then the academic achievement of the learners is affected negatively.

Heavy marking loads are another challenge that teachers confront when teaching large classes. One teacher remarked,

> "My class has 83 learners…it's very large. I assign the learners three or four written items instead of the recommended minimum of 10 items per subject. If I assign them the recommended number of assignment items, I won't be able to complete marking the assignments before the next lesson."

The same teacher went on to say that he was assigning the learners very few assignment items that were easy to mark as a strategy for coping with the heavy making loads. Another teacher who was teaching 65 learners said,

> "We are expected to assign the learners two compositions per week, that is, one in English and another one in Shona. It's practically impossible to meet this requirement with a large class size of 65 learners. I only manage to assign the learners one composition per month in each subject."

The majority of the teachers mentioned the problem of heavy marking loads. They agreed that assigning learners a few assignment items that are easy to mark was a common strategy for contending with heavy marking loads in the schools.

When the teachers were probed about the impact of assigning learners a few assignment items on learning, one teacher responded by saying,

> "…assigning learners very few assignment items, denies them the opportunity to adequately practice and master learnt concepts and skills."

The teachers agreed that very few assignment items do not provide learners with enough opportunities to practise and master new concepts. It is apparent from the responses of the teachers that inadequate assignment items do not enhance the mastery of concepts by learners.

The teachers find it problematic to offer individualised support to learners in large classes. They reported that large class sizes make the classrooms so congested that teachers cannot move around to provide personalised support to the learners. One teacher who was teaching 77 learners complained,

> "My class is so overcrowded that I can't move around to offer learners individualised support…it's a serious challenge to identify all the learners who need individual attention in the congested classrooms."

Another teacher who was teaching 74 ECD A and ECD B learners put it this way,

> "My class is more than treble the size of a standard ECD class of 20 learners. The class is very large for one teacher to offer individualised support to all the learners. I only manage to cater to the individual needs of a few learners."

The challenge of catering for the individual needs of learners in large classes was aptly expressed by another teacher who said,

> "There are fewer chances of a learner getting individual attention from the teacher in a large class than in a small class…large class size forces teachers to focus on teaching fast learners…"

The teachers proffered how lack of individualised support affects slow learners in large classes. In the words of one teacher,

> "Learners who require remedial support are not identified, and they move to higher grades without mastering lower grade concepts…the learners usually lag in theirschool work."

The teachers agreed that the lack of individualised support retards the

intellectual development of learners particularly those with learning difficulties.

Large classes are characterised by disruptive learner behaviours that militate against the provision of quality education. The teachers complained that the large and overcrowded classes are so chaotic that teachers spend more time managing learner behaviours than teaching. One teacher complained,

> "The level of noise in the large classes is too much, especially by learners who sit at the back. They know that you can't squeeze through the overcrowded classroom to get to them…so they are always making noise. Learners who want to learn can't concentrate because of the noise."

Cases of fighting, bullying, destruction of pedagogical resources, arguments, pushing, shoving, theft of stationery, learners not doing assignments, and absenteeism were reported to be rife in the overcrowded classrooms. The sentiments of the teachers suggest that congested classrooms are not favourable ambiences for the provision of quality education.

The TICs confirmed the sentiments of the teachers that the phenomenon of large class sizes in satellite schools was a consequence of the TRF. They verified the concerns of the teachers that large class sizes pose pedagogical challenges to the provision of quality education in satellite schools. In the words of one TIC,

> "…classroom displays and learning centres are always damaged by learners because the classrooms are overcrowded…"

The TICs expressed concern that most of the teachers teaching large classes no longer display instructional media and establish learning centres in their classrooms.

Another TIC complained about the inapplicability of learner-centred pedagogy in congested classrooms. The TIC said,

> "It's very difficult to utilise child-centred approaches in overcrowded classrooms when there is only one CBC textbook for over 40 learners…most teachers are using teacher-centred approaches."

This confirms two findings from the FGIs with teachers. Firstly, the teachers teaching large classes employ teacher-centred pedagogical approaches. Secondly, the textbook-learner ratio is very high in satellite primary schools. Another TIC affirmed the views of the teachers when she said,

> "The critical shortage of textbooks is posing challenges in the teaching of reading and comprehension…in non-core learning areas where there are no textbooks, the content that the teachers teach lack depth and detail. If we had computers and internet access it would have been better."

The TICs urged the government to provide satellite schools with adequate CBC textbooks.

The TICs echoed the sentiments of the teachers that heavy marking loads pose complexities to the provision of quality education in large classes.

> "The teachers are assigning learners fewer written assignment items than stipulated by the MoPSE as a mechanism of coping with heavy marking loads", remarked one TIC.

The learners are denied enough opportunities to practise and master new concepts. Henceforth, learners with learning difficulties may fail to master the concepts.

TICs who juggle school leadership responsibilities with full teaching loads are often compelled to prioritise school leadership over teaching their classes. One of the teachers remarked,

> "The TIC's class is not learning much…most of the time the TIC is away attending meetings and workshops."

Another teacher who echoed similar sentiments said,

> "…a lot of instructional time is lost when the TIC is attending to visitors, doing office work or supervising teachers…the class proceeds to the next grade without completing the syllabuses of the previous grade."

All the teachers reiterated that school leadership and management responsibilities take up most of the learning time of the TIC's class. The teachers appealed to the MoPSE to appoint Non-Teaching School Heads (NTSHs) to lead satellite schools so that each class has its teacher.

The findings indicate that TICs assign learners very few assignment items due to school leadership and management responsibilities. One of the teachers remarked,

> "TICs assign learners very few assignment items because they are overwhelmed by school leadership and administration responsibilities…if they had bursars or secretaries, it would have been better…"

The other teachers raised similar sentiments. Regarding the impact of assigning learners very few assignment items, one teacher commented saying that the learners are accorded limited chances of practising and mastering new concepts and skills.

School leadership and management responsibilities leave TICs with limited time to offer individualised support to the learners they teach. One teacher put it this way,

> "TICs have multiple school management responsibilities…they scarcely have time to cater to the individual needs of the learners they teach."

Echoing similar sentiments, another teacher said,

> "Most of the time TICs are too busy with school administration duties, they don't find enough time to offer remedial support to the learners in their classes…"

If learners are not offered remedial support, they experience challenges in mastering concepts and lag in school work.

When asked how the TIC's class is managed in their absence due to school business, one teacher responded,

> "The TIC usually leaves me with assignments for his class, but I'm forced to focus more on my class because it's an examination class."

Another teacher said,

> "The teachers who are assigned to supervise the TIC's class are in the habit of 'babysitting' the class because they are already overburdened by their large mono-grade classes or large multi-grade classes."

Through probing, it was established that 'babysitting' the TIC's class means occupying the class without meaningful teaching and learning taking place. This confirms earlier claims by the teachers that the quality of education in the TIC's class is very poor.

The TICs indicated that they perform the conflicting roles of school administration and teaching a class.

> "Although our school administration roles are similar to those of Non-teaching School Heads, we have full-time classes to teach", complained one TIC.

This problem was repeatedly raised by the TICs during the interviews. They corroborated the sentiments of the teachers that the school administration and management responsibilities that they perform interfere with their teaching role. In the words of one TIC,

> "We supervise teachers, attend meetings, attend to visitors, and make submissions to the District Office. All these roles leave us with limited instructional time for our classes."

Another TIC complained,

> "You are always disturbed during lessons to attend to office work…when parents or visitors arrive at the school, you can't ask them to wait for you as you teach…you attend to them and the class loses a lot of instructional time."

All the TICs complained that they are stressed by performing school administration and teaching roles consecutively.

> "There is never enough time to perform school administration and management duties or teach your class", remarked one TIC.

The findings show that parents are against the arrangement by the MoPSE of TICs performing the dual role of school administration and teaching a class. They want the MoPSE to appoint NTSHs to lead satellite schools so that each class has its teacher. When probed, one TIC commented that,

> "…it will be a positive development…no class will lose instructional time because the TIC is attending to school administration responsibilities. School administration in satellite schools strengthens, and the quality of education improves…"

The other TICs reiterated similar sentiments and urged the MoPSE to appoint NTSHs to lead satellite schools.

The teachers reported that some satellite primary schools adopted DS as a strategy to cope with the problem of inadequate classrooms. At one school, one teacher explained DS in this way,

> "Our lessons start at 8 am for all classes including those on Double-Sessioning. All the classes at this school commence lessons at the same time with some classes in the classrooms and others outside in the shade of trees."

Another teacher concurred and elaborated,

> "The change-over-time is 11 am for all the classes on Double-Sessioning. Lessons end at 1 pm for all the classes except for ECD A, ECD B, Grade 1, and Grade 2 learners whose lessons end at 12 pm."

The teachers at the other school that practised DS for the same reason mentioned similar timelines.

The teachers expressed the pedagogical challenges that DS presents in the schools. They complained about inadequate furniture for the learners. Concerning this problem, one teacher said,

> "We only have sufficient benches and tables for learners to use when they are in the classrooms. There is no furniture for learners to use when we hold lessons outside in the shade of trees. Learners sit on timber logs, rocks, bricks, pieces of cloth, and even on the ground."

The teachers also indicated that there are no tables for the learners to use. Commenting on the impact of the improvised sitting places on learning, one teacher said,

> "The pain from sitting on logs, rocks, bricks and the ground is excruciating…it distracts learners from participating and concentrating on learning."

Sitting places such as rocks, bricks, timber logs, and the ground do not provide the kind of comfort that is required for a learner to learn effectively.

Due to the unavailability of proper sitting and writing places the teachers are not able to assign learners written assignments for the lessons they conduct outside in the shade of trees. One teacher who said,

> "We don't assign learners written assignments for the five lessons we teach in the shade of trees because, without furniture, textbooks and exercise books get dirty and torn", cogently explained this problem.

The teachers indicated that the lack of furniture leads to poor and illegible handwriting by the learners. When probed about the issue of assignments, one teacher responded by saying,

> "We focus on teaching practical and oral lessons and assign learners written assignments when they get the opportunity to use the classrooms from 11 am to 1 pm."

The findings indicate that this practice presents challenges to the teachers. One challenge that most teachers mentioned is that the learners end up doing written assignments in only three learning areas per day instead of the minimum set standard of five learning areas. Another teacher expressed the complexity of the problem in this way,

> "Classes on Double-Sessioning are in the classroom for only two hours, that is, from 11 am to 1 pm. In those two hours, they are expected to do written assignments for the five lessons that they do before getting into the classroom, and for four other lessons they do in the classroom."

The same teacher further continued to say,

> "The instructional time in the classroom is inadequate…that's why most teachers focus on teaching examinable learning areas."

Another teacher concurred and added,

> "The instructional time in the classroom is so limited that you can hardly offer remedial support to all learners…you are forced by time constraints to concentrate on teaching fast learners."

Most teachers revealed that they do not offer individual support to learners with learning difficulties in the classes on Double-Sessioning due to limited instructional time in the classroom.

The teachers also expressed concern about the lack of chalkboards or whiteboards when conducting lessons under the shade of trees. One

teacher complained,

> "…there are no mobile chalkboards or whiteboards to explain or demonstrate new concepts…it's difficult for learners to master new concepts and skills…"

The teachers agreed that the shade of trees is not conducive milieus for the provision of quality education.

Most teachers identified the transitional period of the DS schooling system as a significant issue that contributes to limited instructional time for DS classes. The transitional period refers to the time taken for class changes. Teachers noted that a substantial amount of instructional time is lost during this interim period. One teacher explained,

> "The transitional period occurs during the 11:00 AM to 11:30 AM lesson, resulting in about 20 minutes lost each day for cleaning the room and packing books. An additional 10 minutes are needed for dust in the swept classrooms to settle."

Another teacher supported this, stating,

> "A whole lesson period of 30 minutes is lost during the transitional period."

The teachers agreed that delays during this time further reduce the already limited instructional time for DS classes. Consequently, as reported by the teachers, learners end up being taught examinable subjects at the expense of non-examinable ones.

DS is significantly disrupted by rain, especially during the rainy season. One teacher noted,

> "When it rains, all learners from ECD A to Grade 7 seek shelter in the classrooms. The overcrowding and noise make effective teaching and learning impossible. Lessons only resume when the rain stops."

Another teacher added,

> "If it rains all day, no learning takes place."

The instructional time lost during the rainy season compromises syllabus coverage and adversely affects the overall quality of education in DS classes.

During the in-depth interviews, the TICs corroborated the sentiments of the teachers that some satellite schools introduced DS to cope with the problem of inadequate classrooms. They also echoed the sentiments of the teachers that conducting lessons in the shade of trees compromises the quality of education in classes on DS. One TIC remarked,

> "When teachers hold lessons in the shade of trees, the attention of the learners is distracted by people, animals or vehicles passing by…effective teaching and learning cannot take place under these conditions…"

Another TIC complained that the pain from sitting on timber logs, rocks, bricks, and the ground lowers learners' levels of concentration and motivation to learn.

The TICs acknowledged the sentiments of the teachers that limited instructional time in the classroom militates against the provision of quality education in classes on DS. One TIC explained the problem in this way,

> "Classes on Double-Sessioning have three hours of instructional time in the classroom if they start lessons in the classroom and only two hours if they start lessons outside the classroom…while infant and junior classes that are not on Double-Sessioning have four and five hours, respectively."

The same TIC further continued to say,

> "The instructional time in the classroom is insufficient to cover nine by thirty-minute lesson periods per day…instructional time constraints are forcing teachers to only teach examinable learning areas."

The other TICs verified that limited instructional time in the classroom compels most teachers to teach only four out of the nine timetabled lessons per day.

TICs shared the sentiments of the teachers that limited instructional time in the classroom makes it difficult for teachers to offer individualised support to learners. One TIC remarked,

> "Owing to the problem of limited instructional time in the classroom, most

> teachers ignore providing individual support to slow learners and concentrate on teaching fast learners".

The other TICs raised the same problem. The TICs urged the government to address the problem of DS by providing funds for satellite schools to construct adequate classrooms.

The TICs agreed with the teachers that the instructional time in the classroom for classes on DS is reduced during the change-over time. One of the TICs commented,

> "The change-over-time often takes 20 to 30 minutes…and instructional time in the classroom for classes on DS is reduced from two hours to only one and half hours…teachers are failing to complete syllabuses of their classes due to inadequate instructional time."

The TICs corroborated the sentiments of the teachers that a lot of instructional time is lost during the rainy season when rains disrupt the DS system. They appealed to the government to assist parents by constructing adequate classroom blocks in satellite schools.

The book corroborates existing studies by the PoZ (2012) and Mutema (2014) that multi-grade classes are prevalent in satellite primary schools. Multi-grade classes increased significantly in this school type following the TRF implemented by the PSC in 2015. However, the existing studies did not explore the ramifications of multi-grade classes on the provision of quality education in satellite schools. This created a knowledge gap on the nature and quality of MGT in satellite schools and its impact on the provision of quality education.

Regardless of the prevalence of multi-grade classes in satellite primary schools, all the teachers and TICs staffing the schools are mono-grade teachers. This problem originates from teacher development programmes in Zimbabwe that exclusively focus on training mono-grade teachers. The pre-service and in-service training that the teachers undergo does not equip them with the

theoretical and practical aspects of multi-grade pedagogy. Therefore, the teacher development programmes in Zimbabwe can be described as 'multi-grade blind'. They are 'blind' to the need for multi-grade teachers in satellite primary schools and other small schools in the country. This problem is not peculiar to Zimbabwe. In most African countries, pre-service and continuing teacher development programmes do not expose teachers to multi-grade pedagogy (Brown, 2010; Taole & Mncube, 2012; Kivunja, 2014; Siririka, 2018). In their SEM reviewed in Chapter 2, Heneveld and Craig (1996) underscore that appropriate teacher development programmes are indispensable supporting inputs for school effectiveness. Henceforth, there is a need for multi-grade teacher development programmes in African countries, including Zimbabwe to enhance the provision of quality education in small rural schools with multi-grade classes.

The national primary school curriculum, policies, and instructional materials premised on mono-grade pedagogy further complicate the implementation of MGT in satellite schools. It is a daunting task for mono-grade teachers to adapt the national mono-grade curriculum to multi-grade settings without professional training in multi-grade pedagogy. A national multi-grade primary school curriculum is also non-existent in other African countries such as South Africa (Taole & Mncube,2012; Joubert, 2010), Uganda and Zambia (Kivunja, 2014) and Nambia (Haingura, 2014; Siririka, 2018). This is why Little (2006b) argues that MGT is an invisible pedagogical approach at the administrative level in most African countries.

There is a taken-for-granted assumption in most African countries that mono-grade teachers can adapt to multi-grade pedagogy without pre-service or in-service training (Taole & Mncube, 2012). This book contradicts this taken-for-granted assumption. Even teachers and TICs with more than 10 years of teaching experience in multi-grade settings experience challenges in adapting the mono-grade curriculum to multi-grade settings. They teach the curriculum

content of the senior grade of a multi-grade class and neglect the content of the junior grade. Learners in the junior grades of multi-grade classes experience learning backlogs that affect their progress and performance negatively. The same problem is reported in studies held by Mansor (2011) in Pakistan, and du Plessis and Subramanien (2014) in South Africa. For mono-grade teachers to teach multi-grade classes effectively, they should be professionally trained in the theoretical and practical skills of multi-grade pedagogy (Brown, 2010; Kivunja & Sims, 2015).

This book corroborates the observation by Haingura (2014) and Siririka (2018) in Namibia that teaching timetables in multi-grade settings are based on mono-grade pedagogy. The teachers in multi-grade settings utilise mono-grade teaching timetables to teach multi-grade classes. The instructional time for one lesson period in a mono-grade class is shared equally between the grades constituting a multi-grade class. Consequently, the instructional time is reduced, making it impossible for teachers to complete the syllabuses of multi-grade classes. Zimbabwe's primary school curriculum is spiral. Henceforth, the uncovered content impedes the learners' mastery of concepts in the higher grades of the primary school cycle. In their SEM, Heneveld and Craig (1996), underline that adequate instructional time is a fundamental enabling condition for school effectiveness. The problem of timetabling can be traced to the 'multi-grade blindness' of teacher development programmes and the national primary school curriculum framework in Zimbabwe.

Due to instructional time constraints caused by following mono-grade teaching timetables in multi-grade settings, some teachers teach examinable learning areas only. When teachers focus on teaching examinable learning areas, the curriculum is 'narrowed' and learners are disadvantaged (Linden (2001). Most teachers follow the mono-grade teaching timetable and teach the curriculum content of the

senior grade in a multi-grade class. Resultantly, the curriculum of the junior grade is not covered. The gap in content coverage that is created affects the learners' mastery of concepts and academic achievement in subsequent grades. Similar timetabling challenges were noted in studies of MGT in other African countries (Haingura, 2014; Kivunja, 2014; Gasa, 2016).

The combination of grades in multi-grade classes is another problem that creates complexities in the provision of quality education in satellite primary schools. Grades with curricula content that cannot be integrated are combined into multi-grade classes. For instance, Grade 2 and 3 learners who should be respectively taught in their mother tongue and English are combined into a multi-grade class. The multi-grade class is treated as a mono-grade class in terms of the language of instruction, and one grade is disadvantaged. Taole (2014b) reports the same pedagogical practice in a study of MGT in South African schools. The study also corroborates findings by Kivunja (2014) in Uganda and Lingam (2007) in Fiji that examination and non-examination grades are combined. In the study that underpins this book, the schools combined Grades 7 and 6, which are examinable and non-examinable, respectively. The evidence from this book and the existing studies show that examination pressure compels teachers to focus on teaching the curriculum content of the examination grade. The Grade 6 learners are taught Grade 7 curriculum content that is difficult for them. This pedagogical practice militates against the learning progress and academic achievement of the Grade 6 learners. The incompatible grade combinations emanate from the absence of a national multi-grade curriculum framework and policies to guide schools on how to handle multi-grade combinations.

Teachers in multi-grade settings are expected to engage in multi-level assessments of learners' progress against prescribed syllabus

outcomes and maintain separate assessment records for each grade (Taole, 2017). The findings presented in this book show that the teachers maintain separate assessment record books for each grade but assign the learners similar tasks based on the curriculum content of the senior grades. Consequently, the learners in junior grades of multi-grade classes underachieve in cluster and termly tests that are based on the curriculum content of their grade levels. They underachieve because the curricula content of their grade levels is not covered when teachers focus on teaching the curricula content of senior grades in multi-grade classes. The teachers employ mono-grade learner assessment systems in multi-grade settings. Hargreaves (2001 in Brown, 2010) corroborates that, teachers experience challenges in adapting mono-grade learner assessment systems to multi-grade settings without professional training in MGT. This is unlike in South Africa, where Taole (2014a) and Mulaudzi (2016) acknowledge that mono-grade teachers in multi-grade settings assess learners according to the prescribed syllabus outcomes of their grade levels. This is a result of pre-set assessment tasks for each grade that teachers in South Africa are provided under the Curriculum and Assessment Policy Statement (Gasa, 2016; Mulaudzi, 2016). Zimbabwe can adopt this approach to learner assessment to enhance the provision of quality education in multi-grade settings.

Negative teacher attitudes towards multi-grade classes also impede the provision of quality education in multi-grade classes. The teachers regard multi-grade classes as more demanding to teach than mono-grade classes. The workload in multi-grade classes involves preparing and maintaining at least two sets of scheme-cum-plan books and professional record books with marking at least two sets of end-of-term tests. Mulkeen and Higgins (2009) and Joubert (2010) also report negative teacher attitudes towards multi-grade classes in studies of MGT in other countries. In South Africa, mono-grade teachers regard multi-grade classes as an unavoidable 'nuisance'

(Berry, 2010). A close analysis of the findings presented in this book and the existing studies suggests that the lack of training in MGT is the underlying factor that influences teachers to hold negative attitudes towards multi-grade classes. The negative attitudes that mono-grade teachers take to the multi-grade classroom negatively affect their commitment and quality of instruction (Brown, 2010). Heneveld and Clarke (1996) emphasise that positive rather than negative teacher attitudes create an ideal milieu for school effectiveness and the provision of quality education.

Large class sizes present significant pedagogical challenges that complicate the delivery of quality education in satellite primary schools. All the teachers and TICs in the selected schools were either teaching large mono-grade classes or large multi-grade classes. Available literature (Chakanyuka *et al.,* 2009; PoZ, 2012), indicates that satellite schools are associated with low enrolments and small class sizes. The problem of large class sizes is a recent phenomenon linked to the TRF. Large class sizes have created the problem of overcrowded classrooms in satellite schools. The classrooms become so congested that the learners destroy the instructional media that the teachers display and the learning centres they establish. Consequently, the teachers no longer display instructional media in their classrooms. A bare classroom environment in terms of instructional media denies learners opportunities for independent learning and the consolidation of learnt concepts. The teacher becomes the only source of knowledge for the learners, stifling self-directed learning that is encouraged by the CBC. From the perspective of Heneveld and Craig's (1996) SEM, the absence of instructional media creates a classroom ambience that is not ideal for the provision of quality education.

Large class size creates congested classrooms that compel teachers to employ rote pedagogical approaches, especially the lecture method. The study corroborates findings by Opoku *et al.,* (2014) and Marais

(2016) that, the lack of space in overcrowded classrooms forces teachers to employ rote pedagogy. Teacher-centred pedagogy, as indicated by the research participants, does not promote quality education because learners are not actively involved in the teaching and learning process. Expressed differently, rote pedagogy makes learners passive recipients of knowledge. The MoPSE (2015) advocates learner-centred pedagogical approaches that enhance the provision of quality education. In the context of multi-grade classes, Brown (2010) recommends learner-centred pedagogical approaches such as self-study, peer tutoring, and cooperative group work as ideal for the provision of quality education.

Evidence from this study indicates that large multi-grade classes further complicate the provision of quality primary education in satellite schools. The teachers who teach large and congested multi-grade classes not only employ the lecture method but also focus on teaching the curriculum content of senior grades. Resultantly, the curriculum content of learners in the junior grades of multi-grade classes is not covered. Despite the perennial problem of large class sizes, teacher development programmes in most African countries, including Zimbabwe, are not preparing pre-service and in-service teachers to teach and manage large classes (Opoku *et al.,* 2014; Marais, 2016). Therefore, the teacher development programmes in African countries including Zimbabwe are 'blind' to the problem of large class sizes.

This study acknowledges the findings by Wadesango *et al.* (2016) that large classes overburden teachers with heavy marking loads. The teachers contend with the heavy marking loads by assigning learners very few assignment items. This study went further to establish that the assignment items are not only few but also of the low order type. The poor quality and inadequate quantity of the assignment items compromise the quality of education in large

classes. Adequate and frequent learner assessment is essential for school effectiveness and, consequently, for the provision of quality education (Heneveld & Craig, 1996).

Existing studies (Mangwanya *et al.,* 2012; Mutema, 2014) report a critical shortage of textbooks in satellite schools. This study verified the problem of textbooks and went further to explore how the acute shortage of textbooks militates against the provision of quality education in large classes. The unusual cases of over 40 learners sharing one updated curriculum textbook are prevalent in the schools, making the teaching of reading problematic. Learners do not have the opportunity to read textbooks individually or take them home to do homework or home study. This study corroborates the observation by Mutema (2014) that if there is only one textbook for both teachers and learners, learners are deprived of individual exposure to the textbook. Teachers fear that the learners may tear or steal the textbook. The teachers associated the dire shortage of textbooks in satellite primary schools with the high rate of non-readers in the schools. This is why Heneveld and Craig (1996) underscore that sufficient textbooks are vital supporting inputs for school effectiveness and the provision of quality education.

Large class size makes it extremely difficult for teachers to identify learners who need individualised support. Studies by Adu *et al.* (2014), Imitaz (2014) and Marais (2016) corroborate that it is hard to identify learners who need extra support in large classes. There are fewer chances for a learner with learning problems to get individual attention from the teacher in large and congested classrooms than in small classes. The teachers concentrate on teaching fast learners, neglecting learners with learning difficulties (Wadesango *et al.,* 2016). They exclude rather than include learners with learning difficulties. This is against the policy of inclusive education that the GoZ ratified and adopted. The learners move to higher grades without mastering

lower-grade concepts, a set-up that militates against their mastery of concepts and academic achievement. In the context of the Equity Model, an educational system that is insensitive to the diverse needs of learners is of low quality (Leu & Price-Rom, 2006; OECD, 2012).

Disruptive learner behaviours in congested classrooms thwart efforts by teachers to provide quality primary education in satellite schools. The unruly learner behaviours include deafening noise, bullying, fighting, and destruction of pedagogical resources. Similar disruptive learner behaviours in large classes were observed in South Arabia (Bahanshal, 2013), Zimbabwe (Wadesango *et al.,* 2016) and Zambia (Shwandi, 2017). This study confirms the observation by Marais (2016) that large classes are chaotic and unmanageable. Disruptive behaviours by learners, particularly noise, make it impossible for learners to concentrate on learning. The teachers teaching large classes devote more time to addressing disruptive learner behaviours than teaching. Addressing learner misconduct in large and cramped classrooms reduces instructional time, learning opportunities, lesson pace, and curriculum coverage (Bahanshal, 2013; Chireshe *et al.,* 2014). This makes large class size one of the major impediments to the provision of quality education in satellite primary schools.

The phenomenon of TICs also complicates the provision of quality education in satellite primary schools. Existing studies in Zimbabwe (PoZ, 2010; Mangwanya *et al.,* 2012), report that satellite schools are headed by TICs. However, the studies did not explore the repercussions of the TIC role in the provision of quality education. This study attempted to address this knowledge gap. Although the school leadership and management responsibilities of a TIC and a non-teaching head are similar in Zimbabwe (PSC, 2019), the TIC has a full-time class to teach. The study substantiates findings by researchers in other countries (Preston et al., 2013; Kgomo, 2016;

Pendola & Fuller, 2018) that performing multiple school leadership and management roles consecutively with full teaching loads overburdens teaching heads. Non-teaching heads tend not to experience administrative overloads because they have administrative support staff such as non-teaching deputy heads, secretaries, and bursars to delegate some responsibilities (Preston *et al.,* 2013; Pendola & Fuller, 2018). The administrative responsibilities overburden the TICs because they do not have administrative support staff. The TICs are further overburdened by teaching large mono-grade classes or large multi-grade classes.

The study concurs with Titus (2004) in Brown (2010) that teaching heads are pushed more into administrative responsibilities than the instructional role. Multiple administrative roles leave the TICs with limited instructional time to teach their classes, assign adequate assignment items, and offer individualised support to the learners. This study corroborates findings by Kgomo (2016) in South Africa that school administration responsibilities make it very difficult for teaching heads to complete the syllabuses of their classes. The stress, strain, and burnout from performing multiple roles that TICs take to their classes, affect the quality of their instruction. When TICs are away on school business, their classes are assigned to teachers in the school, and the learners are further disadvantaged. The teachers who are assigned to teach the TIC's class are already overburdened by their large multi-grade classes or large mono-grade classes. Henceforth, they 'baby-sit' the TIC's class, that is, occupying the class without meaningful teaching and learning taking place. From the perspective of The Education 2030 Agenda (UNESCO, 2015) the learners are left behind in the provision of quality education.

The DS schooling system is another pedagogical practice that creates complexities in the provision of quality education in satellite primary schools. This study authenticates the observation by Hlupo and

Tsikira (2012) that, DS emerged in satellite schools due to inadequate classrooms. One limitation of Hlupo and Tsikira's (2012) study is that it did not explore the ramifications of DS on the nature and quality of pedagogical and management processes in satellite primary schools. Other studies on DS in Zimbabwe (Goronga *et al.,* 2013; Mapolisa *et al.,* 2015; Singadi *et al.,* 2014; Kurebwa & Lumbe, 2015) focused on urban schools. This has created a knowledge gap on the pedagogical repercussions of DS on the provision of quality education in satellite primary schools. The study addressed this knowledge gap in the discourse of quality education in satellite primary schools. In satellite schools with DS, lessons for classes in the morning and afternoon sessions start at the same time with learners in the morning session occupying the classrooms. The learners in the afternoon session conduct their lessons in the shades of trees while waiting for their turn to use the classroom. Similar to the study conducted by Goronga *et al.* (2013) in urban schools, there was no furniture available for learners to use under the shade of trees. The severe pain caused by sitting on the ground, stones, timber logs, and bricks distracts learners from participating and concentrating on learning. The people, vehicles, and animals passing by distract the attention of learners from learning in the shades of trees. Hence, the shades of trees are not conducive teaching and learning milieus for the provision of quality education.

The absence of furniture in the shades of trees makes it impractical for teachers to assign learners written assignments in the five learning areas they cover before getting the opportunity to use the classroom. In the classroom, teachers face the dilemma of assigning tasks across five learning areas while also teaching four other subjects, all within a two-hour timeframe. The limited instructional time in the classroom compels teachers to focus on teaching examinable learning areas. The study verifies the observation by Bray (2008) that, the first casualty of limited instructional time in DS

settings is non-examinable subjects. As noted by Linden (2001), the result is the 'narrowing' of the curriculum. The learners are exposed to an incomplete curriculum that militates against their holistic development and life chances.

The transitional period of the DS schooling system further reduces the instructional time for classes on DS. A whole lesson period is lost while the class leaving the classroom packs its books and sweeps the room. The study verifies observations by earlier studies (Bray, 2008; Singadi *et al.,* 2014; Kurebwa & Lumbe, 2015) that if the transitional period is not well managed, instructional time is lost. The limited instructional time in the classroom and large class sizes make it difficult for teachers to cater to the diverse needs of learners. The study confirms the observation by Bray (2008) that, the second casualty of limited instructional time in double-session classes is the provision of individualised support to learners. The teachers focus on teaching fast learners at the expense of learners with learning difficulties. Ashong-Katai (2013) reports that limited instructional time in the classroom is one of the reasons that compelled the government of Ghana to abolish DS. The government aimed to ensure that learners have sufficient instructional time in the classroom, as adequate instructional time is a crucial factor for school effectiveness (Heneveld & Craig, 1996).

The study acknowledges the findings by Bray (2008) and Goronga *et al.* (2013) that rainy weather disrupts the DS schooling system. On rainy days, all learners, that is, those in the morning and afternoon sessions of DS find shelter in the available classrooms. The classrooms become so cramped that teachers cannot conduct lessons. Lessons only resume after the rains stop. If it rains the whole day, lessons are suspended. The instructional time that is lost during the rainy season and the transitional period compromises curriculum coverage, and the provision of quality education in classes on DS.

According to the OST that informs this study, an OST consists of four integrated elements: context, inputs, transformation processes, and outputs (von Bertalanffy, 1968; Ballantine & Hammack, 2012). A dysfunction in one or more elements of a school organisation can impact other elements and the overall quality of education provided (Ballantine & Hammack, 2012; Lunenburg & Ornstein, 2012). The findings of this study indicate that pedagogical processes in satellite primary schools are dysfunctional due to large class sizes, MGT, the multiple roles of the TIC, and inadequate resources. These dysfunctional pedagogical processes are negatively affecting the quality of education in satellite primary schools.

SDCs, TICs, heads of "mother schools," Cluster Heads, and School Inspectors are integral to the management of satellite schools. These stakeholders are expected to provide support that enhances the quality of primary education.

Satellite primary schools are unregistered institutions that do not receive per capita grants from the MoPSE for instructional materials, relying instead on their SDCs for financial and material resources. However, SDCs often lack the necessary resources to adequately support quality education. One teacher remarked,

> "The majority of parents are poor peasant farmers struggling to make a living… they can hardly afford to pay school fees."

Another teacher echoed similar sentiments,

> "SDCs cannot meaningfully support satellite schools because parents are poor resettled farmers failing to pay tuition fees."

The teachers agreed that parents' severe poverty significantly hampers the SDCs' ability to provide adequate financial and resource management support.

SDCs also lack the financial resources to provide decent accommodation for teachers and TICs. Consequently, poor living

and working conditions contribute to high teacher turnover in the schools. One teacher complained,

> "We live in very small rooms that were once used as offices and storerooms by the former white farm owner. Teachers frequently transfer to registered schools mainly due to inadequate and deplorable accommodation."

Another teacher added,

> "In satellite schools, several teachers share a single room, which offers no privacy... You can't live with your spouse and children. The high rate of teacher turnover is largely due to poor housing."

Such inadequate and poor accommodation exacerbates the problem of teacher turnover. When probed about the impact of high teacher turnover on the quality of education in the schools, one teacher remarked,

> "Teacher turnover is very prevalent in satellite schools... at least three different teachers can teach a class in one year. The continuity of the teaching and learning process suffers when a class has a new teacher almost every term."

The impact of high teacher turnover on the provision of quality education is particularly severe in multi-grade classes, where new teachers often lack training in multi-grade pedagogy.

The teachers reported that SDCs lack the resources to construct standard classroom blocks, leading to poor classroom conditions. One teacher remarked,

> "Although most satellite schools were established almost two decades ago, some still use pole, dagga, and grass-thatched classrooms. The SDCs do not have the financial means to build standard classrooms."

Another teacher complained,

> "The roofs of the make-shift classrooms leak during the rainy season, halting the teaching and learning process for long periods."

Conducting lessons in makeshift classrooms on rainy days is impossible, which negatively impacts curriculum coverage and the overall quality of education.

Due to limited financial support from the SDC, some satellite primary schools use tobacco barns as teaching spaces, which the teachers condemned as unfit for educational purposes. One teacher complained,

> "Tobacco barns are designed for curing tobacco, not for teaching. They lack windows and air vents, resulting in poor lighting and ventilation."

This environment makes it challenging for students, especially those with poor vision to read from textbooks, charts, and boards. Another teacher remarked,

> "The barns are a health hazard; if one learner contracts a contagious infection, it spreads rapidly."

Additionally, the excessive heat in the barns, especially during summer, significantly hampers learner concentration and participation in learning.

The financial constraints of the SDC have resulted in a critical shortage of instructional materials and furniture in the schools. One teacher lamented,

> "There's an acute shortage of textbooks for the new curriculum...most subjects have only one textbook for both teachers and learners, or none at all."

This concern was echoed by many teachers, with another saying,

> "When you want to teach an unfamiliar concept but lack textbooks or internet access for research, you're forced to skip it."

Such gaps in resources create significant learning deficiencies that affect students' academic performance. Additionally, the lack of furniture forces some students to sit on the floor during lessons. One teacher remarked,

> "Learning while sitting on the floor is painful and distracts learners' attention."

Without adequate financial support from the SDC for textbooks and furniture, providing quality education in the schools is a daunting challenge.

In this digital era, often referred to as the fourth industrial revolution, computers and internet access are essential for providing current teaching and learning materials. However, the SDCs lack the financial resources to offer these services in the schools. The absence of computers hinders effective ICT implementation in satellite primary schools. One teacher remarked,

> "Parents can't afford to buy computers or laptops... most satellite schools have only one laptop reserved for administrative tasks."

When asked how they teach the ICT learning curriculum area without adequate resources, the teachers indicated they focus solely on theoretical aspects, leaving learners without the practical competencies expected in the field.

TICs confirmed the sentiments of the teachers that SDCs lack the financial resources to adequately support the schools. This problem was cogently captured by one TIC who said,

> "Less than 30% of the parents pay school fees... SDCs are financially incapacitated to develop satellite schools into effective institutions that provide quality education."

The TICs identified several barriers to the provision of quality education in the schools caused by the SDC's financial constraints, including inadequate accommodation, high teacher turnover, makeshift classrooms, and insufficient instructional materials. Regarding high teacher turnover one TIC commented,

> "Teacher turnover is rampant in satellite schools; in 2019 alone, we lost almost half of the staff due to substandard accommodation."

Another TIC added,

> "A teacher rarely lasts a year at this school because of poor housing."

The TICs echoed the concerns of the teachers that high teacher turnover undermines the continuity and effectiveness of the teaching and learning process in satellite primary schools. All TICs were in agreement that SDCs were financially incapacitated to provide the

necessary support for the provision of quality education in satellite primary schools.

TICs occasionally struggle to receive travel and subsistence allowances from the SDC for attending meetings. One TIC revealed,

> "We often miss important meetings and submit urgent reports late...leading a small satellite school with low cash inflows is a serious challenge."

Another TIC expressed a similar concern:

> "You miss a lot of meetings and crucial information if you don't use your own money to attend...the issue is that reimbursement is often delayed due to low cash inflows. By the time you get refunded, the purchasing power of that money has been eroded by inflation... it's very frustrating."

This frustration negatively impacts the TIC's ability to provide effective institutional and instructional leadership in satellite primary schools.

One of the responsibilities of TICs is to provide management support to teachers. The TICs utilise meetings, class visits, and staff development workshops as avenues for providing management support to the teachers. The teachers identified two main factors that militate against the quality of management support they receive from the TICs. They mentioned the TIC's dual role of teaching a class and school administration and the lack of training in MGT.

One teacher remarked,

> "The TICs hardly find time to conduct class visits because they have classes to teach and many administrative responsibilities."

Echoing similar sentiments another teacher said,

> "…you can go for a term or even two terms without being supervised because, on top of school administration responsibilities, the TIC has a class to teach."

It is evident from the responses that the TICs under-supervise the teachers. The teachers identified several consequences of inadequate supervision, including incomplete scheme-cum-plans, poor quality of teaching, inadequate assignment items, and unmarked exercise

books. They also mentioned incomplete record books and a general lack of preparedness by teachers. Therefore, the inadequate supervision of teachers is one of the barriers to the provision of quality education in satellite primary schools.

The teachers also reported that they are not receiving MGT management support from the TICs. One of the teachers commented,

> "The approach to multi-grade teaching in this district is to integrate the curriculum content of the grades making up a multi-grade class and then teach the content from simple to complex. All the TICs are mono-grade teachers; they cannot assist us…we are left to experiment on our own…"

The main challenge confronting the teachers is to integrate content for multi-grade classes without professional training in MGT and MGT support from the TICs.

TICs facilitate staff development workshops to familiarise teachers with the nature of new learning areas in the CBC. However, the teachers expressed mixed feelings regarding the extent to which they are benefiting from the workshops. One teacher commented,

> "The workshops are providing us with opportunities to discuss and address some of the pedagogical challenges we encounter in teaching new learning areas like VPA, Mass Displays, ICT, Agriculture, and Heritage Studies."

They complained that the workshops focus on mono-grade pedagogy at the expense of multi-grade pedagogy. One teacher put across the problem in this way,

> "Yes, we are holding workshops on the new curriculum, but they focus on mono-grade teaching methods as if all the teachers are teaching mono-grade classes. There is no one to assist teachers in teaching multi-grade classes…the workshops are far removed from our day-to-day challenges of teaching multi-grade classes."

The lack of MGT support from TICs forces the teachers to treat multi-grade classes as mono-grade classes in terms of curriculum content and teaching methods. When probed, the teachers indicated that they only teach the curriculum content of senior grades in multi-

grade classes. Consequently, the curriculum content of the junior grade is not covered, a set-up that negatively affects the mastery of concepts and the academic achievement of learners in the junior grades of multi-grade classes.

TICs indicated that they fail to provide MGT support to teachers due to their dual role of teaching and school administration, and the lack of professional training in MGT. They reported that they experience time constraints to conduct class visits. In the words of one TIC,

> "It's not feasible to supervise each teacher at least once per term because I have a class to teach and a lot of school administration responsibilities...as I supervise the teachers, no one will be attending my class…"

Another TIC argued,

> "The set standard of at least one termly supervision visit per teacher was set with a non-teaching head in mind. For a TIC with a full teaching load and school administration responsibilities, it's not practical."

TICs concurred that inadequate supervision of curriculum implementation by the teachers has a negative bearing on the provision of quality education in the schools.

All TICs were mono-grade teachers who lacked pre-service or in-service training to provide effective MGT support to the teachers. One of the TICs remarked as follows,

> "TICs are mono-grade teachers who are just thrust into the TIC role without induction into multi-grade pedagogy. They can't assist much in issues relating to multi-grade teaching. They need in-service training in multi-grade teaching."

Another TIC who had more than seven years of teaching experience in a multi-grade setting had this to say,

> "Regardless of my long teaching experience in multi-grade classes…I'm still experiencing challenges in teaching a multi-grade class or supporting other teachers who are teaching multi-grade classes. I need in-service training in multi-grade teaching…"

In the absence of MGT support, mono-grade teachers in multi-grade settings are unlikely to provide quality education.

Satellite primary schools are extensions of registered schools, commonly referred to as "mother schools." The heads of these mother schools are expected to provide management support to the satellite schools. Teachers shared their experiences regarding the nature and quality of this support. One significant form of support mentioned was the donation of new curriculum textbooks. One teacher stated,

> "This school received one textbook per grade for the new curriculum in the four core learning areas of Mathematics, English, Science, and Chishona from the mother school."

Teachers at two other satellite schools confirmed receiving similar donations. Another teacher remarked,

> "Although the textbooks are very few, they are a lifeline. It was a formidable challenge to scheme, plan, and teach the core learning areas of the new curriculum without them."

The teachers emphasised that the number of textbooks is inadequate and expressed concern about teaching non-core learning areas without proper resources.

The Heads of 'mother schools' are responsible for inducting new TICs into school administration, particularly in financial management and the online registration of Grade 7 candidates with ZIMSEC. However, many teachers reported a lack of management support from these heads. One teacher expressed frustration, saying,

> "I approached the Head of the 'mother school' for assistance on how to simultaneously teach different concepts to my multi-grade class, but he couldn't help me."

Other teachers corroborated this sentiment, noting that the Heads of 'mother schools' are often reluctant to provide support for Multi-grade Teaching issues. One teacher pointed out,

> "Heads of 'mother schools' are mono-grade teachers who haven't received any professional training in multi-grade teaching."

Without support from the Heads of 'mother schools' and TICs, teachers in multi-grade settings are left to navigate these challenges

on their own. As a result, mono-grade teachers in multi-grade environments cannot be expected to deliver quality education.

TICs echoed the teachers' sentiments regarding the donation of updated curriculum textbooks from some mother schools to their satellite schools. They also confirmed that the Heads of 'mother schools' induct new TICs into financial management and the online registration of Grade 7 candidates with ZIMSEC. One TIC stated,

> "I regularly consult the Head of the 'mother school' on school administration issues whenever I collect pay slips for my staff members. I benefit a lot from discussions on general school administration, but I'm not gaining anything related to multi-grade teaching."

Another TIC shared similar sentiments. They revealed that the Heads of 'mother schools' often fail to provide meaningful support for multi-grade teaching because they are mono-grade teachers unfamiliar with MGT. This raises concerns about the effectiveness of the Heads of 'mother schools' as mentors for TICs in school administration and their ability to ensure quality education in the context of MGT.

The MoPSE expects satellite schools to receive management support from Cluster Heads as part of the BSPZ quality education initiative. The selected TICs belong to two clusters and are part of the Cluster Heads' team in their respective areas. Each Cluster Head conducts at least one termly on-site supervision visit to every school within their cluster. The supervision visits primarily focus on lesson observation, record-keeping, school infrastructure and resources, financial management, production units, and various curriculum issues. When asked about the effectiveness of the supervision visits, one teacher remarked,

> "The supervision visits are effective. The Grade 7 pass rate in satellite schools used to be 0%, but the pass rate has improved significantly due to the on-site cluster supervision visits."

Another teacher added,

> "The termly supervision visits serve as a quality assurance measure that enhances the quality of education in satellite primary schools."

Several teachers expressed concerns about the on-site supervision visits by Cluster Heads, primarily noting that they do not provide adequate support for multi-grade teaching. One teacher remarked,

> "Cluster Heads demand that we scheme and plan separately for multi-grade classes while simultaneously expecting us to integrate content during lessons. They always promise to demonstrate how it's done but never follow through."

Another teacher supported this view, stating that Cluster Heads apply mono-grade standards even when supervising teachers in multi-grade settings. This teacher added,

> "All Cluster Heads are mono-grade teachers who have not received pre-service or in-service training in multi-grade teaching."

This lack of professional training in MGT among teachers, TICs, Heads of 'mother schools', and Cluster Heads poses a significant barrier to providing quality education in multi-grade environments.

Some satellite schools are located in remote areas that are inaccessible by road, resulting in a lack of supervision from Cluster Heads. One teacher remarked,

> "The road to this school is so bad that no transport can ply the route."

The teachers expressed significant concern that this inaccessibility isolates them from management support provided by the Heads of 'mother schools' and Cluster Heads. Another teacher added,

> "Because of the inaccessible road, Cluster Heads haven't visited this school for termly supervision visits in over seven years. These visits could have equipped us with the knowledge and skills needed for teaching and managing multi-grade classes…we are at a disadvantage."

The teachers also voiced frustrations about being geographically, socially, and professionally isolated from other educators in multi-

grade settings, limiting their ability to share challenges and solutions related to MGT. This isolation from the 'mother school', Cluster Heads, and school inspectors compromises the quality of management and pedagogical processes, ultimately affecting the provision of quality education.

The TICs agreed with the teachers that supervision visits by Cluster Heads are gradually improving the quality of education in satellite primary schools. However, they noted that financial challenges hinder Cluster Heads from conducting on-site supervision visits at least once per term. One TIC explained,

> "The supervision visits are funded by the BSPZ affiliation fees paid by the schools. Satellite schools often struggle to pay these fees regularly due to low cash inflows, resulting in supervision occurring only once per year instead of three times."

The satellite schools use their limited financial resources, raised from school fees, for infrastructural development and the procurement of curriculum materials. Another TIC emphasised that many parents cannot afford to pay school fees, further complicating the schools' ability to meet their financial obligations. The same TIC asserted that

> ''The lack of adequate supervision visits contributes to the poor quality of teaching and learning in satellite schools.''

The TICs expressed frustration that Cluster Heads do not provide adequate MGT support because they are mono-grade teachers who lack professional training in multi-grade pedagogy. One TIC articulated the issue, saying,

> "The main limitation of cluster supervision is the composition of our supervision teams. All team members are mono-grade teachers, and there's no one available to provide professional guidance on multi-grade teaching."

This concern was echoed by the other TICs. They also pointed out that long distances between schools and inaccessible roads further hinder the effectiveness of supervision visits by Cluster Heads.

The MoPSE expects School Inspectors to provide management support to satellite primary schools. This support covers various curriculum issues, including supervision and assessment of scheme-cum-planning, lesson delivery, classroom management, marking, record-keeping, financial management, infrastructural development, and maintenance of school grounds. One teacher commented,

> "Due to a poor road network, financial constraints, and inadequate vehicles, School Inspectors often provide on-site management support only once a year."

The limited and infrequent supervision visits contribute to low Grade 7 pass rates in satellite schools. Another teacher expressed similar concerns, stating,

> "The Grade 7 pass rate at this school is the lowest in the entire district because School Inspectors and Cluster Heads haven't visited us for on-site supervision in over seven years due to an inaccessible road."

This highlights that management support from School Inspectors and Cluster Heads is critical for ensuring quality education.

Like the TICs, Heads of 'mother schools', and Cluster Heads, School Inspectors are also unable to provide adequate MGT support to teachers in multi-grade settings. This issue was highlighted by one teacher who said,

> "School Inspectors provide us with useful support in all areas of the school curriculum except for multi-grade teaching."

Another teacher complained,

> "When we approach the School Inspectors with problems related to multi-grade teaching, they don't assist us. They tell us that we are the ones on the ground who should address these issues ourselves."

The teachers are in a dilemma regarding MGT because the Heads of 'mother schools', School Inspectors, Cluster Heads, and TICs lack the expertise to help them. These officials need in-service training in multi-grade pedagogy to effectively support teachers in multi-grade settings.

The TICs acknowledged that School Inspectors provide management support to satellite schools through on-site supervision visits and workshops. One TIC commented,

> "Supervision visits are usually held once or twice a year. They cover all curriculum areas comprehensively, except for multi-grade teaching. School Inspectors have promised us a workshop on multi-grade teaching, but it hasn't materialised in over a decade."

Another TIC echoed the teachers' sentiments,

> "When School Inspectors come for on-site visits, they focus on mono-grade curriculum issues and tell us to develop our strategies for addressing the multi-grade teaching challenges we present to them."

One TIC confirmed that neither Cluster Heads nor School Inspectors had visited the school he leads in over seven years due to an inaccessible road. He lamented,

> "I'm the only supervisor of the teachers…there is no one supervising me or the school."

This raises concerns about the quality of education the school can provide in the absence of external supervision.

School Inspectors conduct staff development workshops on the implementation of the new curriculum with TICs, who then cascade the information to teachers in their respective schools. However, all TICs reported that these workshops focus on mono-grade pedagogy at the expense of multi-grade pedagogy. In the words of one TIC

> "All workshops are silent on multi-grade teaching…School Inspectors are turning a blind eye to multi-grade teaching."

The other TICs echoed similar sentiments, noting that MoPSE policies and the new curriculum framework are also silent on MGT. They pointed out that School Inspectors are often mono-grade teachers who themselves require in-service training in multi-grade teaching. This lack of professional training in multi-grade pedagogy among teachers, TICs, heads of mother schools, Cluster Heads, and School Inspectors creates significant challenges for providing quality education in multi-grade settings within satellite schools.

Satellite schools receive management support from SDCs, Heads of 'mother schools', Cluster Heads, and School Inspectors. The government mandates each school to establish a SDC under Statutory Instrument 87 of 1992 (GoZ, 1992). The SDC provides financial support for the school's pedagogical resource needs by collecting school fees from parents. However, satellite schools receive limited financial support from their SDCs because many parents cannot afford to pay school fees. This book confirms existing literature (PoZ, 2012; Tarisayi, 2015) indicating that most fast-track land reform beneficiaries are poor peasants who struggle to pay school fees. As a result, satellite schools rely heavily on the limited support from their SDCs for financial and material resources, especially since they do not meet MSFS criteria to register with the MoPSE. Unregistered schools are ineligible for per capita grants from the MoPSE for procuring pedagogical resources (Mavhunga & Mazodze, 2014), creating significant infrastructural and instructional resource challenges, including inadequate accommodation, makeshift classrooms, and a lack of computers.

The book corroborates the observation by Hlupo and Tsikira (2012) that poor accommodation contributes to high teacher turnover in satellite schools. Furthermore, the book explores the consequences of high teacher turnover on the quality of education. Teacher turnover is so prevalent that three different teachers may teach the same class in a single academic year, negatively affecting the continuity and quality of the teaching and learning process, as well as curriculum coverage. Due to the (TRF), the ministry takes time to replace teachers who transfer, leading to severe understaffing, large class sizes, and multi-grade classes. These factors complicate the provision of quality education in satellite primary schools.

SDCs often lack the financial resources to procure computers for teaching ICT, a new area in the primary school curriculum. Each

school has only one laptop reserved for administrative purposes, which prevents most teachers from teaching the ICT curriculum effectively. Those who attempt to teach it often focus on theoretical aspects, neglecting practical skills. Consequently, learners miss out on acquiring essential computer skills. An education system that fails to utilise and apply ICT is inherently of poor quality (Blignaut *et al.*, 2010; Jenjekwa, 2013).

One of the roles of the SDC is to provide TICs with subsistence and travel allowances for school-related business. However, satellite schools struggle with low cash inflows due to the financial constraints faced by most parents. This situation makes it challenging for SDCs to provide TICs with necessary allowances. The findings verify observations by PoZ (2012) and Tarisayi (2015) that many land beneficiaries live in poverty and cannot afford school fees. The inability of TICs to attend meetings regularly results in professional and social isolation, causing schools to miss critical information necessary for providing quality education.

The MoPSE expects TICs to support teachers through staff development workshops, meetings, and class visits. While existing studies in Zimbabwe (PoZ, 2012; Mavhunga & Mazodze, 2014; Mutema, 2014) acknowledge that TICs head satellite schools, they do not explore the quality of management support provided to teachers. The dual role of teaching and managing leaves TICs with limited time for adequate support. Studies by Haingura (2014) in Namibia and Mulaudzi (2016) in South Africa confirm that teaching heads often fail to offer sufficient management support due to their multiple responsibilities. Inadequate supervision leads to a lack of preparedness and poor teaching quality, prompting fast-track land reform beneficiaries to advocate non-teaching heads to lead satellite primary schools.

TICs do not provide sufficient MGT support to teachers in multi-grade settings. Workshops held on the new curriculum focus on mono-grade pedagogy, ignoring the needs of those teaching multi-grade classes. Lingam (2007) and Gasa (2016) confirm that teaching heads struggle to support teachers in multi-grade settings due to a lack of professional training in MGT. All TICs are mono-grade teachers who have not received pre-service or in-service training in multi-grade pedagogy, indicating a need for similar training for both TICs and teachers.

The MoPSE expects Heads of 'mother schools' to provide management support to satellite schools (Chakanyuka et al., 2009; PoZ, 2012). However, there is little scholarly work on the nature and quality of this support. The study underpinning this book found that while some mother schools donate new curriculum textbooks to ease shortages, Heads of 'mother schools' do not offer MGT support to teachers and TICs. Like TICs, the Heads of 'mother schools' are mono-grade teachers lacking professional training in MGT. Consequently, the quality of education in multi-grade classes is unlikely to improve when teachers, TICs, and Heads of 'mother schools' lack familiarity with multi-grade pedagogy.

Satellite schools also receive management support from Cluster Heads under the BSPZ quality education initiative. However, there are no published studies on the nature and quality of this support in Zimbabwe. Cluster Heads offer management support to teachers and TICs in satellite schools through on-site supervision visits, covering lesson observations, record-keeping, school infrastructure, financial management, production units, and school grounds. The supervision visits are improving the quality of education in satellite primary schools. Jita and Mokhele (2012) corroborate that school clustering involving on-site visits improve teachers' pedagogical skills and the quality of education.

However, low cash inflows often prevent satellite schools from paying BSPZ affiliation fees, which fund cluster supervision visits. As a result, Cluster Heads typically supervise satellite primary schools only once a year instead of at least three times, confirming the teachers' and TICs' claims about the financial constraints faced by parents. The book aligns with existing research (Jita & Mokhele, 2012; Makaye, 2015) indicating that a lack of financial resources significantly hampers the effective implementation of school clusters in rural settings. Additionally, the fact that Cluster Heads are mono-grade teachers limits their ability to provide MGT support for multi-grade classes. Without adequate MGT support from TICs, Heads of 'mother schools', and Cluster Heads, teachers in multi-grade settings cannot be expected to teach effectively. Some satellite schools receive no management support from Cluster Heads and Heads of 'mother schools' due to inaccessible roads, isolating teachers and TICs from essential management support.

The book also corroborates existing research (PoZ, 2012; Jenjekwa, 2013) that School Inspectors do not frequently visit satellite schools. Infrequent visits are attributed to inadequate vehicles, financial constraints, and inaccessible roads. This book explores the nature and quality of the management support provided by School Inspectors, which includes on-site visits and workshops. Their supervision covers scheme-cum-planning, lesson delivery, classroom management, marking, record-keeping, infrastructure, financial management, and maintenance of school grounds. While the teachers and TICs expressed satisfaction with the support they receive, they noted a lack of assistance on MGT. This aligns with findings from other African countries (Mulkeen & Higgins, 2009; Taole, 2014b; Mulaudzi, 2016; Siririka, 2018), indicating that education officials often do not provide MGT support. Like other education officials, School Inspectors are usually mono-grade teachers lacking expertise in multi-grade pedagogy. Without support

from School Inspectors, Cluster Heads, Heads of 'mother schools', and TICs, mono-grade teachers in multi-grade settings struggle to effectively teach and manage their classes.

The MGT support needed by TICs and teachers includes content integration, timetabling, scheme-cum-planning, teaching methods, learner assessment, class organisation, and class management. Due to the lack of MGT support, teachers and TICs treat multi-grade classes as mono-grade classes, focusing solely on the curriculum content for senior grades. Consequently, the curriculum for junior grades is neglected, adversely affecting learner progress. Similar observations have been made in studies on MGT in other countries (Mansoor, 2011; Taole & Mncube, 2012; Haingura, 2014). Mono-grade teachers require MGT training and support to effectively manage multi-grade classes (Haingura, 2014; Gasa, 2016).

From the perspective of the OST informing this book, management processes fall within the transformation processes of a school organisation (Ballantine & Hammack, 2012; Lunenburg & Ornstein, 2012). In this context, SDCs, TICs, Heads of 'mother schools', Cluster Heads, and School Inspectors are all part of the management process. Quality education relies on the technical competencies of both teachers and educational administrators (Lunenburg & Ornstein, 2012; Hoy & Miskel, 2013). A dysfunctional management process negatively impacts organisational outputs, which reflect the quality of education. The management processes in satellite schools are dysfunctional due to a lack of financial support from the government and limited financial backing from SDCs. Additionally, the multiple roles of TICs hinder their ability to provide adequate management support to teachers. The lack of technical competency in MGT among TICs, Heads of 'mother schools', Cluster Heads, and School Inspectors further compounds the deficiencies in the management processes of these schools. Overall, these dysfunctional

management processes complicate the provision of quality education in satellite primary schools.

The teachers and TICs conduct school-based MGT staff development workshops to tackle the challenges of teaching multi-grade classes. In Makonde District, the focus of MGT is on integrating the content of these classes and teaching it from simple to complex. Through these workshops, teachers and TICs have identified both similarities and differences in the learning content across grades within their multi-grade settings. However, they noted that the learning content in language areas is generally distinct, making integration particularly challenging. One teacher remarked,

> "Our main challenge is how to teach similar and different content from simple to complex practically… there is no one to provide us with in-service training."

The teachers are appealing to the MoPSE to organise a comprehensive MGT in-service training program for all teachers in satellite schools.

There is a significant understaffing issue at each satellite school, with at least three teachers missing due to the Teacher Recruitment Fund (TRF) imposed by the PSC in 2015. To address this, the SDCs of satellite schools have attempted to hire additional teachers. However, they face financial challenges, as many parents cannot afford to pay school fees. One teacher remarked,

> "One or two extra teachers are hired for a term or two, but their contracts are often terminated due to financial constraints."

When asked about the impact of hiring extra teachers, another teacher noted,

> "Employing additional teachers reduces large class sizes and multi-grade classes in satellite schools."

Another added,

> "Multi-grade classes are separated, and large mono-grade classes are divided into two or more classes, making them smaller and more manageable."

This highlights the effectiveness of hiring additional teachers in enhancing the quality of education in satellite primary schools.

Satellite schools also utilise the School Improvement Grant (SIG) to

construct standard classroom blocks as a long-term strategy to address the acute shortage of classrooms and teaching staff. However, the annual SIG funding of $4,500 is insufficient to complete a standard classroom block. To supplement the SIG funds, SDCs mobilise parents to contribute free labour and building materials. Parents also provide water, quarry stones, river sand, bricks, tools, and pit sand for the construction of these classrooms.

The acute shortage of CBC textbooks creates significant pedagogical challenges in delivering quality education in schools. Several teachers mitigate this issue by using old curriculum textbooks to teach some CBC learning areas. One teacher explained,

> "We are using old curriculum textbooks with relevant content to teach new curriculum learning areas."

However, this approach does not apply to entirely new subjects such as VPA, Agriculture, Mass Displays, and ICT. Teachers expressed frustration about relying solely on the syllabus as their content source for these new learning areas and urged the government to provide new curriculum textbooks to satellite primary schools.

Another barrier to providing quality education is the multiple roles of the TIC. Teachers explained how TICs manage these responsibilities. One teacher noted,

> "TICs make up for lost instructional time while conducting school administration in various ways. Some conduct early morning lessons, while others teach their classes in the afternoon from 2 PM to 4 PM."

Another teacher mentioned that some TICs leave their classes to attend school business, assigning a different teacher to supervise their class in their absence.

> "The teacher assigned to supervise is already overburdened by their large class," another teacher pointed out.

They all agreed that this strategy is ineffective and urged the MoPSE to appoint non-teaching heads to lead satellite schools.

TICs sometimes multitask to cope with their various responsibilities. In this context, multitasking refers to performing teaching and school management roles concurrently. One teacher provided an example,

saying,

> "TICs simultaneously teach their classes and supervise the professional documents of teachers."

Additionally, TICs utilise after-school hours and weekends to manage their administrative duties.

TICs confirmed that they conduct school-based staff development workshops on MGT, primarily due to the lack of support from Heads of 'mother schools,' Cluster Heads, and School Inspectors. One TIC remarked,

> "When we approach School Inspectors with the multi-grade teaching challenges we face, they don't assist us. They always advise us that we are the ones on the ground who should devise strategies to address the problems."

Unfortunately, these staff development workshops are often ineffective due to a lack of resource persons with MGT expertise in the schools.

The TICs echoed the teachers' concerns that SDCs employ extra teachers to combat understaffing and high teacher-learner ratios linked to the TRF. One TIC noted,

> "Our fees and cash inflows are very low… we can't afford to hire enough extra teachers like established schools."

When asked about the effectiveness of hiring additional teachers, another TIC responded that it helps reduce the number of large and multi-grade classes.

> "Teaching loads become manageable… teachers can assign adequate assignments to learners and address their individual needs," another TIC elaborated.

They proposed that a lasting solution to understaffing and large class sizes would be for the government to unfreeze the recruitment of teachers.

TICs also acknowledged that the SDCs of satellite primary schools utilise SIG funds to construct standard classroom blocks to alleviate issues related to overcrowding and large class sizes. They praised the parents for their contributions to labour and building materials. One TIC revealed,

> "Each household is going to contribute one 50 kg bag of maize towards the construction of the standard classroom block. The SDC will sell the maize to the Grain Marketing Board and use the money to procure building materials and pay builders."

The TICs echoed the teachers' concerns that the severe shortage of new curriculum textbooks in satellite schools poses significant pedagogical challenges to delivering quality education. They confirmed that schools use old curriculum textbooks to teach relevant CBC content as a temporary solution. One TIC remarked,

> "The problem is that you don't find all the new curriculum content in the old curriculum textbooks. For new learning areas like VPA, Mass Displays, and ICT, there are hardly any sources for teachers to consult."

The TICs are unable to procure many new curriculum textbooks with SIG funds, as these funds are primarily allocated for infrastructural development.

TICs also lose significant instructional time while managing multiple school responsibilities. When asked how they compensate for this lost time, one TIC responded,

> "I always take advantage of the study period from 2 PM to 4 PM on Tuesdays and Thursdays to teach my class any uncovered content."

Other TICs conduct lessons early in the morning before regular classes begin. They agreed that compensating for lost instructional time benefits learners but exacerbates their workloads.

To ensure the teaching and learning process continues in their absence due to school business, TICs shared various strategies. One TIC explained,

> "Before I leave for a meeting or workshop, I prepare work for my class and ask another teacher to cover for me. When I return, I check on the learners' mastery of the concepts and address any problem areas."

Other TICs reported that they either write assignments on the board or provide supervising teachers with page numbers for expected work during their absence. However, the teachers assigned to supervise often end up merely "babysitting" the students, as they are already overwhelmed by their own large mono-grade or multi-grade classes. This leads to a lack of meaningful teaching and learning during the TIC's absence.

Multitasking is another strategy TICs employ to cope with their multiple roles. One TIC explained,

> "I don't have a clerk. If I want to conduct the online registration of Grade 7 candidates, I first give my class some work to do and then call the Grade 7 learners one by one for registration." She added, "While registering the learners, I also teach and supervise my class."

Another TIC mentioned that he typically performs administrative tasks in his classroom rather than in the office.

> "If you serve parents and other visitors from your classroom, they realize that you have a class to attend to and are busy. They usually don't stay unnecessarily long after being served," he argued.

TICs do not have enough time to complete all administrative duties during school hours. They echoed the teachers' sentiments that they often use after-school hours and weekends to manage their multiple roles. One TIC revealed,

> "I often take two hours after school if I want to supervise teachers' professional documents or students' exercise books."

Another TIC expressed similar sentiments,

> "Most of the time, I work after school hours and on weekends to get things done and meet deadlines."

This burden of juggling multiple administrative roles alongside teaching affects the quality of the institutional and instructional leadership they provide.

There is an acute shortage of new CBC textbooks in satellite schools. Currently, these schools manage this issue by utilising old curriculum textbooks to teach some new curriculum learning areas. This strategy is inadequate for entirely new subjects in the CBC such as Visual and Performing Arts (VPA), Agriculture, Mass Displays, and ICT. In these areas, teachers rely solely on the syllabus for content, leading to low content knowledge and negatively impacting the quality of education.

The multiple leadership and management responsibilities placed on TICs result in limited time for teaching. To compensate for lost instructional time, TICs conduct lessons early in the morning and during study periods in the afternoon. When TICs are away on school business, they leave assignments for their classes and designate other teachers to supervise. However, these teachers often struggle to effectively teach the TIC's class due to their heavy workloads from large mono-grade and multi-grade classes, which disadvantages learners regarding curriculum coverage and academic achievement.

TICs cope with their dual roles of school management and teaching through multi-tasking, often performing these responsibilities concurrently. Some TICs take on additional management tasks after school hours and on weekends. This aligns with findings by Newton and Wallin (2013), which indicate that teaching heads experience stress and tension related to conflicting role demands and workload intensification, ultimately impacting the quality of education they provide.

Heads of 'mother schools,' Cluster Heads, and School Inspectors are unable to offer adequate MGT support to TICs and teachers. In response, TICs conduct school-based workshops on MGT, but these are often ineffective due to a lack of trained resource persons. This observation aligns with Kivunja and Sims (2015), who note that MGT

is a specialised pedagogy requiring rigorous pre-service and in-service training.

School Development Committees (SDCs) have employed extra teachers to address understaffing and large class sizes resulting from the TRF imposed by the PSC of Zimbabwe in 2015. Hiring additional teachers has positively impacted the quality of education in satellite schools by enabling the separation of multi-grade classes and the division of large mono-grade classes into smaller, more manageable groups. However, this approach is unsustainable due to low cash inflows in satellite schools, as many parents are unable to afford school fees (PoZ, 2012; Tarisayi, 2015). Consequently, satellite schools can only hire a limited number of additional teachers for short periods.

To address the acute shortage of classrooms, satellite schools utilise SIG funds to construct standard classroom blocks. This supports Tarisayi's (2015) observation that SIG enables schools to complete previously abandoned projects due to financial constraints. To complement SIG funds, SDCs mobilise parents to contribute free labour and building materials for classroom construction.

The teachers recommended several strategies to improve education in satellite schools. Firstly, the Ministry of Primary and Secondary Education (MoPSE) should organise in-service training workshops on Multi-Grade Teaching specifically for mono-grade teachers. Additionally, they suggested that School Inspectors, Cluster Heads, and Heads of 'mother schools' also receive this training to effectively support mono-grade teachers in multi-grade settings. The teachers further agreed that MoPSE should introduce MGT allowances to incentivise educators to take on multi-grade classes. They urged the ministry to collaborate with teachers' colleges to deploy student teachers in satellite schools to help manage extra classes requiring MGT.

Moreover, the teachers recommended the establishment of a programme for constructing standard infrastructure and providing new curriculum materials in satellite schools. They highlighted the need for rural district councils to ensure access to clinics, shopping centres, police stations, and accessible roads in these areas. The government also needs to lift the TRF to address the issue of large class sizes in satellite primary schools.

TICs emphasised the integration of multi-grade pedagogy into teacher development programmes for pre-service teachers. One TIC noted,

> "I wonder why teachers' colleges and universities only train mono-grade teachers when there are many multi-grade classes in satellite schools. It's high time they include multi-grade pedagogy in all teacher development programs."

The TICs proposed intensive in-service training workshops on MGT for practicing mono-grade teachers, TICs, Heads of 'mother schools', Cluster Heads, and School Inspectors.

TICs also expressed concern about the absence of a multi-grade school curriculum, policies, and instructional materials to support teachers in multi-grade settings. One TIC remarked,

"It's very difficult for TICs to offer teachers support on adapting the mono-grade curriculum to multi-grade settings without a policy framework and relevant instructional materials."

They recommended that MoPSE develop a national primary school multi-grade curriculum, along with accompanying policies, syllabuses, and textbooks.

Additionally, TICs voiced frustrations about balancing teaching and school management responsibilities. One TIC lamented,

> "We hardly have enough time to teach or perform administrative roles. Heavy workloads, burnout, and stress are the order of the day."

The classes taught by TICs are disadvantaged in terms of instructional time. To address this, MoPSE should consider appointing non-teaching heads in satellite schools so that each class has its dedicated teacher.

The TICs also urged the government to provide satellite schools with grants for infrastructure development and the procurement of new curriculum textbooks. One TIC commented,

> "The grants will go a long way in addressing the acute shortage of updated curriculum textbooks, Double-Sessioning, and poor working conditions."

These grants would empower SDCs to construct standard infrastructure and mitigate high teacher turnover.

Furthermore, TICs highlighted that the double-session model shortens instructional time, forcing teachers to concentrate on examinable subjects. They recommended that the government implement an infrastructure development programme for satellite schools, similar to the SIG, to alleviate the challenges posed by this model. In the words of one TIC,

> "The infrastructural development programme will also address the poor living and working conditions contributing to high teacher turnover in satellite schools."

TICs criticised the TRF established by the PSC in 2015, which they believe has resulted in severe understaffing and high teacher-learner ratios. One TIC lamented,

> "In some classes, the teacher-learner ratio is as high as 1:103 due to the teacher recruitment freeze. The workload is unbearable. Quality education is unattainable in very large classes."

They recommend that MoPSE lift the TRF and fill all vacant teaching positions in satellite primary schools.

Finally, TICs raised concerns about the infrequency of on-site supervision visits by School Inspectors to satellite primary schools, noting that some schools are not receiving these visits due to inaccessible roads. As a solution, they recommended that Rural District Councils ensure all routes to satellite schools are passable and urged School Inspectors to conduct more frequent supervision visits.

A close analysis of the recommendations provided by the TICs and teachers reveals that most align with the transformation process dimension of quality education. Their insights highlight opportunities for enhancing educational quality in satellite primary schools, particularly regarding pedagogical and management processes. From the perspective of the OST, which informs this book, these recommendations serve as a form of feedback, enabling school organisations to address deficiencies in delivering quality education. The strategies proposed by teachers and TICs for improving education quality in satellite primary schools are synthesised into the book's recommendations in Chapter 6.

This chapter presented an analysis and discussion of the study informing this book. The findings indicate several factors that hinder the quality of pedagogical and management processes in satellite primary schools. Large class sizes, MGT, the multiple roles of TICs, the double-session model, and high teacher turnover negatively impact the quality of pedagogical processes. Additionally, the lack of financial support from the government, limited backing from School Development Committees (SDCs), and insufficient MGT support compromise the quality of management processes in the schools. These deficiencies in the transformation process within satellite primary schools obstruct the delivery of quality education. The next chapter will provide a summary of the findings, along with conclusions and recommendations.

CHAPTER 6 SUMMARY OF FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This book explored the quality of education in satellite primary schools, focusing on the pedagogical and management processes specific to this school type, which represent a knowledge gap in the existing literature. Chapter 1 outlined the research problem and context, articulating the main research question, sub-questions, definitions of key terms, and the structure of the book. Chapters 2 and 3 reviewed the conceptual and theoretical frameworks of quality education, and the specific challenges faced by small rural schools, respectively. Chapter 4 justified the use of the interpretive research paradigm, qualitative research, and multiple case study design as the methodology underpinning the book's findings. Finally, Chapter 5 presented an analysis and discussion of the main findings. Chapter 6 offers a summary of the findings, conclusions, recommendations, and areas for further research.

The book identified several factors affecting the quality of pedagogical processes in satellite primary schools, including MGT, the multiple roles of TICs, large class sizes, and Double-Sessioning (DS).

Multi-grade classes pose complexities to the provision of quality education in satellite primary schools. These classes increased significantly following the severe understaffing in the schools caused by the TRF implemented by the PSC in 2015. Regardless of the prevalence of multi-grade classes in satellite primary schools, no teachers and TICs staffing the schools are trained in multi-grade pedagogy. The pre-service, in-service, and continuing teacher development programmes in the country do not equip teachers with the theoretical and practical skills of MGT. The teacher development programmes are ‘multi-grade blind’. They are ‘blind’ to the urgent need for a multi-grade school curriculum, policies, curriculum materials, teachers, and school supervisors in the country.

Zimbabwe's national primary school curriculum framework, policies, and curriculum materials are premised on mono-grade pedagogy. There is a taken-for-granted assumption that mono-grade teachers can adapt to multi-grade pedagogy without professional training (Taole & Mncube, 2012). This assumption is refuted by the findings presented in this book. Even teachers and TICs with more than 10 years of teaching experience in multi-grade settings, experience challenges in adapting to MGT. For mono-grade teachers to teach multi-grade classes effectively, they should be professionally trained in multi-grade pedagogy (Brown, 2010).

The teachers and TICs experience challenges in adapting the national mono-grade curriculum to multi-grade settings without pre-service or in-service training in multi-grade pedagogy. The challenges they confront include timetabling, content integration and differentiation, scheme-cum planning, teaching methods, class management, and learner assessment. They cope with these challenges by treating multi-grade classes as mono-grade classes in terms of curriculum content. The teachers and TICs focus on teaching the curriculum content of senior grades in multi-grade classes. They also base learner assessment tasks on the curriculum content of the senior grades. Consequently, the curriculum content of the junior grade is not covered. Zimbabwe's primary school curriculum is spiral. Henceforth, the learners in the junior grades of multi-grade classes experience gaps in content coverage that impact negatively on their academic progress and achievement.

The teachers hold negative attitudes towards multi-grade classes because they regard them as more demanding to teach than mono-grade classes. As a result, they are reluctant to be allocated to multi-grade classes. The negative attitudes that mono-grade teachers take to the multi-grade classroom, affect the quality of education they provide. The underlying factor influencing the negative teacher

attitudes towards multi-grade classes is the lack of professional training in MGT.

Large class sizes also pose complexities to the provision of quality education in satellite primary schools. The problem of large class size is a recent phenomenon linked to the TRF implemented by the PSC of Zimbabwe in 2015. All the teachers and TICs in the selected schools teach either large mono-grade classes or large multi-grade classes. Due to the large class sizes, the non-standard classrooms in the schools become so congested that teachers cannot display instructional media or establish learning centres. A bare classroom environment in terms of instructional media denies learners opportunities for independent learning and the consolidation of learnt concepts. A classroom ambience of this nature is not conducive to the provision of quality education.

The limited space in the overcrowded classrooms compels the teachers and TICs to employ rote pedagogical approaches, particularly the lecture method. Rote pedagogy does not promote active learner participation that is associated with the provision of quality education. Large multi-grade classes further complicate the provision of quality education in satellite primary schools. The teachers manning the large multi-grade classes focus on teaching the curriculum content of senior grades. This creates content coverage gaps among learners in the junior grades, which affect their mastery of concepts and academic achievement.

Large mono-grade and multi-grade classes overburden teachers and TICs with heavy marking loads. Due to the large class sizes, it is difficult for the teachers and TICs to review learners' assignments thoroughly. The errors that the teachers and TICs overlook militate against the learners' progress and academic achievement. The teachers and TICs cope with the heavy marking loads by assigning

learners very few assignment items that are of the low order type. The poor quality and low quantity of the assignment items deny learners adequate opportunities to practise and master new concepts and skills.

The acute shortage of new curriculum textbooks in satellite primary schools is also complicating the provision of quality education in large classes. The textbook-learner ratio is so high that cases of over 40 learners sharing one textbook are very common. Learners do not have the opportunity to read textbooks individually, making the teaching of reading for fluency and comprehension problematic. The learners cannot take textbooks home to do homework or home study, effectively leaving the teacher as their only source of knowledge. The dire shortage of textbooks is contributing to the high prevalence of learners who are non-readers in satellite primary schools.

In the large classes, the teachers and TICs are overwhelmed by learners who require individualised support. The large class sizes compel the teachers to concentrate on teaching fast learners, neglecting learners with learning challenges. Hence, learners with learning difficulties are excluded rather than included. This is against the inclusive education policy that Zimbabwe ratified and adopted. The learners with learning difficulties move to higher grades without mastering lower-grade concepts, a set-up that militates against their academic progress and achievement. From the perspective of the Equity Model of quality education reviewed in Chapter 2, an educational context that is insensitive to the diverse needs of learners is of low quality.

The problem of large class sizes has culminated in overcrowded classrooms characterised by disruptive learner behaviours. Learner indiscipline makes the classroom environment chaotic,

unmanageable, and unfavourable for effective teaching and learning. The learners who want to learn in the large classes can hardly concentrate because of noise and other disruptive behaviours. The teachers and TICs manning the large classes spend more time addressing disruptive learner behaviours than teaching. Consequently, curriculum coverage is compromised and the academic achievement of the learners is affected negatively. The combination of large class sizes, multi-grade classes, cramped classrooms, and unruly learner behaviours make the provision of quality education in satellite primary schools a daunting challenge.

TICs of satellite primary schools perform multiple administrative roles simultaneously with full teaching loads. Unlike teaching heads in registered schools, they do not have bursars or secretaries to delegate some tasks. Henceforth they are overwhelmed by administrative responsibilities. The multiple administrative responsibilities leave the TICs with limited time to teach their classes, assign adequate assignment tasks, and offer individualised support to the learners. The learners in the TIC's class are disadvantaged in terms of instructional time, curriculum coverage, the number of assignment tasks, and individual support. The stress, strain, and burnout from performing multiple administrative responsibilities that TICs take to their classes, affect the quality of education they provide. When the TICs are away on school business, their classes are further disadvantaged. Large multi-grade and mono-grade classes already overwhelm the teachers who are assigned to attend the classes. The teachers merely occupy the learners without meaningful teaching and learning taking place, a practice colloquially referred to as 'babysitting' the TIC's class in satellite primary schools.

The DS schooling system is another pedagogical practice that is complicating the provision of quality education in satellite primary

schools. The phenomenon of DS emerged in satellite schools as a stopgap measure to the problem of inadequate teaching and learning space. Lessons for classes on DS are held under the shade of trees before and after the classes get the opportunity to use classrooms. Four reasons make the shade of trees unfavourable contexts for the provision of quality education. Firstly, the learners' concentration on learning is continuously distracted by people, vehicles or animals passing by. Secondly, there are no proper sitting places for learners. The pain from sitting on the ground, stones, timber logs, and bricks diverts learners' attention from concentrating on learning. Thirdly, there are no tables or desks for learners to do written assignments. Hence, the classes on DS do fewer written assignments per day than classes that are not on DS. Lastly, the unavailability of mobile chalkboards or whiteboards under the shade of trees for teachers to explain and demonstrate new concepts compromises the mastery of concepts by the learners.

Classes on DS have less instructional time compared to those that do not share classrooms. This limited time compels teachers to concentrate on examinable subjects, resulting in a narrowed curriculum that hinders learners' holistic development and life opportunities (Linden, 2001). Additionally, instructional time is further reduced during transition periods, as a whole lesson may be lost while students pack their belongings and clean the room. The combination of limited instructional time and large class sizes makes it challenging for teachers to address the diverse needs of all learners. Consequently, educators often prioritise fast learners, neglecting those with learning challenges. This exclusion contradicts the principles of Inclusive Education, which emphasise leaving no learner behind, regardless of their individual needs.

The DS schooling system is often disrupted by rains, especially during the rainy season. On rainy school days, all learners, that is,

those in the morning and afternoon sessions find shelter in the available classrooms. The classrooms become so congested that it is impractical for teachers to conduct lessons. The instructional time that is lost during the rainy season compromises curriculum coverage and the provision of quality education in satellite primary schools with DS.

Quality education, among other factors, is influenced by the level of management support a school receives. Satellite primary schools benefit from support provided by SDCs, TICs, Heads of 'mother schools', Cluster Heads, and School Inspectors.

Satellite primary schools are unregistered institutions that do not receive per capita grants from the government. They rely on their SDCs for financial and pedagogical resources. Parents are the primary financiers of their children's education in these schools; however, many parents are poor peasants unable to afford school fees. As a result, financial support from SDCs is limited, leading to inadequate facilities and a severe shortage of classrooms and instructional materials. These challenges significantly hinder the provision of quality education in the schools.

TICs occasionally miss important meetings due to the SDCs' inability to provide travel and subsistence allowances. This lack of support contributes to the professional and social isolation of TICs and their teachers, negatively impacting the quality of education offered. Additionally, poor working and living conditions lead to high teacher turnover, with some classes experiencing three different teachers within a single academic year. This turnover disrupts the continuity of teaching and learning, curriculum coverage, and overall educational quality.

Due to limited financial support from the SDC, there are no

computers for teaching the ICT curriculum learning area in the schools. Consequently, teachers and TICs can only expose learners to theoretical aspects of ICT, neglecting practical skills. This approach is inconsistent with the CBC which emphasises the development of practical and entrepreneurial skills.

The MoPSE expects TICs to support teachers through staff development workshops, meetings, and classroom visits. However, the dual responsibilities of teaching and managing the school leave TICs with limited time to supervise and provide adequate support to teachers. This insufficient supervision results in a lack of preparedness and a decline in teaching quality among many teachers. Additionally, TICs struggle to offer management support to mono-grade teachers in multi-grade settings, as they are mono-grade teachers without professional training in multi-grade pedagogy. This situation denies learners in multi-grade environments their inalienable right to a quality education.

Satellite primary schools receive management support from their 'mother schools''. Some mother schools assist their satellite schools by donating updated curriculum textbooks, which help alleviate the acute shortage of resources. Heads of 'mother schools' also provide support by inducting new TICs in school leadership and management, as well as facilitating the online registration of Grade 7 candidates. However, like the TICs, the Heads of mother schools are unable to provide effective management support to mono-grade teachers in multi-grade settings due to a lack of professional training in multi-grade pedagogy. Consequently, the quality of education in multi-grade classes is poor because the teachers, TICs, and Heads of 'mother schools' lack the necessary training in this area.

Satellite schools also receive management support from Cluster Heads under the BSPZ quality education initiative. The Cluster Heads assist teachers and TICs through on-site supervision visits, which include lesson observations, record-keeping, assessment of school infrastructure and resources, financial management, production units, and maintenance of school grounds. However, due to financial constraints, satellite schools struggle to regularly pay the BSPZ affiliation fees, which fund cluster supervisions and other related activities. As a result, Cluster Heads cannot provide consistent supervision to satellite primary schools, contributing to poor teaching quality and low Grade 7 pass rates. Similar to the Heads of mother schools, all Cluster Heads are mono-grade teachers, which limits their ability to offer management support to TICs and teachers working in multi-grade classes. This situation further complicates the provision of quality education in multi-grade settings.

The MoPSE also expects School Inspectors to provide management support to TICs and teachers through on-site supervision visits and workshops. This support includes aspects such as scheme, planning, lesson delivery, classroom management, learner assessment, and record-keeping. It also addresses curriculum-related issues, including the availability of infrastructure and resources, financial management, and maintenance of school grounds. However, School Inspectors are unable to supervise satellite schools regularly due to inadequate vehicles, financial constraints, and inaccessible roads. The infrequent visits negatively impact the quality of education in these schools. Additionally, School Inspectors are mono-grade teachers who have not received pre-service or in-service training in multi-grade pedagogy, limiting their ability to provide effective management support to teachers and TICs in multi-grade settings. The teachers and TICs struggle with multi-grade pedagogy without

adequate guidance, leading to poor instruction and educational outcomes in multi-grade classes.

The teachers and TICs who participated in the study informing this book shared various strategies to enhance the quality of pedagogical and management processes in their schools. One approach involves school-based workshops focused on MGT. However, these workshops often prove ineffective due to a lack of facilitators with expertise in this area. SDCs attempt to address issues like understaffing and large class sizes, exacerbated by the Teacher Retention Fund (TRF), by hiring additional teachers. While this strategy can be effective in the short term, it is ultimately unsustainable due to the financial constraints SDCs face, limiting their ability to hire teachers for short periods.

The lack of financial support from the government exacerbates challenges such as makeshift infrastructure, double shifts, inadequate curriculum materials, and high teacher turnover, complicating the delivery of quality education in satellite primary schools. SDCs utilise funding from the SIG for infrastructure development and to acquire pedagogical resources, but this funding remains insufficient. To supplement these efforts, SDCs and TICs organize parents to contribute free labour and building materials for constructing essential teaching and learning facilities. Some satellite schools cope with the shortage of new curriculum textbooks by using old curriculum textbooks in some learning areas. Despite strategies like multi-tasking and compensating for instructional time, TICs find themselves overwhelmed by their many responsibilities, which leaves the classes they teach at a disadvantage.

Based on the findings, the book offers recommendations for improving the quality of pedagogical and management processes in satellite primary schools to enhance the provision of quality education.

One of the significant challenges in implementing MGT is that the national primary school curriculum, policies, syllabuses, and textbooks are primarily designed for mono-grade pedagogy. There is a pressing need for a national MGT primary school curriculum to better guide and support teachers in multi-grade settings. The CDU could structure the multi-grade curriculum in phases: ECD A and B; Grades 1 and 2; Grades 3 and 4; Grades 5 and 6; and Grade 7. Syllabuses and textbooks aligned with this national MGT curriculum need to be developed.

There is a clear need for the MoPSE and the CDU to create a handbook for MGT. This handbook would serve as a valuable resource for teachers, guiding effective strategies for managing multi-grade classrooms. It would also support pre-service, in-service, and ongoing teacher development programs in MGT.

Many teachers face challenges in multi-grade classrooms due to a lack of pre-service or in-service training in multi-grade pedagogy. Colleges and universities should integrate a MGT module into their pre-service and continuing teacher development programmes. This module should address key issues such as grade combinations, timetabling, planning, and various pedagogical approaches. Topics should also include lesson presentation, classroom organisation, class management, learner assessment, record-keeping, and teaching practice. Furthermore, student teachers should be placed in both mono-grade and multi-grade settings during their teaching practice to ensure they acquire the necessary theoretical and practical skills to effectively teach in diverse classroom environments.

Teachers and TICs in satellite primary schools are predominantly mono-grade practitioners who lack professional training in multi-grade pedagogy. There is a strong call for the MoPSE to organise in-service training workshops focused on MGT. These workshops should address key pedagogical issues such as grade combinations,

timetabling, planning, teaching methods, lesson presentation, classroom organisation, class management, learner assessment, and record-keeping. Such training would equip teachers and TICs with the practical and theoretical skills necessary to tackle the challenges they face in multi-grade classrooms.

The absence of professional training in multi-grade pedagogy has led some teachers and TICs to teach senior-grade content in multi-grade settings. To address this, it is recommended that the MoPSE appoint national, provincial, district, and cluster MGT Coordinators. These coordinators would be responsible for coordinating, monitoring, and evaluating the implementation of MGT in schools. They would also provide ongoing support and guidance to teachers and TICs through demonstration lessons and workshops, ultimately enhancing the quality of education in multi-grade classrooms.

School Inspectors, Cluster Heads, and Heads of 'mother schools' are not adequately supporting TICs and teachers in MGT due to a lack of professional training. The MoPSE needs to organise in-service training workshops for the School Inspectors and School Administrators. This training would empower them to conduct MGT workshops for TICs and teachers, enabling them to effectively address the specific challenges faced in MGT.

Many mono-grade teachers in multi-grade settings view these classes as more demanding than mono-grade classes, which negatively impacts their quality of instruction. To address these attitudes, an incentive scheme, such as a multi-grade teaching allowance, could be beneficial. This approach has been successfully implemented in the Republic of Vietnam and may be worth considering for satellite primary schools where mono-grade teachers are managing large multi-grade classes.

Although the administrative roles of TICs and NTSHs are similar, TICs also have full-time teaching responsibilities. The multiple leadership and management tasks assigned to TICs can limit their time for teaching and supervising other teachers. Appointing NTSHs to lead satellite primary schools would ensure that each class has a dedicated teacher, thereby enhancing the quality of school leadership, management, and overall education.

The administrative duties assigned to TICs can be overwhelming, particularly in the absence of clerks or bursars to help manage these responsibilities. If funding for NTSHs is not available, appointing Administrative Clerks as a temporary measure could alleviate some of this burden. By reducing the administrative workload for TICs, these clerks would allow them more time to focus on teaching and supervising their classes effectively.

The large, overcrowded, and unmanageable mono-grade and multi-grade classes in satellite primary schools are largely due to the TRF. This situation has resulted in a significant number of unemployed teacher graduates while satellite schools continue to struggle with severe understaffing. There is a strong need for the PSC to lift the TRF to address this issue.

Some satellite schools have adopted a DS system due to financial constraints faced by their SDCs in constructing adequate classrooms. The DS system reduces instructional time, compromising curriculum coverage and the overall quality of education. Historical successes in Zimbabwe's education sector during the early 1980s were attributed to government intervention in providing essential infrastructure. Therefore, the government must establish an Infrastructural Development Fund dedicated to the construction of teaching and learning facilities in satellite schools. This fund would also help improve poor living and working conditions that contribute to high teacher turnover.

The critical shortage of CBC materials, particularly textbooks and computers, is hindering the provision of quality education in satellite primary schools. Many schools do not meet the MSFS required for registration with the MoPSE to receive per capita grants for procuring these materials. The government needs to register all satellite schools and provide them with per capita grants. These grants would ensure that the schools have sufficient teaching and learning materials, that are vital for delivering quality education.

The findings on which this book is premised highlight several areas within pedagogical and management processes in satellite primary schools that warrant further investigation. Future research should focus on the nature and quality of MGT in these schools, the impact of the TIC role on the provision of quality education, and the effects of large class sizes on educational outcomes. Additionally, exploring the perceptions of TICs, teachers, parents, and learners regarding the double-shift system (DS) is recommended. There is also a need to examine the overall quality of pedagogical and management processes in satellite schools. Given that this book was limited to four satellite primary schools, including four TICs and 16 teachers, a comprehensive study at the district, provincial, or national level involving School Inspectors, TICs, teachers, parents, and learners is recommended. Investigating the pedagogical and management processes in satellite secondary schools is equally important for a holistic understanding of education quality in these contexts.

This book illuminates key challenges in delivering quality education in satellite primary schools, primarily stemming from pedagogical and management deficiencies. The lack of multi-grade pedagogy in both primary and teacher education curricula complicates effective teaching in multi-grade classrooms. Mono-grade teachers often focus on senior-grade content, neglecting junior grades and creating significant content gaps. TICs, Heads of 'mother schools', and School Inspectors also lack

training in multi-grade teaching, limiting their ability to support teachers in these settings. This deficiency is perpetuated by a "multi-grade blind" curriculum framework, highlighting the urgent need for a national multi-grade curriculum and teacher development programme.

Further complicating the situation are challenges posed by large class sizes and a shortage of CBC textbooks, which hinder effective teaching and lead to rote pedagogy. Teachers often find themselves overwhelmed with classroom management issues, resulting in lost instructional time and diminished educational quality. The dual role of TICs as both administrators and teachers adds another layer of complexity, restricting their capacity to provide individualised support and adequate supervision of curriculum implementation.

The DS model, implemented due to inadequate teaching space, adversely impacts teaching and learning conditions. Teaching under the shade of trees, amidst numerous distractions and a lack of essential resources, diminishes learners' motivation and academic outcomes. Financial constraints and infrequent supervision visits exacerbate these challenges, as many satellite schools struggle with limited resources, leading to poor infrastructure and high teacher turnover, which disrupts continuity in education.

Overall, the book concludes that a combination of pedagogical and management deficiencies, exacerbated by systemic challenges such as the absence of a multi-grade curriculum framework, large class sizes, administrative burdens, funding constraints, and ineffective supervision, collectively undermine the provision of quality education in satellite primary schools. A concerted effort from stakeholders at all levels is essential to implement comprehensive reforms that support both teachers and learners, ensuring that quality education is accessible to all students in these challenging environments.

REFERENCES

Abadzi, H. (2009). Instructional time lost in developing countries: Concepts, measurement and implications. *The World Bank Research Observer*, 24(2), 267-290.

Adams, D. (1993). *Defining educational quality.* Arlington: Institute for International Research.

Adu, E.O., Bayaga, A. & Tella, A. (2014). Strategies for teaching and managing large classes in university. *Zimbabwe Journal of Educational Research*, 26(3), 218-304.

Alexander, R. (2008). *Education for all, the quality imperative and the problem of pedagogy: Create Pathways to Access. Research Monograph No. 20*. London: University of London.

Ashong-Katai, L.N.D. (2013). *Abolition of the double shift system of schooling in Ghana: Policy and its implementation in public basic schools: A case study of schools under the Accra Metropolitan Assembly. Unpublished Masters Dissertation*. Olso: University of Olso.

Atkinson, N. (1972). *Teaching Rhodesians: History of educational policy in Rhodesia*. London: Longman.

Auret, D. (2000). *From bus stop to farm village: The farm worker programme in Zimbabwe*. Harare: Save the Children.

Auret, D., McIvor, C., Chipfunyise, T. & McCartney, I. (2000). *We learn with hope: Issues in education on commercial farms in Zimbabwe.* Harare: Save the Children Fund.

Babbie, E. (2015). *The practice of social research.* 14th Ed. Belmont, CA: Wadsworth.

Bahanshal, D.A. (2013). The effect of large classes on English teaching and learning in Saudi Secondary Schools. *English Language Teaching*, 6(11), 49-59.

Ballantine, J.H. & Hammack, F.M. (2012). *The Sociology of Education: A systematic reader.* Boston: Pearson.

Baxter, P. & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-559.

Benbow, J., Mizrachi, A., Oliver, D. & Said-Moshiro, L. (2007). *Large class sizes in the developing world: What do we know and what can we do?* URL:http://www.equip123. [Accessed on 1 January 2020].

Berry, C. (2010). *Multigrade teaching. Discussions Document*. URL:http://www.ioe.ac.uk. [Accessed on 6 March 2020].

Bervell, B., Sam. A.C. & Boadu, K. (2013). The nature of the shift schooling system in Ghana: Implications on pedagogy. *Mediterranean Journal of Social Sciences*, 4(4), 25-37.

Best, J.W. & Khan, J.V. (2010). *Research in education*. 10th Ed. Boston: Pearson.

Bitsch, V. (2005). Qualitative research. A grounded theory example and evaluation criteria. *Journal of Agribusiness*, 23(1), 75-91.

Biyase, M. & Zwane, T. (2015). Does education pay in South Africa? Estimating returns to education using two stage least squares approach. *International Business and Economics Journal*, 14(6), 807-814.

Blignaut, A.S., Hinostroza, J.E., Els, C.J. & Brun, M. (2010). ICT in education policy and practice in developing countries: South Africa and Chile compared through SITES 2006. *Computers and Education*, 53(5/6), 687-699.

Botha, R.J. (2010). School effectiveness: Conceptualising divergent assessment approaches. *South African Journal of Education*, 30, 605:620.

Braun, V. & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. London: Sage.

Braun, V., Clarke, V., Hayfield, N. & Terry, G. (2018). Thematic Analysis. In Liamputtong, P. ed. *Handbook of research methods in health and social sciences*. New York: Springer. 1-18.

Bray, M. (2008). *Double-shift schooling: Design and operation for cost-effectiveness*. 3rd Ed. Paris: UNESCO.

Brown, B.A. (2010). *Multi-grade teaching: A review of issues, trends and practices. Implications for teacher education in South Africa*. Johannesburg: The Centre for Education Policy Development (CEPD).

Brown, J. & Kurzweil, M. (2018). *Instructional quality, student outcomes, and institutional finances*. Washington, DC: American Council on Education.

Bush, T. & Oduro, G.K. (2006). *New principals in Africa: Preparation, induction and practice*. Cambridge: Emerald.

Bush, T. (2011). *Theories of educational leadership and management*. 4th Ed. Los Angeles: SAGE.

CfBT Education Trust. (2013). *Documentation Report on the implementation of the School Improvement Grant pilot project*. Harare: UNICEF.

Chakanyuka, S., Chung, F. K. & Stevenson, T. (2009). *Draft report on the rapid assessment of primary and secondary schools conducted by the Zimbabwe National Education Advisory Board.* Harare: National Education Advisory Board.

Challis, R. (1982). *The foundation of the racially segregated education system in Southern Rhodesia, 1890-1923*. Unpublished Doctoral Thesis. Harare: University of Zimbabwe.

Charmaz, K. (2014). *Constructing grounded theory*. Thousand Oaks, CA: SAGE.

Cheng, Y.C. & Tam, W.M. (1997). Multi-models of quality in education. *Quality Assurance in education*, 5(1), 22-31.

Cheng, Y.C. (2003). Quality assurance in education: Internal, interface and future. *Quality Assurance in Education*, 11(4), 202-213.

Chimombo, J. (2005). Quantity versus quality in education: Case studies in Malawi. *International Review of Education*, 51(2/3), 155-172.

Chinapah, V., Cars, M. & Grinberg, S. (2013). Global efforts towards quality education for all: Evidence and reflections from an international and comparative educational perspective. *Journal of Education and Research*, 3(2), 39-58.

Chisaka, B.C. (2013). 'The qualitative research paradigm'. In Chisaka, B.C., Mamvuto, A. Matiure,S., Mukabeta, M.T., Shumba, T. & Zireva, D. eds. *Action research: Some practical ideals for educational practice.* Harare: Save the Children. 9-13.

Clarke, S. & Stevens, E. (2009). Sustainable leadership in small rural schools: Selected Australian vignettes. *Journal of Educational Change*, 10(4), 277-293.

Clarke, S. & Wildy, H. (2010). Preparing for principalship from the crucible of experience: Reflecting on theory, practice and research. *Journal of Educational Administration and History*, 42(1), 1-16.

Clarke, S., Wildy, H. & Styles, I. (2011). Fit for purpose? Western Australian insights into the efficacy of principal preparation. *Journal of Educational Administration*, 49(2), 166-178.

Cohen, L., Manion, L. & Morrison, K. (2018). *Research methods in education.* 8th Ed. New York, NY: Routledge.

Creemers, B.P.M. & Reynolds, D. (1996). Issues and implications of international effectiveness research. *International Journal of Educational Research*, 25(3), 257-266.

Creswell, J.W. & Creswell, J.D. (2018). *Research design: Qualitative, quantitative and mixed methods approaches.* 5th Ed. Los Angeles: SAGE.

Crotty, M. (1998). *The foundations of social research: Meaning and perspectives in the research process*. London: SAGE Publications.

Davids, C. (2011). The role of the principal in multigrade farm school. *South African Rural Educator*, (1), 1-99.

Denscombe, M. (2014). *The good research guide for small-scale social research projects*. Berkshire: Open University Press.

Denzin, N.K. & Lincoln, Y.S. (Eds). (2018). *SAGE handbook of qualitative research.* 5th Ed. Los Angeles: SAGE.

Dinham, S., Anderson, A., Caldwell, B. & Weldon, P. (2011). "Breakthrough in school leadership development in Australia. *School leadership and management*, 31(2), 139-154.

DSIR. (2020). *Makonde District Annual Report 2020*. Unpublished Report. Chinhoyi: MoPSE.

du Plessis, A. & Subramanien, B. (2014). Voices of despair: Challenges for multi-grade teachers in rural district in South Africa. Pakistan. *Educational Research for Social Change (ERSC)*, 3(1), 20-36.

du Plessis, P. (2014). Problems and complexities in rural schools: Challenges of education and socialdevelopment. *Mediterranean Journal of Social Sciences*, 5(20), 1109-1117.

Edwards, P.A. (2016). *The preparation, experiences, and challenges of novice principals inOntario's small rural school*. Unpublished PhD Thesis. Ontario: University of Toronto.

Flower, F.J.Jnr. (2009). *Survey research methods.* 4th Ed. Thousand Oaks, CA: Sage.

Fuller, B. & Heyneman, S.P. (1989). Third world school quality: Current collapse, future potential. *Educational researchers*, 18(2), 12-19.

Fuller, B. (1986). 'Raising school quality in developing countries: What investments boost learning?' *World Bank Discussion Paper No.2*. Washington, DC: World Bank.

Gasa, A.N. (2016). *Exploring instructional leadership practices within the context of multi-grade teaching: Experiences of principals and teachers. Unpublished Masters Dissertation*. Durban: University of Kwazulu-Natal.

Gatawa, B.S.M. (1988). *Quality-Quantity dilemma in education: The Zimbabwean experience*. Harare: College Press.

Gershenson, S. (2016). Linking teacher quality, student attendance, and student achievement. URL:http://www.mitpressjournals n.org/doi/pdf/10.1162/. [Accessed on 20 August 2020].

Gichuhi, L.W. (2015). Multi-grade teaching and learning in pro-poor schools: Nyeri County. *Scholarly Journal of Education*, 4(1),1-5.

Ginsburg, M., Moseley, S.F. & Pigozzi, M.J. (2010). Introduction: Reforming Education for transformation: Opportunities and challenges. *Development*, 53(4), 451-456.

Giordano, E. (2008). *School clusters and teacher resource centres*. Paris: UNESCO.

Glaser, B.G. & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine.

Gonese, F.T. & Mukora, C.M. (2003). *Beneficiary selection, infrastructure provision and beneficiary support.* Harare: Center for Applied Social Sciences, University of Zimbabwe.

Goronga, P., Dozva, M. & Muchenje, F. (2013). Teacher perceptions of triple-shift schooling system: A case study of Chikonohono primary school in Chinhoyi Urban. *International J. Soc. Sci. & Education*, 3(4), 917-927.

GoZ. (1991). *Education Amendment Act of 1991*. Harare: Government Printers.

GoZ. (1992). *Statutory Instrument 87 of 1992. School Development Committees' Regulations*. Harare: Government Printers.

GoZ. (2009). *Zimbabwe Millennium Development Goals: 2000-2007 Mid-term Progress Report.* Harare: Government Printers.

Grant, C. (2017). *The contribution of education to economic growth. K4D Helpdesk Report*. Brighton, United Kingdom: Institute of Development Studies.

Haingura, S.S. (2014). *An investigation of multi-grade teaching at three primary schools in the Kavango Region, Namibia.* Unpublished Masters Dissertation. Stellenbosch: Stellenbosch University University.

Hallinger, P. & Murphy, J.F. (2013). Running on empty? Finding the time and capacity to lead learning lead *NASSP Bulletin*, 97(1), 5-21.

Hanushek, E.A. & Woessman, L. (2012). Do better schools lead to more growth? Cognitive skills, economic outcomes, and causation. *Journal of Economic Growth*, 17(4), 267-321.

Hanushek, E.A. & Wöβmann, L. (2010). *Education and economic growth.* In Peterson, P., Baker, E. & McGaw, B. eds. International Encyclopedia of Education Volume 2. Oxford: Elsevier.245-252.

Heneveld, W. & Craig, H. (1996). *Schools count: World Bank projects designs and the quality of primary education in Sub-Saharan Africa.* Washington, DC: The World Bank.

Hlupo, T. & Tsikira, J. A. (2012). Comparative analysis of performance of satellite primary schoolsand their mother schools in Masvingo Province. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 3(5), 604-610.

Hoy, W. (2019). *Theory of the school as an open-social system*. URL:http://www.waynekhoy.com [Accessed on 11 June 2020].

Hoy, W.K. & Miskel, C.G. (2013). *Educational administration: Theory, research, and practice.* 9thEd. New York: McGraw-Hill, Inc.

Human Rights Watch. (2003). "*Not Eligible: The politicisation of food in Zimbabwe*". URL:http://www.hrw.org/en/reports/2003/10/23/not-eligible. [Accessed on 9 April 2018].

Imitaz, S. (2014). Exploring strategies for English Language teaching of Pakistani students in public sector colleges. *Research Journal of English Language and Literature (RJELAL)*, 2(2), 247-253.

Jenjekwa, V. (2013). Access and quality in education in resettlement schools: The case of Zvivingwi Secondary school in Gutu District, Masvingo Province in Zimbabwe. *International Journal of Educational Administration and Policy Studies*, 5(2), 18-21.

Jita, L. & Mokhele, M. (2012). Institutionalising teacher clusters in South Africa: Dilemmas and contradictions. *Perspectives in Education*, 30(2), 1-11.

Johnson, R.B. & Christensen, L. (2014). *Educational research: Quantitative, qualitative and mixed approaches*. Los Angeles: SAGE.

Joubert, J. (2007). *Adapted/Adjusted curriculum for multi-graded teaching in Africa: A real solution?* URL:http://multi-grade.ioe.ac.uk. [Accessed on 29 December 2019].

Joubert, J. (2010). *Multigrade schools in South Africa: Overview of a baseline study conducted in 2009 by the Centre for Multigrade Education.* Cape Town: Cape Peninsula University of Technology. URL:http://www.pmg.org.za/files/docx/1700728multigrade.doc [Accessed on 10 May 2019].

Juvane, V. & Joubert, J. (2010). South African multi-grade education conference. *Post Conference Report*. Lemoenskloof Conference Centre, Paarl, South Africa.

Juvane, V. (2005). *Redefining the role of multi-grade teaching.* Working document prepared for the Ministerial Seminar on Education for Rural People in Africa: Policy Lessons, Options and Priorities. Addis Ababa, Ethiopia, 7-9 September, 2005. ADEA Working Group on the Teaching Profession.

Kanyongo, G.Y. (2005). Zimbabwe's public education system reforms: Successes and challenges. *International Education Journal*, 6(1), 65-74.

Kapfunde, C.K. (1999). Educational reform in developing African countries: Myth or reality? In Peresuh, M. & Nhundu, T. eds. *Foundations of Education for Africa.* Harare: College Press. 38-57.

Kariuki, M.R.W. & Guantai, L. (2005). *Class size: Effect on achievement in East and Southern Africa*. Paper presented at the international invitational education policy research conference. Paris, France: 28 September to 2 October, 2005.

Katjaita, M.U. (2011). *An investigation into the management implications of double-shift schooling in the Khomas Region in Namibia.* Unpublished Master's Thesis. Grahams Town: Rhodes University, South Africa.

Katz, D. & Khan, R. (1978). *The social psychology of organisations.* 2nd Ed. New York: Wiley.

Kgomo, P.T. (2016). *The effects of principals' workloads in Limpopo multi-grade primary schools on learners' academic performance.* Unpublished Master's Dissertation. Pretoria: University of Pretoria.

Khadhani, M. & Riddell, R. (1981). Education. In Stoneman, C. ed. *Zimbabwe's inheritance.* London: The Macmillan Press Ltd. 58-73.

Kivunja, C. & Sims, M. (2015). Perceptions of multi-grade teaching: A narrative inquiry into the voices of stakeholders in multi-grade contexts in rural Zambia. *Higher Education Studies*, 5(2), 10-20.

Kivunja, C. (2014). The urgent need to train teachers for multigrade pedagogy in African schooling contexts: Lessons from Uganda and Zambia. *International Journal of Higher Education*, 3(2), 64-72.

Koskinen, K.U. (2013). *Knowledge production in organisations: A processual autopoietic view*. URL:http://www.books .google.co.zw [Accessed on 28 February 2019].

Krefting, L. (1991). Rigour in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 43(3), 214-222.

Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press. Kumar, R. 2011. *Research methodology: A step-by-step guide for beginners*. Los Angeles: SAGE.

Kurebwa, M. & Lumbe, A. (2015). Teachers' voices: Challenges of double-shift sessioning in Gweru Urban Primary Schools. *International Journal of Innovative Research & Development*, 4(3), 38-41.

Langa, V. (2017). '19 000 teachers roaming streets due to govt freeze' [online], *NewsDay Zimbabwe,* 10 October. URL:http://www.zimbabwesituation.com/news/19-000-qualified- teachers-roaming-streets-due-to-govt-freeze [Accessed on 3 January 2020].

Leavy, P. (2017). *Research design: Quantitative, qualitative, and mixed methods, arts-based and community-based participatory research approaches.* New York: The Guilford Press.

Leedy, P.D. & Ormrod, J.E. (2015). *Practical research: Planning and design.* 11th Ed. Boston: Pearson.

Leu, E. & Price-Rom, A. (2006). *Quality education and teacher learning: A review of the literature.* Washington, DC: United States Agency for International Development.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Linden, T. (2001). *Double-shift secondary schools: Possibilities and issues*. Washington, D.C: TheWorld Bank.

Lingam, G. (2007). Pedagogical practices: The case of multi-class teaching in Fiji primary schools. *Educational Research and Review*, 2(7), 186-192.

Little, A. & Pridmore, P., Bajracharya, H. & Vithanapathirana, M. (2007). Learning and teaching in multigrade settings. A final report to DFID. URL:http://www.ioe.ac.uk/multigrade/ [Accessed on 13 April 2018].

Little, A. (2006a). All together now. Multigrade education: Several grades, one room. *IOE LifeWinter*, (4), 32-33.

Little, A. (2006b). *Education For All and multi-grade teaching: Challenges and opportunities*. Dordretcht, Netherlands: Springer.

Little, A.W. (Ed). (2007). *Education for All and Multigrade Teaching: Challenges and opportunities*. Dordrecht: Springer.

Little, A.W. (2005). *Learning and teaching in multi-grade settings*. Paper prepared for the UNESCO 2005 EFA Monitoring Report. URL:http://www.skoleplassen.hisf.no. [Accessed on 25 April 2018].

Lock, A. (2011). *Clustering together to advance school improvement working together in peer support with an external colleague*. London: National College for Leadership of Schools and Children's Services (NAEC).

Loewenson, R. (1991). Child labour in Zimbabwe and the Rights of the Child. *Journal of Social Development in Africa*, *6(1), 19-31.*

Lotz-Sisitka, H. (2013). Conceptions of quality and 'learning as connection': Teaching for relevance. *Southern African Journal of Environmental Education*, 29, 1-14.

Lunenburg, F.C. & Ornstein, A.C. (2012). *Educational administration: Concepts and practices.* 6thEd. Belmont, CA: Wadsworth.

Lunenburg, F.C. (2010). Schools as open systems. *Schooling*, 1 (1), 1-50.

Makaye, J. (2015). *School clusters as sites for instructional leadership: A case of the Better Schools Programme of Zimbabwe.* Unpublished PhD Thesis. Bloemfontein: University of The Free State.

Mangwanya, E., Jeko, I. & Manyumwa, C. (2013). Availability of print materials and its consequences for the quality of education in schools located on new resettled farm areas in Zimbabwe. *Asian Social Science*, 9(1), 249-256.

Mansoor, S. (2011). *Multi-grade teaching: An inevitable option*. URL:http:www.aserpakistan.org. [Accessed on 11 December 2019].

Mapfumo, J., Mukwidzwa, F. & Chireshe, R. (2014). Sources and levels of stress among mainstreamand special needs education teachers in Mutare Urban in Zimbabwe. *International Journal of Educational Sciences*, 6(2), 187-195.

Maphosa, C., Mutekwe, E., Machingambi, S., Wadesango, N. & Ndofirepi, A. (2013). School clusters in Zimbabwe: What issues do clusters tackle? *International Journal of Educational Science*, 5(3), 293-300.

Mapolisa, T., Khosa, M.T., Ncube, A.C. & Tshabalala, T. (2015). Effects of Double-Sessioning to quality education in Mzilikazi District primary schools: Teachers' perceptions. *Nova Journal of Humanities and Social Sciences*, 4(1), 1-6.

Marais, P. (2016). "We can't believe what we see": Overcrowded classrooms through the eyes of student teachers. *South Africa Journal of Education*, 36(2), 1-10.

Marshall, C. & Rossman, G.B. (2016). *Designing qualitative research.* 6th Ed. Thousand Oaks, CA:Sage.

Matondi, P.B. (2012). *Zimbabwe's Fast Track Land Reform*. London: Zed Books.

Mavhunga, P.J. & Mazodze, C. (2014). Quality of educational provision in Fast Track ResettlementSchools in Zimbabwe: A case study of Chiwodza primary school. *European Scientific Journal*, 1, 438-448.

Mbayo, A.A.S. (2011). *Beyond school inputs and resources: An assessment of the effects of program intervention on learning achievement in Rebeb schools in Serra Leone. Unpublished DEdThesis*. Pretoria: University of South Africa.

Mbudzi, M. & Ndlovu, S. (2000). *Review of Better Schools Programme structures in the Ministry of Education, Sport and Culture*. Harare: Mand Startouts (Pvt) Ltd.

McMillan, J.H. & Schumacher, S. (2010). *Research in education.* New Jersey: Pearson.

Mele, C., Pels, J. & Polese F. (2010). A brief review of systems theories and their management applications. *Service Science*, 2(1-2), 126-135.

Mertens, D.M. (2010). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. 3rd Ed. Los Angeles: SAGE.

Miles, M.B., Huberman, A.M. & Saldaña, J. (2014). *Qualitative data analysis: A methods sources book*. 3rd Ed. Los Angeles: SAGE.

Mintah, E.K. (2014). Using group method of teaching to address the problem of large class size: Action research. *International Journal of Learning and Development*, 4(2), 82:97.

MoESAC. (2000). *The Better Schools Programme Zimbabwe: A manual on clusters*. Harare: MoESAC.

MoESAC. (2001). *The Better Schools Programme: A manual on resource centres: Module C*.Harare: MoESAC.

MoESAC. (2010). *Handbook for School Development Committees*. Harare: MoESAC.

MoESAC. (2013a). *Education medium-term plan: Operational plan*. Harare: Government Printers.

MoESAC. (2013b). Minimum Schools Functionality Standards 2013. Harare: MoESAC.

Mohlala, T. (2010). One teacher, two grades. *The Teacher*: 31, May/June.

Monteiro, A.R. (2015). *The teaching profession: Present and future*. London: Springer.

MoPSE. (2015). *Curriculum Framework for Primary and Secondary Education 2015-2022.* Harare: MoPSE.

MoPSE. (2016). *Education Sector Strategic Plan 2016-2020*. Harare: MoPSE.

MoPSE. (2017). *Ministry of Primary and Secondary Education, EMIS Report 2017*. Harare:MoPSE.

Moyo, S. (2011). Three decades of land reform in Zimbabwe. *Journal of Peasant Studies*, 38(3), 493-571.

Mugadzaweta, J. (2017). 'Teachers shortage dents curriculum implementation' [online], *The Herald*, 8 February. URL:http://www.herald.co.zw/teachers-shortage-dents-curriculum-implementation [Accessed on 9 August 2020].

Mulaudzi, M.S. (2016). *Challenges experienced by teachers of multi-grade classes in primary schools at Nzhelele East Circuit.* Unpublished Masters Dissertation. Pretoria: University of South Africa.

Mulkeen, A.G. & Higgins, C. (2009). *Multi-grade teaching in Sub-Saharan Africa: Lessons from Uganda, Senegal and The Gambia*. Washington, DC: The World Bank.

Mulryan-Kyne, C. (2010). Teaching large classes at college and university level: Challenges and opportunities. *Teaching in Higher Education*, 15(2), 175-185.

Munene, I.I. (2015). Providing basic Education for All in Africa: What we have learned. *Africa Education Review*, 12(1), 1-6.

Munjanganja, L.E. & Machawira, M.S. (2014). *Education for All 2015 National Review Report: Zimbabwe*. URL:http://www.efa2015 reviewsunesco.org. [Accessed on 5 September 2018].

Mupa, P. & Chabaya, R.A. (2011). *Effect of class size on students' opportunity to learn: Experiences in primary schools in Masvingo province in Zimbabwe*. Saarbrucken: Lambert Academic Publishers.

Murdock, D. (2009). Teaching principals in smaller primary schools: Their issues, challenges and concerns. *Teach Journal of Christian Education*, 3(1), 32-37.

Murisa, T. (2010). Social dvelopment in Zimbabwe. Discussion paper prepared for the Development Foundation for Zimbabwe. URL:http://pdf4pro.com/download/social-development-in-zimbabwe-dfzim [Accessed on 27 July 2019].

Murwira, Z. (2018). 'Government to recruit 3 000 teachers' [online], *The Herald*, 31 December. URL:http://www.herald.co.zw/govt-to-recruit-3-000-teachers. [Accessed on 13 July2020].

Mustafa, H.M.H., Mahmoud, S., Assaf, I.H., Al-Hamadi, A. & Abdulhamid, Z.N. (2014). Comparative analogy of overcrowded effects in classrooms versus solving 'cocktail party problem' (neural networks approach). *International Journal of Engineering Science and Innovative Technology (IJESIT)*, 3(2), 175-182.

Mutema, E.P. (2012). The Fast Track Land Reform Programme: Reflecting on the challenges and opportunities for resettled former farm workers at Fairfield farm in Gweru District, Zimbabwe. *Journal of Sustainable Development in Africa*, 14(5), 96-106.

Mutema, F. (2014). An examination of the learning conditions in Zimbabwe's satellite schools: A case of Somabhula Resettlement Area-Midlands Province. *International Journal of Humanities and Social Science*, 4(8), 285-290.

Mwiinde, L. & Muzingili, T. (2020). Education on the edges: Reflection on satellite schools in BingaDistrict, Zimbabwe. *African Journal of Social Work*, 10(2), 101-108.

Nawab, A. & Baig, S.R. (2011). The possibilities and challenges of multi-grade teaching in rural Pakistan. *International Journal of Business and Social Science*, 2(15), 166-172.

Neuman, W.L. (2014). *Social research methods: Qualitative and quantitative approaches.* 7th Ed. Boston: Allyn Bacon.

Newton, P.M. & Wallin, D. (2013). The teaching principal: An untenable position or a promising model? *Alberta Journal of Educational Research*, 59(1), 55-76.

Ng, P.T. (2015). What is quality education? How can it be achieved? The perspectives of school middle leaders in Singapore. *Edu Asse Eval Acc*, 27, 307-322.

Ngcobo, S.G. (2015). *Exploring the role of Principal-cum Teachers in a multi-grade school context: Evidence from five principals in one district of KwaZulu-Natal. Unpublished PhD Thesis*. Pietermaritzburg: University of KwaZulu-Natal.

Nhundu, T. & Makoni, R.D. (1999). Colonial education: Context, functions and importance. In Peresuh, M. & Nhundu, T. Eds. *Foundations of Education for Africa*. Harare: College Press. 22-37.

Nikoloski, K. (2016). Technology and economic development: Retrospective. *Journal of Process Management-New Technologies International*, 4(4), 45-50.

Nsubuga, Y. (2011). *Education quality: A literature review*. URL:http://www.education-quality-a-literature-review. [Accessed on 14 January 2018].

Nyagura, L.M. (1993). Quantitative developments, quality and equity concerns in Zimbabwean primary and secondary sectors. *Zimbabwe Journal of Educational Research*, 5(1), 21-40.

Nyandoro, J., Mapfumo, J. & Makoni, R. (2013). Effectiveness of School Development Committees in financial management in Chimanimani West Circuit Primary Schools in Zimbabwe. *Social Sciences and Humanities*, 4(1), 255-274.

OECD. (2012). *Equity and equality in education: Supporting disadvantaged students and schools*. URL:http://www.oecd.org/education/school. [Accessed on 15 February 2020].

Opoku-Asare, N.A., Agbenatoe, W.G. & DeGraft-Johnson, K.G. (2014). Instructional strategies, institutional support and student achievement in general knowledge in Art: Implications for Visual Arts Education in Ghana. *Journal of Education and Practice*, 5(21), 121-134.

Owens, R.G. & Valesky, T.C. (2011). *Organisational behaviour in education: Leadership and school reform*. Boston: Pearson.

Patton, M.Q. (2015). *Qualitative research and evaluation methods.* 4th Ed. Thousand Oaks, CA: SAGE.

PCIET. (1999). *Report of the Presidential Commission of Inquiry into Education and Training*. Harare: Government Printers.

Pendola, A. & Fuller, E.J. (2018). Principal stability and the rural divide. *Journal of Research inRural Education*, 34(1), 1-20.

Pigozzi, M.J. (2008). *Towards an index of quality education*. URL:http://www.unesco.org/.[Accessed 6 January 2019].

Pigozzi, M.J. (2010). Quality education: A UNESCO perspective. In Cohen, J. & Martlin, M. Eds. *International perspectives on the goals of universal basic and secondary education*. New York: Routledge. 235-245.

PoZ. (2012). *First report of the Thematic Committee on the Millennium Development Goals on the provision of education in resettled areas*. Harare: Government of Zimbabwe.

Preston, J.P., Jakubiec, B.A. & Kooymans, R. (2013). Common challenges faced by rural principals: A review of the literature. *The Rural Educator*, 1-12.

Pridmore, P. & Son, V. (2006). Adapting the curriculum for teaching health in multi-grade classes in Vietnam. In Little, A. ed. *Education for All and multi-grade Teaching: Challenges and opportunities*. Dordretcht: Springer.

Pridmore, P. (2007). *Adapting the primary school curriculum for multi-grade classes in developing countries: A five-step plan and an agenda for changes*. London: University of London.

PSC. (2015). *Establishment control: Approved Establishment for 2015-2016: Ministry of Primaryand Secondary Education*. Harare: PSC.

PSC. (2019). *Vacancy announcement No. 18 of 2019*. Harare: PSC.

Punch, K.F. (2014). *Introduction to social research: Quantitative and qualitative approaches.* 3rd Ed. Thousand Oaks, CA: Sage.

Rao, V.S.P. & Narayana, P.S. (2008). *Principles and practice of management.* Delhi: Konark: Publishers.

Reddy, A.N. & Sinha, S. (2010). *School dropouts or pushouts. Overcoming barriers for the right to education. Create pathways to access. Research Monograph No 40*. Sussex: Create.

Reddy, S. (2007). *School quality: Perspectives from the developed and developing countries.* Bangalore: Azim: Premji Foundation.

Reynolds, D., Sammons, P., De Fraine, B., Townsend, T. & Van Damme, J. (2011). *Educational Effectiveness Research (ESR): A state of the art review.* Paper presented to the annual meeting of the International congress for School Effectiveness and improvement, Cyprus, 2011.

Riddell, A. (2008). *Factors influencing educational quality and effectiveness in developing countries: A review of research*. URL:http://www.getz.de/de/documente/gtz2008. [Accessed 26 March 2018].

Ritzer, G. (2015). *Contemporary Social Theory.* London: Routledge.

Sadomba, W.Z. (2011). *War veterans in Zimbabwe's revolution: Challenging neo-colonialism, settler, and international capital*. Harare: Weaver Press.

Sadomba, Z.W., Chigwanda, B. & Manyati, T. (2015). Education in the crucible of a postcolonial revolution: Community reaction to the challenges of Zimbabwe's crisis. *Social Dynamics*, 41(2): 235-252.

Sagyndykova, G. (2013). *Academic performance in double-shift schooling*. Unpublished PhDThesis. Tucson: University of Arizona.

Saldaña, J. (2016). *The coding manual for qualitative researchers*. 3rd Ed. London: SAGE.

Samoff, J. (2007). Education quality: The disabilities of aid. *International Review of Education*, 53(5), 485-507.

Sandvik, S.B. (2011). *Quality education a livelihood strategy? The relevance of secondary school education in Kisoro district, South-Western Uganda.* Unpublished Master's Thesis. Kristiansand: University of Agder, Norway.

Sanyal, B.C. (2013). *Quality assurance of teacher education in Africa*. Addis Ababa: UNESCO.

Saqlain, N. (2015). A comprehensive look at multi-age education. *Journal of Educational and Social Research*, 5(2), 285-290.

Sayed, Y. & Ahmed, R. (2011). Education quality in post-apartheid South African policy: Balancing equity, diversity, rights and participation. *Comparative Education*, 47(1), 103-118.

Scheerens, J., Luyten, H. & Ravens, J.V. (Eds). (2011). *Perspectives on educational quality: Illustrative outcomes in primary and secondary education in the Netherlands.* London: Springer.

Schutt, R.K. (2015). *Investigating the social world: The process and practice of research.* 8th Ed. Los Angeles: Pine Forge Press.

Scott, W.R. & Davis, G.F. (2007). *Organisations and organising: Rational, natural, and open system perspectives.* London: Routledge.

Seidman, I. (2013). *Interviewing as qualitative research: A guide for researchers in education and the social the social sciences.* 3rd Ed. New York: Teachers College Press.

Shizha, E. & Kariwo, M.T. (2011). *Education and development in Zimbabwe: A social, political and economic analysis.* Boston: Sense Publishers.

Shwandi, L. (2017). *Experiences and challenges faced by teachers and pupils of large classes in selected secondary schools of Lusaka District of Zambia. Unpublished Masters Thesis*. Lusaka: University of Zambia.

Sifuna, D.N. & Sawamura, N. (2010). *Challenges of quality education in Sub-Saharan Africa- Some Key Issues.* URL:http:www.aadcice. hiroshima.u.a.c.jp. [Accessed on 4 October 2019].

Singadi, G., Goronga, P., Gatahwi, L. & Mutangirwa, L. (2014). Teachers' and students' perceptionsof double session schooling on ordinary level students' performance in Geography. *The International Asian Research Journal*, 2(1), 18-27.

Singleton, R.A. Jnr & Straits, B.C. (2010). *Approaches to social research*. Oxford: Oxford University Press.

Siririka, G. (2018). *Perceptions of teachers, learners and parents regarding multi-grade teaching: Development of an intervention programme for selected multigrade primary schools in Kunene Region, Namibia.* Unpublished PhD Thesis. Windhoek: University of Namibia.

Sithole, F. (2017). *Strategies to enhance teacher motivation in satellite secondary schools in the resettlement areas of Matebeleland North Province.* Unpublished PhD Thesis. Harare: Zimbabwe Open University.

Sithole, P. (1996). *The problem of access to primary school education in Zimbabwe's commercial farms*. Paris: UNESCO.

Stake, R.E. (2010). *Qualitative research: Studying how things work*. New York: The Guilford Press.

Starman, A.B. (2013). The case study as a type of qualitative research. *Journal of Contemporary Education Studies*, 1, 28-43.

Starr, K. & White, S. (2008). The small rural school principalship: Key challenges and cross-school responses. *Journal of Research in Rural Education*, 23(5), 1-12.

Stephens, D. (2003). Quality of basic education. EFA Monitoring Report Team. Paris: UNESCO. URL:http://www.unesdoc.unesco.org/images [Accessed 13 January 2020].

Steyn, G.M. (2001). Focusing on guiding principles of quality to redesign educational institutions. *South African Journal of Education*, 21(1), 17-24.

Summers, C. (2002). *Colonial lessons: Africans' education in Southern Rhodesia, 1918-1940*. Postsmouth, NH: Heinemann.

Suzuki, T. (2004). *Multi-grade teaching in primary schools in Nepal: Practice and training.* Unpublished PhD Thesis. London: University of London.

Tambulukani, G. (2004). *Zambia's multigrade experience*. Lusaka: Ministry of Education.

Taole, M. & Mncube, V.S. (2012). Multigrade teaching and quality education in South African ruralschools: Teachers' experiences. *Studies of Tribes and Tribals*, 10(2), 151-162.

Teddlie, C. & Reynolds, D. (2000). *The international handbook of school effectiveness research.* London: Falmer Press.

Tikly, L. (2011). Towards a framework for researching the quality of education in low-income countries. *Comparative Education*, 47(1): 1-23.

Tikly, L.P. & Barret, A.M. (2011). Social justice, capabilities and the quality of education in low-income countries. *International Journal of Educational Development*, 31(1), 3-14.

Tikly. L. (2010). *Towards a framework for understanding the quality of education. EdQual WorkingPaper No. 24.* Bristol: EdQual.

Titus, D. (2004). *The implementation of multi-grade teaching in rural areas in the Keetmanshoop Education Region: Leadership and management challenges.* Unpublished PhD Thesis. Grahams Town: Rhodes University, South Africa.

Tripon, C. & Dodu, M. (2011). *Change management and organisation development*. URL:http://www.apubb.ro/wp-content/uploads /2011. [Accessed 16 April 2018].

Tshili, N. (2019). 'Gvt to recruit 5 000 teachers' [online], *Chronicle,* 29 January. URL:http://chronicle.co.zw/govt-to-recruit-5-000-teachers. [Accessed 19 July2020].

UNESCO. (2004). *EFA Global Monitoring Report 2005: Education for All the Quality Imperative.* Paris: UNESCO.

UNESCO. (2005). *Education for All Global Monitoring Report 2005.* Paris: UNESCO.

UNESCO. (2009). International conference on education. 48th Session. Geneva, Switzerland, 25-28November 2008. Paris: UNESCO.

UNESCO. (2011). *Imperative for quality education for all in Africa: Ensuring equity and enhancing teaching quality.* Prepared for the ECOSOC Annual Ministerial Review (AMR) Regional Preparatory Meeting for Africa. Lomé Togo April 2011.

UNESCO. (2014). *Education for All Global Monitoring Report 2013-2014. Teaching and learning: Achieving quality for all.* Paris: UNESCO.

UNESCO. (2015). *Education 2030 Incheon Declaration and Framework for Action: Towards inclusive and equitable quality education and lifelong learning for all.* Incheon: UNESCO.

UNICEF. (2012). *The right of children with disabilities to education: A rights-based approach to inclusive education*. Geneva: UNICEF.

UNICEF. (2018). Summative evaluation of UNICEF support for education in Zimbabwe. URL:http://www.unicef.org/eval database/files/UNICEF. [Accessed on 20 November 2019].

United Nations in Zimbabwe. (2012). UN Supports Zimbabwe in the Revitalisation of basic social services. *Newsletter Issue 2*. Sept 2011-January 2012.

Vithanapathirana, M. (2006). *Training modules on multi-grade teaching for multi-grade teachers in Sri Lanka*. Colombo: University of Colombo.

von Bertalanffy, L.V. (1968). *General systems theory: Foundations, development, applications*. New York: George Braziller.

Wadesango, W., Hove, J. & Kurebwa, M. (2016). Effects of a large class size on effective curriculum implementation. *International Journal of Educational Sciences*, 12(2), 173-183.

Willig, C. (2013). *Introducing qualitative research in Psychology*. 3rd Ed. New York: Open University Press.

Yin, R.K. (2018). *Case study research and applications: Design and methods*. New York: The Guilford Press.

Zhou, G. & Zvoushe, H. (2012). Public policy making in Zimbabwe: A three-decade perspective. *International Journal of Humanities and Social Sciences*, 2(8), 212-222.

Zvobgo, R.J. (1997). *State, ideology and education*. Gweru: Mambo Press.

Zvobgo, R.J. (1999). *The post-colonial state and educational reform: Zimbabwe, Zambia andBotswana.* Harare: ZPH.

Synopsis

The Fast-track Land Reform Programme implemented by the Government of Zimbabwe in 2000 resulted in the emergence of unregistered satellite primary schools in former White-owned large-scale commercial farming areas, providing education to the children of the fast-track land reform beneficiaries. While existing research has primarily focused on contextual and resource input factors affecting educational quality in these schools, this book addresses a critical knowledge gap regarding the nature and quality of pedagogical and management processes. Based on a qualitative multiple case study conducted at four satellite primary schools in the Makonde District of Zimbabwe, data were generated from four Teachers in Charge and 16 teachers through in-depth and focus group interviews and analysed thematically. The findings reveal that Teachers in Charge, who head the schools, juggle multiple administrative roles alongside full teaching loads, leaving them with limited time to teach and supervise curriculum implementation effectively. Despite the prevalence of multi-grade classes, neither the Teachers in Charge nor the teachers are trained in multi-grade pedagogy, and they do not receive support from Cluster Heads or School Inspectors, who also lack professional training in this area. This pedagogical disjuncture results from a "multi-grade blind" primary school curriculum and teacher development programs. Due to a lack of government funding, these schools suffer from poor infrastructure, with a severe shortage of classrooms and instructional materials. Some schools have adopted a double-session schooling system to address the lack of teaching space. The book offers new insights into the complexities and prospects of achieving quality education in small rural schools in general and satellite primary schools in particular.

About the Author

Dr Godfrey Jakachira is an educational sociologist with extensive experience in teacher development within college and university settings. He earned his Doctor of Education degree in Socio-Education from the University of South Africa, where he developed a strong passion for quality assurance and enhancement in education. Dr Jakachira has published several articles on quality education, reflecting his dedication to advancing effective teaching and learning practices, and contributing to the overall improvement of educational standards.