CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS IN MANAGING AND IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA

A DISSERTATION SUBMITTED IN FULFILMENT

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BY

LUKAS MATATI JOSUA

9803335

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MAIN SUPERVISOR: **PROF REHABEAM KATENGELA AUALA**

CO-SUPERVISOR: **DR HELENA MIRANDA**

ABSTRACT

Namibia is at the stage of reviewing the curriculum structure of its basic education. Resultant, the Ministry of Basic Education, Arts and Culture has introduced a revised curriculum since 2015, whose implementation needs a carefully designed approach for its effective adoption. The study explored the experiences of teachers and principals of public schools on challenges with management and implementation of the revised curriculum in Ompundja Circuit and suggests how the challenges can be addressed. A model is designed to address challenges that hinder successful management and implementation. Using Social Realism and Instructional Leadership theories, the study addresses the two main research questions: What are the challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia? It further addresses two sub-questions as follows: What challenges do teachers and principals of public schools in Ompundja Circuit experience with the management and implementation of the newly revised curriculum? How can these challenges be addressed to ensure successful management and implementation of the revised curriculum? The second research question is which model could be developed to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit? Furthermore, the study addressed two main objectives: To establish challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia. The first main objective is sub-divided into two sub-objectives: To identify challenges experienced by public school teachers and principals in Ompundja Circuit with the management and implementation of the newly revised basic education curriculum. In addition, to determine how the challenges experienced by public school teachers and principals could be addressed to ensure successful management and implementation of the revised curriculum. The second objective is to develop a model that can be used to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit. Explanatory Sequential Mixed Methods design and multi-stage sampling were used to select the respondents and participants from a population of 409 teachers including 27 principals in the Ompundja Circuit in Namibia. A stratified random sampling was used to select three schools each from a stratum of primary, combined and secondary schools. Again, as simple random sampling was used to select 120 respondents from the selected schools. In the second round of data-generating, a purposive sampling technique was used to select five principals. A sample of 120 respondents (29%) completed a questionnaire while

five principals were purposively sampled for a face-to-face interview. Quantitative data were analysed using the Statistical Product and Social Sciences and qualitative data were analysed using the content analysis method.

This study revealed that training on curriculum implementation was offered, however, the training needs to be enhanced. Some schools were well furnished with infrastructures; nevertheless, others need workshops for vocational subjects as well as science and computer laboratories. It was found that there were challenges related to teaching and learning resources, which could be addressed by engaging stakeholders. Further, there were funding challenges, which could be addressed through stakeholder funding, re-introduction of school development funds and increase of universal primary education funding. There was a shortage of vocational subject teachers, which could be addressed through training. There was a low teacher-learner ratio in rural schools and a high teacher-learner ratio in urban schools. To address overcrowding, combined schools in urban settlements should be promoted to senior secondary schools as well as providing more classrooms and teachers. There was a need to fund learner support initiatives. Another challenge is that the new curriculum was designed in a top-down manner; therefore, to address the negative attitudes teachers and principals should be involved in curriculum development. This study recommended that stakeholders should support schools with educational resources. Schools should enhance in-service training on revised curriculum implementation. Furthermore, expertise-sharing and integration of the curriculum content in teacher training programmes were recommended. Further research about establishing the level of implementers' participation in the planning and design of the RCBE and assessing the structural, cultural and agential constraints on the use of ICT tools in providing quality teaching and learning were recommended. Lastly, the study was concluded with a model design for addressing challenges relating to revised curriculum implementation.

LIST OF PUBLICATIONS

1. Josua, L., Auala, R. & Miranda, H. (2022). Chronicle of Basic Education Curriculum Transformations in Pre- and Post-Independent Namibia: A Responsiveness Perspective. *Creative Education, 13* (3) 1154-1169. doi: 10.4236/ce.2022.134072
2. Josua, L., Auala, R. & Miranda, H. (n.d.). A social realist perspective of challenges facing educators in implementing the revised curriculum in Ompundja circuit in Namibia. Manuscript submitted for publication in the journal *Africa Journal of Education and Practice*, awaiting review feedback.

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LIST OF ABBREVIATIONS

BEC	Basic Education Curriculum
CA	Continuous Assessment
CBC	Competence-Based Curriculum
CoE	College/s of Education
CRS	Christian Religious Studies
CSE	Computer Science Education
ECC	Early Childhood Curriculum
ErfKE	Education Reform for Knowledge Economy
FET	Further Education Training
HEI/s	Higher Education Institutions
HIGCSE	Higher International General Certificate of Secondary Education
ICT	Information Communication Technology
IGCSE	International General Certificate of Secondary Education
JSE	Junior Secondary Examinations
LVIs	Learners with Visual Impairments
MBEAC	Ministry of Basic Education, Arts and Culture
MCA	Millennium Challenge Account
MoEAC	Ministry of Education, Arts and Culture
NDPs	National Development Plans
NSSCH	National Senior Secondary Certificate Higher Level
NSSCO	National Senior Secondary Certificate Ordinary Level
ORDEAC	Oshana Region's Directorate of Education, Arts and Culture
PS	Permanent Secretary
RCBE	Revised Curriculum for Basic Education
RME	Religious and Moral Education
SDF/s	School Development Funds
SDGs	Sustainable Development Goals

SPSS	Statistical Package for the Social Sciences
TEC	Technology Education Curriculum
TVE	Technical and Vocational Education
TVET	Technical and Vocational Education and Training
UNAM	University of Namibia
UPE	Universal Primary Education
UREC	University of Namibia Research Ethical Committee
VET	Vocational Education and Training

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DEDICATION

This thesis is dedicated to all my colleagues, family (Mee Monika ‘Soviet” Shivute, Mee Sofia Iiyambo, Mee Twiisheni Josua, Kondja-Nomkumo Afrika Josua, Etuhole Tuuva Josua, Penduka Inotila Josua) and friends for the kind support and encouragement. When I was under pressure, they massively provided words of encouragement and wisdom.

OLUPANDU

Omapandulo aa okwa nuninwa ovanailonga pamwe naame, ovakwanedimo (ngaashi Meme Monika ‘Soviet” Shivute, Mee Sofia Iiyambo, Mee Twiisheni Josua, Kondja-Nomkumo Afrika Josua, Etuhole Tuuva Josua, Penduka Inotila Josua) nookaume molwa omavatelo elili nokulili nokutwange omukumo efimbo nefimbo. Efimbo nda hangika kounye ile nda wililwapo koinakuwanifwa yawedwapo omwa kala nokutwange omukumo pauyadi.

DECLARATIONS

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Lukas Matati Josua

CHAPTER 1: INTRODUCTION AND ORIENTATION OF THE STUDY

1.1 Introduction

In this chapter, an orientation of the research, a statement of the research problem, and research questions and objectives of the study are presented. It also presents the significance of the study, the limitations of the study, and the scope within which the study was conducted. Furthermore, the chapter provides clarification of key concepts used in the study and an outline of the chapters. This chapter ends with a summary of the whole chapter.

1.2 Orientation of the study

Effective educational leadership, management and administration have been perceived as a gate route to school curriculum management and implementation success. It is believed that effective curriculum implementation requires quality leadership in schools (Naicker, Chikoko, & Mthiyane, 2014). In his academic contemplation, Şahin (2011) reflects that if teachers and principals are to succeed in effective curriculum implementation to harvest the desired learners' outcomes and attributes they should act within the scope of cooperation, collegiality, expertise and teamwork. The latter demands stakeholders to contribute to effective decision making. To clarify this viewpoint, all stakeholders such as the government, publishers, parents, teachers and learners should partake in the process of curriculum development (Nghihalwa, 2018). These stakeholders should all be

represented in curriculum planning and design, they should not only come to the fore during the management and implementation process. Gone are the days when the role of ensuring effective curriculum management and implementation was only performed by the autocratic principals, who are bureaucratic, managerial and hierarchical oriented without involving other stakeholders. The school leaders from this school of thinking consider their subordinates as production machines who only need to be given order to work. They are inconsiderate of the human characteristics of their teachers. Contemporary educational leaders are required to practise an inclusive participatory instructional leadership as enshrined in the four goals of education that are access, equity, equality and democracy (Ministry of Education and Culture, 1993).

A purpose of this mixed-methods study is to get an understanding of challenges experienced by teachers and principals of public schools in the management and implementation of the revised curriculum in Ompundja Circuit in Namibia. Challenges are impediments, constraints, barriers or hindrances, obstacles or problems with revised curriculum management and implementation. Several studies on impediments or challenges of curriculum implementation have been conducted (see e.g, Angula, 2015; Ayasra, 2015; Badugela, 2012; Dzimiri & Marimo, 2015; Magongoa, 2011; Mingaine, 2013; Njoku & Njoku, 2015). This far there are only a few known studies by Nghihalwa (2018) and Amunkete (2020) that are conducted in Namibia on the newly revised curriculum implementation which started in 2015 to 2022.

In 2011, the National Conference on Education that started on the 27th of June 2011 and ended on the 1st of July 2011 took place in Windhoek, it was resolved to make changes to the basic education curriculum. This culminated in the Revised Curriculum for Basic

Education (RCBE), which is under implementation from January 2015 to 2022. The current study focuses on the management and implementation of the RCBE. The aim of the RCBE, among others, is to fulfil Goal 4 of Sustainable Development Goals (SDGs) of the United Nations while also ensuring equitable quality education for all (Ministry of Education, Arts and Culture, 2017). Revised Curriculum for Basic Education is geared to respond to the challenges and needs of the Namibian society (Ministry of Education, 2015) that the previous curricula failed to do or accomplish. It is also aimed at fast-tracking the realisation of the goal of Namibia Vision 2030 that seeks to increase the quality of life of Namibians to the level of their counterparts in the developed world by the year 2030 (Government Republic of Namibia, 2004). This vision document, further stipulates that by 2030 Namibia will be a prosperous, flourishing and developed nation. Largely, the recent curricular change in Namibia aims to fast-track the country's developmental agenda so that by 2030 the country would have industrialised and developed.

There has been a new curriculum reform since 2014 that was adopted in the Cabinet's third meeting on the 25th of March 2014. This adopted curriculum approved curriculum reform for basic education and the eight-year implementation plan. The aim of revising curricula is to bring balance to the socio-economic and political development of a country. Ahmadi and Lukman (2015) opine that it is pivotal to note that, it is one thing to develop or design a curriculum, and another to implement it effectively. The approval of the RCBE in Namibia could not be pardoned from Ahmadi and Lukman's assertion. The RCBE should be effectively managed and implemented if it is to achieve the desired outcomes.

It is expected that effective education is one of the pillars that could fast-track Namibia to an industrialised nation by the year 2030 as stipulated in Vision 2030 (Government Republic of Namibia, 2004). It is against this background that this study aims to explore the challenges experienced by teachers and principals of public schools in Ompundja Circuit in Oshana Region when managing and implementing the revised curriculum and suggest ways to address the identified challenges. Furthermore, the study proposed a model that could be used by curriculum implementation stakeholders to address the obstacles experienced in the management and implementation of the revised curriculum for basic education.

1.3 Statement of the problem

A research problem according to Brink, van der Walt, and van Rensburg (2018, p. 50) is "an area of concern in which there is a gap or a situation that need a solution, improvement or alteration or which there is a discrepancy between the way things are and the way things ought to be". Socio-economic challenges in Namibia have stimulated the urge for curriculum changes among the leaders, who in cabinet resolved to alter the basic education curriculum, of which implementation started in January 2015. Stakeholders in education such as teachers, principals, learners and parents play a pivotal role in the management and implementation process of the RCBE in public schools in the Ompundja Circuit in Oshana Region in Namibia. In the process of curriculum management and implementation, these stakeholders may encounter some challenges. According to Taole (2015) "issues surrounding education reform have posed challenges to educationists in both developed and developing countries, such as the United States of America, New

Zealand, Botswana, Australia and Namibia" (p. 267). Teachers and principals of the public schools in the Ompundja Circuit in Oshana Region are not excluded from these challenges.

Since 2015, the Ministry of Basic Education, Arts and Culture (MBEAC) embarked upon a task to implement RCBE. Revised curriculum for basic education aims to respond to the socio-economic challenges of the Namibian society (Ministry of Education, 2015). Management and implementation of the newly revised curriculum is being done in stages. Curriculum management and implementation started with Junior Primary in 2015 followed by the Senior Primary in 2016, then Grade 8 in 2017, Grade 9 in 2018. Further, the National Senior Secondary Certificate Ordinary Level curriculum for Grade 10 was implemented in 2019 while Grade 11 in 2020, Grade 12 (National Senior Secondary Certificate High Level) in 2021 and hopefully Grade 13 in 2022 (A-Level). Table 1.1 shows the implementation schedule of the RCBE:

Table 1.1. The RCBE implementation schedule (Source: Ministry of Education, 2014)

PHASE/GRADE	YEAR OF IMPLEMENTATION
Junior Primary	2015
Senior Primary	2016
Grade 8	2017
Grade 9	2018
Grade 10	2019
Grade 11	2020
Grade 12	2021
Grade 13 (A level)	2022

Successful management and implementation of a RCBE in Ompundja Circuit requires the participation of teachers and principals to offer dedication, leadership, management and

administration in this implementation process. Amunkete (2020) concurs that no matter how well the curriculum is developed if the key implementing agents, teachers, do not comprehend and accept the curriculum these differences could lead to inefficiency and the attainment of national goals of basic education is under threat. Teachers and principals are some of the key stakeholders in the management and implementation of the RCBE in public schools, thus they are seen as agents of education transformation. Although studies were conducted on the implementation of curricula in general (see Amunkete, 2020; Nghihalwa, 2018), the researcher was unaware of any study conducted to investigate the challenges experienced during the RCBE implementation to teachers and principals of selected basic education public schools in Namibia. Thus, the purpose of this study is to extensively explore the different challenges that teachers and principals of public schools have been experiencing and encountering in the management and implementation of the revised curriculum for basic education (RCBE) in the Ompundja Circuit in Oshana Region in Namibia and suggest how these challenges can be addressed. Based on the findings of the study, a model is designed to address the challenges that hinder the successful management and implementation of the RCBE in Ompundja Circuit in Oshana Region in Namibia.

1.4 Research questions and objectives of the study

This is a mixed-methods study, with research questions for quantitative data and research objectives for qualitative data. The next sub-heading discusses the research questions and objectives for the study.

1.4.1 Research questions of the study

To explore the challenges experienced by teachers and principals regarding the management and implementation of the RCBE in public schools in the Ompundja Circuit in Oshana Region in Namibia and to suggest how such challenges in the curriculum management and implementation process can be addressed, the study attempted to answer to this main question:

1. What are the challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia?

1.1 What challenges do teachers and principals of public schools in Ompundja Circuit experience with the management and implementation of the newly revised curriculum?

1.2 How can these challenges be addressed to ensure successful management and implementation of the revised curriculum?

2. Which model could be developed to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit?

1.4.2 Objectives of the study

Furthermore, the study attempted to achieve the following main objective:

1. To establish challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia.

1.1 To identify challenges experienced by public school teachers and principals in Ompundja Circuit with the management and implementation of the newly revised basic education curriculum.

1.2 To determine how the challenges experienced by public school teachers and principals could be addressed to ensure successful management and implementation of the revised curriculum.

2. To develop a model that can be used to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit.

1.5 Significance of the study

Findings of this study may be of significant use to various stakeholders regarding challenges experienced by public school teachers and principals during the process of managing and implementing the RCBE in Ompundja Circuit. The study generated knowledge that could aid the teachers and principals in successfully carrying out the mission of managing and implementing the RCBE. From this study, school principals as leaders in public schools can get the evidence they need to guide decision making concerning the management and implementation of RCBE in their schools. These findings may also alert education policymakers to prepare for the challenges arising from the management and implementation of RCBE and devise ways to overcome them.

This study provides information on the situations in public schools. The identified pitfalls could aid the prevention of the experienced impediments. Teachers and principals of public schools got the opportunity to provide their views on the challenges experienced in

the process of managing and implementing the RCBE. This study contributes to the body of literature on suitable strategies to help with the successful management and implementation of the revised curriculum in the region. It also designed a model that can be used to enhance effective curriculum management and implementation. Academics and researchers get a basis for further research in the gaps that may exist. Researcher hopes that the study motivates other researchers to investigate other issues related to the management and implementation of RCBE in the same circuit or other places in the country.

1.6 Limitations to the study and its implications

According to Kumar (2014), limitations are structural problems relating to methodological aspects that might be encountered in this study. Limitations for this study are such as the study did not engage all people affected by the RCBE management and implementation, design and decision-making process to give their views. This may have led to the skewed representation of the views of stakeholders involved in the management and implementation of the revised curriculum. Ideally, this study ought to include all implementers of the RCBE for all phases of schools.

Due to the scope of the study and contextual constraints facing the researcher, not all people involved in the management and implementation were conducted to share their experiences. Teachers, heads of departments and principals make up the first line of the key managers and implementers of the RCBE, thus, this study focused on them. This study

focused on public schools only and this is a limitation because it missed the views of teachers and principals of private schools in Ompundja Circuit.

Researcher is a full-time employee of the University of Namibia (UNAM); therefore, time for fieldwork was limited. Otherwise, a wider study would have been most appropriate. The first round of data collection was done through a questionnaire between the 13th of Mach 2019 and the 16th of May 2019. The second round was generated between the 1st and 2nd of July 2019 after the first set of data were interpreted. During the process of data collection and generating, the RCBE implementation was in the first phase of senior secondary school, Grade 10. This has not enabled the researcher to investigate the RCBE implementation in Grades 11 and 12. This was a limitation observed in the study because the study could not provide the entire reflection of the RCBE from Grade 0 to Grade 12.

This research could not get the views of principals of a special school because at the time of interviews these principals were only appointed effective from the 1st of April 2019 after part of the first round of data collection has been completed. Furthermore, there were teachers of different levels of visual and hearing impairments. Revised curriculum documents, as well as the research instrument, were not compatible with their varied abilities. Resultant, the questionnaires could not be completed without involving a third party to collect data from differently-abled teachers. This may have undermined the anonymity of these participants' responses.

Data collection instrument as well as data-generating tool were not piloted in a special school. This constrained the research from getting the views of respondents from that context. Some of the challenges related to the teacher-learner ratio in a special school were only picked up when some of the respondents made written comments on the

questionnaires. Qualitative data could have been interpreted using electronic tools. At the time of qualitative data interpretation, the University of Namibia had lost the license for qualitative data analysis tools. When the license was renewed, the data were already analysed manually. This was a limitation because it may have affected the findings, coding and more so the quality of the theme. The researcher improved the quality through reading and re-reading through raw data.

Researcher was unable to obtain resources from the UNAM Short Loan section of the library that were found at the various UNAM Campuses and other materials from some directorates of the Ministry of Education, Arts and Culture. This was due to Coronavirus 2019 (COVID-19), a pandemic that prevented the exchange of physical materials during the partial lockdown for Erongo and Khomas Region including Okahandja and Rehoboth local authorities on the 28th of March 2020 that was followed by the countrywide lockdown on the18th of April 2020. The respondents were asked to plot a cross indicating their perceptions on the Likert Scale questionnaire as well as to respond to semi-structured interview questions. It was up to the respondents and participants to give their honest responses to the questions. As a mitigation measure, the purpose of the study was clarified both in writing and verbally to the respondents that the study is purely academic.

1.7 Delimitations of the study

According to O'Leary (2010), delimitations discuss the borders of the study or how a study was purposefully narrowed through conscious exclusions or inclusions. For instance, this study was limited to teachers and principals of selected public schools in

Ompundja Circuit, who are trusted to oversee the management and implementation of the RCBE to get in-depth data. The scope covers all teachers and principals of public schools (from junior primary schools to senior secondary schools) in the Ompundja Circuit in Oshana Region in Namibia.

Scope of the study was determined by the following circumstances. First, Ompundja Circuit is the only circuit with a Special School in the Oshana Region. Second, one of the Senior Secondary Schools in the circuit is designated to offer pre-vocational and technical education subjects. Third, the circuit has a combination of both rural and urban schools. Ompundja Circuit also has secondary schools that integrate learners with visual impairments and those with hearing impairments in a mainstream school system. The given reasons make Ompundja Circuit relevant for this study as well as a crop of cream in terms of the various challenges experienced during the management and implementation of the RCBE.

1.8 Definitions of key concepts

It is pivotal to define key concepts that may be understood otherwise by the readership of this study. The "operational definitions" of abstract concepts that may be understood differently are provided (Creswell, 2014, p. 169). These concepts, thus, must be inferred to mean as defined in the context of this study.

Basic education: Revised Curriculum for Basic Education sub-divided basic education into four phases namely: Junior Primary phase: Pre-primary and Grade 1-3; Senior Primary phase: Grade 4-7; Junior Secondary phase: Grade 8-9 and Senior Secondary phase: Grade 10-12 plus the introduction of the 13th grade or A-Level (National Institute

for Educational Development (NIED), 2015). Given the above, the basic education in the context of the current study is referred to as education levels from Grade 0-12/13 that are meant to impart basic functional literacy on learners.

Challenge: According to Mandukwini (2016), a challenge is "something that by its nature or character serves as a call for special effort" (p. 8). Furthermore, Josua (2013) defines challenges as constraints, barriers or hindrances that confront teachers and management of educational activities in a school. In this study, challenges mean the impediments, constraints, barriers or hindrances that the teachers and principals of public schools in Ompundja Circuit encounter when managing and implementing the RCBE that was approved by Cabinet at its third meeting on the 25th of March 2014.

Curriculum: Curriculum is etymologically derived from the Latin word "*currer*" meaning "race course", the term curriculum refers to the course of deeds and experiences through which children grow to become mature adults (Carl, 2017). Badugela (2012) defines curriculum as a way in which the learning and teaching content is planned and developed. Further, according to Nwiyi and Okorie (2014, p. 2), curriculum "is an organized plan of course outlined with the objectives and learning experiences to be used for the achievement of the objectives of education". For the purpose of this study, a curriculum is academically used to mean an organised plan of the basic education curriculum outline that aims to achieve the objectives of basic education in the Ompundja Circuit of Oshana Educational Region in Namibia. For the sake of this study, the term curriculum will be used to refer to all reforms contained in the revised national curriculum for basic education as approved by Cabinet at its 3rd session on 25 March 2014.

Management: Management has different connotative meanings. Magongoa (2011) generally relates management to leading with certain objectives and guidelines in mind. Certo and Certo (2016), on the other hand, define management as "the process of reaching organizational goals by working with and through other organizational resources" (p. 37). In the context of this study, management will be understood as defined above. Managers ensure that the change is maintained and administered to realise the set goals for an organisation such as a school. For instance, the curriculum change requires managing and maintaining.

Leadership: "Leadership is the capacity to influence others through inspiration motivated by a passion, generated by vision, produced by a conviction, ignited by a purpose" (Munroe, 2005, p. 52). Leadership is an act of initiating the change aimed at improving teaching and learning (Mushaandja, 2006). Leaders are expected to use their influence to inspire their followers to work, without being coed, toward realising the purpose of their organisation. A school leader should ignite participatory educational leadership in stakeholders to ensure effective curriculum management and implementation.

Instructional leadership: This is an act of leading teaching and learning at the school level to improve learners' academic achievement (Bhengu & Mkhize, 2014). According to Bush (2015), instructional leadership enables the involvement of educators in learning and teaching activities, which has potential to enhance positive student learning outcomes. Principals and teachers engage in collaborative or distributed practice, team up with staff in a shared environment to motivate teachers to realise the goals of the school. The primary goal of a school is to ensure learners' academic performance is improved through quality teaching and learning.

Curriculum implementation and management: This refers to the process of putting in practice the plan or "the translation of the curriculum into action" (Saidu & Saidu, 2015, p. 59). They further define curriculum implementation as "the translation of the whole curriculum into action for the betterment of the society" (p. 59). Badugela (2012) refers to curriculum implementation as an action that involves putting into practice, the officially prescribed courses of study, syllabuses and subjects. According to Ogunbiyi (2012, p. 39), "curriculum implementation is an enterprise of translating curriculum conception into new patterns of action". Bandele and Faremi (2012) state that "curriculum implementation refers to what happens in practice as compared to what was supposed to happen" (p.16). They further elaborate that "it includes the provision of organized assistance to staff to ensure that the newly developed curriculum and the most powerful instructional strategies are delivered at the classroom level" (p.16). All the definitions above create a picture of putting a plan into action. This study interpreted the definition of curriculum implementation and management as putting a plan of an RCBE into practice. This study adopted these definitions.

Teachers: According to the Ministry of Basic Education, Sport and Culture (2001a,), a "teacher", "in relation to state schools, means a staff member who is professionally qualified to teach others in formal education…" (p. 1). In the context of this study, the definition from the education Act, 2001 (Act 16 of 2001) is adopted. Their participation determines successful and effective curriculum management and implementation largely (Carl, 2017). So, a teacher is any official formally appointed by the Ministry of Education, Arts and Culture to facilitate learning and teaching in a school. Teachers are the key

managers and implementers of a curriculum. Teacher, in the context of this study, includes all ordinary teachers, Head of Department (HoD) as well as principals.

Principals: Magongoa (2011, p.2) describes "a principal's role as leaders or facilitators of implementation". In the context of this study, the principal means a teacher who holds the post as the head of the school, officially appointed by the Permanent Secretary (PS) of the Ministry of Education, Arts and Culture (MoEAC) to head a school. According to Carl (2017) like the teachers, the involvement of principals in the curriculum implementation enables fruitful implementation. Principals like teachers are "the key transformational agents in the process of change including curriculum implementation" (Ayeni, 2013, p. 40). Principals are instructional leaders leading teaching and learning (curriculum management and implementation) in collaborations with teachers at their respective school levels.

Revised curriculum for basic education: Ministry of Education, Arts and Culture has embarked upon a task to revise and implement a new curriculum from 2015 to 2022. In the context of this study, RCBE is referred to as the revised national curriculum for basic education as approved by Cabinet at its 3rd meeting on the 25th of March 2014 (Ministry of Education, n.d.).

Public schools: In the context of this study, a public school is referred to as a state-funded school that has an officially approved phase from Pre-Grade (Grade 0) to Grade 1-12/13. It should be divided into these phases pre-primary or Grade 0, junior primary school phase (Grade 1-3), senior primary (Grade 4-7), junior secondary phase (Grade 8 and 9) and senior secondary phase (Grade 10 to 12/13).

Primary schools: All schools that fall within the category of grades starting with Grade 0 to Grade 7 (National Institute for Educational Development (NIED), 2015). However, Nekomba and Ngutjinazo (2019) demarcated primary school phase as "the junior primary phase will be from Grade 1 to 3 while the senior primary phase will be from Grade 4 to 7". As long as a school is falling within this grades' category, this school should, in the context of this study, be referred to as a primary school.

Secondary schools: These, in the context of this study, were any schools with grades ranging from Grade 8 to 12. These schools have no primary school grades or combined school grades, but secondary school grades only (National Institute for Educational Development (NIED), 2015). According to Nekomba and Ngutjinazo (2019) the junior secondary school phase is made up of two-year Grade 8-9 while senior secondary phase starts from Grade 10-11, a two year National Senior Secondary Certificate Ordinary Level (NSSCO), with an additional year of Grade 12 forming the Advanced Subsidiary which substitutes National Senior Secondary Certificate Higher Level (NSSCH).

1.9 Chapters outline

The following section presents the chronological outline of the chapters of this dissertation report; the outline provides a brief overview of what each chapter covers. **Chapter 1:** This chapter introduced the study with its orientation, the statement of the problem, research questions and objectives, significance and rationale of the study, limitations to and its implications of the study, delimitations of the study, definitions of the key concepts and the chapter's outline.

Chapter 2: The researcher presents a critical review of the relevant literature starting with the theoretical framework that supports the study. History of curriculum transformations in pre and post-independence Namibia is discussed. The chapter further discusses what the RCBE entails. The heart of the chapter is the synthesis of international, sub-regional and local pieces of literature on the challenges of curricula management and policies implementation.

Chapter 3: In the third chapter, the methods and processes followed in designing the study are presented. It started with the research paradigms, a discussion of mixed methods approach, the descriptions of the research site and population, research design, sample and sampling operations, research instrument and tool, pilot study and the modification of instrument and tool after they were piloted, data collection and generating procedures, data analysis as well as the ethical consideration.

Chapter 4: Chapter four discusses the presentation of data of the study, quantitative data collected through questionnaires and qualitative data generated from face-to-face semi-structured interviews. The data is presented without providing much detail.

Chapter 5: In this chapter, the findings are discussed, interpreted and reconciled with literature to address the research questions and objectives that inform this study.

Chapter 6: In this chapter conclusion of the study are provided; recommendations are made in the light of the findings of the study as well as a Model Design for addressing curriculum management and implementation challenges.

1.10 Summary

This chapter provided an orientation of the study to explore the challenges experienced by public schools' teachers and principals in managing and implementing the RCBE in the Ompundja Circuit in Oshana Region in Namibia. The study also suggested how the challenges in the curriculum management and implementation process can be addressed. The researcher provided a statement of the problem to make readers aware of the problem under investigation that is exploring the aspects relating to challenges experienced in the revised curriculum management and implementation process with the view to devise appropriate strategies to help with the successful rollout of this curriculum. Significance of the study was highlighted and paved a way for consideration of research questions and objectives that acted as guidance for stating what is to be achieved by the study. Limitations and scope or delimitation of the study are also stated. Key terms in the topic are defined and clarified to make the study more understandable to the readership. Before summing up the chapter, an outline of chapters in the study is presented. The next chapter discusses the literature reviewed concerning the research questions and objectives.

CHAPTER 2: THEORETICAL FRAMEWORK, BACKGROUND AND CHALLENGES TO CURRICULA IMPLEMENTATION PROCESSES

2.1 Introduction

This chapter presents the theoretical framework, serving as a perspective from which this study is viewed. It also reviewed the literature on the history of curricula reforms from pre to post-independent Namibia. It reviews the literature related to the research problem, in particular aligning the literature reviewed with the research questions and objectives. Further, the review of journals and newspaper articles, theses, dissertations and books related to the subject of the research are synthesised and analysed to offer a constructive critique. The chapter presents a review of literature to create a critical reflective review of associated kinds of literature and identify gaps in knowledge as well as areas where further research may be required. Furthermore, the chapter identifies relations, gaps, and inconsistencies in the literature (American Psychological Association, 2010). The next section discusses the theoretical framework as a lens through which this study is viewed.

2.2 Theoretical framework

Grant and Osanloo (2014) identify the theoretical framework as a moonpath or blueprint of research and one of the significant facets of the inquiry procedure. It is a theory that informs and clarifies the structure and visual modality of the research. A theoretical framework underpins a study or is an analytical lens through which a study is viewed.

Social Realism theory of Margret Archer a British sociologist as well as the Instructional Leadership Theory underpinned this study.

2.2.1 Archer's social realism theory

Critical Realism is a philosophical theory advanced by a British sociologist, Roy Bhaskar since the 1970s, who acknowledged that external reality is independent of human action and thought (Slemming, 2019). Put simply, the self is the doer or subject while the external reality is the object towards which an action is performed.

According to Bhaskar (2008), realities must not be conflated or mixed up with our experience of it. Further, Bhaskar elucidates that there are three levels of three strata of what is (ontology) (Boughey & McKenna, 2017; Slemming, 2019). The first stratum is empirical that is the experiences and observations where explorations of reality must commence. Human beings experience and observe the world differently. The second stratum is actual that are events that take place in the world. The actual and empirical co-exist as events are experienced as they happen. The last stratum is the reality that is made up of both natural and social structures as well as mechanisms. The real co-exists with the empirical and the actual but cannot be conflated for analytical purposes. From Critical Realism, Margaret Archer (1995, 1996, 2003) developed a Social Realism theory, an analytical tool that is used to understand the social world.

Theoretical viewpoint of the study resonates with the thoughts of Archer's (1995, 1996, 2003), Social Realism is a theoretical lens to better understand events and experiences of

the social world in relation to the management and implementation of the Revised Curriculum for Basic Education (RCBE) in public schools in Ompundja Circuit in Namibia. A social context is made up of "people" (agents) and the "parts" (structure and culture) (Archer, 1995). "Both culture and structure are important aspects of social life" (Boughey, 2012, p. 62). Further, Boughey clarifies that agency refers to the personal and psychological makeup of the actors, how they relate socially as well as how they use their capacity to act voluntarily.

In order to understand the interaction in a social context, it is necessary to understand how agents, in a socio-cultural context, respond to constraints and enablement. According to Quinn (2012), a realist understands the social world in which phenomena are investigated to discourse causal processes at different levels of the social world. The social world is understood to be made up of the entities of structure (rules, committees and material resources), culture (values, norms, believes and relationships) and agency (individuals or groups of people) that can be examined separately without conflating them. The latter of the domain (agency) is shaped by structure and culture in a social setting that has the potential to enable or constrain it (Singh, 2015). Each of the domains, separately, has the potential to enable or constrain achieving effective management and implementation an education policy such as a curriculum. Because once the parts (people and culture) are conflated, it is impossible to distinguish if the agency is being exercised. The three domains should be viewed as separate domains of reality, each with properties and powers (Shalyefu, 2018). Once you understand the separate contribution of the three domains of Social Realism to a social setting then try to understand their interplay between them

(Mogashana, 2015). Despite separate analyses of the three domains, it is important to note that they are interrelated when they interact.

Archer (1995, 1996, 2003) emphasised that in order to understand a social world, structure, culture and agency should be analysed separately without conflating them. For example, Boughey (2012, p. 62), indicated that "in sociology, there has long been a tendency to conflate the 'parts' (i.e. culture and structure) and the 'people' (agency). Boughey further argues that conflating the 'parts' and the 'people' constitute duality, which renders it impossible to identify if the agency is being exercised. In amplifying this, social realism domains should be analysed separately to avoid a 'fallacy of conflation', which comes as result of upward, central and downward conflation. The upward conflation happens where there is a denial of autonomy to the structure which makes the agents to have more power than the structure. Meanwhile, central conflation is when a structure is reproduced through people where power is constrained and enabled simultaneously by the structure. Lastly, downward conflation is when the structure has more power than the agents.

2.2.1.1 The domain of structure

Structure is the world out there with physical and human material interests as well as roles that may be unequally distributed, in a social realm (Archer, 1996; Boughey, 2012). It is also about social roles and positions. The changes in structures contribute to the changes in other domains, which are culture (believes, norms, values) and agency (people as individuals or a group).

It is imperative to provide enabling mechanisms, within structures, to ensure effective curriculum management and implementation. Structures in the basic education setting in Ompundja Circuit are such as committees, policies, financial, human resource or infrastructural materials.

Committees responsible for curriculum management and implementation can be at the level of a subject, department, school, cluster, inspector or region. Some of the committees are such as subject committees, departmental committees, school management, school board, cluster management and circuit management committee. Policies are such as circulars, subject policies, revised curriculum documents and syllabi. Material resources such as infrastructures and physical resources for example laboratories, classrooms, workshops, textbooks and other assistive teaching and learning devices are examples of structures. Some of the structures are at the national level but have an impact on the operation of schools are such as Vision 2030, National Development Plans (NDPs), Education and Training Sector Improvement Programme (ETSIP), ICT Policy for Education in Namibia and curriculum documents. For example, structures such as committees are social groups that set boundaries of who should be present at events where important decisions that support curriculum management and implementation may be taken and how they may affect the learners and society in general.

Funds and skills also make up material structures that the curriculum implementers need to have access to be able to execute their functions. The structures can complement or contradict one another and require agents with powers and properties to transform their social context.

2.2.1.2 The domain of culture

According to Archer (1995) culture is made up of beliefs, opinions, ideas, theories, values, concepts and myths that may exist independently with or without agents being aware or unaware of them. The culture manifests through discourses used by specific agents and actors at a particular time. Discourses are real and may constrain or enable curriculum management and implementation in a particular context. Culture is about how people think about things and has the causal powers to influence some players to enable or constrain things. The effective revised curriculum management and implementation may be constrained or enabled by the culture within a social context.

Culture can be unveiled through discourses that are prevalent in a particular context (Vorster & Quinn, 2017). Some of the transformational discourses are contained in the four major goals for education in Namibia that are access, equity, quality, and democracy that were adopted two years after independence (Ministry of Education and Culture, 1993). The democratisation of stakeholders' participation in the affairs of education in Namibia is a feature of instructional leadership practice. Colonial education was elitist and only availed to the privileged few. From independence, opportunities to basic education opened up for indigenous natives that led to 'massification'.

Like structural items, cultures can be complementary or contradictory to one another, where the latter cerates "situational logics" (Archer, 1996). The parts (structure and culture) have an effect on how people can or cannot exercise their agency in a particular situation. Thus, Archer (1995) affirms that, although the actors and parts are intertwined, if they are analytically conflated, it is awkward for each stratum to change over time and

how they exert causal influence on each other. This means that the parts or the agents cannot exert influence over the other.

2.2.1.3 The domain of agency

Agency is about human action interactions that may change or transform things or keep it statics or the way it is. Agents are people who operate within a particular structural and cultural system. Social interaction of agents in a particular context can bring about structural or cultural changes (i.e. morphogenesis) or may keep things unchanged (i.e. morphostasis). Emergent personal powers and properties are exercised as people interact with parts (structure and culture) (Archer, 2003).

There are several role players (agents) in the management and implementation of the revised curriculum for basic education in public schools in Ompundja Circuit. Amunkete (2020) listed the agents that form up a structure of Curriculum Coordinating Committee (CCC) for basic education in Namibia as the National Institute for Educational Development (NIED), regional directors, inspectors, principals and teachers. The latter, according to Angula (2015) is a critical element in the management and implementation of a curriculum. Amunkete (2020) alluded that teachers play an important role in guiding the curriculum designers by specifying the needs of learners, teachers and society. The teachers and principals are the other key stakeholders in the process of managing and implementing this curriculum in Ompundja Circuit. Teachers are responsible for the day-to-day management and implementation of teaching, learning and assessment activities. They are the mediators of classroom practice (Angula, 2015).

Principals are overseeing RCBE management and implementation activities at their respective schools in Ompundja Circuit. Angula (2015) indicates that principals deploy staff, allocate teaching time to subjects, provide devices to assist teaching and learning, as well as creating a conducive teaching and learning environment. As a practice of instructional leadership, principals should lead by examples such as attending their lessons despite the management and administrative load that they carry. This practice is a display of leaders (principals) leading by example. These actors should be equipped with the necessary powers and properties in exercising their agency to manage and implement various components of the RCBE in public schools in Ompundja Circuit in Namibia.

Using analytical dualism, Archer (1995) argues that each of the three entities of Social Realism (structure, culture and agency) are interdependent. They should be examined separately before trying to understand the interplay between them. Interaction of these three domains can constrain or enable effective management and implementation of RCBE in public schools in Ompundja Circuit. It can result in transformation or change in form (morphogenesis) or maintaining of the *status quo* or stability of form (morphostasis). This study is going to use Archer's Social Realism theory as a theoretical framework to understand the structural, cultural and agential challenges experienced by teachers and principals in managing and implementing the revised curriculum in public schools in Ompundja Circuit.

2.2.2 Instructional leadership

Over the years, instructional leadership has dominated the discourses in the education fraternity. There has been growing research and scholarly publications that link improved learners' performance to quality leadership in schools. Several studies concluded that quality instructional leadership provided in schools influences learners' academic performance (Bhengu & Mkhize, 2014; Hoerr, 2008; Lumadi, 2017; Şahin, 2011). According to Bhengu and Mkhize (2014), over the past two decades, more attention has been placed on instructional leadership in schools in South Africa. Generally, Namibia and specifically Ompundja Circuit are no exception to this practice of instructional leadership aimed at improving learners' academic performance. This means that more attention has been placed on the role that school leadership should collectively enhance effective teaching and learning at a school level. This can be achieved when the principals subscribe to democratic ways of running the school by involving the stakeholders in the management and decision-making process. They should also ensure continuous professional development for teachers to enable them to improve effective teaching and learning. Democracy is one of the four goals of education that requires participatory decision making in an educational setting (Ministry of Education and Culture, 1993). Democracy enables the free flow of innovative ideas because teachers and together with principals become equal participants in the process of managing and implementing a curriculum.

Instructional leadership requires school leaders to be involved in the affairs of the school, delegate duties to teachers, but they should be accountable to the results (Hoerr, 2008). Principals have been deemed as instructional experts; now teachers know pedagogically

much more about how their pupils learn. Thus, it is ideal to allow teachers to decide on the ways and manner in which they should conduct the lessons. On this basis, instructional leaders should promote teamwork, continuous learning, collaboration and cooperation among teaching staff to improve student learning (Bhengu & Mkhize, 2014; Hoerr, 2008). In Namibia, "there is an emphasis on professional and effective leadership for curriculum implementation" (Uugwanga, 2007, p. 34). The latter should be molded around teamwork, collaboration, cooperation and continuous professional development and training for teachers. Professional development and training increase and build capacity among educators, which has the potential to improve learners' academic performance.

Meaningful participation and collaboration of teachers demand contemporary school leaders or principals to urge teachers to learn and grow as a precursor to effective student learning and growth (Hoerr, 2008). Instructional leadership should take a stand against the status quo while supporting new opinions and applications that supports learners' pedagogical access (Şahin, 2011). It is expected that contemporary educational leaders should place learning at the centre of school activities. For effective learning to take place, a conducive environment should be created among a community of education practitioners that should work as a team (Lumadi, 2017).

Effective educational management and leadership ensure effective student learning, good interpersonal relations among teaching and learning staff and continuous professional development of teachers to upscale their skills and knowledge. Lumadi (2017) postulates that to achieve educational goals set out in curriculum school leaders and managers should listen to the people around them and be sensitive to their feelings. They should also allow them to have a voice in the affairs of running the school. These are necessary precursors

of effective management and leadership in a school setting. Continuous empowerment of teachers in their area of need is pivotal in a teaching and learning environment as well as effective curriculum implantation.

Instructional leadership ensures that the focus of activities in the school instruction to improve and subsequent pupils' learning takes place so that the school fulfills its academic mission. The purpose of this study is to explore the different challenges that teachers and principals of public schools have been experiencing when managing and implementing the revised curriculum for basic education (RCBE) in the Ompundja Circuit in Namibia and suggest how these challenges can be addressed. The purpose of the revised curriculum is to respond to the challenges and needs of the Namibian society (Ministry of Education, 2015), which the previous curricula failed to do or accomplish. Vision 2030 seeks to make Namibia a prosperous, flourishing and developed and industrialised nation using education as a pillar to achieve global and national developmental goals. In order for education to produce contemporary learners with necessary post-modernistic attributes and to realise the national goal, a paradigm shift of inculcating learners is a prerequisite. This implies that there is urgency and a philosophical clarion call to affect post-modernistic teaching and learning. Effective teaching and learning can be achieved through quality leadership, which walks the talk or lead by example, emphasise on the development of teachers at the school, placing teaching and learning at the centre daily and promote the culture of teaching and learning accountability at the school (Naicker et al., 2014). Therefore, this study was undertaken from the combined perspectives of Instructional Leadership and Social Realism analytical theories.

The next sections discuss the background of curriculum reforms in Namibia from pre-colonial to post-colonial era. This is followed by challenges encountered during the

management of education policies and curricula implementations. The challenges are related to training and professional development, infrastructures or physical resources, teaching and learning resources, budgetary or financial resources, technical and vocational education, teacher-learner ratio, learner support, as well as teachers' feelings and views of the revised curriculum.

2.3 Pre-colonial to post-independence education curriculum

This discussion starts with an overview of the curriculum under traditional education during the pre-colonial era. A highlight of the curriculum during the missionary education era is given. Further, the curriculum under the German colonialism period is discussed. In addition, the curriculum under the South African colonial rule is discussed. Lastly, brief post-independence curriculum reforms are discussed. Although this discussion focused on the sequential curriculum area in Namibia, it links with the current study that is about the challenges experienced by public school teachers and principals of public schools in Ompundja Circuit when managing and implementing the revised curriculum for basic education (RCBE).

2.3.1 Curriculum management during the pre-colonial era

Providing the historical background of this study is premised on giving the subsequent historic development of the basic education curriculum in the pre-colonial epoch and beyond. Implication of "beyond" implies that this historical context provides a

comprehensive understanding of an academic essence of pre-colonial, colonial and post-colonial curriculum reforms. Although education in Namibia has been provided before the coming of the missionaries, it is still debated today whether the essence of education of the time provided was formal or informal. In Namibia like everywhere else in the globe, a greater part of education is informally transmitted orally. Auala (1989) perceived traditional education as a collective means used by adults to transmit cultural heritage, beliefs and skills from one generation to another. Ellis (1984), on the other hand, indicates that pre-colonial traditional education was part of everyday life where adults took the responsibilities of teaching, correcting and punishing any child. Traditional education preserved social norms, cultural values and customs that were relevant to the context of indigenous people. During this era, the traditional education curriculum was managed using pre-scientific theories of management that were not documented.

According to Hailombe (2011) formal education was first introduced by European missionaries in Namibia. This view point seems to be premised on the peripherizing of indigenous knowledge systems by the western settlers, which Ndlovu-Gatsheni (2018), Santos (2014) and other epistemic decolonial agitators calls epistemicide or epistemic violence/ colonisation perpetuated against the indigenous epistemic cannons by the European settlers. Before the era of the missionary, knowledge has been transferred from one generation to the other through initiations, observations and imitation. In that era, there was no written curriculum for the imparting of knowledge in Namibia in general nor were there formal schools, as they are known today. One does not have to go to school to be educated because education was part of living among members of a nuclear or extended family within a household or community (Tiberondwa, 1998). This indigenously managed

education brought positive social cohesion, solidarity and cooperation (Ellis, 1984). It also contributed immensely to the intellectual enrichment of the indigenous people, thus calling indigenous education informal sounds too fallacious.

2.3.2 Curriculum management during the missionary education era

Around 1805, the first missionary society arrived in Namibia from Europe (Auala, 1989; Kandumbu, 2005; Shangula, 2020). Missionaries did not only build churches in Namibia but also built schools to teach catechism aimed at producing loyal and obedient labourers towards the white settlers and colonial masters. In Namibia and other African countries, missionary education was also used to advance the project of colonialism, political and economic dominance as well as cultural imperialism (Tiberondwa, 1998). Nangula (2013) explains that catechism refers to the booklet that shortly describes the doctrines and principles of Christianity. Missionaries, in their curriculum, provided western-styled industrial education sufficient to provide skills to native blacks to serve them. According to Cohen (1994), the Rhenish mission recognised the importance of education for practical service alongside elementary knowledge. This industrial education formed the basis of the curriculum during the missionary education era in Namibia.

Rhenish Mission Society from Germany settled at Otjimbingwe in 1842 followed by the Finnish Missionary in 1870 that settled in the northern parts of Namibia (Auala, 1989; Ellis, 1984). Otjimbingwe is located in Erongo Region and it is estimated to be approximately 195 kilometres from Windhoek, the Capital City of Namibia. Like the Wesleyan Mission Society, the curriculum for Rhenish and Finnish Mission Societies was

bordered around the Christianisation of the local indigenous communities by teaching them how to read the Bible (Hailombe, 2011; Iita, 2014). Further, Amukugo (1993) expresses that western education for Africans was left in the hands of missionaries, and hardly moved beyond basic literacy and numeracy training. Akawa (2014) stated that "missionaries offered a western form of education with an emphasis on reading and writing in the mother tongue, religion and arithmetic" (p. 155). This confirms that the curriculum planned by the missionary educators was designed to produce non-critical but loyal servants for missionaries, white settlers and colonisers. Despite revealing that missionary education was of poor quality, on the contrary Akawa (2014) posits that missionary schools produced an early generation of radical nationalists and it encouraged debates and critical thinking. According to Iita (2014) and Auala (1989), girls were trained in domestic chores while the boys were trained in brick making, carpentry and gardening among other basic skills. Boys were taught handwork while the girls were taught western styles of housework (Cohen, 1994). These skills only supported them to work as servants and semi-skilled labourers to serve the white settlers.

According to Ellis (1984, p. 14), “many white settlers in Namibia saw any education of blacks as a threat to colonisation”. Basic education curriculum during the missionaries era was managed autocratically with little input from stakeholders such as teachers, parents and learners. Curriculum was designed for the stakeholders and they were left either to take the curriculum or leave it. During this time, several indigenous knowledge structures were abolished without due consideration. Amplifying the threat of indigenous education to colonisation, Cohen (1994) indicates that missionaries believed that indigenous people should not be educated to be self-reliant but to serve as assistants to white settlers. Some

of these accounts confirm the basis, purposes and responsiveness of the curriculum during the era of missionary education in Namibia (Akawa, 2014; Amukugo, 1993; Hailombe, 2011; Iita, 2014; Kandumbu, 2005). Missionaries did not provide to natives an education relevant to realities of the African political, socio-economic and cultural context.

2.3.3 Curriculum management under German colonialism (1884-1915)

The era of missionaries was followed by the intrusion of the territory by the Germans that came at the invitation of the missionaries. The missionaries invited the Germans to provide security and protection against the anticipated resistance from the local communities. This invitation relates to the political role taken by missionaries in colonial Namibia. The Germans colonised Namibia for approximately 31 years from 1884 to 1915 (United Nations International Children's Emergency Fund (UNICEF), 2017). During their colonial era, the Germans did not bother about providing a liberating education to the native Namibians. Instead, they only established the first German *Realschule* in 1906 for White children, while "the running of educational institutions was to a large extent left in the hands of missionaries" (Amukugo, 1993, p. 44). According to Auala (1989), the Germans introduced two separate systems of education one for the whites and one for the native Africans. Under the German colonial era, the missionaries continued providing education to the indigenous Namibians aimed at imparting biblical knowledge in a curriculum prescribed by the Germans (Hailombe, 2011; Katjavivi, 1988; Peters, 2016). This means the curriculum during the German colonial period did not differ much from the Eurocentric aligned curriculum offered during the missionaries' era. Administration and

management of the basic education curriculum were dictated by the perceived responsiveness of the curriculum, which was prescribed by the German colonial agents. Therefore, there was no significant difference between missionary education curriculum management and that of the German colonial regime.

2.3.4 Curriculum management under the South African colonial rule (1915- 1990)

When Germany lost World War I, South African forces invaded Namibia on behalf of Britain in 1915 and ruled over it under martial laws that ended on 1 January 1921. Moreover, South Africa had hoped to annex Namibia as its fifth province, but the League of Nations intervened by placing Namibia under a 'C' mandate to be administered by South Africa (Ellis, 1984). The annexure marked the end of German administration over Namibia and "South Africa, acting on behalf of Britain, and was made responsible for Namibia under the terms of a League of Nations Mandate" (Katjavivi, 1988, p. 13).

South African colonial regime started from 1915 to 1990 (Shanyanana, 2011). The colonial system reigned over Namibia for approximately 75 years. The study by Amukugo (1993) indicates that the South African colonial regime did not show much interest in managing and developing indigenous African education either. Supporting this view point Peters (2016,) stated "both occupying powers did not pay any particular attention to the education level of the indigenous black population" (p. 310). Further, the study by Peters indicated that education was left in the hands of various missionary societies that were subjected to following the government regulations. Unlike the Germans, the South African colonial government introduced several education reforms (Auala, 1989). The reforms

impacted the curriculum changes, both in management, policy and practice. These reforms were to enforce the policies promoting white supremacy and separateness or apartheid (Aloovi, 2016).

Bantu Education was introduced soon after the National Party of Afrikaners nationalist came to power in 1948 by winning the whites' only elections. Bantu Education was specifically designed for indigenous Namibians and South Africans. South African white minority regime later introduced apartheid in Namibia (Amukugo, 1993). Education for indigenous Africans was designed to prepare natives only for semi-skilled white-collar office jobs such as teaching, preaching and nursing. It also produced cheap unskilled labourers to serve in subordinate positions. Shanyanana (2011) cemented the above by stating that such an education aimed to equip indigenous citizens with skills to have them employed as semi-skilled labourers or serve specific manual jobs.

Basic education curriculum, during this period, was designed for economic responsiveness. It was improved to produce a small but significant black middle-class of some skilled labours that worked as administrators during the apartheid government (Ellis, 1984). These curriculum changes enabled economic and political responsiveness. The curriculum of Bantu Education did not encourage academic creativity, innovation and critical thinking among the indigenous Namibians. It was planned to serve the specific purpose of producing non-critical, but loyal servants of the 'superior' white masters.

A self-evident truth is based on the fact that before independence, on the 21st of March 1990, the education system in Namibia was run based on racial segregation (Hailombe, 2011; Ministry of Education and Culture, 1993). This meant that blacks, whites and coloureds were ontologically conditioned through legal means to attend school separately.

Education for blacks was inferior while whites received 'superior' education (Hailombe, 2011). Hailombe further enlightened that coloured received an education that was inferior to the whites but superior to that of the blacks. Auala (1989) states that "Education for Whites became compulsory, but not for Coloureds and Africans" (p. 69). The separate schools and curricula complimented a segregated socio-economic development as well. These segregated education systems based on race meant that curricula were different for these racial groups.

Furthermore, this characterisation led to the unequal and unjust allocation of financial, human and material resources in education. The system established through laws called apartheid or separateness arranged the education for the natives to be managed and administered by *Bantustans* or homelands through an education system called Bantu Education. There were eleven segregated and fragmented education systems in Namibia along the ethnic and tribal lines (Hailombe, 2011). Schools in Bantustan were characterised by overcrowded classrooms, a lack of properly trained teachers as well as poorly equipped schools (Auala, 1999). However, there was no ethnic segregation among the white communities. Once again, Hailombe (2011) stressed that before independence, education in Namibia was for the privileged few. This means that the bulk of African children of school-going age had no privilege to attend basic education. Auala (1989) intimated that the segregated education system "increases racial discrimination and encourage inequality in social, intellectual and regional development" (p. 106). These were some of the hindrances and obstacles to effective curriculum management and implementation during the South African colonial regime. Management of curriculum implementation was centred on the purpose and responsiveness of the education at that

time. Education was designed and managed towards producing cheap semi-skilled labourers to occupy administrative positions. This strengthened the colonial project as well as concretising the policy of apartheid. Parents, learners, teachers and principals were not practically involved in the design of the curriculum.

Upon obtaining independence, the incoming democratic government had to introduce several education reformations to change the unjust discriminatory system that perpetuated over approximately 100 years. The next section discusses those curricular reforms that took place after independence.

2.3.5 Post-independence curricular management and reforms (1990- Present)

When the ceasefire agreement was signed and promulgated between South West Africa People Organisation's (SWAPO) military wing People Liberation Army of Namibia (PLAN) and South African apartheid government, the implementation of United Nation Resolution 435 was enforced on the 1st of April 1989. A democratic election was held under the supervision of the United Nations Transition Assistance Group (UNTAG) by the end of 1989. During that time South West Africa People Organisation (SWAPO), as a political party, won the first democratic elections and formed a new democratic government on the 21st of March 1990. The Constituent Assembly adopted a Constitution that was enforced on Independence Day. As soon as independence came, new ways of equally educating a nation were devised that led to some post-independence education

reforms aimed at undoing the structural and cultural injustices created through a long period of subjugation and colonialism that have been going on for over ten decades.

At Namibia's independence in 1990, the incoming South West Africa People Organisation (SWAPO) government inherited an education system that was fragmented and unequal (Peters, 2016). From independence, education became a basic fundamental human right enshrined in Article 20 (1) in Chapter 3 of the Namibian Constitution that reads "All person shall have right to education" (Ministry of Information and Broadcasting, 1990, pp. 12-13). Education in Namibia is made a part of basic human rights through constitutional pronouncement. Auala (1999) indicates that when Namibia obtained independence, schooling became a right for every Namibian child of school-going age. It should be noted that the Namibian Constitution is supreme to all laws governing the affairs within the boundaries of Namibia. This constitutional declaration opened chances to those that did not have the privilege to attend school. It led to the mass influx of learners into schools. This mass influx of learners in basic education has affected the management and delivery of curriculum in one way or the other.

A few days before Namibia's Independence Day, the country sent a high-level delegation of educationists to a global education conference in Jomtien, Thailand that discussed the concept of "Education for All". From that conference, the Namibian government in 1993 introduced a policy document called "Towards Education for All (TEFA)". For Namibia, incorporating education into fundamental human rights and freedom in the constitution was a remarkable and historic milestone the new democratic government has taken.

As earlier alluded, the initial reform in education targeted creating a uniform non-segregated system of education. In support of the uniform system of education,

Shanyanana (2011) stresses that different racial education systems were "merged into one unified, democratic, national department of education" (p. 5). Furthermore, the Ministry of Education and Culture (1993) indicates that the commitment of this educational reform aimed to the realisation of the policy maxim Towards Education for All (TEFA). This education policy had four goals through which it could achieve the policy maxim namely access, equity, quality and democracy (Ministry of Education and Culture, 1993). Some of the reforms in basic education introduced participatory and collaborative management of a curriculum implementation process as expected in an instructional leadership setting.

Development and education level for blacks that was fractured drove most lack citizens of Namibia into abject poverty. The prolonged subjugation caused the damage that the indigenous Namibians still dwell in today. To arrest the underdevelopment caused by the apartheid regime, the new democratic Namibian government resolved to amalgamate the eleven different systems of education into one unified education system.

Common education curriculum was designed to redress the cultural, social and economic injustice from the prolonged period of colonialism. This educational reform is premised on a learner-centred approach instead of the teacher-centred approach that took centre stage during colonial education. Under the learner-centred approach, learners are placed at the centre of learning through discovery in a social context. Teachers are facilitators of learning in the learner-centred approach unlike in the teacher-centred approach where they are portrayed as the only custodian of knowledge. The teacher-centred pedagogy, where teaching is offered through the lecture method, encouraged rote learning and memorisation of facts. This denies learners an opportunity to gain pedagogic access at the

meta-cognitive level of learning. Learners would find it difficult to remember the content (Aloovi, 2016).

Additionally, other post-independence education reforms were such as the introduction of the Junior Secondary Examination (JSE) during 1991-1993. This examination covered content for the three years of the junior secondary school curriculum that started from Grade 8 to Grade 10. Junior Secondary Examination (JSE) is blamed for enabling learners to drop out of school at an early age because some of these learners leave school at the average age of around sixteen years old. This was followed by the introduction of the senior secondary school curriculum (Grade 11-Grade 12) during 1994-1995. This reform marked the end of the Cape Education Department Examination for Matric or Standard 10 by full-time candidates in 1994.

International General Certificate of Secondary Education (IGCSE) and Higher International General Certificate of Secondary Education (HIGCSE) examinations were introduced in 1994. The International General Certificate of Secondary Education examinations were set and marked locally, while the Higher International General Certificate of Secondary Education examinations were set, marked and moderated by the University of Cambridge in the United Kingdom. Despite the reform of the Cape Education system, there were no major reforms in the content of subjects, except the translation in the medium of teaching and learning from Afrikaans to English, as well as the removal of the racist remarks contained in the instructional materials (Aloovi, 2016). The content in these examination papers remained foreign to learners. This led to another proposal of localisation of the senior secondary school examinations.

In January 2006, the Namibia Senior Secondary Certificate (NSSC) was implemented (Ministry of Education, 2005). This change enables the localisation of the curriculum and improves the results of the senior secondary school examinations. The design and content remained more or less the same as the H/IGCSE. Once again, this has changed after the 2011 National Education Conference held in Namibia's Capital City, Windhoek.

The next sections discuss the challenges encountered during education policies and curricula implementations. The challenges are related to training and professional development, infrastructures or physical resources, teaching and learning resources, budgetary or financial resources, technical and vocational education, teacher-learner ratio, learner support, as well as teachers' feelings and views of the revised curriculum.

2.4 Challenges related to teachers training

This part discusses the curriculum management and implementation challenges related to teachers training. It starts with staff qualifications, training of staff as well as their skills and knowledge.

2.4.1. Qualification of staff

This area discusses challenges related to the qualification of staff. Some studies found the challenges; obstacles or impediments to curriculum implementation linked to lack of qualified staff (see Achimugu, 2016; Ahmadi & Lukman, 2015; Mingaine, 2013; Tubaundule, 2014). Some of these studies are paraphrased and synthesised to show the

common impediments to curriculum management and implementations that are linked to a lack of qualified staff. Availability of qualified human resources enables effective teaching and learning, if the teachers are not adequately qualified to teach with confidence, this may negatively affect effective management and curriculum implementation.

A research by Mingaine (2013) explored the challenges that hamper the efficient implementation of Information Communication Technology (ICT) in public secondary schools in Kenya. It is recognised that the supply of qualified ICT teachers was found to be a major challenge in the implementation process of ICT in schools. As a practice of instructional leadership, principals should see to it that the schools have qualified ICT teachers to enable effective teaching and learning. Information Communication Technology is one of the elements underlined in the implementation of the RCBE that could benefit from the findings and recommendations of Mingaine's study.

Ahmadi and Lukman (2015) analysed the challenges confronting the effective implementation of a new secondary school curriculum in Nigeria to proffer far-reaching solutions. This study found that the deficiency of qualified staff impedes the effective implementation of the new secondary school curriculum in the settings under study. Like Mingaine's (2013) study, instructional leaders should promote effective learning by ensuring that schools are staffed with qualified teachers. The scope of Ahmadi and Lukman's (2015) study only targeted the secondary school curriculum. Nevertheless, the current study looks at the whole basic education curriculum management and implementation in Namibia's Ompundja Circuit in the Oshana Region. The findings of Ahmadi and Lukman (2015) study may inform the implementation of the RCBE. Despite their study focus being on a secondary school curriculum, the finding and the suggested

solutions could be used in the context of revised curriculum management and implementation.

Poor preparation of teachers or lack of qualified teachers has emerged from Achimugu's (2016) study as one of the factors affecting the implementation of the curriculum. Achimugu studied the factors affecting the effective implementation of Senior Secondary Education's Chemistry Curriculum in Kogi State in Nigeria. Lack of professionally qualified teachers is riskier in a hard science subject, such as Chemistry that could be the case in public schools in Ompundja Circuit. Achimugu adds that if learners leave without being fully equipped with the necessary knowledge and skills they may be at risk of failure, in later stages of their academic life.

Lack of sufficient qualified teachers, as well as a lack of continuous professional development, affects curriculum implementation (Tubaundule, 2014). Continuous professional development is a characteristic of instructional leadership in schools. Tubaundule evaluated the complexity involved in implementing Namibia secondary school curriculum. What Tubaundule's study and the current study have in common is that they were both conducted in the Namibian context but the scopes differ. Tabaundule only focused on a secondary school curriculum implementation, while the current study is concerned about the management and implementation of the entire RCBE across all levels of basic education schooling. Ogunbiyi (2012) and Saidu and Saidu (2015) revealed that the lack of qualified personnel harms the implementation of any educational policy or curriculum. What Saidu and Saidu have found may also harm the management and implementation of the revised curriculum in public schools in Ompundja Circuit.

Scholars believe that deficiency of qualified staff in an educational setting derails effort of effective curriculum management and implementation (Achimugu, 2016; Ahmadi & Lukman, 2015; Mingaine, 2013; Saidu & Saidu, 2015; Tshabalala & Ncube, 2014). These studies reveal that the availability of qualified educators is a prerequisite to effective curriculum management and implementation and Ompundja Circuit schools may benefit from conduit findings of these studies.

2.4.2 Training of staff

The literature reviewed here is about the training of staff. Several studies have found that lack of training has a negative impact on education curriculum implementation (Altinyelken, 2010; Badugela, 2012; Iita, 2014; Josua, 2013; Lumadi, 2014; Magongoa, 2011; Makunja, 2016; Olateru-Olagbegi, 2015; Patius, 2014; Quest, 2014; Selepe, 2016). If teachers are not adequately trained on how to manage and implement the new curriculum they may not be able to appropriately dispense information to learners in their schools. For instance, Patius (2014) found that factors that influence the implementation of the curriculum in public primary schools in Ukwala division of the Siaya County in Kenya are related to inadequate teachers' training. It is stated, in that study, that teachers were not adequately trained in the curriculum or course of study. The lack of training among teachers is a setback because teachers will have limited knowledge and skills to share with learners in public schools in Ompundja Circuit.

Olateru-Olagbegi (2015) conducted a critical review of the sufficiency of the Revised 9-Year Basic Education Curriculum (BEC) in Nigeria. This study identified factors that pose

a threat to the successful implementation of the revised-9 Year BEC. One of the identified factors was the unavailability of adequately trained teachers. A revised-9 Year BEC implementation was evaluated against the Finnish School System. This could be a gap since Finland is a developed nation; hence, the provision of resources and the schooling environment are not scaled at the same level as that of the Ompundja Circuit in a developing country such as Namibia. The researcher of the current study believes that training among teachers is a zenith of effective teaching and learning which improve academic performance in schools.

One of the challenges that constrain efforts to implement a thematic curriculum in Uganda is the derisory professional development of teachers (Altinyelken, 2010). Altinyelken's study found that pre-service teacher education lacks adequate support that might affect thematic curriculum implementation. It also revealed that lack of proper teacher training in continuous assessment practices obstructed thematic curriculum implementation that could be a setback to effective learner performance. Continuous assessment practice is part of the changes in the RCBE, thus the findings of Altinyelken's study may benefit the current study. Continuous training in disciplinary or teaching and assessment for and for learning practice by teachers is central to effective curriculum management and implementation and may increase academic performance among learners.

Badugela (2012) found that one of the factors against the successful implementation of the National Curriculum Statement presented to Further Education Training (FET) educators at Tshifhena Secondary School in Limpopo Province in South Africa are such as staff development and educators' preparedness. If teachers lack preparedness to facilitate teaching and learning in schools, this may negatively affect the management and

implementation of the revised curriculum, which brings about ineffective academic performance. According to Bhengu and Mkhize (2014), staff development is an important feature of instructional leadership that improves learning and academic performance in schools. Badugela's (2012) study used multiple instruments and tools to collect and generate data, namely questionnaire, interview and document analysis and it focused on one secondary school only targeting FET educators. Revised curriculum management and implementation in Ompundja Circuit may benefit from staff development and teachers' preparedness, which is highlighted in Badugela's study. Professional development enables the agents through capacity building initiatives, which is a feature of instructional leadership.

Lumadi (2014) revealed that teachers feel they did not receive adequate on-the-job training. This is a challenge teacher faced when implementing a new curriculum in the North West and Limpopo Provinces as observed by Lumadi (2014). This is another indication that whenever there is a new curriculum to be managed and implemented, such as the RCBE, the implementers should be given continuous training to equip them with the necessary knowledge and skills that could smoothen the curriculum management and implementation. Continuous workplace training is a zenith of effective teaching and improved academic performance among learners.

Further research by Magongoa (2011), challenges faced by secondary school principals in managing the implementation of the new curriculum in Polokwane Education Cluster are lack of staff development and induction. The purpose of effective curriculum management and implementation is to ensure learners acquire relevant functional knowledge and skills to enable them to survive in life against all odds. Therefore, the induction of novice

teachers to effective curriculum management and implement, which may lead to improved academic performance and learning. Some of the findings from Magongoa (2011) are in line with Lumadi's (2014) findings. The targeted respondents in Magongoa's study were principals only. Both qualitative and quantitative research approaches were used through questionnaires and structured interviews to get information from the respondents. Magongoa's study is limited in educating us on the challenges of implementing a new curriculum because it only involved principals, hence it lacks teachers 'views and experiences. Despite the limitation of Magongoa's study, the managers and implementers of the revised curriculum in Ompundja Circuit have lessons to learn from Magongoa's study.

There are challenges faced by primary teachers, according to Selepe (2016), whose study sought to establish the nature of implementing the curriculum in three Maseru primary schools. Selepe found that teachers reflected some limited clarity on the implementation of an integrated curriculum. Like Lumadi (2014) and Magongoa (2011), Selepe too found that training and development were a challenge to the implementation of the curriculum for most teachers. Selepe's (2016) study is also limited because it only focused on three primary school teachers. There is a need to obtain data from both teachers and principals of basic education public schools in Ompundja Circuit, Oshana Region in Namibia. Curriculum management and implementation must be clear to both teachers and principals to manage and implement the curriculum without fail.

Iita (2014) assessed the Religious and Moral Education (RME) curriculum and its implementation among public schools in the Ompundja Circuit of Oshana Region in Namibia. Iita's (2014, p. 106) study found "lack of pre-service and in-service training for

RME teachers" as one of the constraints hindering the effective implementation of the RME curriculum. In-service training is continuous professional development that enables teachers to improve academic performance in their respective schools while pre-service training provides professional qualification for teachers. The latter contributes to improved academic performance. Although the study focused on the implementation of RME as a subject, the population of the study is the same as the one for the study on the management and implementation of RCBE. So, we may learn some challenges experienced by teachers and principals in implementing the RME curriculum in Ompundja Circuit's public schools.

In the Khomas Region in Namibia, Quest (2014) revealed that principals lacked sufficient Information Communication and Technology (ICT) knowledge due to a lack of continuous training among others. This hampered the implementation of ICT in schools in that region. Lack of training could be linked to a knowledge gap that renders principals not to be able to successfully manage and implement ICT into teaching and learning activities at their schools. Several gaps have been identified in Quest's study. Methodologically, there is a gap because Quest's study has targeted a small sample, thus, its findings could not be generalised to the entire basic education sector in Namibia. Like Makunja (2016), the study by Quest (2014) used a qualitative design of a case study nature. The sample focused only on three secondary school principals from a population of 27 secondary schools. Quest indicated in the study that the findings from the sample of three principals could not be generalised to the entire population. Moreover, there was no triangulation to influence the conclusion drawn. Despite the methodological

shortcomings, the findings of Quest's study could enhance the management and implementation of ICT in public schools in Ompundja Circuit.

Josua (2013) explored the challenges facing school management of an urban inclusive school for learners with visual impairments in northern Namibia. Further, his study found that members of the school management of an inclusive school for learners with visual impairments are faced with a challenge of lack of staff training on how to handle learners with visual impairments in an inclusive school setting. This research, although not directly aligning to the broad basic education curriculum, touched on the implementation of an inclusive education curriculum for learners with visual impairments. Generally, lack of training among staff hinders policies, strategies or programme implementations (Iita, 2014; Quest, 2014; Selepe, 2016). Inclusive education practice is encouraged in RCBE, thus training of staff aimed to enhance inclusive practice may benefit the teachers and principals of public schools in Ompundja Circuit. Training is an important component of instructional leadership that could accelerate transformation.

In order to successfully execute policies, strategies or programme implementations, there is a need to continue training staff to acquaint them with the new ways of doing things. Teacher training is deemed as one of the most important support for teachers. It is crucial for the curriculum management and implementation process. The scholarship output by (see Altinyelken, 2010; Iita, 2014; Josua, 2013; Olateru-Olagbegi, 2015) supports the position that teacher training is a crucial instructional support intervention that enhances effective curriculum management and implementation that ensures effective pedagogic access to learners. Through continuous teacher training and instructional support, teachers

are capacitated to provide pedagogy that is relevant to the community of contemporary learners.

2.4.3 Skills and knowledge

This part discusses the challenges related to skills and knowledge. Syomwene (2013) discusses the factors affecting teachers in the implementation of curriculum reform and education policies in Kenya. Syomwene's study cited inefficient school leadership as another hindrance to curriculum reform and education policy implementations. The inefficiency of school leadership is also attributed to a lack of knowledge and skills. Training, skills and knowledge are interrelated components that could improve learners' academic performance. Knowledge and skills are essential competencies that can be acquired through different forms of training, where teachers and principals in public schools in Ompundja Circuit could profit from the findings of Syomwene's study.

Ayasra (2015) investigates obstacles that prevented the implementation of a science curriculum that was developed within the Education Reform for Knowledge Economy (ErfKE) Project in Jordan. The study found that lack of specialised teachers is an obstacle to effective curriculum implementation in science subjects. Specialisation could further be strengthened through training and further research. Bhengu and Mkhize (2014), as well as Hoerr (2008), indicated that continuous learning among teachers improves student learning. Resultant from lack of specialisation, teachers do not use the modern strategy of teaching science because they do not know them. One cannot teach what they do not have knowledge and skills on. This may contribute to a lack of self-confidence and self-esteem.

Teachers in Ayasra's study were also unable to use laboratories to conduct scientific experiments. Lack of experiments denies learners the opportunity to learn through experiments and identify new knowledge from the observations or reflections. This accession is compatible with the theory of cognitive constructivism. The study by Ayasra is limited to a small sample for science teachers of the basic education setting while this study targets both teachers and principals in public schools in a circuit of education and could bring advantage to public schools educators in Ompundja Circuit. Teachers must be specialised in a subject that they teach so that they provide effective teaching and learning, which improves academic performance. Gone are the days when teachers were made to teach subjects, which they are not professionally qualified to teach.

According to Tubaundule (2014), low general knowledge and understanding of a secondary school curriculum implementation could influence the development and implementation of curriculum change in Namibia. This finding supports the finding of studies by Ayasra (2015) and Syomwene (2013). The revised curriculum is for entire basic education curriculum management and implementation. Thus, it is recommended that teachers should have bold general knowledge and understanding of a secondary school curriculum, which they are going to implement. This could be beneficial to educators, managers and administrators in Ompundja Circuit.

2.5 Challenges related to infrastructure or physical resources

Infrastructural technologies or physical resources play a major role in a curriculum management and implementation process. These are material resources or structural

hindrances or enablers to curriculum management and implementation. Challenges related to infrastructures or physical resources that may affect the management and implementation of the revised curriculum are discussed.

This part cited several studies on the challenges to the curriculum implementation process that are related to infrastructure or physical resources (Agih, 2015; Altinyelken, 2010; Ayasra, 2015; Lumadi, 2014; Magongoa, 2011; Syomwene, 2013). Improved academic performance is enhanced by the availability of relevant physical infrastructures such as classrooms, science and computer laboratories. Quality of infrastructures motivates both teachers and learners who get motivated to improve teaching and learning as well as academic performance.

Physical facilities refer to buildings, equipment and other facilities that aid and promote the teaching and learning process (Agih, 2015). Ayasra (2015) indicated that the lack of laboratories has forced teachers to resort to traditional lecturing methods of teaching. The traditional lecturing method is more teacher-centred, thus; it may deny learners an opportunity to be at the centre of knowledge creation and effective learning through discovery. Lack of laboratories at schools where learners may carry out scientific experiments is a challenge to the implementation of the science curriculum. Lack of infrastructural technologies compromises effective learning and academic performance. It also makes the learning environment unconducive for effective learning that instructional leadership seeks to promote. This may deny learners, in public schools in Ompundja Circuit, an opportunity to learn through experiments, observations and practice. Ayasra's study was carried out in a Jordanian town that may be well developed than the setting of this study in Namibia in Ompundja Circuit.

Altinyelken (2010) and Syomwene (2013) affirm that lack of infrastructural facilities such as the classroom hinders effective teaching and learning, subsequent effective curriculum implementation. Equally, they add that inadequate storage facilities for teaching and learning aids negatively impact any curriculum implementation. Although Altinyelken's study gauged the perceptions of teachers, it empirically included head-teachers, deputy head-teachers and some officials in the education fraternity, as well as academics.

According to Magongoa (2011), one of the challenges faced by secondary school principals in managing the implementation of the new curriculum is the lack of physical resources. Lumadi (2014) explored factors faced by teachers in curriculum implementation and found that internal factors that are negatively influencing teachers in curriculum implementation were such as a lack of laboratories which supports the finding by Agih (2015), ablution facilities, canteens, and libraries. These are necessary structural physical facilities in the provision of effective and quality education. The phenomenology of physical facilities such as classrooms, laboratories and libraries are important resources in education. Effective teaching and learning as well as curriculum management and implementation will be limping if these resources are lacking or poorly used (see findings by Agih, 2015; Altinyelken, 2010; Ayasra, 2015; Lumadi, 2014). The researcher believes that for curriculum to be managed and implemented effectively in Ompundja Circuit the resources should be provided and effectively used. The next section presents challenges associated with teaching and learning resources and their impact on curricula .implementations.

2.6 Challenges related to teaching and learning resources

Teaching and learning resources make up the physical material (structures), which if they are not available they may negatively influence success in curriculum management and implementation. Taole (2015) contented that the availability of teaching and learning resources plays a vital role in the efficient delivery of quality teaching and learning. This part discusses challenges linked to teaching and learning resources in relation to how they affect effective teaching and learning, as well as policies and curricula implementations. Iita (2014, p.105) opines that lack of teaching resources "seriously hinders the teaching and learning of any subject, including RME". Effective teaching and learning cannot take place without the necessary teaching and learning materials (Bamidele & Bakare, 2015; Dzimiri & Marimo, 2015; Tjihenuna, 2015). Teaching and learning resources are detrimental to learners' motivation and academic performance. As long as there are adequate teaching and learning assistive devices and resources, learners are motivated to challenge the subjects that are deemed difficult. The basic education curriculum in Namibia is reformed after every fifth year to align it with skills, values and attitudes needed to keep up with globalisation changes (Nghihalwa, 2018). The basic education graduates need functional attributes especially in science and mathematics that enable them to survive in the 21st century.

Mkandawire (2010) stresses that the absence of teaching and learning materials, as well as the limited procurement and supply of teaching and learning materials, are some barriers facing curriculum managers and implementers. These barriers affect effective instructional leadership practice in schools. The first line of managers and implementers are teachers, head-teachers, standard officers and others who manage and implement a

curriculum in learning institutions (Mkandawire, 2010). A gap in Mkandawire's study, which was passively conducted through desktop and did not source the views of the respondents, but rely on the views expressed in the literature and other secondary sources of information. Lack of teaching and learning resources denies learners the benefits of education. Availability of teaching and learning resources supports student learning and improve academic performance. Once the teaching and learning resources are available, it motivates and increases curiosity among learners that fuels their love to learn and acquire the graduate attributes relevant in their adult life.

Lack of well-resourced classrooms, especially in rural areas, according to Badugela (2012) is identified as one of the challenges to implementation of the National Curriculum Statement. To establish the factors that influence the implementation of the curriculum in public primary schools in Ukwala division of Siaya County, Patius (2014) steered a study that established that a serious shortage of teaching and learning materials were found to negatively impact curriculum implementation. In their study, Dzimiri and Marimo's (2015) found that one of the challenges faced in implementing the localised syllabus is inadequate resources, namely textbooks and instructional media. The multiple tools used in Dzimiri and Marimo's study to collect and generate data may eliminate bias through information triangulation. Shortage of instructional resources such as textbooks puts the effective implementation of the revised curriculum in jeopardy. Deficiency of teaching and learning resources is a structural constraint that infringes on effective learner performance that instructional leadership in schools strives to promote. Most schools in rural settings, as is the case in Ompundja Circuit, have unique challenges related to lack of teaching and learning resources. This puts pressure on to volatile situation teachers and

learners are experiencing in a rural setting. This contributes to demotivation and academic underperformance.

A fieldwork study by Altinyelken (2010) on the implementation of thematic reveals that a limited supply of textbooks, teaching and other learning materials hinders the implementation of thematic, a new curriculum for primary schools, in Uganda. Tjihenuna (2015) raised some concerns about the revised curriculum for basic education in Namibia. One concern is structural in nature that is a shortage of mother tongue textbooks. For instance, learners in the Junior Primary level are expected to use the Mother tongue, or Home language or a local language that is predominantly used as a medium of communication and instruction. Some teaching materials (structures) are still written in English. Shortages of textbooks in all grades from the junior to senior primary level are cited as a concern as well. One-textbook per learner ratio seems to be distant. Shortage of textbooks in Namibia is sometimes blamed on learners' vandalism. Textbooks are effective teaching and learning resources without which may impede the effective management and implementation of the RCBE. Lack of resources such as textbooks in schools contributes to poor academic performance, which brings about perpetual socio-economic inequality. Inequality may result in loss of hope, violence, drug abuse and other social ills witnessed in our communities recently.

Instructional and learning facilities, as well as materials (structural materials) are challenges to members of school management especially at schools practising inclusive education for learners with visual impairments (LVIs) (Josua, 2013). According to Josua (2013), resources such as assistive equipment make LVIs less dependent on their peers and teachers. Findings of this study point to a lack of structures that are facilities and

materials, which intrudes the effective management and implementation of inclusive education for LVIs in a mainstream school setting. If schools that practice inclusivity do not have adequate assistive resources, it puts inclusiveness at risk. Lack of teaching and learning resources and loss of vision generally lead to low self-esteem, lack of confidence and demotivation. These may have a negative impact on student learning and academic performance.

Tubaundule (2014) made findings on the complexity involved in implementing Namibia secondary school curriculum. The study manifested that limited resources could stifle the implementation of the secondary school curriculum. The finding of this study, like all other studies discussed previously under this sub-topic, could enlighten this study because the secondary school phase forms part of the basic education.

Quest (2014) found that there are imbalances in providing Information Communication Technology (ICT) tools between schools in different suburbs in the Khomas Region of Namibia. Some specific ICT resources are such as computers and internet connectivity. Quest's study was carried out in Windhoek, which is the Capital City of Namibia and is likely to have well-resourced schools than rural, semi-urban and urban schools in the Ompundja Circuit in Oshana Region in Namibia. Despite the setting differences, Quest's study could be beneficial to instructional managers (teachers and principals) in Ompundja Circuit in Namibia. In the Otjozondjupa Region of Namibia, Angula's (2015) study found that lack of teaching aids and resources hampered the implementation of the compulsory Mathematics curriculum at the senior secondary level. This study focused on the implementation of a compulsory curriculum of one subject area, Mathematics that is deemed as a gap related to the scope. Unlike the single subject, Mathematics and ICT

curriculum management and implementation, this study focuses on a broad basic education curriculum management and implementation in the Ompundja Circuit of Oshana Region in Namibia thus, could be advantaged by the findings of the studies by Angula and Quest. ICT and Mathematics are part of RCBE, thus if there are no adequate resources to support ICT and Mathematics pedagogical access, then effective ICT and Mathematics implementation in schools is under threat.

Some of the studies reviewed have found that lack of teaching and learning resources is a challenge to the implementation of education policies as well as curricula management and implementation (Angula, 2015; Dzimiri & Marimo, 2015; Iita, 2014; Josua, 2013; Tubaundule, 2014). Teaching and learning resources are important pillars in an education setting, as revealed in studies by (see e.g. Altinyelken, 2010; Angula, 2015; Badugela, 2012; Magongoa, 2011; Mkandawire, 2010) and Ompunja Circuit is not isolated. It can be concluded from the studies that deficiency of teaching and learning materials obstructs effective curriculum management and implementation. Public schools in Ompundja Circuit are no exemption to this claim. The next section dwells on the challenges of curricula management and implementation in relation to financial resources.

2.7 Challenges related to budgetary or financial resources

Archer (1995, 1996 and 2003) refers to lack or availability of financial resources as a structural mechanism that can be enabling or constraining and should be carefully considered in any educational setting. Financial resources are used to acquire teaching and learning materials, to fund training initiatives such as workshops, conferences and

seminars, upkeep of the physical resources such as buildings and procure teaching and learning aids. The availability or non-availability of funds could exert a causal effect on agency and culture. If these resources are lacking, then effective teaching and learning could be in jeopardy and may not be successfully fulfilled. Thus, the following paragraphs discuss the findings of several studies that are reviewed concerning financial resources (Ahmadi & Lukman, 2015; Altinyelken, 2010; Badugela, 2012; Mingaine, 2013; Syomwene, 2013). Schools need money to procure teaching and learning resources and ensuring the upkeep of physical infrastructures. There is more that teachers can do, using alternative teaching and learning resources, without requiring any budget. Thus, teachers and principals should look into finding alternative indigenous resources to fill the gap. There may also be some things in schools that cannot be done without a budget. Once there is no budget, it may derail effective curriculum management, as well as teaching and learning. Therefore, stakeholders in education should think of alternate ways to acquire funds to ensure that the necessary resources are made available.

Syomwene (2013) and Ahmadi and Lukman's (2015) conducted studies, which found that one of the factors affecting teachers in the implementation of curriculum and policies is poor economic growth stemming from the community members' inability to offer financial support towards curriculum reforms and educational policies. Furthermore, inadequate funds allocated to education are another challenge that impedes effective new secondary school curriculum management and implementation. It is worthwhile to advise stakeholders in education namely; parents and business sectors should support schools in kind or financially to add to the budget provided by the government from collecting tax revenues. Schools should also raise funds through entrepreneurial activities.

Dzimiri and Marimo (2015) found one of the most critical challenges that affected the implementation of the curriculum that is related to funds to carry out fieldwork. Fieldwork enhances effective teaching and learning because it brings reality to the theory learned in Geography lessons. Geography is part of the basic education in Namibia. If there are no fieldwork trips, then effective teaching and learning may be endangered. Like the study by Dzimiri and Marimo, other studies (see e.g. Altinyelken, 2010; Mingaine, 2013) found inadequate funding as a hindrance to effective curriculum management and implementation. Mkandawire (2010) indicated that barriers facing teachers, head-teachers, standard officers and others from the successful implementation of the curriculum in learning institutions is limited funding. Badugela's (2012) study found that budgeting and financial constraints are some of the limitations to the implementation of the National Curriculum Statement. Limited financial resources are a structural constraint that could hinder implementing agents to effectively implement a curriculum. Inadequate financial resources are a structural constraint that has a negative effect on how the agents act. In her study, Quest (2014) found that lack of finances hampers the implementation of the ICT into school activities in the Khomas Region, which are likely to be well-resourced unlike the schools in urban and rural settings in the Oshana Education Region, where Ompundja Circuit is located. ICT resources can be costly and if there are no injections of funds, the realisation of effective teaching and learning may be a wild dream and white elephant.

Several studies revealed that lack of finance is a structural constraint that impedes effective curriculum or education policies implementation (Mkandawire, 2010; Quest, 2014). Their findings concretised the importance of financial resources in the

implementation of a curriculum such as the RCBE in Ompundja Circuit. In a nutshell, adequate education funding has the potential to enhance effective teaching and learning in schools. It also raises the academic performance of learners from the low-income category. These tie with the goal of instructional leadership.

One of the additional components of the Revised Curriculum for Basic Education (RCBE) transformation is the inclusion of technical and vocational disciplines. The next section discusses the challenges associated with the implementation of the vocational curriculum.

2.8 Challenges related to the technical and vocational education curriculum

One of the notable changes in the RCBE is the introduction of the pre-vocational, vocational and technical subjects as a new component. The vocational stream is deemed to have the potential to fast-track Namibia to an industrialised nation by the year 2030 as stipulated in Vision 2030. To put the above point in perspective, the Harambee Prosperity Plan (HPP) (2016) stressed that Vocational Education and Training (VET) is "a source of skills, knowledge and technology needed to drive productivity in knowledge-based and transitional societies for the twenty-first century" (p. 44).

Namibia has envisioned being a developed country by 2030 (Government Republic of Namibia, 2004). Thus, VET is one of the pillars through which Namibia can be driven towards the desired standard of development. Technical courses introduced in the basic education curriculum include bricklaying and plastering, electricity, plumbing, and pipefitting, and technical drawing as well as office practice and hospitality subjects (Smith, 2016). Each of the 13 regions of Namibia has a school reserved to offer technical

and vocational subjects. Mweshipandeka Secondary School in Ompundja Circuit in Oshana educational region is designated to offer vocational and technical subjects.

2.8.1 Teachers training in vocational education stream

Several studies, although not entirely related to Namibia's Ompundja circuit context have found training-related challenges that may hinder effective curriculum implementation of the vocational education stream (Bandele & Faremi, 2012; Chikoore & Museva, 2014; Nwiyi & Okorie, 2014; Swanzy, 2010). As stated under 2.4.2, lack of training among vocational subject teachers is a setback because teachers will have limited disciplinary knowledge and skills to share with learners. The same principle applies in vocational discipline because when teachers are not trained they will lack contemporary theories used in the field to improve academic performance.

Bandele and Faremi (2012) found that teachers and instructors are professionally qualified to teach in Technical Colleges. Nevertheless, it is revealed that one of the factors militating against the successful implementation of the Technical College Curriculum (TCC) is the lack of in-service training, which keeps staff on par with contemporary knowledge and skills. Continuous professional training is an instructional leadership feature and cultural enabler of effective vocational discipline curriculum implementation. Instructional leaders should see to it that staff development is maintained, to enable effective development of teachers is maintained and to enable them to produce effective academic performance in vocational subjects. The above standpoint is supported by Kyahurwa (2013), who stated that curriculum management is a demanding task that requires instructional leaders or

principals to be well prepared to enhance effective curriculum management. To emphasise, Kyahurwa (2013) as well as Bhengu and Mkhize (2014) revealed that principals should promote professional development among teachers in various ways to improve learner achievement.

From the position of the school leadership in Ghana, Osei-Asibey (2015) examined the challenges in the implementation of the Technical and Vocational Education Curriculum. This survey found that vocational training in Ghana is faced with several challenges. The curriculum implementation is a challenge due to the low training of teaching staff. This challenge supports findings in other studies (see, e.g., Bandele & Faremi, 2012; Gwembire & Katsaruware, 2013; Tshabalala & Ncube, 2014). Thus, it is advisable to accelerate the provision of training to vocational subject teachers to increase the success of revised curriculum management and implementation.

According to Swanzy (2010), there are challenges in the implementation of vocational and technical education policies in senior secondary schools in the Sekondi/Takoradi Metropolis in Ghana. Swanzy's survey found that inadequate qualified vocational and technological education teachers affect the quality of graduate attributes. The status of not enough qualified instructors is an indication that they have not been trained as vocational and technical education educators. It may also bring teachers that may end up teaching subjects for which they are not properly qualified to teach. This may be disastrous to the call for well-trained vocational experts, who should be equipped with powers and properties to manage vocational pedagogy. They are likely not to deliver graduates with the right graduate attributes. Instructional leaders (teachers and principals) should deploy teachers to teach subjects that they can effectively teach and graduate students with

effective graduate attributes. Further, the study found that under-qualified specialist teachers in vocational or technical subjects are one of the problems that hamper the curriculum implementation of vocational or technical subjects (Nwiyi & Okorie, 2014).

A study by Tshabalala and Ncube (2014) found that schools undergo challenges such as lack of expertise amongst the teachers and inadequate time due to a shortage of qualified teachers. The latter is a result of teachers who teach in other areas who are made to teach vocational subjects. A provision of properly qualified instructors in the fields of vocational education and training should be underlined to ensure that the proper curriculum management and implementation are executed successfully. There is a risk of producing graduates that are not prepared for the task of vocational work, which may derail the country from achieving industrialisation by 2030.

Chikoore and Museva (2014) focused on the obstructions on the trail of implementing technical or vocational education in Zimbabwean secondary schools. Those responsible for the implementation of technical or vocational education are lacking professional development and in-service training (Bandele & Faremi, 2012; Gwembire & Katsaruware, 2013; Tshabalala & Ncube, 2014), refresher courses, workshops and conferences aimed at enriching them professionally. The current study targeted technical and vocational education at secondary schools only. The shortages of adequately trained vocational education teachers may impedes successful management and implementation of technical or vocational education curriculum and derail academic performance among learners.

In the RCBE, the pre-vocational and technical education subjects start at the Senior Primary phase (Grade 4-7), while vocational and technical education is offered in secondary school (Grade 8-12/13). Training is a cultural domain, offered to agents that

make up a structure. Training has the potential to enhance the personal emergent powers and properties of actors so that they invest it in the work of transforming the RCBE curriculum management and implementation. The following sub-section discusses the infrastructure challenges in the vocational education stream.

2.8.2 Infrastructure in the vocational education stream

Studies that investigated the challenges facing the implementation of a curriculum found that equipment (structures) are outdated (Bandele & Faremi, 2012; Idris, et al., 2012; Nwiyi & Okorie, 2014; Tshabalala & Ncube, 2014). Bandele and Faremi (2012) elaborate that there are no standard workshops for practical work. Vocational education requires a balance between theory and practice because the field is practice-based and should maintain a workshop where students could exercise the skills learned from theory. Absence of workshops obstructs the effective management and implementation of vocational education curriculum as well as practice-based learning.

A study carried out by Idris et al. (2012) investigated the implementation of technical and vocational education found that one of the challenges is an outcome of the lack of appropriate facilities. Resource shortage may delay the effective management and implementation of technical and vocational education in post-primary schools in Nigeria. Sharing the same sentiment Kyahurwa (2013,), who alluded that "effective curriculum management is compromised because resources determine how much can be done at any given time" (p. 36). This study may benefit from Idris et al., (2012) since the pre-vocational and technical discipline is one of the major transformations in the RCBE, which

is being implemented in the Ompundja Circuit of Oshana Region in Namibia. If a school has no favorable environment due to a lack of infrastructure both teachers and learners get demotivated and academic performance drops. A school may struggle with qualified teacher retention.

Unavailability of functional infrastructures (structures) such as equipment, instruments and workshops or workrooms were some of the major problems militating against the implementation of a vocational or technical curriculum in a secondary school in Nigeria (Nwiyi & Okorie, 2014). The lacks of infrastructural structures lead to an unfavourable learning environment, which impedes the successful implementation of vocational or technical issues. This is another evidence of the importance of having the adequate infrastructure to enable effective management and implementation of a curriculum. Absence of enough facilities at the workshops derails the implementation of vocational and technical education policies (Nwiyi & Okorie, 2014).

Unavailability of enough facilities at the workshops according to Swanzy (2010) is one of the challenges that derailed the implementation of vocational and technical education policies in senior secondary schools in the Sekondi or Takoradi Metropolis in Ghana. In Zimbabwe's Nkayi District, Tshabalala and Ncube (2014) found that lack of equipment, as well as a shortage of specialist rooms for the practical teaching of these subjects, impedes TVET policy implementation. For any curriculum to be effectively managed and implemented, teaching and learning assistive equipment and specialist rooms where practical could be taught should be provided. Specialist rooms are equivalent to workshop venues where students could put the theory learned into practice. This may cause experiential learning through discoveries. It makes learners active participants in the

construction of knowledge and skills. The next sub-section discourses the challenges related to teaching and learning resources in the vocational education stream.

2.8.3 Teaching and learning resources in vocational education

Several studies have found that lack of teaching and learning resources (structures) obstruct effective implementation of the technical and vocational education curriculum (Chikoore & Museva, 2014; Gwembire & Katsaruware, 2013; Idris et al., 2012; Nwiyi & Okorie, 2014). Principals and teachers should get to the pedestal to drive effective teaching and improve academic performance in vocational discipline amid limited instructional resources.

Inadequate teaching resources such as syllabi, textbooks, teaching aids, workrooms (Nwiyi & Okorie, 2014), tools, consumables, and others were found to be some of the impediments to implementing the Technical and Vocational Education Policy in Secondary Schools in Rural Communities of Rushinga District in Zimbabwe (Gwembire & Katsaruware, 2013). Effective teaching and learning may not take place in the absence of some of these instructional resources. Effective teaching and learning is central in any reformed curriculum. Chikoore and Museva (2014) found that some obstacles related to material resources in technical or vocational instruction were in short supply. Like in the previous paragraph, this paragraph supports the position that teaching and learning hardly take place in the absence of support materials. Lack of appropriate teaching resources is once again one of the challenges found by the study carried out by Idris et al., (2012) to

investigate the implementation of technical and vocational education in Post-Primary Schools in Nigeria. The next paragraph discusses financial challenges in the vocational education context.

2.8.4 Financial resources in the vocational education stream

Some studies that brought out the challenges related to budgetary or financial resources (structure) in a vocational education stream, which impact the execution of the policies or curricula management and implementations are reviewed (Bandele & Faremi, 2012; Swanzy, 2010; Tshabalala & Ncube, 2014). This review is conducted to establish challenges experienced from which the ways to solve the challenges could be deduced.

Bandele and Faremi (2012) revealed that insufficient finance derails effective implementation of the Technical College Curriculum in South West, Nigeria. Deficiency of funds results in a shortage of safety facilities, libraries and instructional materials. Once the fore stated are in limited supply it distances the successful implementation of a curriculum or course of study. Furthermore, Tshabalala and Ncube (2014), who examined teachers' perceptions on challenges and the extent to which rural secondary schools implement the technical and vocational education and training policy in Zimbabwe like Bandele and Faremi (2012) as well as Tshabalala and Ncube (2014) found that implementation of the vocational curriculum is hampered by lack of funds. Shortage of finances is perceived as a challenge to the management and implementation of vocational education and training policy in schools. Their study investigated the implementation of TVET in rural secondary schools only.

One of the highlights of the RCBE is the introduction of pre-vocational and technical subjects in the curriculum. Implementation of the vocational education curriculum is not immune to challenges related to funding as cited in several studies (Bandele & Faremi, 2012; Swanzy, 2010; Tshabalala & Ncube, 2014). In their study, Tshabalala and Ncube (2014) indicate that "schools lack the financial resources to adequately implement TVETs" (p. 014). For effective teaching and learning as well as curriculum management to take place workshops need to be furnished with up-to-date equipment. Swanzy (2010), therefore, claims that additional funding is required to advance the delivery of quality vocational and technical training for teachers.

To conclude, it is necessary to improve funding to enable the proliferation of the offering of technical and vocational education. Increased funding, according to Bandele and Faremi (2012, p. 19), is needed to buy "modern hand tools, equipment, machine, equipped technical workshop; purchase laboratory facilities, furniture and safety facilities". The next section discusses challenges in the curricula management and implementations that are linked to the teacher-learner ratio.

2.9 Challenges related to teacher-learner ratio

Acceptable staffing norms for mainstream schools in Namibia are one (1) teacher for every 35 primary learners while for the secondary learner is 1 teacher for every 30 learners (Ministry of Basic Education, Sport and Culture, 2001b). Teacher-learner ratio is prescribed by policy (structure) and may exert a causal effect on agency and culture. It is found by Nakale (2017), Selepe (2016) to be a hindrance to effective teaching and learning

as well as curriculum implementation in schools. The following paragraphs dwell on a review of studies that are related to the teacher-learner ratio. Some of these studies found that a high teacher-learner ratio interferes with successful curricula management and implementations (Angula, 2015; Makunja, 2016; Mkandawire, 2010; Ogunbiyi, 2012; Tubaundule, 2014).

Makunja (2016) stressed that a high teacher-student ratio and overcrowded classrooms threaten the implementation of a curriculum. This finding supports Nakale (2017) and Selepe (2016). This also leads to overloading teachers. Once a teacher is overloaded, he or she may struggle to meet quality teaching and learning as well as performing curriculum management task. The teacher may not be able to give individual attention to learners that require remedial interventions. In such cases, Makunja (2016) indicates that the biggest number of learners in a classroom is due to limited capacity in classrooms. If the challenge is a lack of classrooms where conducive teaching and learning could take place, stakeholders in education should come up with ways to address the shortage of classrooms or provide support staff, who may not necessarily be teachers.

Selepe (2016) found that the high student-teacher ratio in Lesotho schools denies students' attention from the teacher. Once more, a high teacher-pupil ratio is also found by Ogunbiyi (2012) as one of the problems hindering the implementation of the senior secondary school French curriculum in Lagos State. Mkandawire (2010) revealed that overcrowded classrooms are a result of a population explosion. Effective teaching and learning could be derailed by the high teacher-learner ratio. Teachers may struggle to provide individual attention to support learners with diverse abilities.

Furthermore, Tubaundule (2014) and Angula (2015) established that a high teacher-learner ratio impedes curriculum implementation in Namibian schools. As indicated previously in Namibia, the approved teacher-learner ratio is 1 teacher for every 35 learners for primary schools while for secondary schools is 1 teacher for every 30 learners (Ministry of Basic Education, Sport and Culture, 2001b; Nakale, 2017). Teachers Union of Namibia (TUN), according to Nakale (2017) has threatened the Ministry of Education, Arts and Culture with unspecified action due to the high teacher-learner ratio that is above the national benchmark. Some teachers teach as high as 44 learners per classroom against the prescribed teacher-learner ratio, which undermines quality teaching and learning (Nakale, 2017).

If the teacher-learner ratio is too high in violation of the prescribed ratio, it constrains effective learning and teaching to take place. It also negatively affects learner performance. In an overcrowded class, teachers rely more on the lecturing mode of teaching (culture), which is more teacher-centred (cultural material). Although the lecturing method could be effective in an overcrowded classroom, it impedes interactive as well as social constructive learning. Instead, learners go for rote learning which only enables them to memorise facts for a short period. The next section discusses the curricula implementation challenges that are related to learner support.

2.10 Challenges related to learner support

According to Bojuwoye, Moletsane, Stofile, Moolla and Sylvester (2014) the word "support" carries many meanings and overtones. In this study, the researcher has not been

able to locate a specific definition for the phrase learner support after a rigorous literature review. Smit (2020) arrives at a similar conclusion that no specific defining could be found in the literature consulted.

Bojuwoye et al., (2014), view learning support as an act that assists learners in meeting their academic, social and emotional needs. When providing learner support, educators should recognise the unique abilities of every learner. A learner is central to his or her academic, social and emotional needs despite their diverse abilities. Teachers are supposed to devise differentiated learning support approaches depending on the abilities of a specific learner. Briefly, learner support aims to remove barriers to learning in order to improve academic performance. The researcher of the current study does not expect any surprises on the different understandings of the term learner support as it is displayed in this part. The next section discusses the curricula implementation challenges that are related to feelings and views.

2.11 Challenges related to feelings and views

According to Archer (1995, 1996, 2003), the domain of culture describes the ideas, beliefs, theories, values and ideologies which are demonstrated through discourses used in particular social contexts by the agents at particular times. Here some study findings that relate to feelings and views are discussed. The non-involvement of key stakeholders in the curriculum or policy design and planning serves as a factor that may influence effective education policy or curriculum management and implementation when implementers adopt negative attitudes or perception, which are characteristics of a culture (Ahmadi &

Lukman, 2015; Gwembire & Katsaruware, 2013; Ogunbiyi, 2012; Tubaundule, 2014). Negative attitudes, beliefs and values are cultural constraints to the effective management of curriculum implementation. A source of negative perception has to be addressed to build confidence among the implementing agents so that the curriculum could be implemented and managed with success.

According to Ahmadi and Lukman (2015), one of the challenges confronting the effective implementation of the secondary school curriculum in Nigeria is the non-involvement of key stakeholders (teachers) in the decision-making and curriculum planning. This non-involvement of some implementers in the design of a curriculum influences the attitudes, beliefs and values of these stakeholders towards curriculum management and implementation. Teachers work with students daily and are aware of their shortcomings as well as the challenges of the curriculum (Amunkete, 2020). Therefore, if the teachers are kept out of the process of curriculum design they may develop negative attitudes toward the curriculum that they are going to implement. Ogunbiyi (2012) adds that the senior secondary school French curriculum implementation is impeded by the non-involvement of various groups of implementers in the design and planning of the curriculum. Teachers are implementers yet are often minimally involved in the curriculum design. Their non-involvement in curriculum design may render them a lack of knowledge for the curriculum that they are going to implement.

Gwembire and Katsaruware (2013) found various challenges of implementing the technical and vocational education policy in secondary schools in rural communities in Zimbabwe, and one of them is the non-involvement of technical and vocational subject teachers in the designing of the syllabus or marking examinations. In Namibia,

Tubaundule (2014) found that the lack of involvement of implementers such as teachers in the development of curriculum has a negative effect on curriculum implementation. Exclusion of teachers promoted non-inclusive and undemocratic participation in the design of a curriculum which they are to implement.

A composition of first-line of curriculum managers and implementers is teachers and principals. It is therefore critical to involve them in the design and decision-making process of a curriculum. Their non-involvement results in them disowning the curriculum management and implementation process. It is essential to address how their involvement can be enriched.

2.12 Summary

This chapter critically reviewed various related literature sources that are related to the Revised Curriculum for Basic Education (RCBE) in Namibia. Chapter two discussed and transcended the theoretical framework, which informs this study. It also provided a historical context of basic education curriculum transformation in pre and post-independence Namibia. Additionally, the chapter dwelled on several studies about challenges, obstacles, hindrances, impediments or problems with curriculum management and implementation. Moreover, the challenges identified in various literature indicate that they are complementarily related to teachers training, physical resources, teaching and learning resources, financial resources, technical and vocational education, teacher-learner ratio and as well as feelings and worldviews. Lastly, the review informed the

direction of the research and confirmed the relevance to the theoretical framework for this investigation. The next chapter discusses the research methodology used in this study.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research paradigms that underpin the study and research design used in the study. The research design started with a discussion of mixed methods approach followed by a general description of research setting. A description of a research site and population of the study, sample and sampling techniques, and explains the sampling procedures used in the study. The closed-ended questionnaire and face-to-face semi-structured interview guide that were used to collect and generate data were also discussed. This chapter further discusses the piloting of the research instruments and tools as well as how the refining and modification of the research questionnaire and interview guide was done after the pilot study, data collection and generating procedures and data analysis methods. It also explains the research ethics adhered to during the conduct of the study.

3.2 Research paradigm

Paradigm is derived from a Greek word meaning pattern (Kivunja & Kuyini, 2017) and was first coined by an American, Thomas Khun in 1962 to refer to a philosophical way of thinking. This is a philosophical stance guiding the systematic approaches of scientific research, which rationally emerged from what is called research paradigms. Apart from that, Antwi and Kasim (2015) define the term paradigm as "…and approach to thinking about and doing research". In their scholarly definition, Kivunja and Kuyini (2017) refer to a paradigm as a terminology that implies binocular through which a researcher views

the world. In short, a paradigm is about how a researcher perceives the empiricism of the world and how rationally a researcher interprets and acts within that phenomenological world. A paradigm influences the way an investigator sees and think about the criticality of the chosen research topic and how a scholar determines to persevere in exhausting tedious methodology. There are three common elements and questions, dimensions or characteristics of research paradigms according to Guba (1990):

- Ontology (truth and reality) - What is reality?
- Epistemology (knowledge) - How do you know something?
- Methodology (way/s or methods) - How do you go about finding out?

Over the years, quantitative research methodology has been used to gather information in social sciences such as educational management, which started from the discipline of the natural sciences (Antwi & Kasim, 2015). The origin of quantitative ways of creating knowledge and understanding things stemmed from sciences such as Mathematics, Chemistry and Physics. The methodology relied on the use of observable and numerically measurable variables to create an understanding of what is researched. From the 1980s, qualitative research started gaining momentum and there have been debates about which one of the two methodologies is superior to the other (Antwi & Kasim, 2015). The proponents of these two methodologies could not agree on the two approaches to be used together. Of late, there has been an emerging wave of researchers that advocated for the two approaches to be used together to understand things. This culminated in advocacy for mixed methods research to gain prominence.

3.2.1 Post-positivism

According to Bertram and Christiansen (2014), it is recommended to look at positivism, an earlier approach to research, first before one seeks to understand post-positivism. Positivism and post-positivism are all scientific approaches to research used to understand a phenomenon. The former claims "the world can be known completely" (Bertram & Christiansen, 2014, p. 23). However, the latter claims that human can only approximately come closer to the truth.

Some authors (Antwi & Kasim, 2015; Bertram & Christiansen, 2014; Brink et al., 2018; De Vos, Strydom, Fouché, & Delport, 2011; Kivunja & Kuyini, 2017; Shikalepo, 2021) have debated about the superiority and non-superiority of research paradigms. The staunch post-positivist paradigm advocates belief that numerical observation and experiments should be used to understand human nature but conscious of the critical stance of human factors. The post-positivist paradigm, like the positivism, uses objectivity to understand the process of scientific inquiry of a particular phenomenon where the knower and object to be known are separated so that they do not influence each other. This viewpoint aligns with the quantitative research approach as a way of objective and impartial understanding human nature and behaviours free from bias or human errors. Additionally, Shikalepo (2021) stated that in natural science fields knowledge is discovered using evidence taken from objective scientific measurements and observations. In this study, the first round of data was quantitatively collected from the respondents using a self-administered questionnaire. Thus, one of the research paradigms adopted by this study is a post-positivist philosophical way of understanding things using numerical data, which are rarely influenced by human factors but knowing the critical stance on human factors

(Shikalepo, 2021). According to Bertram and Christiansen (2014, p. 187) post-positivists align with generalizability or external validity that "tend to work with larger samples selected through random or stratified random sampling" to weigh the extent to which the findings from the larger sample can be generalised to a larger population.

3.2.2 Interpretivist or constructivist paradigm

Knowledge is constructed in a social context, where it is premised on subjective interpretations (Shikalepo, 2021). In this study, after the numerical data were interpreted, follow-up interviews with five purposively selected principals to generate in-depth data. Collected in-depth data of human experiences using interviews were analysed using interpretations (Hoosier, 2019). Interpretivist paradigm is also referred to as constructivist. Interviews provided an opportunity to gain an in-depth socially constructed understanding. The assumption is that people create subjective meaning through social interactions to ensure that a revised curriculum is effectively managed and implemented in public schools in Ompundja Circuit. This study, to an extent, also adopted the interpretivist or constructivist paradigm due to the following reasons. According to Rehman and Alharthi (2016), interpretivism or constructivists believe that truth and reality are mentally constructed or created and not discovered through numerical construction. Interpretivists seek to understand how individuals interpret the world around them (Kivunja & Kuyini, 2017). Critics of interpretivism have blamed the paradigm for being unable to yield theories that could be generalised to a larger population as well as subjective involvement of researcher with participants (Rehman & Alharthi, 2016). This

mixed methods study requires a third dimension of philosophical assumption or paradigm, a pragmatic debate, which will be discussed in the next section.

3.2.3 Pragmatic paradigm

The mixed methods make use of the mixture of qualitative and quantitative methods, which links to both positivist and interpretivist paradigm. It is underpinned by the pragmatic paradigm as way to understand social context. However, Shikalepo (2021) refers to pragmatic worldviews as a way to use two or more complimentary philosophical assumptions to understand a social phenomenon. Therefore, this study is underpinned by the use of a combination of quantitative and qualitative approaches. Shikalepo (2021) concurs that "pragmatism strikes the balance between subjectivity and objectivity throughout the research process, resulting in a balanced understanding of the phenomenon being studied" (p. 88).

A combination of these paradigms is associated with natural and social sciences such as education management where instructional leadership is practised. The first dimension is the doctrine of ontology, which is a way of understanding the nature of reality by responding to the question, what is truth and reality. Many phenomenological realities are constructed in a social context. The second dimension is the doctrine of epistemology wherein assumption is about the nature of knowledge. What is the view of truth and reality? The third dimension is the methodology, which is a systematic way of knowing the truth and reality. What are the methods used to know truth and reality? This study used an explanatory sequential mixed methods approach (quantitative and qualitative). Given

the nature of this study (mixed methods approach) and its purpose, a combination of positivist, interpretivism or constructivist and pragmatic philosophical assumptions are combined to complement one another while offsetting the weaknesses that one paradigm may have.

3.3 Mixed methods research approach

Figure 3.1 shows how the explanatory sequential mixed methods design is outlined. A researcher gathered data in two phases. Firstly, the quantitative data were collected by a self-administered questionnaire. Collected quantitative data were interpreted. Secondly, the qualitative data were generated through face-to-face semi-structured interviews. Qualitative data were transcribed and interpreted in the sequence to elaborate on quantitative data collected in the first phase. Figure 3.1 gives a graphical image of the mixed-methods approach used in this study.

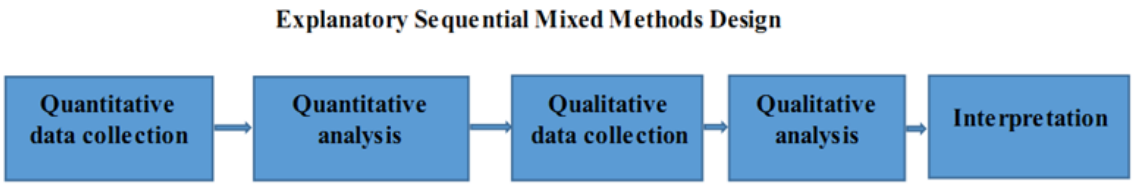

Figure 3.1. Illustration of the explanatory sequential mixed methods design

Mixed-methods approach uses multiple methods in one research project to explore the research question and objective from different angles (Davies & Hughes, 2014; Kumar, 2014). Mouton (2009) stated that the use of multiple methods of data collection in a single study is likely to increase the reliability of the observation. Mouton adds that using

multiple data collection methods allows the methods to complement each other, thus balancing the shortcomings. Using the mixed methods approach, also, escalates the understanding of the research problem.

3.4 Research site and population of the study

This part presents the context of the research starting from Namibia, Oshana Region and Ompundja Circuit. It also discussed the population of the study.

3.4.1 Research setting

Research is conducted on a site. Brink et al. (2018) equate a research setting to a specific location where the data are collected as well as generated. Here a research setting is presented starting generally from Namibia, Oshana Region and specifically Ompundja Circuit.

3.4.1.1 Namibia

Namibia is located in the southwest of Africa. The country has a gross land area of 825 000 square kilometres. According to Namibia Statistics Agency (2011), its population is estimated to be approximately 2.5 million people, which makes it one of the least densely populated countries in Africa and the World with an average of 1.5 people per km². Three-quarters of the Namibian population lives in rural areas.

The map of Namibia is shown in Figure 3.2.

Figure 3.2. Namibian map (SOURCE: EENI Global Business School, 2020)

3.4.1.2 Oshana Region

Oshana Region is one of the fourteen political and geographical regions of Namibia with an area measuring about 8647 square kilometres. The region has about 176 674 inhabitants (Namibia Statistics Agency, 2011). The region is divided into eleven constituencies, namely; Ondangwa Rural, Ondangwa Urban, Oshakati East, Oshakati West, Ompundja, Okatana, Okaku, Uuvudhiya, Okatyali, Uukwiyu wUushona and Ongwediva. Oshana Region is host to three urban settlements, namely Ondangwa, Ongwediva and Oshakati. It shares borders with Ohangwena Region (north), Kunene Region (south), Omusati (west)

and Oshikoto (east). Ompundja circuit is located in the Oshana Region. Figure 3.3 shows the location of the Oshana Region on the Namibian map.

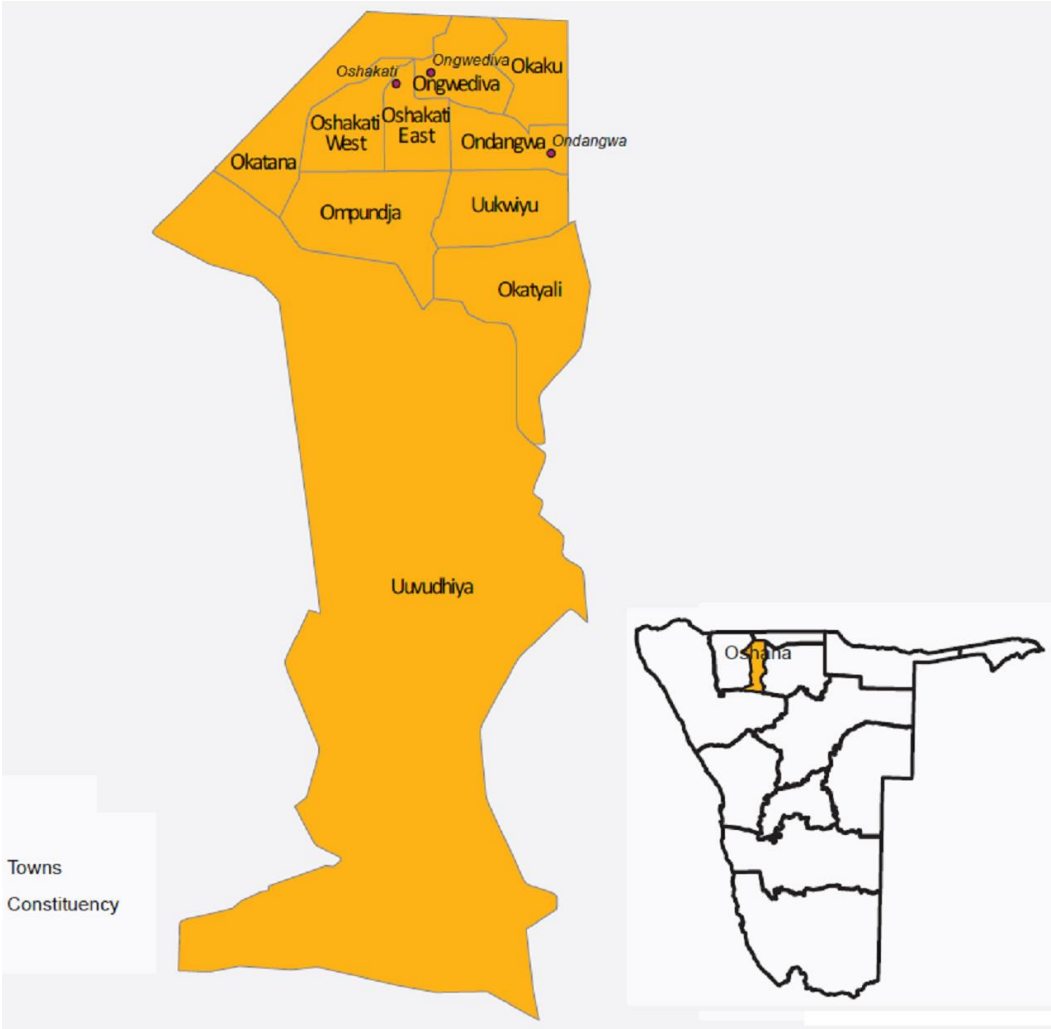

Figure 3.3. Oshana Region map (SOURCE: Namibia Statistics Agency, 2014, p. 7)

3.4.1.3 Ompundja Circuit

Ompundja Circuit is made up of 26 public schools with 409 teachers (382 teachers and 27 principals). The circuit is made up of 14 primary schools, eight (8) combined schools and four (4) secondary schools. Two of the latter have hostel accommodation. A third school with hostel accommodation is a special school (Pre-grade to Grade 10). Eleven schools in Ompundja Circuit were schools in the boundaries of the Ongwediva Town Council while 15 were rural schools. Ompundja Circuit in Oshana Region in Namibia was chosen due to the following reasons: The circuit has schools in rural, semi-urban and urban areas. This circuit is also within the proximity of the researcher. A total of 160 questionnaires were handed out to potential respondents and 120 questionnaires were returned to the researcher, which made up a 75% response rate from the population, which is going to be discussed next.

3.4.2 Population of the study

According to Creswell (2014, p. 160), “a population is a group of individuals who have the same characteristics” of some interest to the researcher. It is used to set the boundaries of the respondents in the study. Target population of this study is all 409 respondents, composed of 382 teachers and 27 principals from the 26 public schools in the Ompundja Circuit. There were 27 principals from 26 public schools in the circuit because there are two principals in a special school, where one principal is responsible for learners with hearing impairments while the other catered for learners with visual impairments. Table

3.2 presents the study population of public schools in Ompundja Circuit, cluster centres and grades offered at each school.

Table 3.2. Public schools in Ompundja Circuit

Cluster centres	Name of schools	Grades offered
1. Gabriel Taapopi	1. Gabriel Taapopi SS	10-12
	2. Charles Anderson PS	Pre-9
	3. Ongwediva Control CS	Pre-9
	4. Kandjengedi PS	Pre-7
2. Mweshipandeka	5. Mweshipandeka SS	8-12
	6. Ekwafo SS	8-12 (from 2021 only 8-11
	7. Ongwediva JSS	8-10 (from 2020, 8-11)
	8. Eluwa Special S	Pre-10
	9. International PS	Pre-7
	10. Shapwa PS	Pre-7
	11. Hashiyana PS	Pre-7
3. Enguwantale	12. Enguwantale CS	Pre-9
	13. Omulunga PS	1-7
	14. Dr. Chief Samuel Ankama JPS	Pre-7
	15. Endombo JPS	Pre-4
	16. Uupeke PS	Pre-3
4. Kapolo	17. Kapolo CS	4-10 (from 2020, 4-11)
	18. Omusimboti CS	Pre-9
	19. Nevonga JPS	Pre-3
	20. Ompundja JPS	Pre-3
	21. Iikuku JPS	1-3
5. Ondjora	22. Omuhama CS	Pre-9
	23. Ondjora CS	4-9
	24. Onekondjelo JPS	Pre-6
	25. Oshinyadhila JPS	Pre-3
	26. Omeege JPS	Pre-3
5 Clusters	26 Public schools	

Ompundja Circuit is one of the five circuits of education in the Oshana Region. The circuit is divided into five cluster centres. There were 26 public schools in Ompundja Circuit, of which 14 were primary schools (Grade 0- Grade 7), eight were combined schools (with both primary and junior secondary 8th and 10th grade or phases), and four were secondary schools. Four of the primary schools and two of the combined schools are located within the boundaries of Ongwediva urban settlement, while ten primary schools are found in rural settlements. The remaining five combined schools are located in rural areas. Four secondary schools range between Grade 8 or 9 to Grade 11 or 12, of which two secondary schools each has no hostel while the other two each has hostel accommodation. All public secondary schools were located within Ongwediva urban settlement. In addition, a special school accommodates Pre-grade to Grade 10 and has hostel accommodation facilities. Overall, eleven schools in Ompundja Circuit are semi-urban schools, within the boundaries of the Ongwediva Town Council, while 15 are rural schools. In clarifying the latter, semi-urban schools accommodate learners from both rural and urban setting.

3.5 Research design

A research design is an overall plan for obtaining answers to the research questions and objectives being studied and a way of handling some difficulties faced during the entire research process (Christensen, Johnson, & Turner, 2011). Komba (2016, p. 77) defines research design as “a framework that specifies how each activity should be conducted to accomplish the research objectives”. The above definitions mean that a research design is a plan or strategy that is used to accomplish the set research goals. In other words,

researchers aim at discovering new knowledge and add it to the existing body of knowledge as a valuable academic contribution. As long as the plan is clearly presented, it serves as a guide to the readership to comprehend the entire research from introduction to conclusions.

Given the purpose of this study, research questions and objectives, as stated in Chapter 1, this study adopts a Mixed Methods Research Design, the QUANTITATIVE→Qualitative (QUAN→qual) to generate quantitative data from Sections A to C of the questionnaire and qualitative data from a follow-up semi-structured interview guide. A QUAN→qual design is also known as an Explanatory Sequential Mixed Methods Research Design (Mills & Gay, 2016). Explanatory Sequential Mixed Methods research approach is a research design where a combination of quantitative and qualitative methods is used to collect and generate data as well as to analyse data in a single study to understand a particular research problem (Creswell, 2014). The process started with collecting quantitative data. After the quantitative data were collected, they were interpreted. Qualitative data were generated after the quantitative data were interpreted. Interpretation of the quantitative data and qualitative data are converged to write up a research report. It is assumed that collecting and generating data through a mixed-methods approach "enhance the accuracy and meaningfulness of your conclusions" (Kumar, 2014, p. 19). This study used an Explanatory Sequential Mixed Methods Research Design.

Researcher consciously recognised that no single method is sufficient in gathering valid and reliable data and in answering the research questions and objectives posed at the beginning of this study (Creswell, 2005). Consequently, this study used a combination of two research designs. Firstly, data were collected using the Likert scale questionnaire. Secondly, a semi-structured interview guide was employed as a follow-up way of

generating data to supplement the initial data collected through questionnaires. The combination of the design and instruments eliminated the shortcomings found in one design and instrument to enable triangulation of data gathered.

3.5.1 The quantitative approach and methodology

In this study, the first round of data was quantitatively collected through closed-ended questionnaires. According to Mills and Gay (2016, p. 24), quantitative research is "the collection and analysis of numerical data to describe, explain, predict or control phenomena of interest". In this study, a quantitative method is used first to collect data through a self-administered questionnaire. Descriptive quantitative research is used first to gather quantitative information from a sample of research participants large enough to give statistically meaningful information (Mills & Gay, 2016). In the opinion of a researcher, it is ideal to gather quantitative evidence first and do cross-reference with the qualitative data, which will be collected, to establish if there is a correlation in the findings. In this study, the quantitative data were collected separately and the data analysis was done separately as well.

3.5.1.1 Sample and sampling procedures for quantitative approach

According to Mills and Gay (2016, p. 31), the sample refers to "individuals selected from a population for a study". A sample is a representative portion of a population. The sampled respondents and participants have similar characteristics as that of the population. Multistage sampling was used to select the sample of the study. Public schools in

Ompundja circuit were divided into the following three strata: 14 primary schools (Pre-grade or grades 0-7), eight combined schools (grades 0-12) and four secondary schools (grades 8-12). The sampled schools from the strata consisted of one urban and two rural primary schools (Pre-grade or Grade 0 - 7), one urban and two rural combined schools with grades ranging between Pre-grade or Grade 0 to Grade 12. Two of the sampled secondary schools have hostel accommodation while one located in a semi-urban area has no hostel accommodation.

Stratified random sampling was used to select nine (9) schools (three schools each from each stratum) from the three strata of primary, combined and secondary schools in the Ompundja Circuit. The nine (9) schools were selected because they represented 35% of the sum of public schools in the circuit. Pieces of paper with the names of schools were put in a fishbowl and it was shaken up to mix the papers. A person was asked to randomly make three draws from the fishbowl until the schools were enough. The paper picked represented the name of a selected school that formed a part of the sample. The selected schools represent 35% of all 27 public schools in the Circuit. In a stratified random sample, a population is split up into strata and a random sample is taken from each subgroup (Fink, 2014).

From each stratum of a school phase (primary schools, combined schools and secondary schools) respondents from urban and rural schools were selected using simple random sampling, where every member of the population had an equal chance of being selected (Cohen, Manion, & Morrison, 2011; Fraenkel, Wallen, & Hyun, 2012). Further, Fink (2014) stresses that through simple random sampling, a probability sampling; every member of the target population has a known chance of being admitted in the selected

sample. Thus, the simple random sampling techniques were used to get a sample of 120 respondents, which is inclusive of teachers, Heads of Departments and principals. In the second round of data-generating through follow-up interviews, five principals were purposively selected from the three strata.

Brynard, Hanekom and Brynard (2014) indicate that for a population of 500 a researcher could select a sample size of 25% or 30% respondents. In this study, the 120 respondents made up 29% of the 409 population members of the respondents of this study. All these respondents completed a closed-ended questionnaire in the first round of data collection.

3.5.1.2 Data collection questionnaire and how it was developed

This part discusses an instrument used during the quantitative data collection process. Quantitative data were collected using the closed-ended questionnaire.

This study used a self-developed questionnaire, which the researcher developed after an in-depth literature review. Self-administered questionnaire (*see Appendix G*) with three (3) sections was used to collect data that gauge the perception of the teachers and principals of public schools on the implementation of the RCBE in Ompundja Circuit. Hard copies of questionnaires were handed to the respondents at their respective schools. Although the self-administered questionnaire prevents bias from the researcher one of its shortcomings is that it did not allow the researcher to explain questions to respondents.

Section A had questions that asked the background of the respondents, such as age category; gender, the position of respondents, whether their school offers vocational

subjects. This section also asked participants the location of the school, years of teaching experience, phase of their school, highest professional qualification, offering of training, the usefulness of training, duration of the training and whether the respondents have a revised curriculum document or not. Section B and C were 5-point Likert scale where each item was rated as “Strongly Disagree”, “Disagree”, “Neutral”, “Agree” and “Strongly Agree”. According to Leedy and Ormrod (2013, p. 192), the Likert rating scale “is more useful when a behaviour, attitude, or phenomenon of interest needs to be evaluated on a continuum of, say, ‘inadequate’ to ‘excellent’, ‘never’ to ‘always’ or ‘strongly disapprove’ to ‘strongly approve’. The questionnaire is guided by the research questions outlined in Chapter 1 (1.4.1). A researcher was a non-participant in the process of answering questionnaires.

A questionnaire has both weaknesses and strengths. One of the weaknesses, according to Bell (as cited in Tshabalala & Ncube, 2014), is that it may invite respondents to lie and answer questions vaguely. These anticipated shortcomings were mitigated through pilot testing of the questionnaire. Contrary, according to Chawawa (as cited in Tshabalala & Ncube, 2014), a questionnaire has strengths because it may increase reliability due to impersonality.

The researcher outlines how the questionnaire of this study was developed. After the researcher wrote a concept note in the area of interest a process of extensive review of related literature was conducted. After the literature review, the researcher identified themes and developed research questions and objectives. These themes from which a questionnaire was developed are extracted from the following sections of the literature review. The themes are taken from challenges related to training and professional

development (see 2.4), infrastructures/ physical resources (see 2.5), teaching and learning resources (see 2.6), funding or financial resources (see 2.7), vocational related education (see 2.8), teacher-learner ratio (see 2.9) and learner support (see 2.10). The final theme is taken out from challenges related to teachers' attitudes and perceptions (see 2.11). These themes used to establish to how they impact revised curriculum implementation in public schools in Ompundja Circuit.

The statements of the Likert scale questionnaire were developed. The closed-ended research questionnaire is divided in three sections, which "limit the answers to options by the researcher" (Brink et al., 2018, p. 141). The draft questionnaire was discussed with supervisors to ensure that ambiguous questions/statements are removed Bertram and Christiansen (2014) and Brink et al., (2018) before it was taken to a statistician and an SPSS expert to assess if the questionnaire can be interpreted statistically with SPSS tool.

The question was piloted to a small sample before it was given to the respondents to complete (Bertram & Christiansen, 2014). These pilot study respondents are taken from the same population but did not form part of the actual study. This process enhanced the quality of the questionnaire and allows changes to the questionnaire before the data collection starts (Brink et al., 2018). This process, in agreement with Bertram and Christiansen (2014), ensures that the questionnaire did not deviate from the focus of the research question while aligning the statements in the questionnaire with purpose of the study. One benefit of a closed-ended questionnaire, it elicits easy to analyse factual information (Brink at al., 2018; Kumar, 2014). Bertram and Christiansen (2014) and Kumar (2014) refer to some shortcomings of closed-ended questionnaire such as lack of depth, investigator bias, conditioning of thinking due to patterning of questions.

Additionally, Brinket al. (2018), also identified some drawbacks are such as limited response options and neglect of some significant potential responses. In the end, the researcher with detailed literature review and guidance from the supervisors designed the questionnaire.

3.5.1.3 Ensuring validity and reliability

Validity and reliability of the research instrument that was used to collect quantitative data during this study are discussed here. The discussion starts with validity and then reliability.

Validity refers to the extent to which a measurement instrument measures what it was intended to measure (Kumar, 2014). An instrument might be declared to have no validity if the difference between repeated studies is huge. In this study, validity was established as follows: firstly, face validity was done when the questionnaire was piloted with population members with similar characteristics as the respondents in the actual study. Pilot study contributed to face validity, which "refers to the degree to which a test appears to measure what it claims to measure" (Mills & Gay, 2016, p. 187). Furthermore, experts were asked to make an intuitive judgement on the questionnaire (Brink et al., 2018). Secondly, different articles from other countries, similar to this study were reviewed to look at different questions used to establish content validity. Content validity refers to whether the measure, test, or question on the instruments such as a questionnaire covers the intended area (Check & Schutt, 2012; Mills & Gay, 2016). The questionnaire for this study was subjected to content validity to ascertain that it is relevant to the purpose of the study. In a nutshell, content validity is ensured when a questionnaire was developed after

a thorough review of related literature. Expert opinion of supervisors and the review of related literature were used to ensure content validity. Construct validity was determined by subjecting the questionnaire to factors analysis. The development instrument is often based on the researcher's claim cardinally hinged on literature review (Brink et al., 2018). Lastly, the respondents during the pilot study were asked to comment on the questions that they did not understand as well as give suggestions for any possible changes.

Bertram and Christiansen (2014) define reliability, as the extent to which a research instrument can be repeated with the same group of respondents and still produce more similar results. Reliability refers to the accuracy or precision of the findings of a study. Reliability of the instrument was assessed using the pilot study. Cronbach's alpha coefficient was used to test the reliability of the Likert scale questionnaire and measure internal consistency (Brink et al., 2018). Maree (2016) gave the three categories of degrees of internal consistency of Cronbach alpha coefficient as follows:

- 0.90 – high reliability,
- 0.80 – moderate reliability and
- 0.70 – low reliability

The score for the Cronbach alpha coefficient in this study is 0.925, which indicates that the questionnaire's internal reliability is positive, thus; high degree of reliability. This contributed to the reliability or consistency of the instruments. In the context of this study, Cronbach alpha coefficient was used to measure how reliable is the factor analysis for all items together. The factor analysis measured whether the questions to the respondents aligned with the construct that is being measured. In order to determine the construct

validity, the factor and items analysis were carried out (Maree, 2016). Furthermore, Maree reasoned that the factor analysis determined the line of items that should be grouped so that similar factors are measured. This Cronbach alpha coefficient is valuable to develop a questionnaire that scales respondents' attitudes. It was calculated for the constructs identified in the factor analysis to measure the reliability of the questionnaire, to weigh how accurate it measured what is being measured.

3.5.1.4 Pilot study and modification of questionnaire

Questionnaire was piloted with teachers of public schools from Ompundja Circuit that did not form part of the actual study. The piloting aimed to determine whether the questionnaire would elicit anticipated responses. According to Leedy and Ormrod (2013, p. 112), "a pilot study is an excellent way to determine the feasibility of the study". The researcher conducted a pilot study on selected respondents from public schools in the Ompundja Circuit, who had similar characteristics as that of the targeted sample of the actual study. Davies and Hughes (2014) explain that a good draft of the research instrument should be tested on subjects as similar as possible to those targeted in the main study. These respondents in the pilot study did not form part of the actual sample where data was collected and generated. The sample of the pilot quantitative study consisted of eleven respondents from two public schools in Ompundja Circuit.

Before the questionnaires were administered for the pilot study, the purpose of the study was explained to all respondents. The respondents were asked to identify questions they had difficulties understanding. They were also asked for comments and suggest how best

the questionnaire could be rephrased to yield the necessary information and inform adjustment by the researcher. The researcher interpreted data and checked for the unexpected answers that may have occurred because of possible misinterpretation of questions. The process of modifying the research instrument is going to be discussed in the next paragraphs.

Pilot study was conducted from 11th to 22nd February 2019. Face validity was ensured. Before the questionnaire was piloted, it was given to two different experts, a statistician and a computer system administration network lecturer to determine whether the data to be collected could be analysed using the SPSS. One of them responded as follows: "*I went through the questionnaire; the questions are straightforward and can easily be quantified using SPSS or any other tool.*" After that, the researcher, distributed the questionnaires to respondents to fill them in and asked them to make comments regarding the questions that they find vague and tautological. Content validity refers to whether the instrument such as a questionnaire covers the intended area (Check & Schutt, 2012; Mills & Gay, 2016). The questionnaire for this study was subjected to content validity to ascertain that it is relevant to the purpose of the study. Expert opinion of supervisors and the review of related literature were used to ensure content validity.

Results from the questionnaire revealed that the instrument was valid and reliable. The researcher had to slot in the changes suggested by the pilot study respondents, which contributed to face validity. Some of the questions that were misunderstood were restructured or omitted completely from the questionnaire. This enabled the pruning of the questionnaire, which was left only closed-ended questions.

3.5.1.5 Quantitative data collection procedures

Johnson and Christensen (2012, p. 195), clarify the method of data collection as a "technique for physically obtaining data to be analysed in a research study". Upon obtaining the ethical clearance (*see Appendix A*) and permission from the Director of Education, Arts and Culture in Oshana Region (*see Appendix C*), the process of collecting data was carried out without disrupting the teaching and learning activities in the schools.

Before data collection and generating started, the purpose of the study was explained to the respondents and participants and an Information Letter as well as Consent Form for the actual study (*see Appendices E and F*) was signed by each respondent and participant to indicate their willingness to participate in the study. Prospective respondents participated in the study; the description of all the features of the study that might influence their choice to participate was provided (Johnson & Christensen, 2012). Before handing the questionnaires to respondents, the researcher had a session with respondents to explain the nature of the study. Quantitative data collection began with the filling of close-ended questionnaires by all participants (*see Appendix G*).

Respondents were expected to complete the questionnaire the same day they were brought to their school, but this did not happen because they felt they needed enough time to complete the questionnaire. The questionnaire was planned to take about 40 minutes to complete. Respondents were asked to hand the completed questionnaires to the principal where they were collected by the researcher after two days. After collecting the completed questionnaires, the data collected were fed into computer software, Statistical Package for the Social Sciences (SPSS) to meticulously analyse them. After the quantitative data were

analysed, the researcher went back to the field to generate the second round of data using a semi-structured interview guide (*see Appendix H*).

3.5.1.6 Quantitative data analysis

This part sketches how the information gathered from a questionnaire were interpreted. In other words, data analysis is about making meaning of what the data are trying to tell. In this study, quantitative data were analysed separately. Data analysis started with a report on quantitative results and before proceeding to generate qualitative data (Creswell, 2014). Quantitative data were analysed descriptively using SPSS and are presented in the forms of charts, tables, graphs and percentages.

3.5.2 The qualitative approach and methodology

A second round of data was qualitatively generated using the semi-structured interview guide. Mills and Gay (2016) define qualitative research as "the collection, analysis, and interpretation of comprehensive narrative and visual data to gain insights into the particular phenomenon of interest" (p. 25). Qualitative approach used in this study investigated the quality of a phenomenon and enabled the researcher to get the experiences of participants on the challenges experienced with the implementation of the RCBE in Ompundja Circuit as well as how to address the identified challenges. This approach describes the phenomena from the participant's point of view (De Vos et al., 2011). It also gave an in-depth understanding of the phenomena.

3.5.2.1 Sample and sampling procedures for qualitative approach

In the final round of data-generating, five principals from public schools were purposively selected for an individual interview. Purposive sampling, a non-probability sampling, was used to ensure the study gets in-depth information from principals due to the professional role they play in schools (Cohen, et al., 2011). Five principals are selected as follows: two principals of primary schools, one each from a rural and urban school, one combined school principal, which is within an urban setting and the two principals of secondary schools from urban vicinity. One of the secondary schools has hostel accommodation for learners while the other one does not have hostel accommodation. Principals were sampled because of the wealth of knowledge they possess by virtue of their professional roles in schools (Brink, et al., 2018; Cohen, et al., 2011).

3.5.2.2 Data generating interview guide

This part discusses a tool used during the qualitative data generating process. Qualitative data were generated using a semi-structured interview guide.

Interviews involve the interviewer or researcher generating data from the participants Johnson & Christensen, 2012). In this study, the semi-structured interview guide (see Appendix H) was used to generate data that could not be obtained through a questionnaire. Face-to-face interviews were conducted with individual participants in the comfort of their work environment. An interview guide had eight open-ended questions; however, the interviewer posed additional probes. According to Fox and Bayat (2013), probing

encourages research subjects to reflect deeper on events experienced by them. It also empowers the researcher to prompt the participants for clarity or additional information (Johnson & Christensen, 2012). Leedy and Ormrod (2013) state that semi-structured interviews enable the researcher to ask for clarification through individually tailored questions; however, the researcher may follow the standard questions.

Interviews, in general, enabled the participants to add meaning and elaborate points. Interview allows the researcher to enter another person's world to comprehend that person's inner perspective to outward behaviours. Although there was a list of questions on issues to be explained, the interviewer was free to probe for further elaboration on a particular subject. Like in questionnaires, the interview questions were guided by the research objectives outlined in Chapter 1, (1.4.2). The interview guide had two sections. Section A dealt with a brief introduction to the interview before asking participants about critical challenges experienced by teachers and principals of public schools in the process of managing and implementing the RCBE. When the participant identified a challenge, they were asked to suggest a possible way to address the identified challenge. In Section B, the participants were equally asked to share their views or opinion, advice or suggestions on the challenges experienced by teachers and principals of public schools when managing and implementing the revised curriculum for basic education in Ompundja Circuit and how these challenges can be addressed.

Researcher with guidance from the supervisors and after a robust review of literature designed the semi-structured interview guide that was used to generate qualitative data. An interview guide directed the interview rather than dictating it (De Vos et al., 2011).

3.5.2.3 Ensuring trustworthiness

Rigour is used in qualitative research to indicate how desirable and appropriate is the method used to address the research objective. For the research design to have a high standard of worthiness, it should address credibility, confirmability, dependability and transferability (Mills & Gay, 2016). Whenever these four criteria are met in qualitative research, it evaluates the worthiness of research. Differently put, trustworthiness is a degree to which we can trust and depends on the findings of qualitative research. These criteria will be elaborated on in the next discussion.

Credibility - Credibility looks into the philosophical essence of consistency and cohesiveness of the research findings, which can be ensured through the triangulation of data. In this study, the data was triangulated by using a questionnaire and an interview guide. Data have been generated for over a month (prolonged engagement) where the researcher held a face-to-face meeting with potential participants to explain the process before conducting interviews with principals. The prolonged engagement with the participants increased report, which enable participants to volunteer sensitive information that they could have withhold at the beginning of the data collection process (Chilisa, 2012). Interviews were followed by an immediate transcription of the interviews.

Confirmability - Confirmability relates to objectivity (De Vos et al., 2011). In this study, the researcher can admittedly say that a long professional acquaintance with most of the participants who formed part of the sample of this study is maintained. Data is shared and discussed with the team of supervisors who provided audit and expert input.

Dependability - In qualitative research, dependability is equivalent to reliability (Chilisa, 2012). This was done with the assistance of supervisors and various critical readers who ascertained that the congruency in data-generating, findings of the study and data analysis was maintained. The researcher did some reflexivity and used triangulation. There is dependability when an outsider can establish that the data communicates what the researcher claims they say (Shank, 2006).

Transferability - Lincoln and Guba (1999) cited in De Vos et al., (2011) propose transferability as an alternative to external validity or generalisability to establish whether the findings of a study are transferable to a different context, setting or population. Qualitative research does not seek to make generalisable findings like quantitative research. It is meant to describe a phenomenon and see if there is a relationship between the findings of the other studies. The process is adequately described in detail to enable the reader to decide whether the process can be transferred to another research setting or population.

3.5.2.4 Pilot study and modification of interview guide

Interview guides were piloted with two principals of public schools where the questionnaire was piloted. Participants in the pilot study did not form part of the actual study. The piloting aimed to determine whether the interview guide would elicit anticipated responses from the participants. Kumar (2014) refers to a pilot study as a small-scale feasibility study that is undertaken to decide if it is worth carrying out a complete study. Thus, a researcher conducted a pilot study on selected participants of

public schools in the Ompundja Circuit of the Oshana Region, which had similar basic characteristics to the targeted sample in the actual study. The process of modifying the research instrument is going to be discussed next.

Piloting of an interview guide through interviews took longer than the anticipated 35 minutes. It was decided to re-structure the questions to align them with themes as they appear in the literature review (see Chapter 2). These themes are as follows; teachers training, infrastructures or physical resources, teaching and learning resources, funding or financial resources, vocational related education, teacher-learner ratio, learner support and teachers' feelings and views about the revised curriculum management and implementation. To allow a clear understanding of some of the questions, probing questions were used depending on the responses from the participants. Interview guide was changed according to the comments by the participants and on the advice of the supervisors. A guide was altered and refined to assist the researcher to gather the information that sufficiently responds to the research objectives.

3.5.2.5 Qualitative data generating procedures

Interviews were a follow-up on the findings of the first data collected through questionnaires and only involved principals who were purposively selected. A similar ethical procedure such as the one employed during the data collection with the questionnaire was followed during the interview sessions where an Ethical Clearance Certificate and a letter from the Director of Education, Arts and Culture were presented to the respondents and participants before the data generating process started (*see*

Appendix A and Appendix C). The process of collecting data was carried out after teaching and learning activities. This was done to ensure the teaching and learning activities were not interrupted. The interview process took about 35 minutes. All interviews were tape-recorded and transcribed after all interviews were completed.

3.5.2.6 Qualitative data analysis

Qualitative data obtained through a semi-structured interview were analysed using the following steps of content analysis. Qualitative content analysis is described as "a research technique for making replicable and valid inferences from texts to the context of their use" (Krippendorff, 2013, p. 24). The researcher listened to the interviews from the recording device and transcribed them word-by-word. The researcher read and re-read the transcriptions carefully several times to obtain a sense of the transcribed notes while jotting down the ideas that come to mind. Researcher reads the individual interview transcripts to make sense of what the participant was talking about, which was written down on the margin. After reading all the interview transcripts, the codes were assigned to themes using a *priori* or pre-existing coding. Codes were developed before scrutinising the current data (Johnson & Christensen, 2012). A coding process started from the process of reviewing pieces of literature. Researcher assigned each topic with code and wrote codes next to appropriate categories while determining if new codes and categories emerged. Researcher found words that described the concept and altered them into themes. Researcher decided on the abbreviations for single categories and alphabetised the codes. Researcher arranged data according to categories and does preliminary analysis. Lastly,

the researcher went through materials several times to arrive at the concluding set of categories.

Responses were presented in report form and, in most cases, direct quotes were recorded to support some responses appeared. At the end of the responses to every interview question, summary interpreting items that appeared more often in the responses were written. This process yielded themes and categories from which the meaning of the participants' views was extracted.

3.6 Research ethics

Consideration of ethical issues during the entire process of conducting this research is meticulously discussed. A principal importance of research ethics is to make certain the protection and welfare of the research participants are guaranteed. Generating data by interacting with people lead to ethical issues to arise (Brynard et al., 2014). These are such as taking caution to avoid harming anyone and respecting respondents as well as participants' privacy among others. Before the researcher embarked upon the process of data collection and generating, an Ethical Clearance Certificate was obtained from UNAM Research Ethics Committee (UREC) (*see Appendix A*).

Ethical Clearance Certificate was used to get a permission letter to enter the research site from the Director of Education, Arts and Culture in Oshana Educational Region. The letter of permission (*see Appendix C*) was electronically mailed to the Inspector of Education, Arts and Culture of Ompundja Circuit indicating that permission to enter the research site to collect and generate data was obtained. After the Inspector of Education was informed,

the researcher visited schools to explain the purpose of the research to the participants and hand the questionnaires to the respondents.

A researcher, also, ensured that respondents and participants were equally prevented from any harm, breach of confidentiality, improper use of information and exposure to any form of bias (Kumar, 2014). Lastly, the researcher promised to share the report of the study with the regional office of education in Oshana Region and UNAM Library.

3.6.1 Invasion of privacy

To protect participants against the risks of invasion of privacy, the researcher ensured that the overarching principle where participants had to give informed consent was strictly respected (Gray, 2014). Further, the researcher had the right to generate data through interviewing participants; however, these rights did not trespass into the privacy of the interviewees. Participants were treated with dignity, integrity and confidentiality.

3.6.2 Loss of confidentiality and anonymity

Although there were responses that the researcher may have linked to a given person's response, such responses, as well as the identity of participants, were not made public. In order to assure participants' confidentiality, their real names were not used in the research report. Instead, pseudonyms were used in the research report to represent participants'

names. This was to ensure that anonymity for the natural person was maintained throughout the study.

3.6.3 Physical and psychological harm

Participation in the study was done voluntarily and subjects could leave the research anytime they wish. A researcher ensured that no respondent or participants would be injured because of this study. There was no application of coercion or external constraints used to obtain data from respondents or participants. For example, the study did not engage the research subjects in any harmful activities apart from completing the questionnaire or responding to the interview. The information shared in this report may not cause any physical or psychological harm. Respondents and participants were asked to sign an Informed Consent Forms (*see Appendix E and F*). Cohen et al. (2011) refer to informed consent as the freedom to participate in research. Cohen et al. (2011) identify four technical aspects that are discussed as follows:

- **Competence:** Potential subjects were competent enough to make independent and mature decisions about participating in the study.
- **Voluntarism:** Subjects were given the freedom to choose to participate in the study without cohesion. If there were risks involved, the researcher ought to reveal them.
- **Full information:** Participants were furnished with relevant information about the process of research.

- **Comprehension:** Subjects were made to understand the entire research process as well as what was expected from them so that they were able to make an informed decision about their involvement.

All these aspects were followed throughout the period of the scholarly dissertation.

3.6.4 Voluntary participation

A researcher must not try to engage in deception about the nature of the study (Creswell, 2014). The researcher clearly explained, as far as possible, the true purpose of the study. Respondents and participants were informed that their participation in the study was voluntary and they were free to withdraw from the study anytime.

3.6.5 Storage of data

Data gathered are to be stored for five years in different forms as follows:

- Questionnaires and recordings of the interviews are to be stored in a sealed box that is kept in a safe place, to which only the researcher has access.
- Interview transcripts and recordings were scanned and saved on Google Drive, accessed only through a password only known by the researcher, while the hard copies were destroyed by shredding.

3.7 Summary

In this chapter, the researcher presented the scientific methods and processes followed in designing the study. The research paradigm, research design, population, sample and sampling techniques, research instrument and tool, the pilot study, as well as the modification of instrument and tool after being piloted, data collection and gathering procedure, data analysis, and ethical consideration are presented. A study population of 409 is made up of 382 teachers and 27 principals. A multi-stage sampling was used first to get the three schools from each stratum of the schools (primary schools, combined and secondary schools). Simple random sampling was used to select the 120 (29%) participants for the first phase of data collection. The 120 respondents represented 75% of the return rate of the questionnaires handed out.

Finally, purposive sampling was used to select five principals for a follow-up interview. Questionnaires and interview guides were used in the study. They were piloted, modified before data collection, and generating. Quantitative data were interpreted using SPSS to produce graphs and tables and percentages while the content analysis was used to interpret the qualitative data. This chapter also presented the ethical protocols followed to minimise any physical or psychological harm to the research subjects. The chapter is concluded with a summary. The next chapter discusses the presentation and analysis of data.

CHAPTER 4: PRESENTATION AND ANALYSIS OF DATA

4.1 Introduction

In this chapter, construct validity of a questionnaire is assured because the instrument measures what it is intended to measure. This is verifiable when the results from the questionnaire are compared with the findings discussed under various themes in a literature review chapter (see Chapter 2, from 2.4 to 2.11). This chapter presents and analyses the quantitative data collected through questionnaires. It presents the biographical information of the respondents. Equally, it provides information on the perceptions or views of respondents on the status of public schools in Ompundja Circuit concerning challenges experienced when implementing the revised curriculum. It also presents the status of how the challenges in the implementation of the revised curriculum for basic education could be addressed to ensure a successful implementation in the circuit. In the data presentation chapter, the data from the five-point Likert Scale (Strongly Disagree, Disagree, Neutral, Agree and Strongly Agree) were presented in graphs and charts with a brief elaboration in words. The Strongly Disagree and Disagree responses are presented as disagreeing; Neutral remained neutral while Agree and Strongly Agree were presented as agreeing. Qualitative data was generated through interviews with principals about the encountered revised curriculum management and implementation challenges, and thus suggest ways on how to effectively address the identified challenges as they are presented.

4.2 Presentations of the biographical information

Firstly, the biographical information of the respondents is presented here. This includes age category, gender, the position of respondents, whether respondents' school offers vocational subjects, location of the school, years of teaching experience, phase of their school, highest professional qualification, offering of training, the usefulness of training, duration of the training and whether the respondents have a revised curriculum document. Secondly, the status of the challenges experienced by teachers and principals during the management and implementation of the RCBE in the Ompundja Circuit of Oshana Region is presented. Lastly, the section presents how challenges of execution of the revised curriculum for basic instruction can be addressed to assure successful management and implementation.

4.2.1 Age categories of respondents

A Bar graph is the presentation of the age group of the respondents (teachers, HoDs and principals) in this study. Figure 4.4 shows the age group of participants.

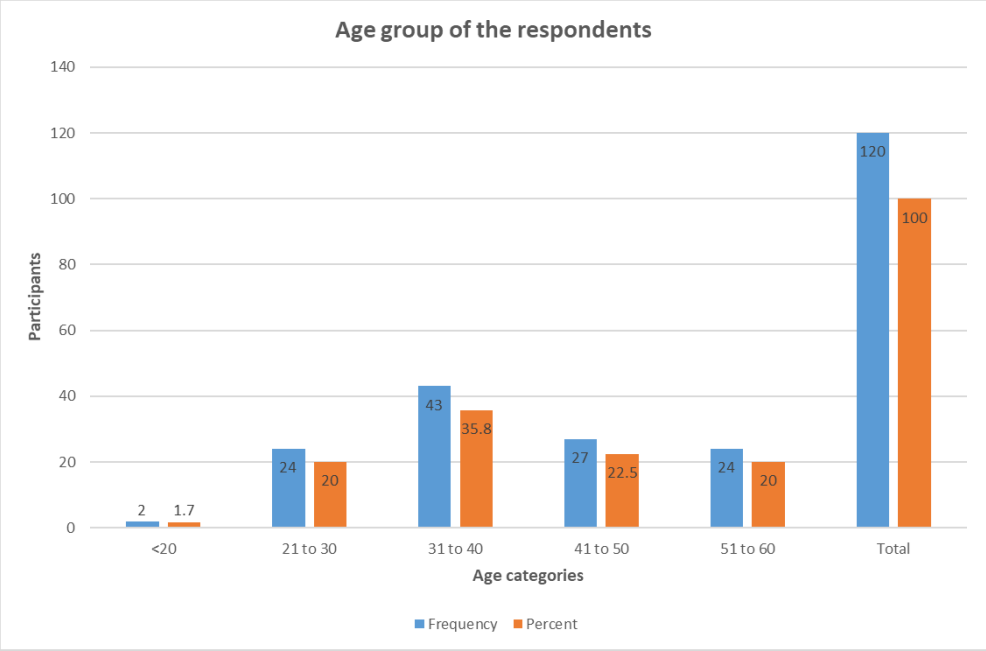

Figure 4.4. Age group of respondents

As shown in Figure 4.4 that the 31-40 age groups had more respondents (35.8%) followed by age group between 41-50 (22.5%). The 21.7% of the respondents were in the age group of 21-30 and 51-60 follows in the third position with 20%. There is no respondent younger than 20 years of age. This implies that the majority of respondents (58.3%) are between the age categories of 31-40 and 41-50.

4.2.2 Gender of the respondents

Table 4.3 shows the gender of respondents. This indicates the demarcation of respondents to the study by gender.

Table 4.3. Respondents' gender

Gender of the respondents	Frequency	Per cent
Male	39	32.5
Female	81	67.5
Total	120	100.0

Table 4.3 shows that the majority of the respondents (67.5%) were female while males were 32.5% of the total respondents. This implies that the majority of the respondents were female.

4.2.3 A position held by respondents

Positions that respondents hold in their respective schools are presented. In Figure 4.6, the positions of respondents in schools are shown.

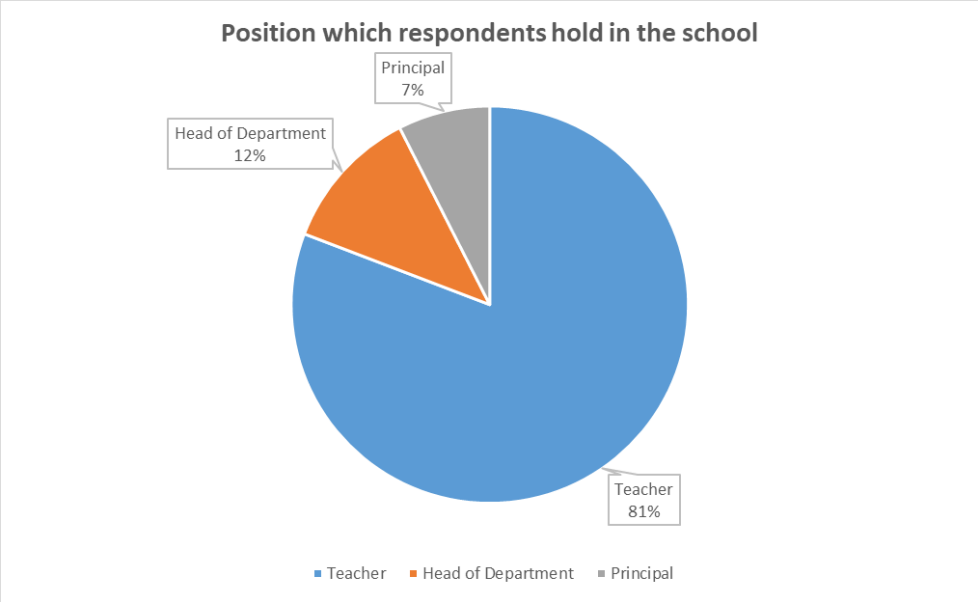

Figure 4.5. Position of respondents

Figure 4.5 show that 81% of the respondents held the position of ordinary teachers. Twelve per cent of respondents were Heads of Departments (HoDs) and 7% were principals. This indicates that more teachers that are ordinary took part in the study than Heads of Departments and principals.

4.2.4 Vocational related subjects

Respondents were asked to indicate whether their schools offered vocational related subjects or not. As far as the revised curriculum is concerned, these are subjects such as Design and Technology, Elementary Agriculture and Home Ecology, Agricultural Science, Computer Studies, Office Practice, Visual Art, Integrated Performing Arts, Home Economics, Fashion and Fabrics, Hospitality, Technical Drawing and Technical Studies A, B and C, Woodwork, Building Studies, Metalwork and Welding and Motor

Mechanics. Figure 4.6 displays the respondents' responses if their schools offer vocational related subjects.

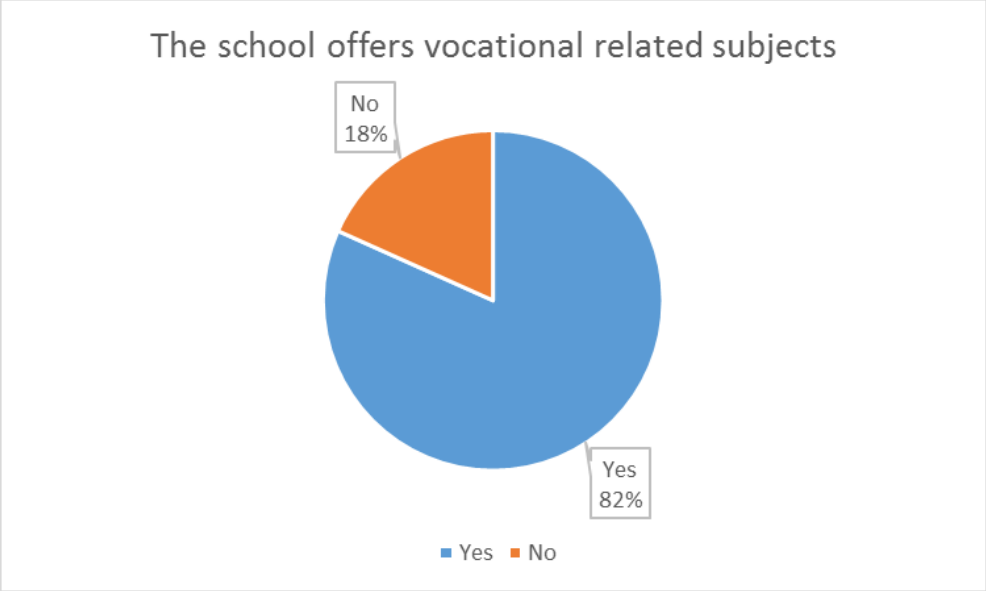

Figure 4.6. Vocational subjects offered at the school

Figure 4.6 shows whether the respondents' school offers vocational related subjects or not. Eighty-two per cent of the 120 respondents confirmed with a yes that their schools offered vocational related subjects while a mere 18% of the respondents indicated that their schools did not offer any vocational related subjects. This implies that the majority of respondents (82%) indicated that vocational subjects are offered at their schools. Therefore, most respondents are aware of or have experienced that vocational subjects taught at their respective schools.

4.2.5 Location of the respondent's school

Respondents were asked to indicate the location of their school. A Pie Chart in Figure 4.7 reveals the location of the respondents' school.

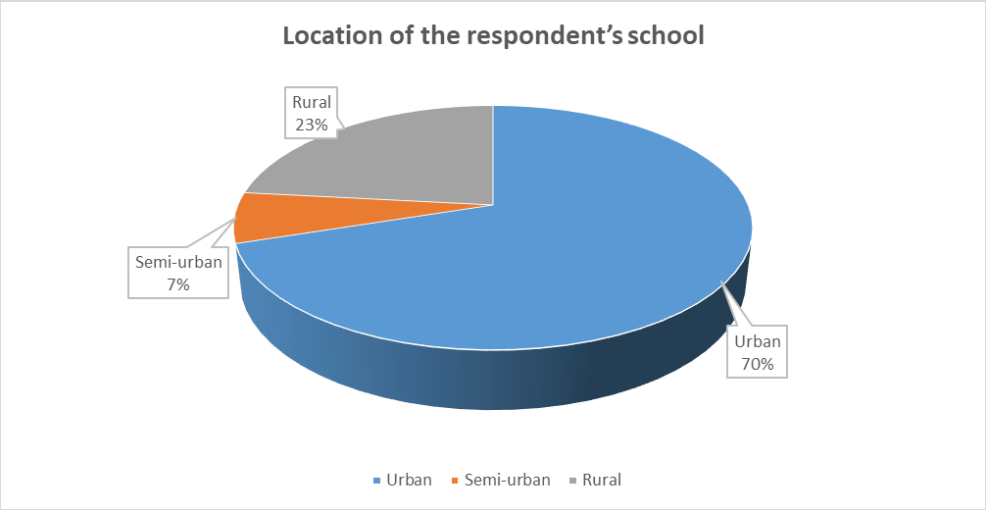

Figure 4.7. Location of the school

The pie chart in Figure 4.7 reveals that the majority of respondents (70%) indicated that their schools were located in urban settlements. This is followed by 23% of respondents who stated that their schools were in rural locations while only 7% indicated that their schools were in the semi-urban location. This revealed that the majority of respondents, (70%) worked in urban domiciled schools.

4.2.6 Years of teaching experience

Respondents were asked to indicate their teaching experience. Table 4.4 shows the teaching experience of respondents, who participated in the study.

Table 4.4. Teaching experience

Years of teaching experience	Frequency	Percent
0 to 5	17	14.2
6 to 10	21	17.5
11 to 15	32	26.7
16 to 20	23	19.2
>20	27	22.5
Total	120	100.0

Table 4.4 shows that 26.7% of the total respondents have years of teaching experience ranging between 11-15 years. This is followed by greater than 20 years of teaching experience represented by 22.5%. The lowest category is 0-5 years of teaching experience, which had only (14.2%) of the respondents. Therefore, the majority of the respondents had between 11 to 15 years of teaching experience.

4.2.7 Phase of the school

Respondents were asked to show, which phase their school is categorised. The schools are categorised into three categories: pre-grade, Grade 1-7, combined school (pre-grade, Grade 1-12) and secondary school (Grade 8-12). Table 4.5 displays the category of respondents' schools. Table 4.5 shows the phases of schools that are divided into three categories, namely: Pre-grade, Grade 1-7, combined school (Pre-grade, Grade 1-12) and secondary school (Grade 8-12).

Table 4.5. Category of the school

Phase of respondents ' school	Frequency	Per cent
Pre-grade, Grade 1-7	29	24.2
Combined school (pre-grade, Grade 1-12)	41	34.2
Secondary School (Grade 8-12)	50	41.7
Total	120	100.0

It can be seen here that 41.7% of the respondents indicated they teach in secondary schools. The second-highest number (34.2%) of respondents worked at combined schools. The 24.2% of respondents worked at pre-grade and Grade 1-7 school phase. This implies that more secondary school teachers took part in the study than primary and combined school teachers did.

4.2.8 Highest professional qualification

Respondents were asked to give their highest professional qualification. Figure 4.8 is a graph, which shows the highest professional qualification of respondents.

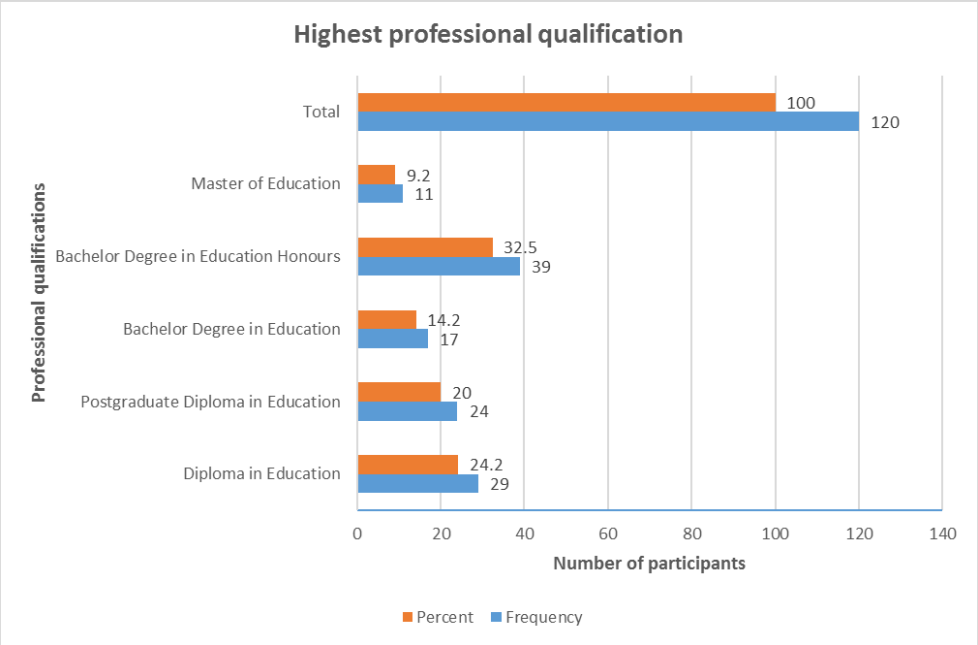

Figure 4.8. Respondents' highest professional qualification

Respondents that held a Bachelor Degree in Education (Honours) made up 32.5% and 24.2% of respondents had a Diploma in Education as their highest professional qualification. The 17 respondents, that are 14.2%, are holders of a Bachelor of Education degree while 9.2% of the respondents hold a Master of Education degree. This means that all teachers that participated in the study are professionally qualified.

4.2.9 Training or workshop offered on implementation of the revised curriculum

Figure 4.9 represents whether the respondents have received training on the revised curriculum or not.

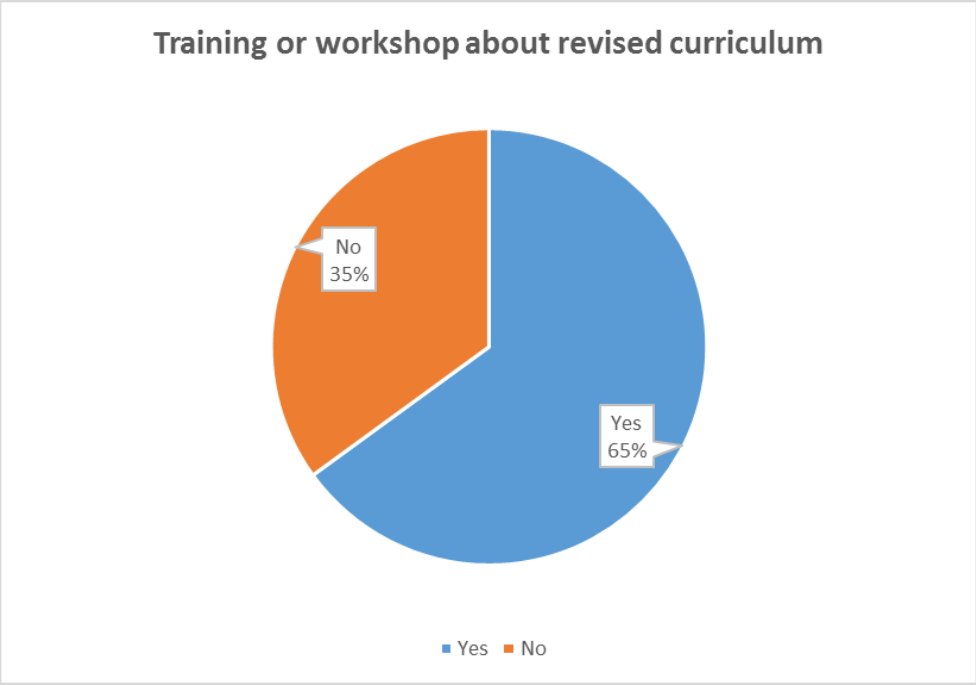

Figure 4.9. Training or workshop on the revised curriculum

According to Figure 4.9, the majority (65%) of the respondents indicated that they have received training or workshop on the revised curriculum implementation. While 35% of respondents indicated that, they have not received any training or workshop on revised curriculum implementation. This displays that the majority of respondents received training on the revised curriculum.

4.2.10 Usefulness of training or workshop received

Respondents were asked to scale the usefulness of the training that they indicated in 4.2.9. Figure 4.10 presents the responses on how useful was the training on the revised curriculum that was offered.

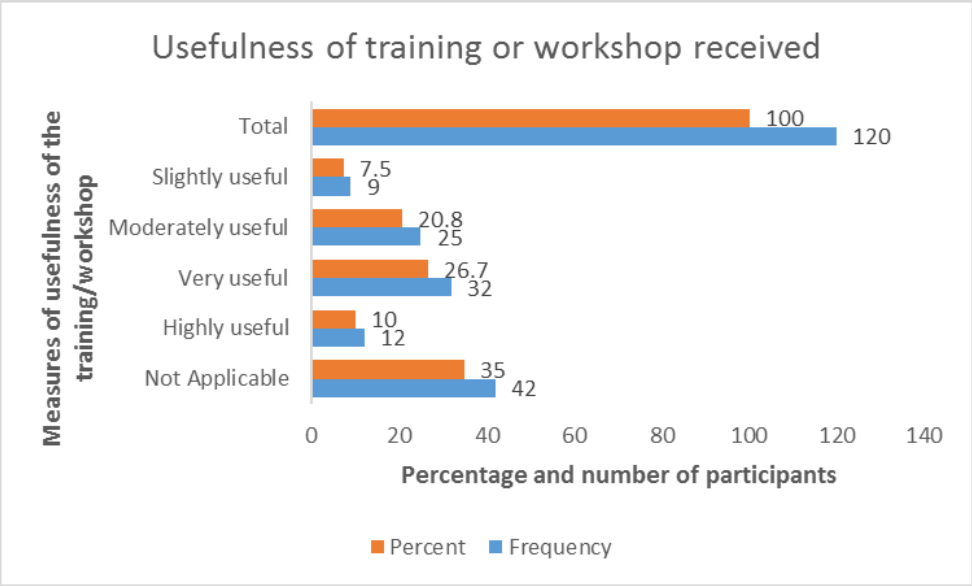

Figure 4.10. Usefulness of training or workshop received

This question about the usefulness of training received did not apply to 35% of the respondents who have indicated that they did not receive any training. As shown in Figure 4.10, only 26.7% of the respondents indicated that the training or workshop offered was very useful. While 10% of the respondents indicated that, the training received was highly useful. The 20.8% of the respondents rated the training they received as moderately useful. Apart from the 35% of respondents who indicated that they were never trained, the respondents gave varied responses on the usefulness of the training they went through.

4.2.11 Duration of training or workshop

Respondents were asked to indicate the duration of the training or workshop that was provided to them. Table 4.6 shows the duration of training or workshop offered to respondents to enable effectiveness in implementing the revised curriculum for basic education.

Table 4.6. Duration of training or workshop

Duration of training or workshop	Frequency	Percent
Not Applicable	42	35.0
One day	11	9.2
Two days	5	4.2
Three days	12	10.0
Four days	13	10.8
Five days	32	26.7
More than five days	5	4.2
Total	120	100.0

In Table 4.6, 35% of the respondents indicated that this question did not apply to them. This number relates to the respondents that answered they have not received training or workshop about the curriculum under implementation as well as those who responded that the usefulness of training or workshop received did not apply to them. Respondents indicated that the training or workshop offered took five days were 26.7% of the respondents. Further, 10.8% of the respondents stated that the training or workshop took four days. Ten per cent of the respondents indicated that the training was offered in three days.

4.2.12 Curriculum document for respondents

Respondents were asked to state if they have received the revised curriculum document. Figure 4.11 displays the information on whether the respondents have received the revised curriculum document. This is a structural strength and an enabling mechanism for effective revised curriculum management and implementation in public schools in Ompundja Circuit.

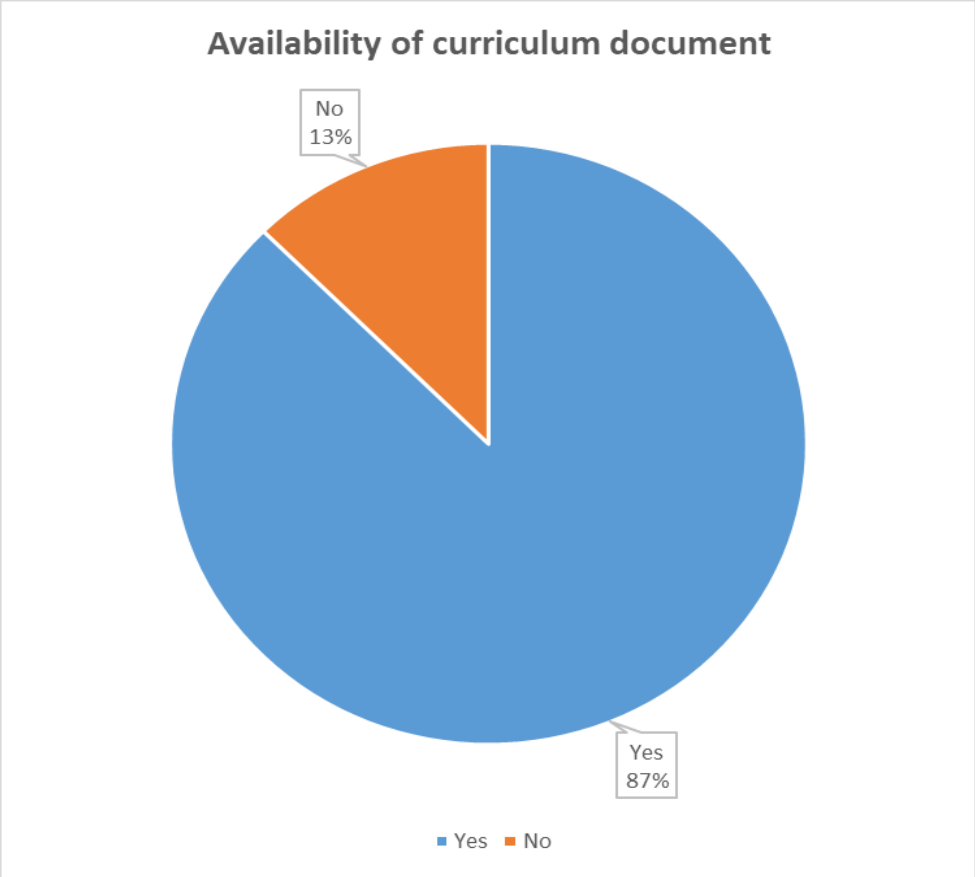

Figure 4.11. Depicts if respondents have the revised curriculum document

As shown in Figure 4.11, a majority of respondents, (87%) indicated that they have received revised curriculum documents. Only 13% indicated that they have not received the revised curriculum document. This is a structural strength and an enabling mechanism

to ensure effective curriculum management and implementation in public schools in Ompundja Circuit.

4.3 Teachers training in schools in Ompundja Circuit

Challenges experienced by teachers and principals during the implementation of the newly Revised Curriculum for Basic Education (RCBE) in the Ompundja Circuit of Oshana Region are presented. These challenges are related to training and professional development, infrastructures or physical resources, teaching and learning resources, budget or financial resources, technical and vocational education, teacher-learner ratio, learners support and views of respondents on the revised curriculum.

4.3.1 Status of teachers training

This part presents the data from the questionnaire about the status of teacher training in Ompundja Circuit. It also presented challenges shared by principals and ways to address those challenges.

This frequency table in Table 4.7, presents the challenges related to teacher training in the RCBE implementation.

Table 4.7. Frequency table depicting responses on challenges related to teachers training

The table depicting the responses about the challenges related to teachers training.

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

STATEMENTS	SD		D		N		A		SA		Total	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
1. I am adequately trained to implement the revised curriculum.	16	13.3	17	14.2	29	24.2	50	41.7	8	6.7	120	100
2. I am qualified to help with the implementation of the revised curriculum.	1	.8	8	6.7	24	20.0	61	50.8	26	21.7	120	100
3. Teachers, at my school, are qualified to teach subjects that are to be implemented in the revised curriculum.	2	1.7	6	5.0	24	20.0	57	47.5	31	25.8	120	100
4. At my school, there is a Continuing Professional Development to aid implementation of the revised curriculum.	14	11.7	24	20.0	26	21.7	47	39.2	9	7.5	120	100
5. At my school, in-service training on the implementation of the revised curriculum is offered to teachers.	25	20.8	35	29.2	30	25.0	23	19.2	7	5.8	120	100
6. At my school, all teachers are professionally qualified to teach.	3	2.5	5	4.2	12	10.0	46	38.3	54	45.0	120	100

Key: Fr = Frequency

Respondents were asked to indicate whether all teachers were professionally qualified to teach. As shown in the table in Table 4.7, 83.3% of the respondents agreed that all teachers were professionally qualified to teach. Fifty per cent of the respondents disagreed with the statement "At my school, in-service training on the implementation of the revised curriculum is offered to teachers." Only 24% of the respondents agreed while 25% were neutral about the statement. The majority of the respondents indicated that teachers are

professionally qualified. Meanwhile, 50% of respondents disagreed with the provision of in-service training at their respective schools.

Respondents were asked to indicate that Continuing Professional Development (CPD) aid the implementation of the revised curriculum. Only 46.7% of the respondents agreed that their schools have CPD. The 31.7% of respondents disagreed while 21.7% were neutral. This implies that CPD is not offered to most respondents in their respective schools. Respondents were asked to indicate whether teachers, at their schools were qualified to teach subjects that are to be implemented in the revised curriculum. The data clearly show that most respondents, (73.3%) agree that teachers at their respective schools were qualified to teach subjects that are to be implemented in the revised curriculum.

Respondents were asked to state if they were qualified to assist with the implementation of the revised curriculum. The data clearly shows that 72.5% of the respondents agreed that they were qualified to aid the implementation of the revised curriculum. When respondents were asked to indicate if they were adequately trained to implement the revised curriculum, only 48.4% of the respondents agreed that they have received adequate training to implement the revised curriculum. From these empirical responses, it seems the respondents believed that the training on the revised curriculum offered was not adequate to enable them to implement the revised curriculum effectively.

Respondents were asked to indicate on a Likert Scale questionnaire whether they agree, neutral or disagreed with the proposed way in which challenges related to teacher training can be addressed. This part presents how challenges related to teacher training should be addressed. Table 4.8 displays responses on teachers' training, provision of qualified

teachers, training of principals, in-service training for teachers, as well as the induction of new teachers can be addressed.

Table 4.8. Frequency table showing how to address challenges related to teachers training

The table showing the responses about addressing challenges related to teachers training.

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

STATEMENTS	SD		D		N		A		SA		Total	
	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%	Fr	%
1. Teachers should be trained to ensure a successful implementation of the revised curriculum for basic education.	-	-	-	-	1	.8	31	25.8	88	73.3	120	100
2. Government should provide enough qualified teachers to implement the revised curriculum.	1	.8	2	1.7	5	4.2	31	25.8	81	67.5	120	100
3. Principals must be trained to ensure effective implementation of the revised curriculum.	-	-	2	1.7	3	2.5	31	25.8	84	70.0	120	100
4. Oshana Region's Directorate of Education, Arts and Culture should conduct regular in-service training on implementation of the revised curriculum.	-	-	2	1.7	1	.8	31	25.8	86	71.7	120	100
5. Newly employed teachers should be given induction about the revised curriculum.	-	-	1	.8	3	2.5	26	21.7	90	75.0	120	100

Key: Fr = Frequency

Respondents were asked to indicate whether teachers should be trained to ensure a successful implementation of the revised curriculum for basic education. Table 4.8 shows that most respondents (93.4%) agreed that the newly employed teachers should be given

induction about the revised curriculum. A mere 3.3% of responses represented a combined neutral and respondent that disagreed with the statement. This implies that the majority of respondents valued teacher training to ensure that the revised curriculum is successfully implemented.

Respondents were asked to indicate whether the government should provide enough qualified teachers to implement the revised curriculum. The majority of respondents, (95.8%) agreed that government should provide enough qualified teachers to implement the revised curriculum. The 2.5% of the respondents were neutral while 1.7% disagreed. Because of the above responses, respondents feel that instructional leaders, principals, should be trained to enable them to lead the process of curriculum management and implementation.

Respondents were asked to indicate whether principals must be trained to ensure effective implementation of the revised curriculum. The majority of respondents, (95.8%) agreed that principals must be trained to ensure effective implementation of the revised curriculum. Only 2.5% of respondents were neutral while 1.7% disagreed. This unveiled that respondents want the government to play a part in ensuring that qualified teachers are provided.

Also, respondents were asked to indicate whether Oshana Region's Directorate of Education, Arts and Culture should conduct regular in-service training on the implementation of the revised curriculum. The majority of respondents, (97.5%) agreed. Only 1.7% of respondents disagreed while 1.4% was neutral.

Lastly, respondents were asked to indicate whether newly employed teachers should be given induction about the revised curriculum. The majority of respondents, (99.1%)

agreed that teachers should be trained to ensure a successful implementation of the revised curriculum for basic education. Neutral respondents were 2.5% and 0.8% disagreed. These respondents valued that novice teachers should be inducted on revised curriculum once they enter the teaching profession.

4.3.2 Challenges related to teacher training

This part presents the views and reflections of principals about challenges related to teacher training in public schools in Ompundja Circuit. The first question posed to the participants was meant to establish whether there were any challenges experienced with the implementation of the revised curriculum that are related to teacher training. Similarly, the participants were also asked to suggest possible remedies to the challenges they raised. Participant Kondja gave the following responses as follow:

> *"I heard they (teachers) are saying they do need training because they feel the revised curriculum is a bit high from what they were trained to do. Because some of the topics, for example, in Grade 9 they were not supposed to be there. They were in Grade 11 and so on, so; continuous training is really essential."*

This response suggests that training is needed to fill the gap in teacher's professional training because the revised curriculum is higher than the level of training that some teachers had received.

Another principal, Participant Nomkumo had this to say:

> *"It is a new thing and teachers need to study the curriculum so that they acquaint themselves with the content thereof."*

In fact, the revised curriculum is a new concept to teachers. There is a need to acquaint teachers continuously with the new curriculum through seminars and other training initiatives.

Participant Etuhole reacted to the question of challenges encountered in the revised curriculum implementation that are related to teacher training as follows:

> *"I can say the training has been conducted even though it was in very short time because some of the training was conducted only three days or if it is long, it is only five days." Now the problem is that not all people can capture the information at the same time. Jah… some are very quick, some are very slow."*

Training for some teachers has been conducted between three and five working days. The training duration is short because teachers, the recipients of training cannot all capture the information at the same pace.

Participant Tuuda gave the following training challenge:

> *"Yes, there are challenges more particular on the training of teachers. There was an initial training which was given at the beginning there, but that training was not enough". …It was kind of a haphazard training it was not really taking teacher to at least possibility to go topic by topic."*

Participant Tuuda indicated that there was no adequate training for teachers. This response concurs with Participant Etuhole.

Participant Afrika indicated that teachers were trained, but pointed out the following challenges:

> *"There is an indication that some subjects the standard, which is being implemented now is high above, possibly, the training of some teachers, especially teacher that were trained through the BETD and they added this and that*

qualification in their own they would actually struggle in some areas to cope with the revised curriculum. Now we are here at Grade 10 only, but you hear people are already struggling with some subject. An indication has even come that item, which use to be taught in university are now being taught at Grade 10 level. One is left to wonder what's next at Grade 11 and what's next at the advance level so there might be a gap here and there."

The above response agrees with the one by Kondja. The Basic Education Teacher Diploma (BETD) has previously trained teachers in lower, upper primary education as well as junior secondary education. This led to the Cabinet decision to merge the former Colleges of Education with the University of Namibia's Faculty of Education to equip the graduate teachers with content and pedagogical skills.

Challenges that emerged from this part of the interview are summarised in this paragraph. Although the majority of respondents (65%) indicated that they received training on the revised curriculum (see Figure 4.9), the participants in the interviews feel that more training should be conducted. Foremost, there appears to be a gap in teachers' professional training because the revised curriculum is higher than the level of training of some educators. Secondly, the revised curriculum is viewed to be a new concept to teachers. Thus, there is a need to introduce and reorient teachers to the new curriculum through ongoing training initiatives. Lastly, although there was in-service training conducted as indicated by the participants, the duration was short and insufficient because the recipients of training cannot all capture the information at the same rate.

4.3.3 Addressing challenges related to teacher training

A further probing question was asked to Participant Kondja. The question was about the remedies that he could suggest ensuring the teaching staff members were very well capacitated to enable them to implement the revised curriculum. Participant Kondja answered as follows:

> *"Yeah, well this should be workshops or in-service training as they call it. It is very essential for teachers that are already teaching to be trained on the revised curriculum, especially the new topics that are added to the grades. Therefore, I do not know whether the government or region the curriculum it is a continuous process it needs to be enforced from time to time. So that at the end of the day they will acquaint themselves with all interventions and concepts so that curriculum implementation will be successful."*

Participant Kondja proposed that lack of training could be addressed through workshops and in-service training, which could bridge the knowledge gaps in the revised curriculum through especially the new topics that are added to the grades.

On the contrary, participant Etuhole was asked if the Ministry of Education, Arts and Culture should conduct in-service training. Etuhole responded as follows:

> *"In-service training can be made even during the school holidays."*

Participant Etuhole suggested that the Ministry could address the lack of training through in-service training, which concurs with Kondja's response.

Participant Tuuda was asked to suggest any possible interventions and responded as follows:

"Possibly training must come from the Advisory Services. They are not that much active also. They are the one who supposed to engage teachers and at least hear where they have a problem and at least because sometimes the problem is topic-based or theme-based on a certain part of the syllabus and that teachers need to, then, get a support from the Advisory Service."

Participant Tuuda indicated that Advisory Services could conduct training. This can address topics or themes based on the challenges facing teachers.

He further proposed how the challenges should be addressed:

"… it was given, the days were not enough not all teachers were trained at that time, now there is still again a need for intervention training to be done in between there."

Participant Tuuda proposed that continuous training initiatives should be done in between.

Participant Afrika suggested that the challenges could be addressed as follows:

"At the regional level workshops of different phases can then be conducted such that people can at least be updated in different ways. And I believe, through workshop teachers also have a chance to come together and when they come together they will live a support-based kind of which they can do on their own."

Like Participant Kondja, Afrika emphasised workshops as intervention, which could be coordinated at a regional level.

In conclusion, the participants offered some remedies on how to counter the challenges on revised curriculum management and implementation that are related to teacher training. Firstly, it is proposed that the lack of preparation could be addressed through workshops and in-service training. These developmental initiatives could bridge the knowledge gaps in the revised curriculum, especially the new topics that are appended to the grades.

Secondly, the Advisory Services could conduct regular training that addresses themes-based challenges that are facing teachers. This training and workshops could be organised at a regional level.

4.4 Infrastructures or physical resources in Ompundja Circuit

Status of infrastructures or physical resources in schools in Ompundja Circuit is equally presented. It also presents the challenges related to infrastructures or physical and ways to address them.

4.4.1 Status of infrastructures or physical resources

This part presents the status of infrastructures or physical resources in the Ompundja Circuit of Oshana Region. Furthermore, it presents the challenges as well as proposed ways to address the identified challenges.

Respondents were asked to indicate whether their school has enough furniture to facilitate the smooth implementation of the revised curriculum. Figure 4.12 shows whether the respondents agree or disagree that their schools have enough furniture.

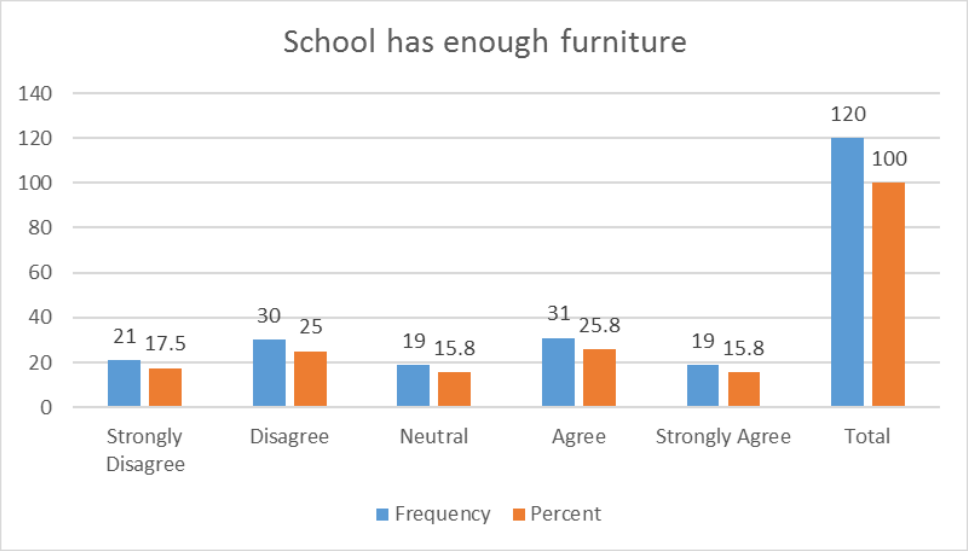

Figure 4.12. Adequate furniture at school

Figure 4.12 shows that 41.6% of the respondents agreed that their schools have enough furniture to facilitate the smooth implementation of the revised curriculum. There is a thin line between the respondents that agreed and the 42.5% of respondents that disagreed. The 15.8% of the respondents' responses were neutral on this item.

Respondents were asked to indicate whether their schools have offices for teachers. Figure 4.13 depicts responses about whether their schools have offices for teachers.

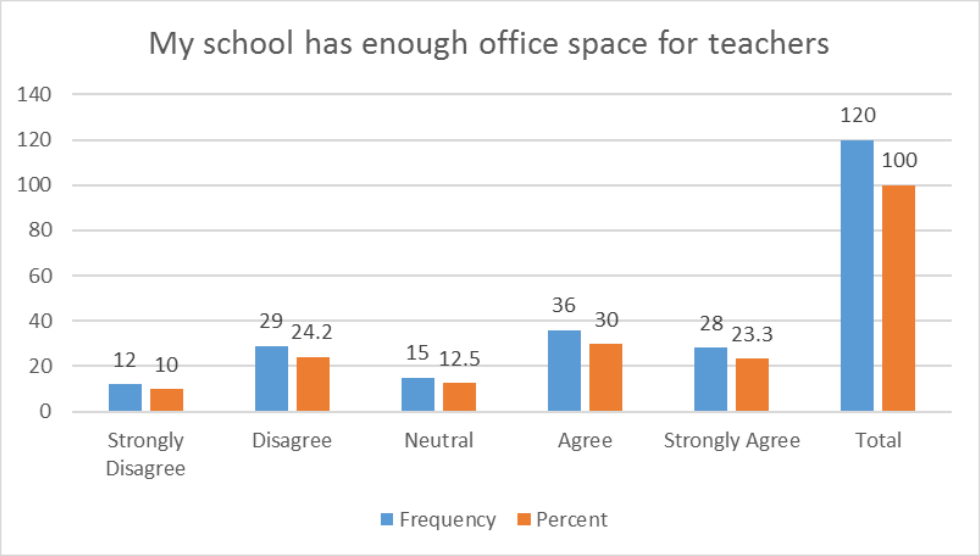

Figure 4.13. Office for teachers

In Figure 4.13, 53.3% of the respondents agreed that their schools have enough offices for teachers. The 12.2% gave a neutral response while the remaining 34.2% of the respondents disagreed. This shows that most respondents have enough offices at their schools.

Respondents were also asked to indicate whether their schools have well-equipped computer laboratories. Figure 4.14 portrays responses whether respondents' schools have well-equipped computer laboratories.

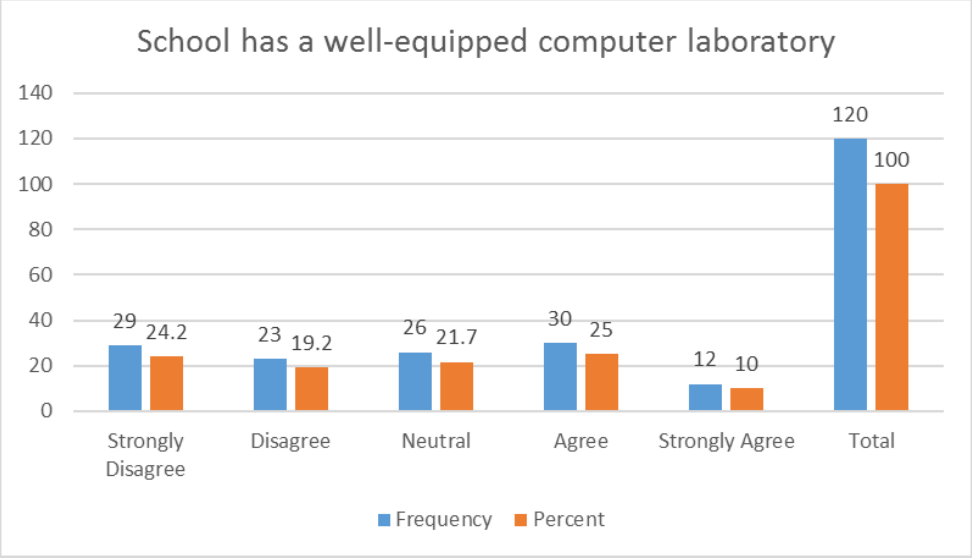

Figure 4.14. School has a well-equipped computer laboratory

Figure 4.14 show the responses to the statement, “My school has a well-equipped computer laboratory to expose learners to modern-day technology.” Only 35% of the respondents agreed compared to 43.4% who disagreed. Meanwhile, 21.7% of respondents gave a neutral answer as they could not decide whether their schools had well-equipped computer laboratories or not. These responses indicated that the computer laboratories in schools in Ompundja Circuit were not well equipped.

Respondents were required to state whether their schools have enough science laboratories to aid the implementation of the revised curriculum. Figure 4.15 represents their responses.

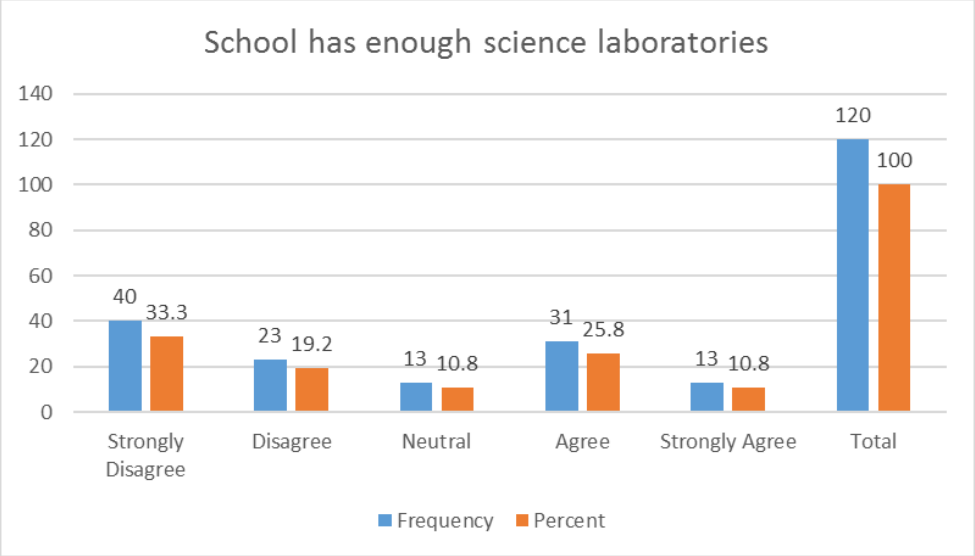

Figure 4.15. Science laboratories

According to Figure 4.15, the majority of the respondents (52.5%) disagreed that their schools have enough science laboratories for the implementation of the revised curriculum. Of the total respondents, 10.8% of the respondents were neutral. This is an indication that some public schools in Ompundja Circuit have a shortage of science laboratories.

Revised curriculum management and implementation require schools with adequate classrooms. Respondents were asked to indicate whether their schools have enough classrooms. Figure 4.16 portrays the responses of the respondents indicating whether their schools have enough classrooms.

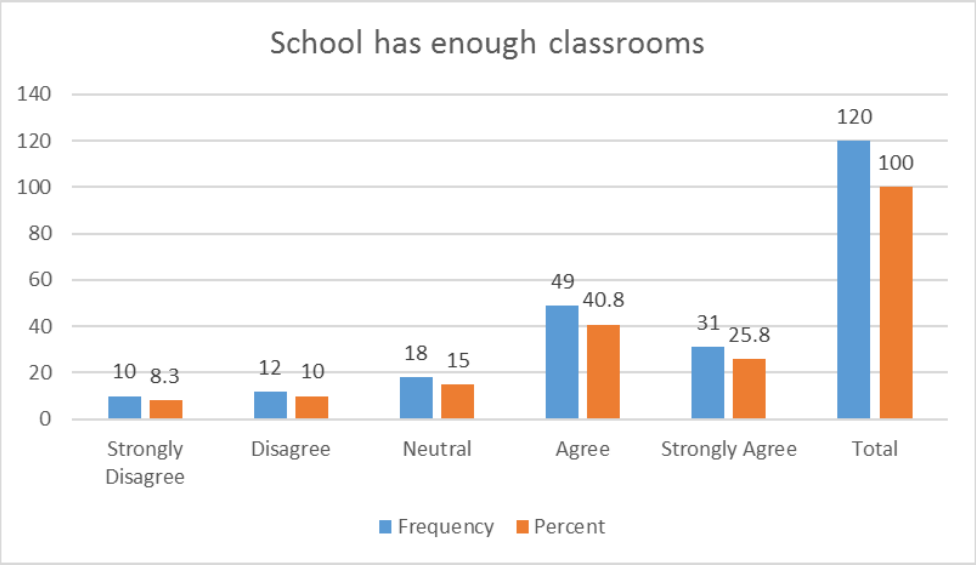

Figure 4.16. Enough classrooms

Figure 4.16, the majority of respondents, (66.6%) agreed that their schools have adequate classrooms to enable the implementation of the revised curriculum. Only about 18.3% of the respondents disagreed with the statement while fifteen per cent were neutral. This shows that some schools in Ompundja Circuit have enough classrooms to implement the revised curriculum.

Sport forms part of extra-mural activities in an educational setting. In the next item, respondents were asked if their schools have enough sports facilities for the implementation of the revised curriculum. Their responses are shown in Figure 4.17

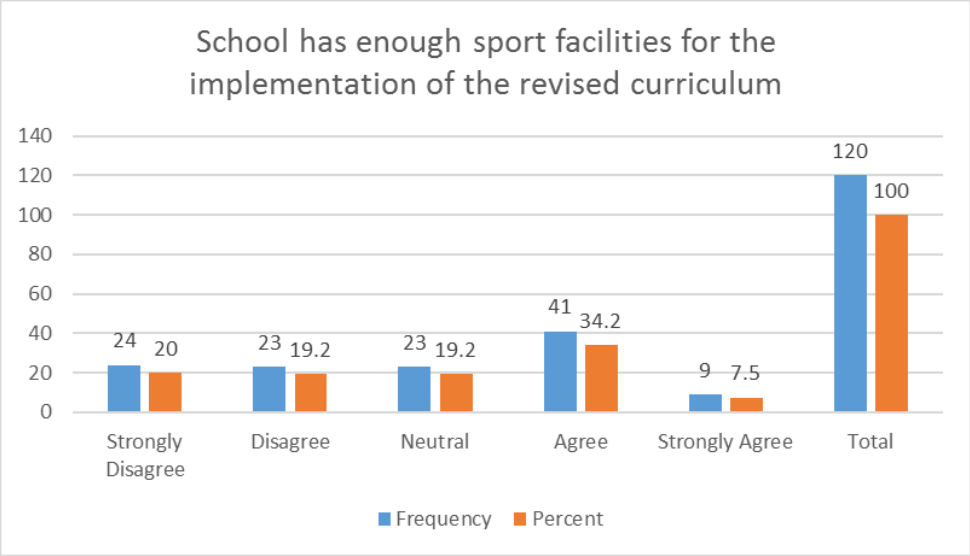

Figure 4.17. Availability of sports facilities

Figure 4.17 show that about 41.7% of the respondents agreed that their schools have enough sports facilities to enable the implementation of the revised curriculum. The respondents that disagreed were 39.2% of the respondents whilst 19.2% of the respondents were neutral. This implies that there were no adequate sports facilities at public schools in Ompundja Circuit to affect the revised curriculum.

Respondents were asked to indicate whether their school has electricity that facilitates the implementation of the revised curriculum. Figure 4.18 represents the responses on whether schools have electricity to ease curriculum implementation.

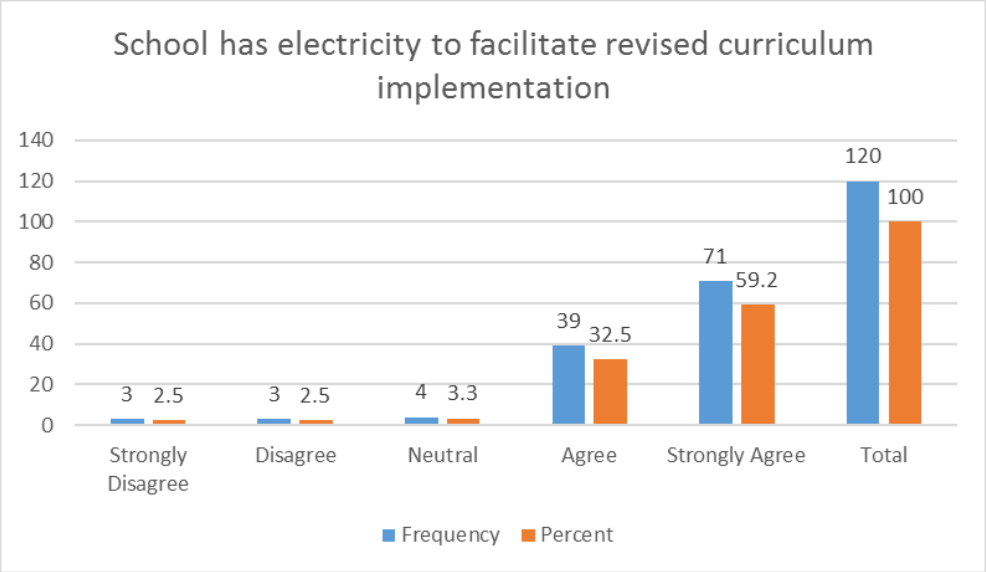

Figure 4.18. Schools are electrified

Figure 4.18 illustrates that the majority of respondents, (91.7%) agreed that their schools have electricity that facilitates the implementation of the revised curriculum. The four respondents (3.3%) neither agreed nor disagreed with the statement. It is evident from the responses that most public schools in Ompundja Circuit were electrified.

Respondents were further asked to indicate if their schools need accommodation facilities for the implementation of the revised curriculum. Their responses are shown in Figure 4.19.

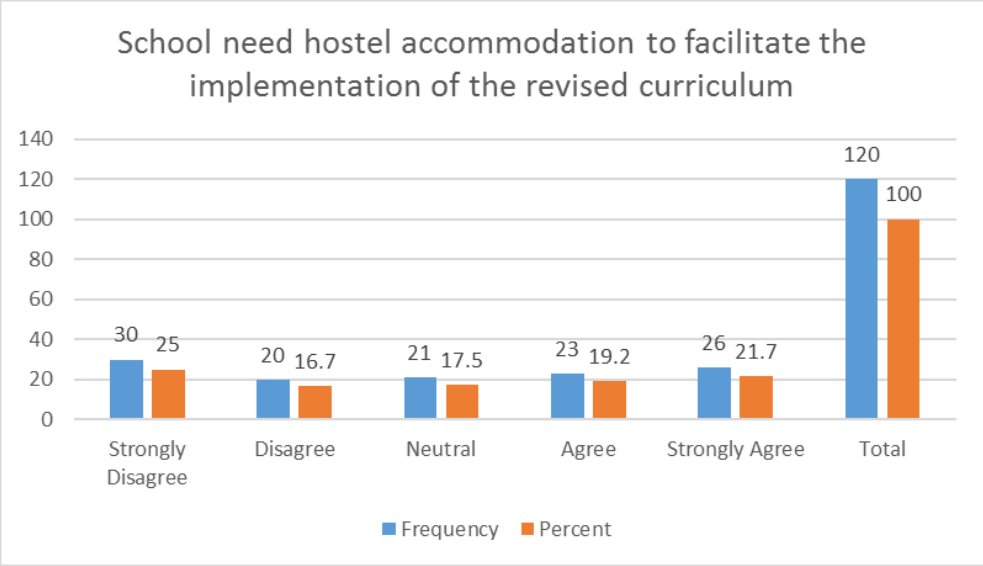

Figure 4.19. Hostel accommodation

Figure 4.19 gives that only 41.7% of the respondents indicated that they disagree that the hostel accommodation has much to do with the facilitation of the implementation of the revised curriculum for basic education. This is followed by 40.9% of the respondents who indicated that they agreed that the hostel contributes to the revised curriculum implementation. Perhaps these were respondents from the rural sides of the Ompundja Circuit. From these responses, hostel accommodation is not viewed to contribute to the effectiveness of the revised curriculum management and implementation among public schools in Ompundja Circuit.

Respondents were asked to indicate whether the Ministry of Education, Arts and Culture should build enough workshops at schools that offer vocational subjects. Figure 4.20 presents results, whether the Ministry of Education, Arts and Culture (MoEAC) should build workshops for the vocational setting.

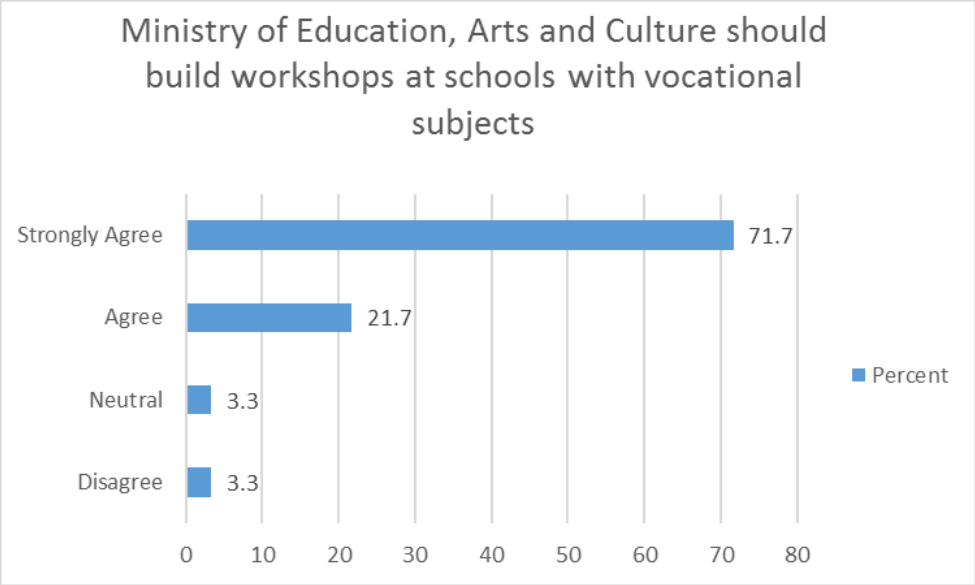

Figure 4.20. Building of vocational workshops by the MoEAC

Most respondents, 93.4% agreed that the MoEAC should build enough workshops at schools that offer vocational subjects. The 3.3% of each of the respondents were neutral and disagreed with the statement. The majority of respondents feel that vocational workshops should be constructed by the Ministry of Education, Arts and Culture.

Figure 4.21 indicates the responses of respondents to the question of whether the Ministry of Education, Arts and Culture (MoEAC) should have adequate science laboratories for schools.

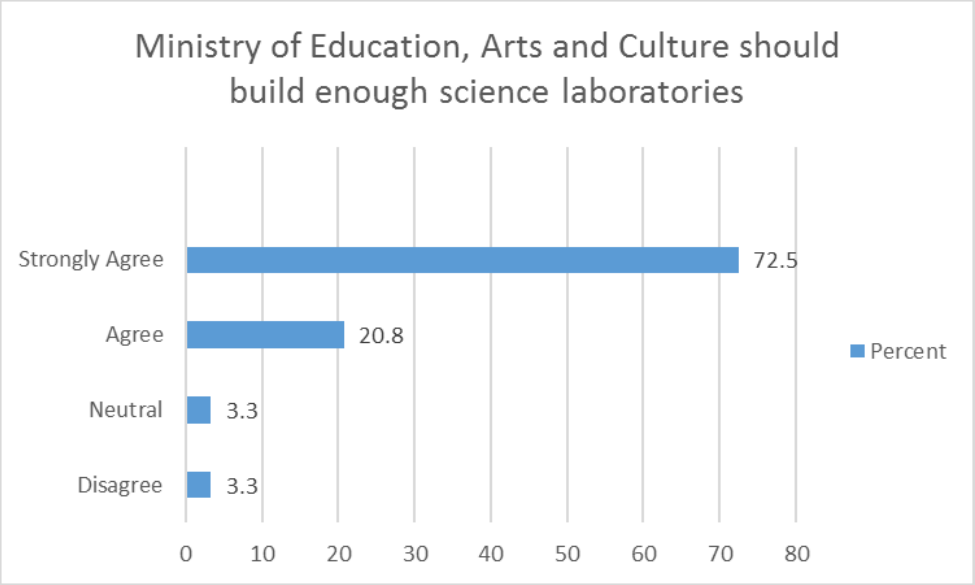

Figure 4.21. Building of science laboratories by the MoEAC

As can be seen in Figure 4.21, the majority of respondents, (93.3%) agreed that the MoEAC ought to build enough science laboratories at the schools. The 3.3% of responses each goes to neutral and disagree with the statement. Again, the majority of respondents feel that science laboratories should be provided by the line ministry, in this case, a Ministry of Education, Arts and Culture.

Respondents were asked to indicate whether the Ministry of Education, Arts and Culture should build enough sports facilities for schools. Data in Figure 4.22 indicates whether the Ministry of Education, Arts and Culture (MoEAC) should consider building sports infrastructure to affect the implementation of the newly revised curriculum.

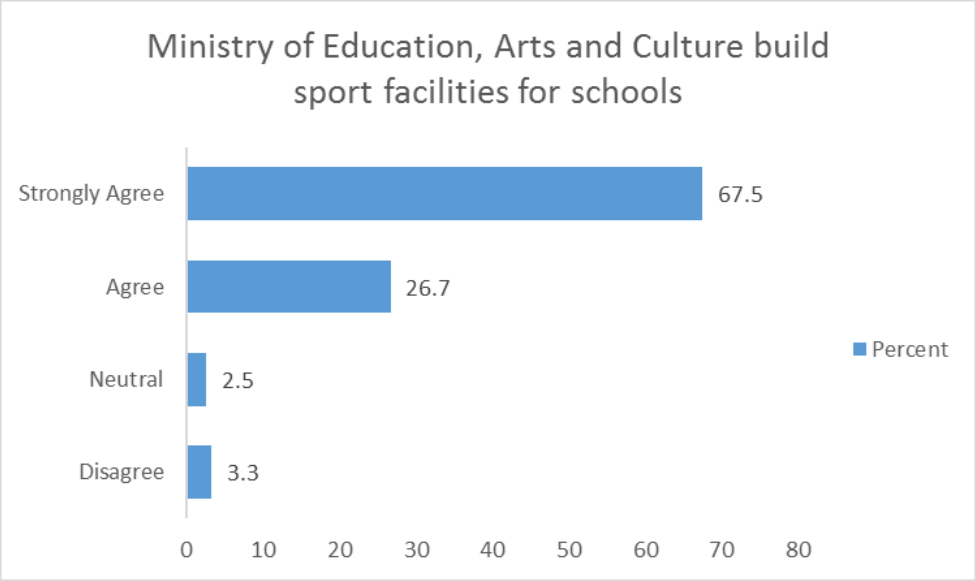

Figure 4.22. Building of sports facilities by the MoEAC

As shown in Figure 4.22, 94.2% of respondents agreed that the MoEAC should build enough sports facilities for schools. This did not correlate with the response of 34.2% of respondents who indicated that the schools have enough sports facilities.

Figure 4.23 shows responses to the question of whether the Ministry of Education, Arts and Culture (MoEAC) should build more classrooms for schools.

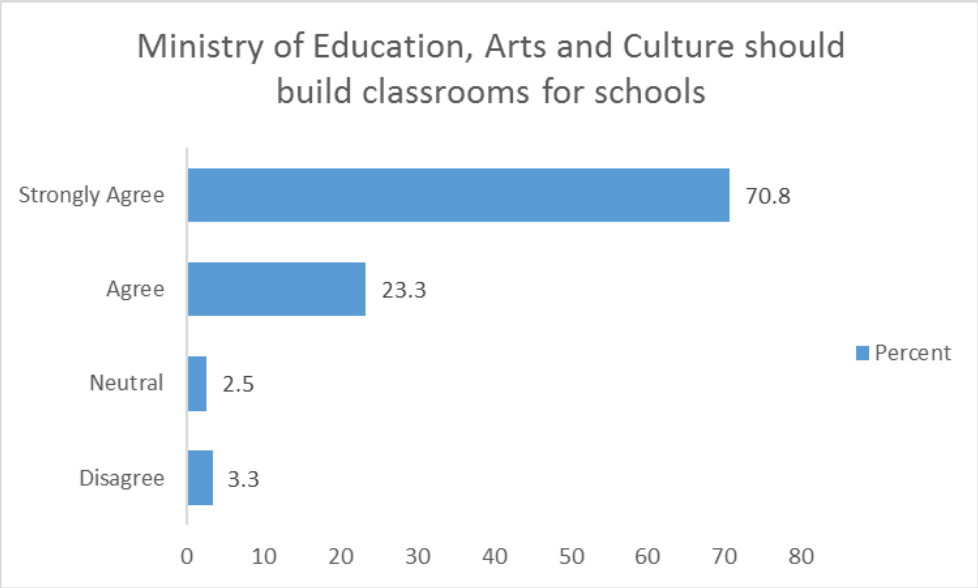

Figure 4.23. Building of classrooms by the MoEAC

A biggest number of respondents, (94.1%) agreed that the MoEAC should build enough classrooms for schools that are up to modern standards.

Meanwhile, 3.3% of the respondents disagreed while 2.5% were neutral. Many respondents feel that the line ministry should provide enough classrooms (also see Figure 4.16).

Respondents were asked to indicate whether all schools must be electrified. Thus, Figure 4.24 shows the data as to whether the schools should be electrified.

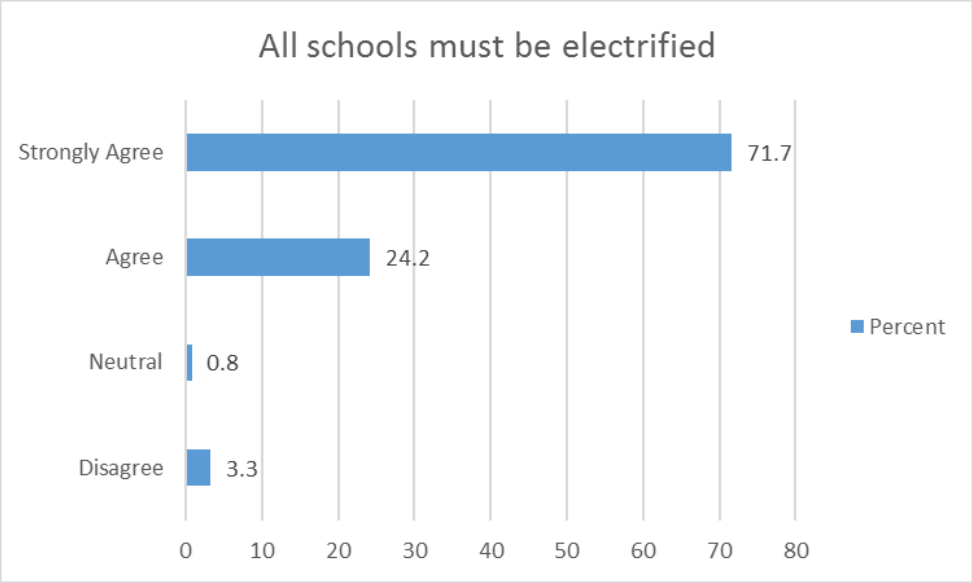

Figure 4.24. All schools must be electrified

Figure 4.24 shows the responses of respondents when asked to scale the statement if all schools must be electrified. The highest number of respondents (95.9%) has indicated that they agree with the statement. Only 3.3% of the respondents were in disagreement while 0.8% was neutral. A large number of respondents feel that the electrification of schools contributes to effective teaching and learning.

Respondents were asked to specify whether the school should have a Staff Room for teachers that facilitate the implementation of the revised curriculum. Figure 4.25, presents the responses on whether schools should have a staff office building.

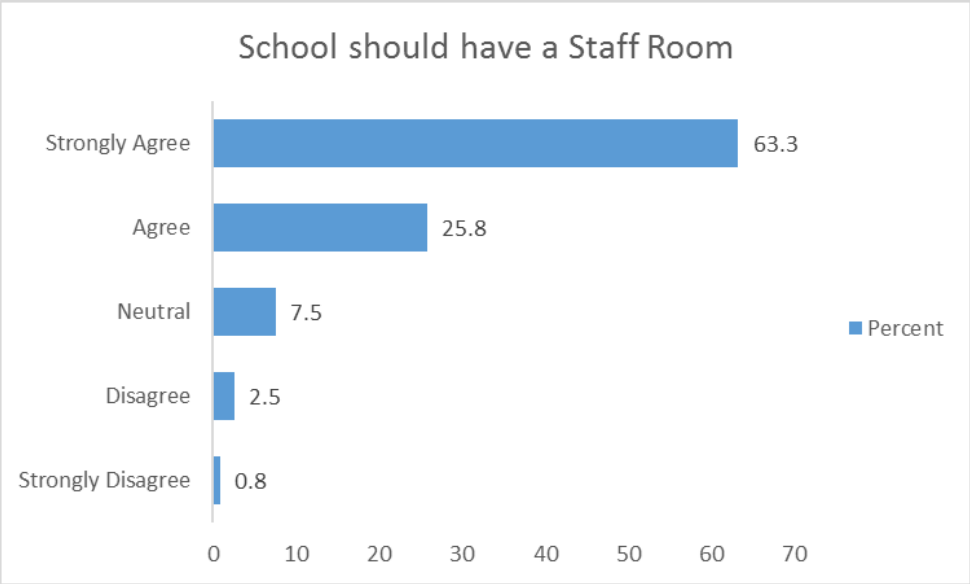

Figure 4.25. Availability of staff room at school

A largest number of respondents, (89.1%) agreed that the schools should have a Staff Room for teachers that facilitate the implementation of the revised curriculum. Only a mere 2.5% of respondents disagreed that the schools should not have a Staff Room for teachers that facilitate the revised curriculum implementation.

Lastly, respondents were asked to show whether they agreed that hostel accommodation should be built for all schools. Figure 4.26 ranks the responses about the building of hostel accommodation facilities in all schools in Ompundja Circuit.

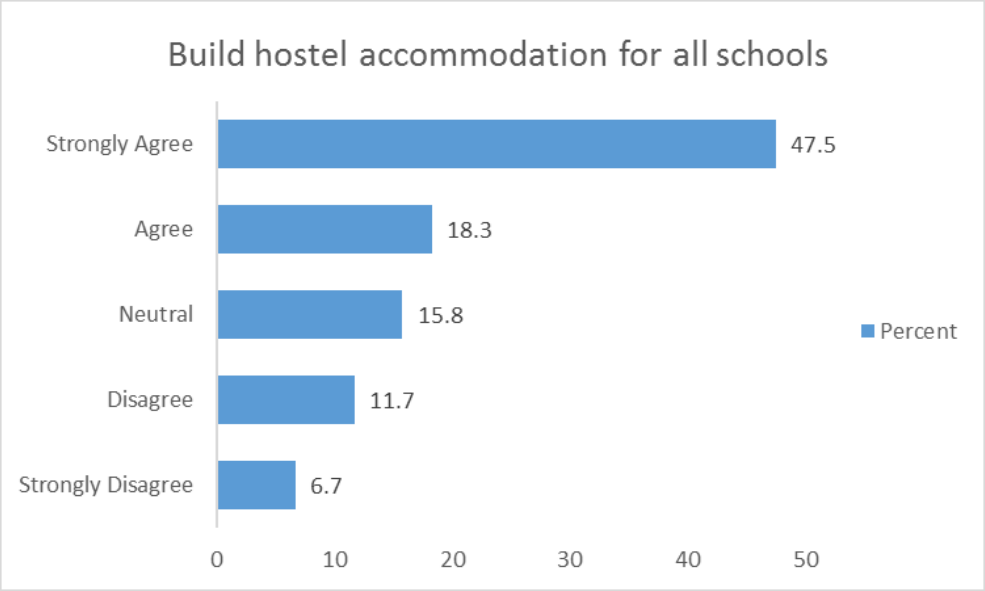

Figure 4.26. Building hostel for all schools

About 65.8% of the respondents agreed that hostel accommodation should be built for all schools. Nevertheless, 15.8% of the respondents were neutral while 11.7% disagreed. Although the majority of respondents indicated that hostel accommodation is needed in schools, the figure went down to 65.8%.

4.4.2 Challenges related to infrastructures or physical resources

At this point, the participants were asked to pinpoint out challenges that they have experienced during the implementation of the revised curriculum that are related to infrastructures or physical resources. Some participants could not identify any challenges, for example, Participant Kondja.

> "*No, not really at our school, we were fortunate to be one of the Millennium Challenge Account (MCA) beneficiaries. The infrastructures are good. We have enough classrooms and we have system of learners rotating from one class to another class. Facilities are also fine, the Computer Lab is there, is functioning,*

the Science equipment and chemicals they are there. I do not think we really need something so urgent or to be called as an obstacle for us to implement the revised curriculum in terms of infrastructures and facilities."

According to Participant Kondja, his school is well furnished with infrastructures or physical resources because the school benefited from the MCA funds.

Again, Participant Nomkumo too did not identify any challenges related to infrastructures or physical resources. His response is as follows:

"Others such as infrastructures, we are well equipped with infrastructures that were already at hand, so that one is not a challenge thus far."

Participant Etuhole gave her response regarding challenges related to infrastructures and physical resources in this manner:

"I suggest that the Ministry of Education can provide the buildings such as laboratory and library. Also the sports facilities… and also the furniture especially to our schools, we need the library for our books to be kept, as well as the space to have 2 or 3 computers to teach our learners."

Participant Etuhole singled out laboratories, libraries, sports facilities, furniture, computers and computer laboratories, which were in short supply at their school. The lack of these things influences the implementation of the RCBE at her school.

Participant Afrika also gave the following challenges by responding as follows:

"*Today, we have Physics and Chemistry in other words the content on its own is advanced such that now there is a need for physical structure that can now contain the advance Physics and Chemistry. One could also then indicate in the area of Science Kits and I believe that this is coming with the advancement of this subject and of course in terms of the furniture this is not necessarily coming because of curriculum reform."*

In his response, Participant Afrika singled out the challenges of lack of physical structures and furniture that can contain advanced Physics and Chemistry, which forms part of the revised curriculum at the senior secondary level.

Furthermore, Participant Afrika explained as follows:

> *"The situation is different such that with the movement of people moving to urban centres, we are struggling now to accommodate everybody that is supposed to be accommodated in schools in town. Do not forget that the Grade 10 has now been moved mostly to what use to be Senior Secondary, which are only found in urban setting in Ompundja Circuit. So, it is a challenge, now we have taken more people than what we are supposed to take and unfortunately, we may not be able to cater for them."*

This suggests that there is a challenge in accommodating learners in schools due to the mobility and influx of learners from rural schools to urban schools, which were reserved to offer the revised curriculum at a senior secondary level only.

Participant Afrika was once again asked to indicate if their school witnessed challenges related to students' accommodation. He respondents as follows:

> *"Let people in senior grades be in boarding schools and of course that is becoming a challenge now because what we are getting is not only people that are from here, urban settings. Now you expect the whole group to pass Grade 9 and go to Grade 10, it is likely to put pressure on the secondary schools that are only in urban setting. We are likely not… to be able to contain the pressure and the demand that will be coming from there."*

This symbolises that the urban secondary schools in Ompundja Circuit are going to host more Grade 10 learners, which was not the case before the new curriculum. This led to

the influx of a large number of learners from rural schools that will need accommodation in urban secondary schools.

Participant Afrika was asked what he meant when he said urban schools was he referring to secondary schools only or what schools exactly. This is how he responded:

> *"Well, when you talk of Ompundja Circuit all schools that have got hostel facilities are in Ongwediva, which is an urban centre. And these are the schools that are in demand and these are the schools that supposed to cater for the reformed curriculum of the senior grade level."*

This implies that all schools with hostel accommodation were urban schools while the rural schools do not have hostel accommodation. This led to an influx of learners from rural schools to schools in urban areas.

This part presented several challenges related to the infrastructure and physical facilities. They are such as lack of libraries, science and computer laboratories, sports facilities, furniture, and hostel accommodation facilities. Despite the 41.7% of respondents who disagreed versus the 40.9% of respondents who agreed as shown in Figure 4.19, some interviewed participants feel that hostel accommodation is needed in secondary schools that admit learners from rural schools. The absence of these infrastructures potentially hampers effective curriculum management and implementation in Ompundja Circuit.

4.4.3 Addressing challenges related to infrastructures or physical resources

Participants were asked to propose ways in which the challenges related to infrastructures or physical resources could be addressed. Participant Nomkumo was given a scenario that 52% of respondents agreed that Science Laboratories were not in their school. Nomkumo was asked for his suggestions regarding the provision of Science Laboratories at his school. The participant responded as follows:

> *"I single out that for a school to qualify should have enough infrastructures such as laboratories, libraries and other specialised rooms. So, it is true that the curriculum will not be successful if there are no sufficient laboratories put in place."*

Upon being asked for her take regarding the availability of computer laboratories in her school, this is how Participant Etuhole responded by providing an alternative on how to address the challenges:

> *"We need computers, that is the reason I said we need a Computer Lab. So that we can go and find some Good Samaritan to provide us even with three computers, to teach our learners on ICT, even on the basic."*

After Participant Afrika was asked to propose remedies to address those shortcomings, Afrika stated as follows:

> *"Of course, talking about the subjects in terms of the advancement one would possibly think and wish to see the supply of infrastructures that are not very easy to come by. And then things like Science Kits; and possibly reworking on the building that we use to have just to equip them with items, which are friendly to the revised curriculum."*

From the discussions, the respondents suggested that infrastructures should be acquired for the management and implementation of the revised curriculum to succeed in Ompundja Circuit. These are such as libraries, laboratories, specialised rooms, and computer laboratories. Reworking the existing buildings to enable them to contain the activities of the revised curriculum was also suggested. Good Samaritan can be lobbied, to construct computer laboratories as well as provide computers to schools.

4.5 Teaching and learning resources

This part presents the status of teaching and learning resources. The challenges, as well as the proposed way to address these challenges related to teaching and learning resources, are presented.

4.5.1 Status of teaching and learning resources

This part presents the status of the teaching and learning resources in schools in Ompundja Circuit. Figure 4.27 presents the rating of respondents' responses regarding whether their schools have sufficient teaching and learning resources to implement the revised curriculum.

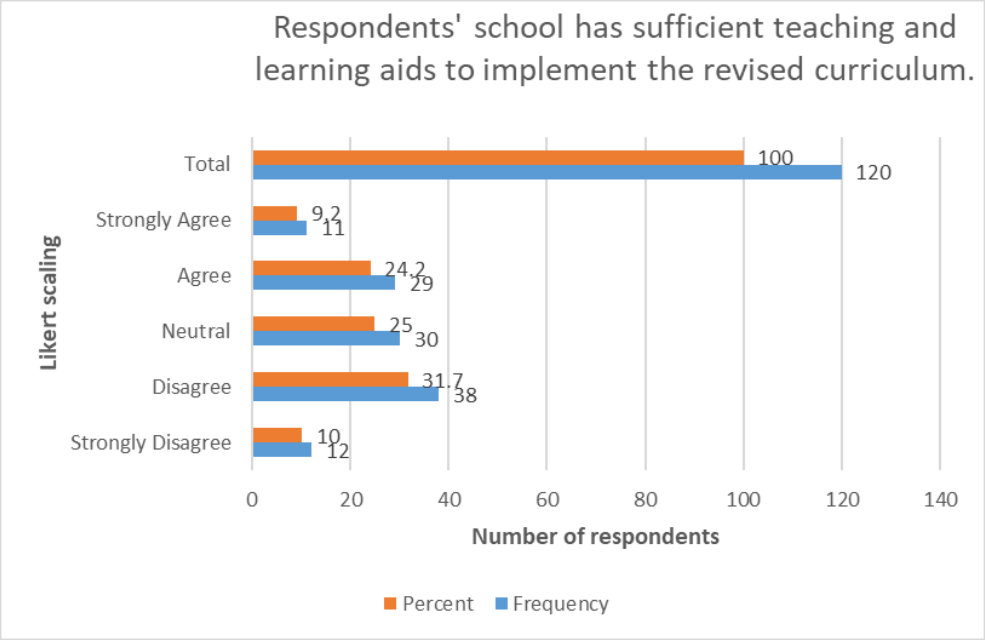

Figure 4.27. Sufficient teaching and learning aids

Figure 4.27 displays that only 33.4% of the respondents agreed that their schools have sufficient teaching and learning aids required to execute the revised curriculum. The data suggests that some schools have sufficient teaching aids while others do not. Twenty-five per cent of the respondents gave neutral responses to the statement. Respondents that disagreed that their schools have sufficient teaching and learning resources necessary to implement the revised curriculum were 41.7%. It is clear from the data that respondents have mixed feelings about the availability of enough teaching and learning aids at their schools.

Respondents were asked to indicate whether their school has enough Information and Technology equipment to implement the revised curriculum. Figure 4.28 presents respondents' indications of whether they agreed or disagreed that their schools have sufficient information and technology equipment.

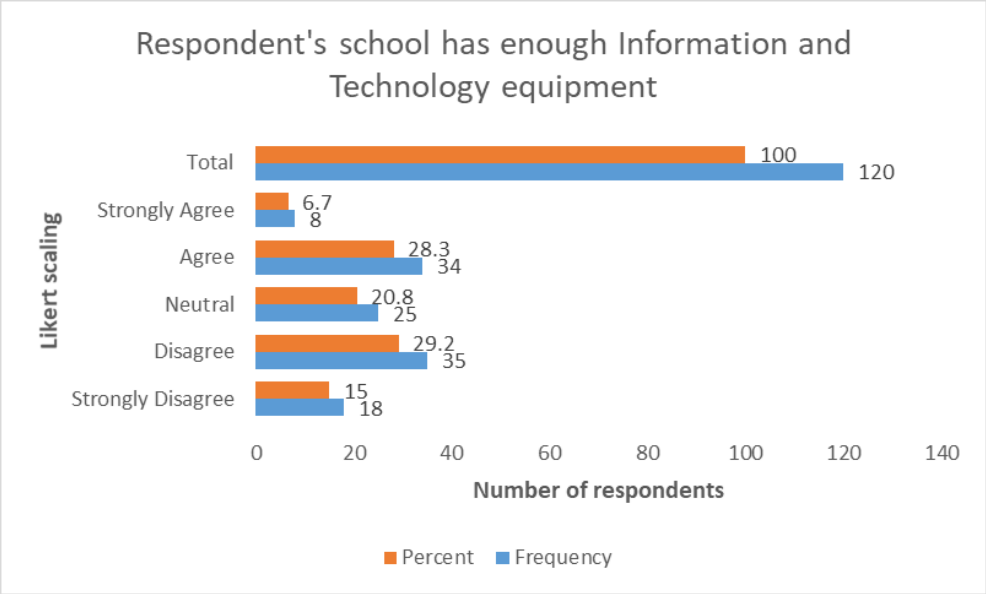

Figure 4.28. Information and technology equipment

Only 35% of the respondents agreed that their schools had information and technology equipment to facilitate the implementation of the revised curriculum. As shown in Figure 4.28, the 44.2% of the respondents disagreed that their schools have enough information and technology equipment to implement the revised curriculum. Meanwhile, 20.8% provided a neutral response. This implies that many public schools in Ompundja Circuit did not have sufficient information on technological devices and the urgency to implement them.

Respondents were also asked to indicate if stationeries were available at their schools. Figure 4.29 illustrates if the schools had stationeries for the implementation of the revised curriculum.

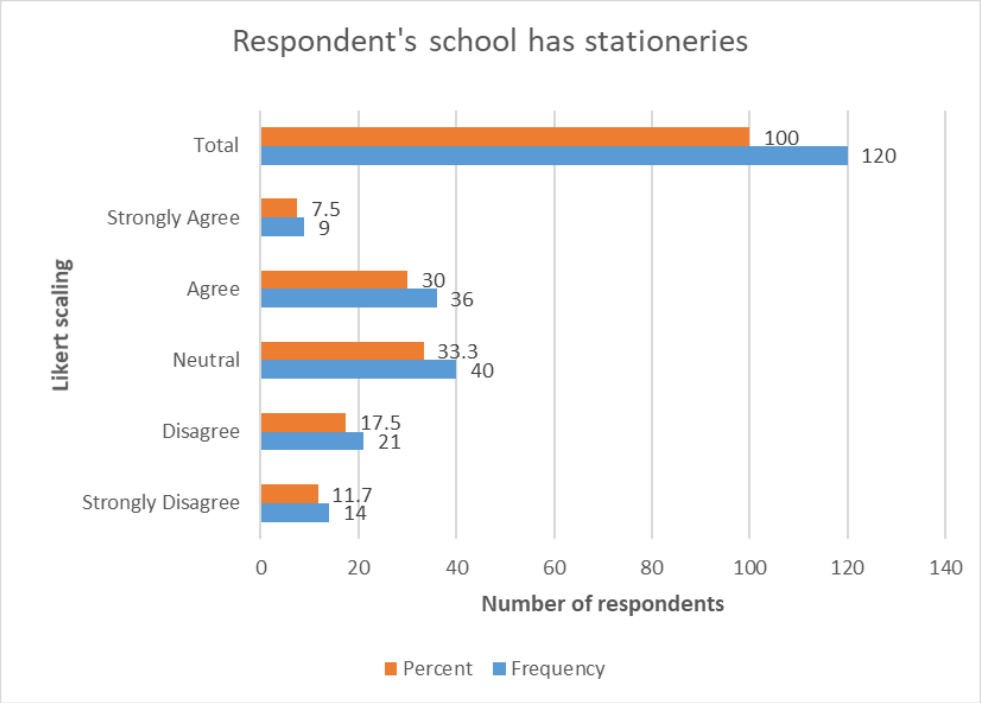

Figure 4.29. Availability of stationeries

Only 37.5% of the respondents agreed with this statement. This did not give a clear position, whether the public schools in Ompundja Circuit were provided with enough stationery or not to implement the revised curriculum. According to responses of respondents in Figure 4.29, 33.3% of the respondents gave a neutral response to the statement "My school has stationeries for the implementation of the revised curriculum." Respondents were asked to indicate the degree to which their schools have science laboratories that are well equipped for the implementation of the revised curriculum. Figure 4.30 demonstrates the respondents' responses.

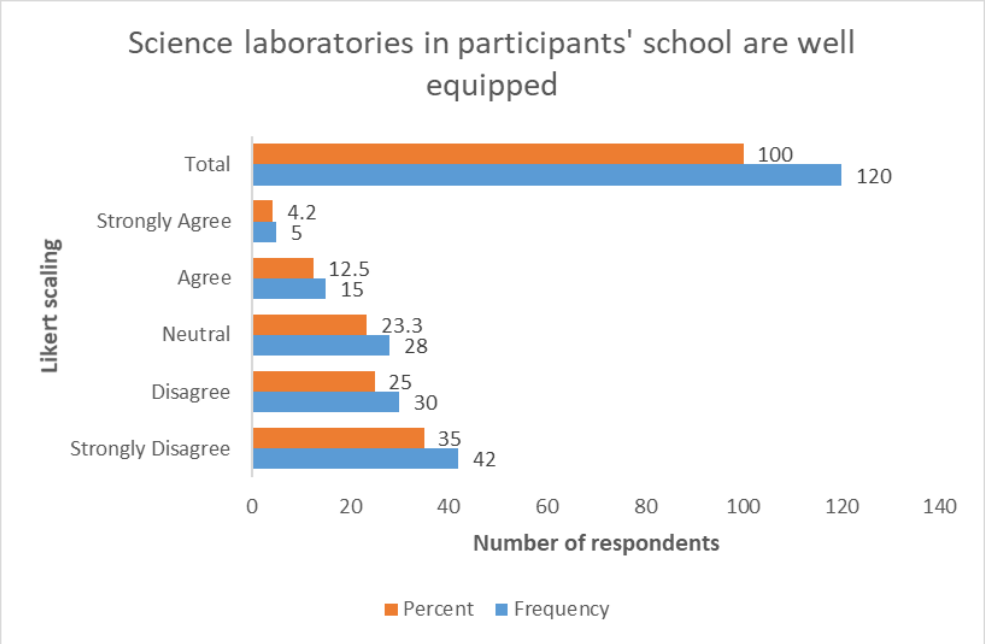

Figure 4.30. Equipped science laboratories

Respondents were also asked to indicate if the science laboratories at their schools were well equipped. Figure 4.30 shows the outcome indicators. This interpretation signifies that the majority, (60%) of the respondents disagreed based on the fact that their school science laboratories were not well equipped for implementing the revised curriculum. This entails that more respondents believe their school science laboratories are not sufficiently armed with relevant teaching and learning resources.

Respondents were asked to indicate whether their school's one textbook per child policy was in place as required by the newly revised curriculum. Figure 4.31 illustrates the degree to which the respondents feel the one-child textbook policy is in place as required by the newly revised curriculum.

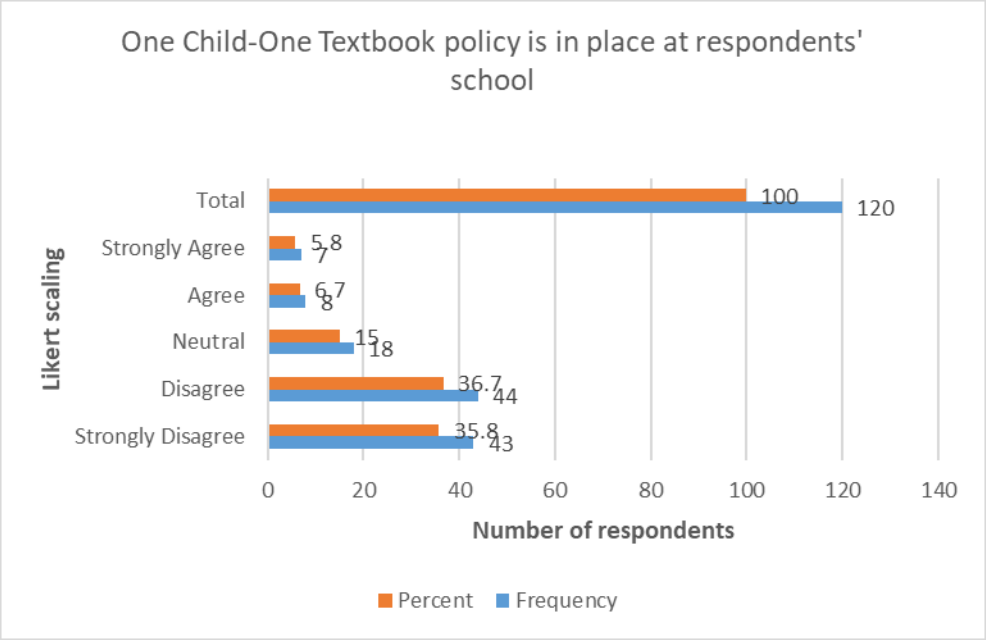

Figure 4.31. One textbook per child

Respondents were also asked to indicate if the one textbook per child policy was in place in their schools. Only 12.5% agreed that one textbook per child status was in place in their schools. In Figure 4.31, the majority of the respondents (72.5%) disagreed that their school's one-child textbook policy is in place as required by the newly revised curriculum. Fifteen per cent of the respondents were neutral. This appears to indicate that learners in public schools in Ompundja Circuit do not have sufficient textbooks.

To address challenges related to teaching and learning resources, the teachers were asked to respond by rating whether they agree, neutral or disagree. Their responses to the question of whether the Ministry of Education, Arts and Culture should provide teaching and learning aids for the implementation of the revised curriculum are provided in Figure 4.32.

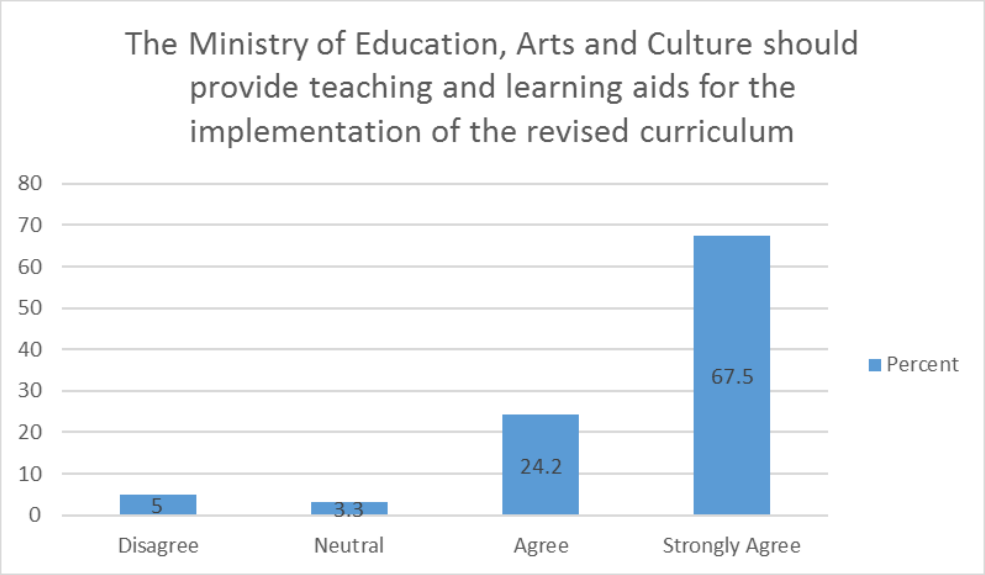

Figure 4.32. Ministry should provide teaching and learning aids

A staggering 91.7% of the respondents agreed that the MoEAC should provide teaching and learning aids for the implementation of the revised curriculum. This denotes that majority of respondents expect the line ministry to provide schools with teaching and learning aids.

Teachers were asked to indicate whether they see a need to use alternative resources, in the absence of teaching and learning resources. Their responses are presented in Figure 4.33.

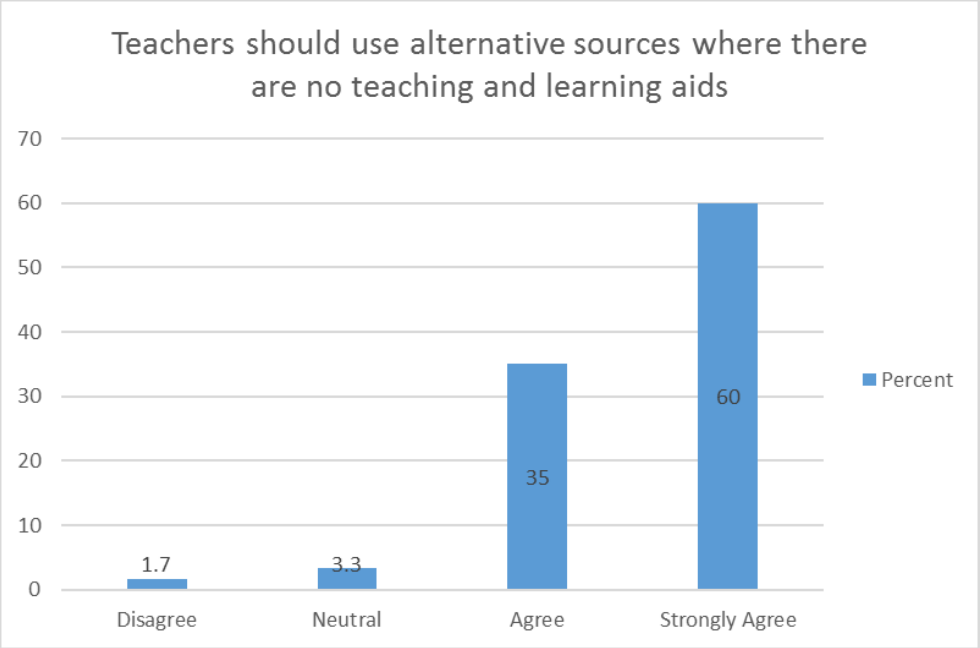

Figure 4.33. Teachers should use alternative teaching and learning resources

Figure 4.33 shows that 95% of respondents agreed that teachers should use alternative sources where there were no teaching and learning aids, while 3.3% were neutral and the remaining 1.7% disagreed. Despite the feeling that the Ministry of Education, Arts and Culture should provide teaching and learning materials, the majority of the respondents, believe that the use of substitute teaching and learning material could boost effective teaching and learning.

Vocational subjects were part of the changes introduced in the RCBE. Implementation of vocational subjects in the revised curriculum requires the availability of resources. Respondents were asked to share information on the availing of the vocational subjects' teaching and learning resources. The responses about these resources are depicted in Figure 4.34.

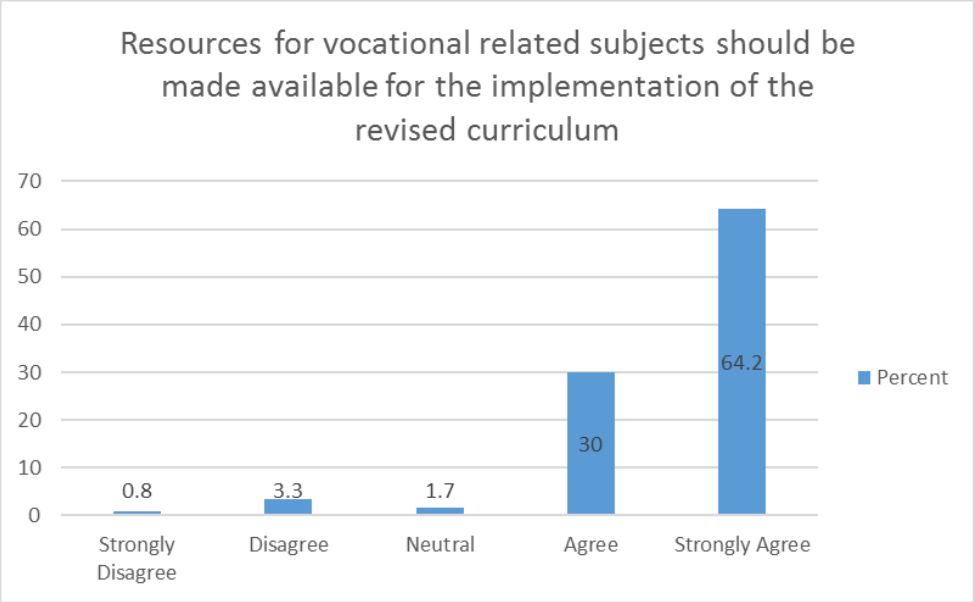

Figure 4.34. Avail vocational subjects' resources

Majority of respondents, (94.2%) agreed that resources for vocational related subjects should be made available for the implementation of the revised curriculum, while 1.7% was neutral compared to 4.1% who disagreed. This implies that the majority of respondents believe that teaching and learning resources for vocational subjects should be provided to teachers.

Teachers were asked to indicate whether they see a need to have a library stocked up with resources for the implementation of the revised curriculum. Figure 4.35 represents responses on whether libraries should be stocked up with resources.

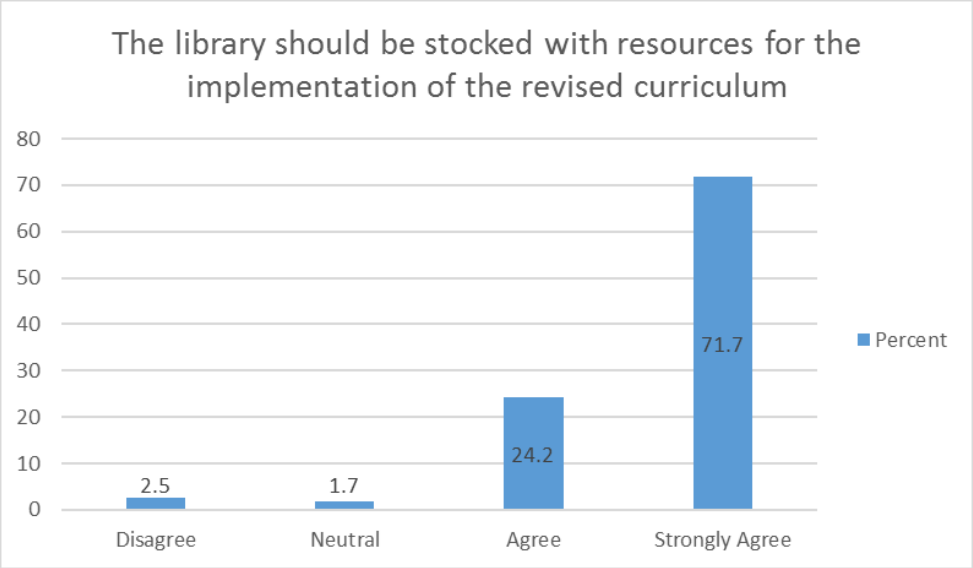

Figure 4.35. Stock up library with resources

As shown in Figure 4.35, 95.2% of the respondents agreed that libraries should be stocked with resources for the implementation of the revised curriculum, while 1.7% was neutral and 2.5% disagreed. The majority of respondents feel that library resources should be made available to enable effective implementation of vocational discipline in public schools in Ompundja Circuit.

Science laboratory equipment is needed. Teachers were asked to indicate whether science laboratories must be stocked with adequate teaching and learning resources. Their responses are shown in Figure 4.36.

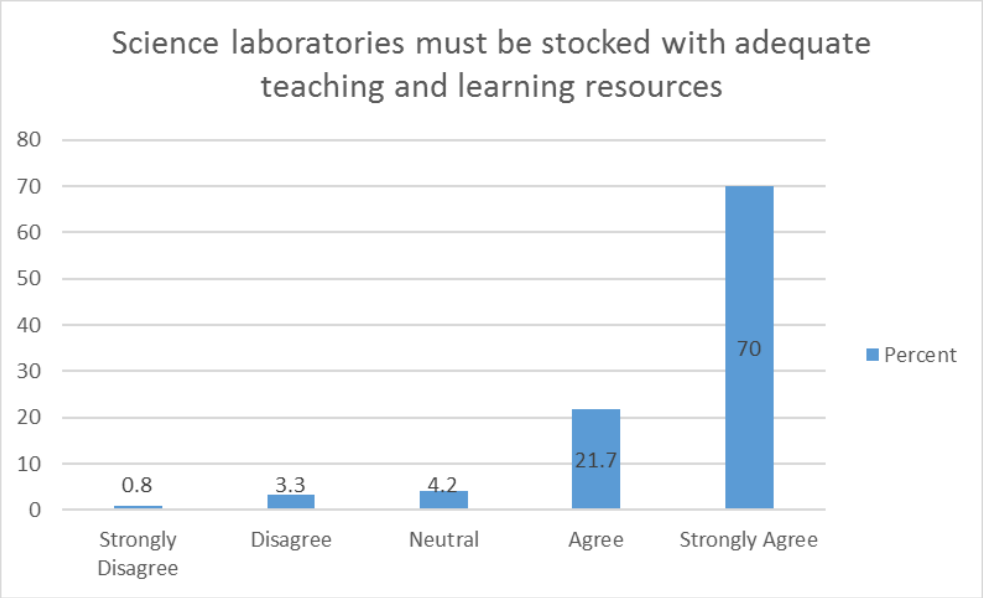

Figure 4.36. Stock up science laboratories with resources

It is expressed in Figure 4.36 that 91.7% of the respondents agreed that the science laboratories must be stocked with adequate teaching and learning resources. This denotes that for effective teaching and learning to take place the science laboratories should be furnished with adequate instructional materials.

Qualified vocational subject teachers are necessary human resources in the curriculum management and implementation process. Figure 4.37 shows whether qualified vocation subject teachers should be involved in the implementation of the RCBE.

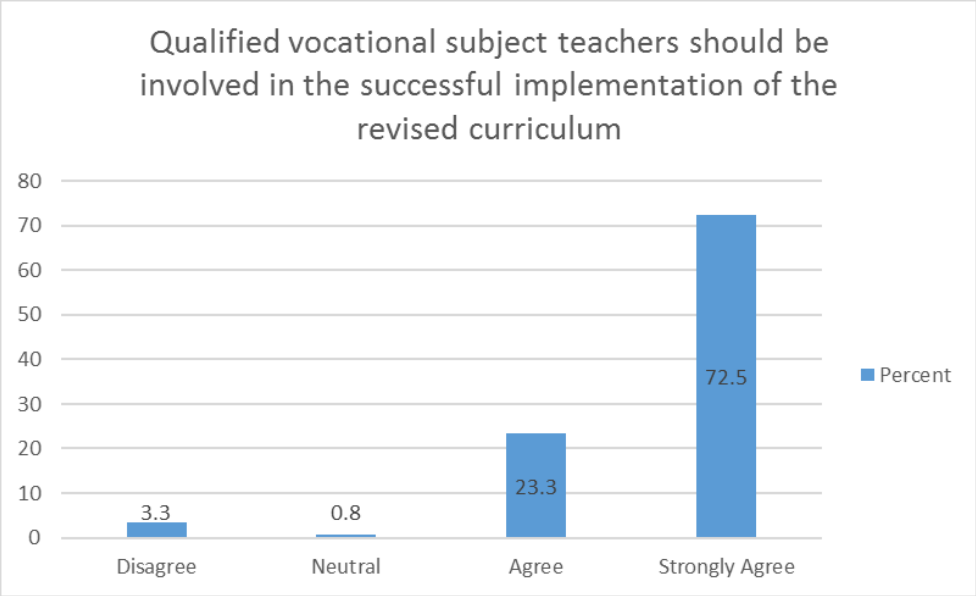

Figure 4.37. Involve qualified vocational subject teachers

It is illustrated in Figure 4.37 that 95.8% of the respondents agreed that the qualified vocational subject teachers should be involved in the successful implementation of the revised curriculum, 0.8% were neutral and 3.3% disagreed.

4.5.2 Challenges related to teaching and learning resources

At this point, the researcher asked the participants if there were challenges related to teaching and learning resources that affect the implementation of the revised curriculum in their schools. Participants were also asked to suggest ways in which the challenges could be addressed.

Kondja responded as follows:

> *"Since the revised curriculum, the textbooks were changed and we have not yet reached the level of one-to-one book per learner."*

Textbooks were changed in the revised curriculum, thus; the targeted ratio of one book per learner is not honoured. This is a challenge that may affect the implementation of the revised curriculum.

Nomkumo's response implies that there were no enough teaching and learning resources. This was how he responded:

> *"We are trying, by all means, to make sure that we deploy with the limited resources at our disposal. It will not be successful if there are no quality teaching and learning resources at our disposal."*

It is evident from the response above that the teaching and learning resources were available but in limited quantities. The limited resources were a point of concern to the effective revised curriculum management and implementation in Ompundja Circuit.

He further emphasises that:

> *"Teachers are finding it difficult to come up with quality teaching and learning resources or teaching aids in terms of subject corners, which are reliable and valid to the education process of our learners."*

Challenge is that teachers find it difficult to come up with valuable teaching and learning resources to supplement the limited resources that they have. This could affect the successful implementation of the revised curriculum for basic education in Ompundja Circuit.

Researcher further probed Nomkumo to express his take on participants, who indicated that they do not have sufficient ICT equipment as teaching and learning resources. The participant responded as follows:

"It is true; there are no sufficient ICT equipment. In our context, we are lucky because our school was funded under the MCA and we have laptops, we have go projectors, we have internet connectivity, which is quite reliable. We are not finding this as a challenge, but I have witnessed other schools in the region that are not deployed yet with available ICT equipment."

Availability of ICT resources at other schools in a circuit and region is a point of alarm that may influence curriculum management and implementation.

A researcher again probed Participant Nomkumo to indicate how the timely provision of quality textbooks is affecting the process of revised curriculum implementation. His response is as follows:

"Procuring of textbook resources, it is quite slow. ... Because of bureaucracy that is in place. This year alone we did not receive any textbook thus far. Although we have ordered, it is affecting the successful implementation of the revised curriculum."

Bureaucratic delays were stated to hamper the revised curriculum management and implementation due to the late delivery of textbooks to schools in Ompundja Circuit. Some schools did not receive any textbooks this year at all.

A similar question about the challenges related to the teaching and learning resources was posed to Participant Etuhole, who answered as follows:

"The challenge we have here at our school, the textbooks are not sufficient, even the stationeries. So you know before, the Ministry had to provide us with the stationeries before the commencement of another year. Now you find yourself, you are in January the school is starting already, no stationeries, no textbooks."

Etuhole's response and that of Nomkumo agrees, which implies that the textbooks were there but not enough. This state of affairs hampers the effective implementation of a revised curriculum in Ompundja Circuit.

In response to the challenge related to teaching and learning resources that influence the implementation of the revised curriculum, Participant Tuuda said:

> *"In a modern education now that we are advocating the integration of ICT because the learners of today they will be bored when they are looking at the teacher explaining. .... So, the problem that we have is that the resources are not sufficient at all."*

Use of ICT is another way of supplementing the lack of teaching and learning resources, however, the ICT kits were not sufficient at schools where there are any.

Finally, the researcher asked Participant Afrika about the challenges that impact revised curriculum implementation were related to teaching and learning resources. Participant Afrika replied as follows:

> *"... In the area of textbooks, the Ministry and the circuit were moving what is called a one-on-one ratio. This is an ongoing process and now that we have the new curriculum we are at the very beginning now. We now have to start using completely different textbooks. Such that we are now at zero and given the fact that the economic situation not that good to provide enough. You find yourself in a situation whereby there is no supply in specific subjects."*

Like Participant Kondja, Participant Afrika implies that the school is far from arriving at the intended one textbook per learner ratio because it is expected that the new curriculum is using different textbooks. This is aggravated by the state of the economy, which is not good.

To summarise the interpretations, there are some challenges related to the lack of teaching and learning resources at schools in Ompundja Circuit. The challenges are such as slow procuring and delivery of textbooks, insufficient textbooks, and lack of stationeries, insufficient ICT resources as well as lack of computers and internet connectivity. The revised curriculum led to the use of different textbooks, which resulted in the inability to reach the ratio of one textbook per learner. The findings from the interviews about textbooks and stationeries support the quantitative data shown in Figure 4.30 and Figure 4.31.

4.5.3 Addressing challenges related to teaching and learning resources

Participant Kondja provided two possible ways of addressing the lack of textbooks.

Kondja stated:

> *"We are still waiting to see whether the government will pronounce something to say maybe parents should start, those that can afford, should start buying the textbooks. Otherwise, what we do we rely on copies. That one textbook we make copies and give to learners."*

Here, Participant Kondja advised the government to allow schools to ask parents to buy textbooks for learners. The participant also opined that schools should make copies of textbooks provided they do it within copyrights.

Considering the response about teachers finding it difficult to come with quality teaching and learning resources, Nomkumo stressed that teachers need training on the design of teaching and learning resources as follows:

"So, this aspect of teachers training needs to be enforced on the development of teacher and learner resources."

Researcher asked participant Nomkumo if there was anything that the participant thinks should be done about using alternative indigenous teaching and learning resources. This is how the participant responded to the question:

"So far, those who were trained under, BETD programme are ensuring that they follow the system of developing teaching and learning resources in context."

This seems to suggest that other teacher training such as the Bachelor of Education, as a remedy, should equip teachers with knowledge on how to develop alternative indigenous teaching and learning resources, which are locally available.

Participant Nomkumo further went on to advise the MoEAC as follows:

"I advise Regional Directorate or the Ministry of Education, Arts and Culture head office should take a keen interest in the procurement of teaching and learning resources promptly so that they enable the implementation of the revised curriculum successfully."

The researcher asked Etuhole to suggest how to address the shortage of teaching and learning resources such as stationeries. This was the participant's answer:

"My suggestion is that the Ministry should provide the stationary beforehand (PAUSE) during October, November when we come in January the other year we are sitting with the stationeries already. I understand that on the textbooks, financial problem is now everywhere. So, they should assist with the few textbooks."

In the absence of textbooks, Participant Afrika suggested the following possible solution:

> *"One would also expect technical based recourses, which are used for lesson presentations to be enhanced a little bit."*

Participant Africa was asked whether is proposing that ICT should be the way to address some of the shortcomings regarding the teaching and learning resources. Participant replied as follows:

> *"That's an obvious solution. If we could possibly have more of internet connectivity done at schools, where possible, we could also have ICT devices provided and supplied one would think now the ICT resources will now compensate lack of textbooks."*

In conclusion, the participants made suggestions on how the teaching and learning resources setbacks could be addressed. These were such as the government allowing schools to ask parents to buy textbooks for learners. Alternatively, schools can make copies of the available textbooks in line with the relevant copyrights regulations. Teachers should be trained in designing and developing alternative teaching and learning resources. Ministry of Education, Arts and Culture should deliver stationery on time. Preferably, the stationeries to be used should be delivered in advance. Lastly, the ICT resources should be enhanced as well as the internet connectivity should be broadened to compensate for the use of textbooks.

4.6 Funding or financial resources

A status of funding or financial resources in public schools in Ompundja Circuit is discussed here. It also presents the challenges related to funding in schools as well as suggested ways to address the identified challenges.

4.6.1 Status of funding or financial resources

Respondents were asked to indicate whether their schools receive enough funds from the government to implement the revised curriculum. Figure 4.38 displays the respondents' views.

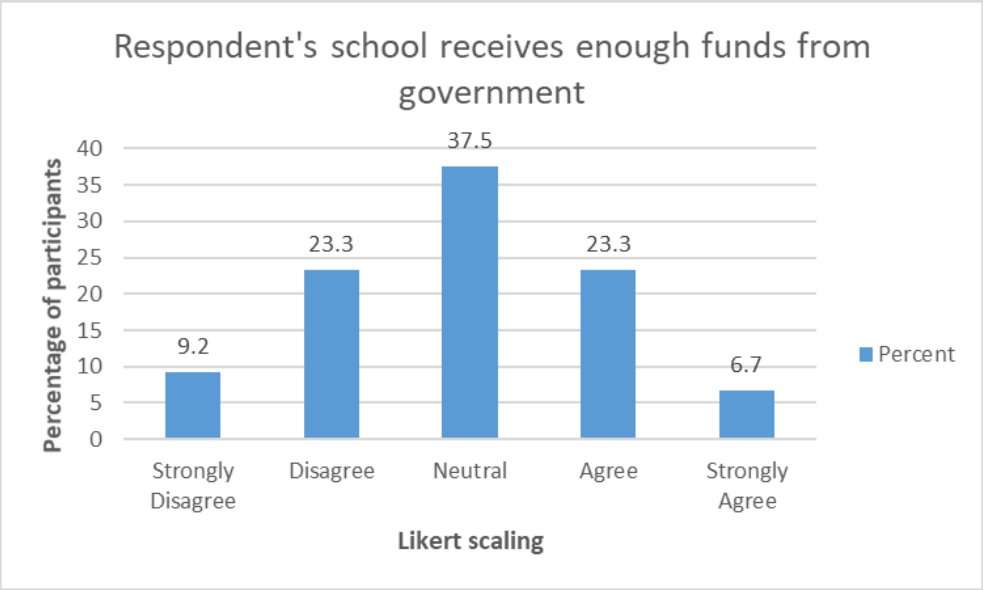

Figure 4.38. Enough funds from government

Only 30% of the respondents agreed that their school receives enough funds from the government to implement the revised curriculum. Figure 4.38 indicates that 37.5% of the respondents were neutral about the statement, whether their schools receive enough funds from the government to implement the revised curriculum. This seems to indicate that some of the respondents do not know if the government gives funds to schools for the implementation of the revised curriculum in Ompundja Circuit. This left the 32.5% of respondents having disagreed.

Respondents were asked to indicate whether their schools had adequate funds for learning materials. Figure 4.39 represents whether schools in the circuit have enough funds for learning materials for the implementation of the revised curriculum.

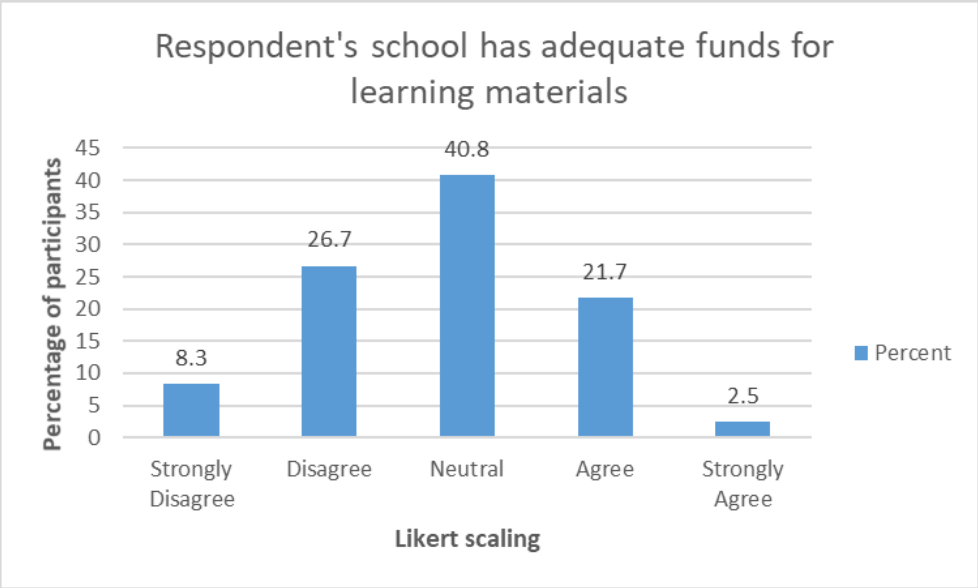

Figure 4.39. Enough funds for learning materials

Only 24.2% of the respondents agreed that their schools had enough funds for procuring learning materials. Figure 4.39 also depicts that 40.8% of the respondents opted to be neutral. Thirty five percent disagreed with the statement. There is no outright majority on whether schools have adequate funds to procure enough learning aids while only above 40% took a neutral stand.

Respondents were asked to state whether parents support the schools financially. Figure 4.40 shows the responses of respondents when they were asked to state the extent of disagreeing and agreeing that parents support the school financially.

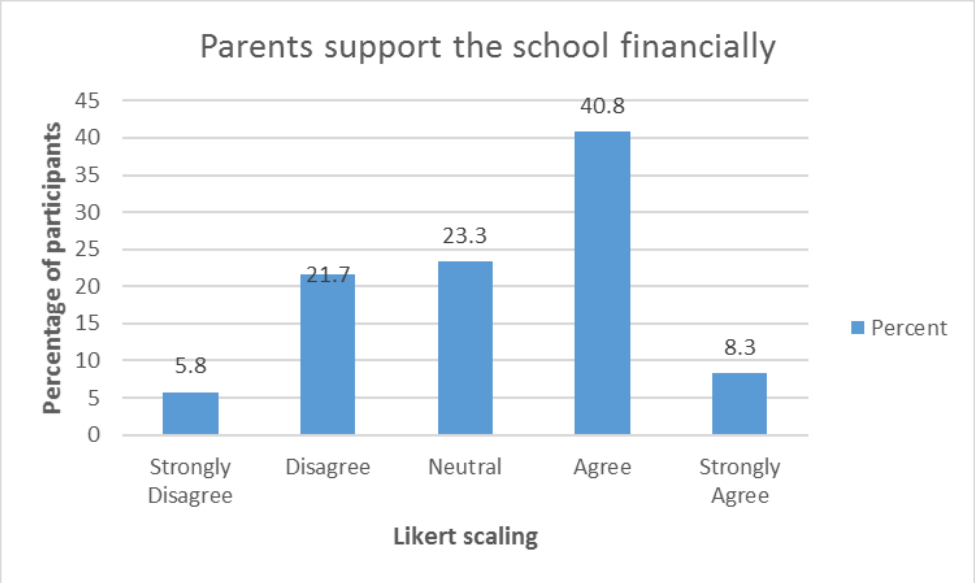

Figure 4.40. Parents support the school financially

In Figure 4.40, 49.1% of the respondents agreed that parents support their schools financially. The 23.3% of respondents were neutral on this statement. The 27.5% of respondents disagreed that the parents support their schools financially. This indicates that about 50% of the respondents had shown a clear position regarding parents' financial support to the public schools.

Respondents were asked to indicate whether private stakeholders support the schools financially. Figure 4.41 shows the extent of disagreeing and agreeing to the statement if private stakeholders support participants' schools financially.

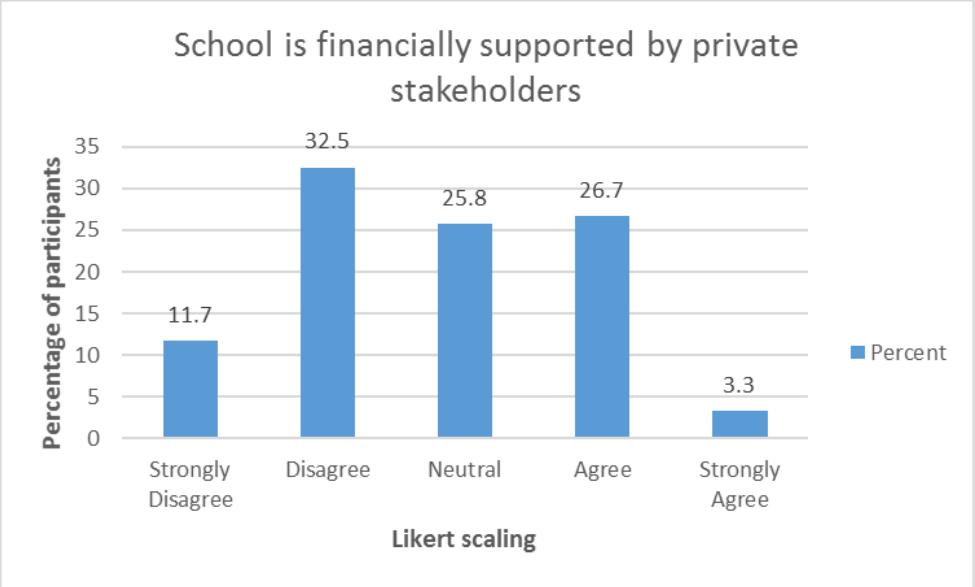

Figure 4.41. Private sector supports the school financially

Only 30% of the respondents agreed that the private stakeholders support schools financially. It is expressed in Figure 4.41 that 44.2% of the respondents disagreed that private stakeholders, apart from parents, learners and the MoEAC or ORDEAC, support the schools financially. This is followed by 25.8% of respondents who were neutral on this statement. This implies that respondents were uncertain whether the private stakeholders offer financial assistance to public schools in Ompundja Circuit.

Respondents were also asked to rate if the removal of SDF had a negative effect on the implementation of the revised curriculum for basic education. Thus, Figure 4.42 illustrates how the removal of SDF has a negative effect on the revised curriculum implementation.

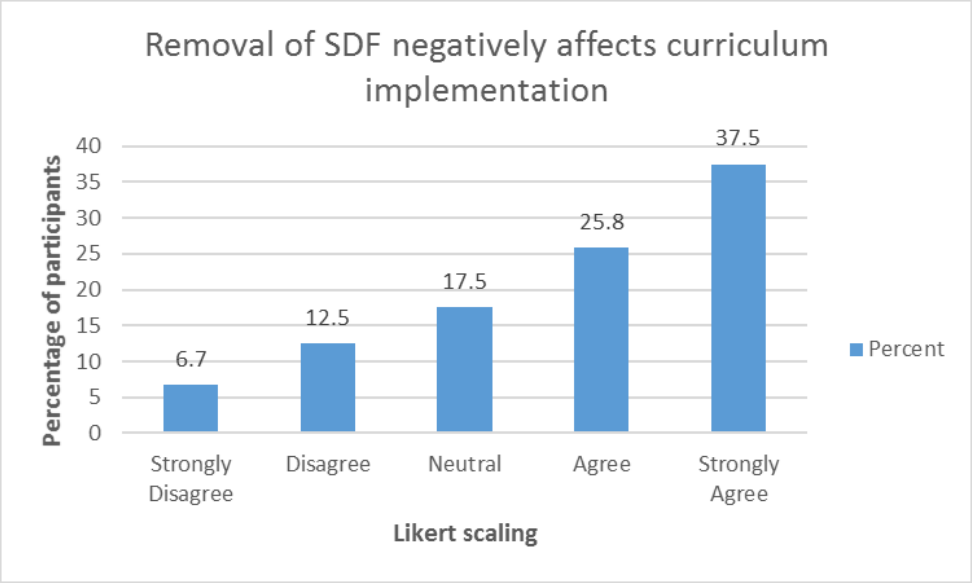

Figure 4.42. Removal of SDF negatively affects curriculum implementation

Figure 4.42 states that the majority of the participants, 63.3% agreed that the removal of School Development Funds (SDFs) has a negative effect on the implementation of the revised curriculum for basic education. The 17.5% of the respondents were neutral regarding the SDF's impact on the implementation of RCBE. This means that the majority of respondents feel the removal of School Development Funds (SDFs) has negatively affect revised curriculum management and implementation.

Financial resources are important in educational settings because they are used to acquire teaching and learning materials and maintaining physical resources among others. Ways how to address challenges related to financial resources are presented in this section.

Respondents were asked to indicate whether the Ministry of Education, Arts and Culture should fund the activities related to the implementation of the revised curriculum. Figure 4.43 indicates the participants' responses.

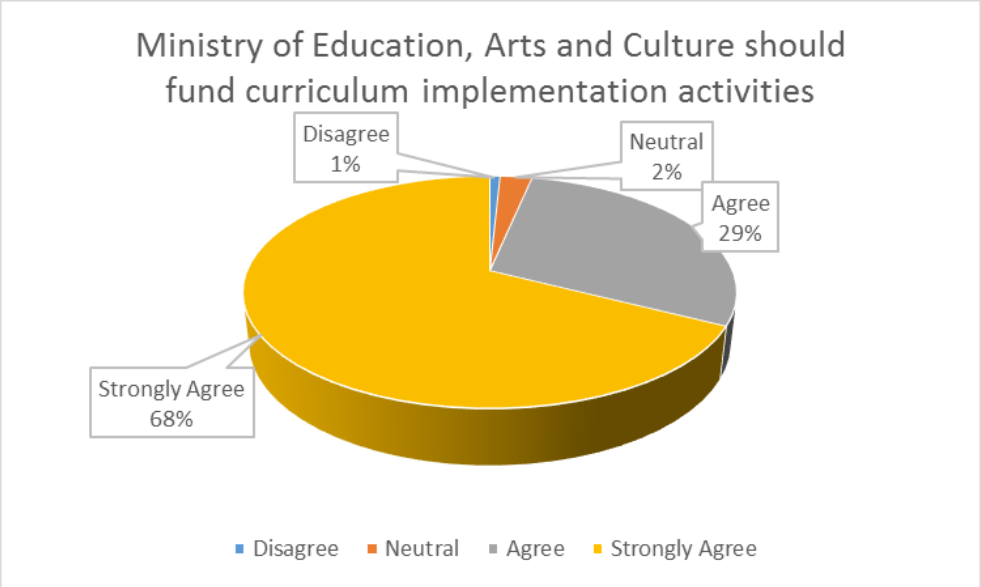

Figure 4.43. MoEAC should fund curriculum implementation

Figure 4.43 shows that the majority of respondents, (97%) agreed that the MoEAC should fund the activities related to the implementation of the revised curriculum, while 2% were neutral and the remaining 1% disagreed. This implies that respondents believe that the host ministry, the Ministry of Education, Arts and Culture, should supply the revised curriculum management and implementation activities.

Figure 4.44 indicates the responses of participants on whether the Ministry of Education, Arts and Culture (MoEAC) should finance the teaching and learning materials.

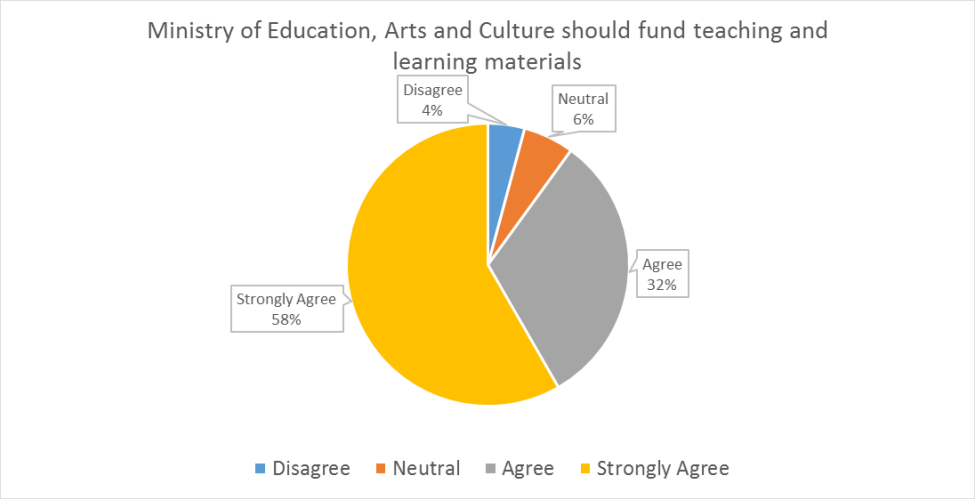

Figure 4.44. MoEAC should fund teaching and learning activities related to curriculum implementation.

As shown in Figure 4.44, the majority of respondents (90%) agreed that the MoEAC should fund teaching and learning activities related to the implementation of the revised curriculum.

Respondents were asked to indicate if they see it necessary for parents to support the schools financially. Their responses are shown in Figure 4.45.

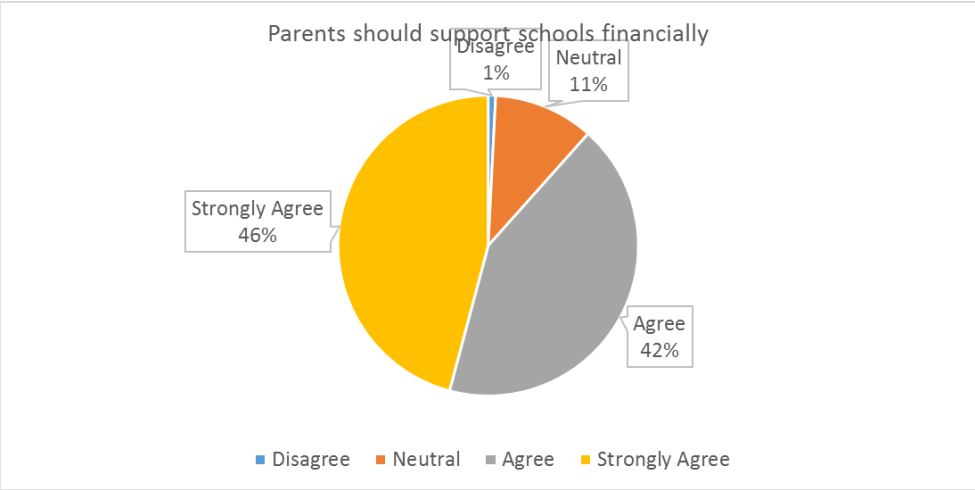

Figure 4.45. Parents should support schools financially

As shown in Figure 4.45, the majority of respondents, (88%) agreed that parents should support schools financially, while 11% were neutral and the remaining 1% disagreed.

This shows that the majority of respondents believe that parents should support schools financially.

Teachers were asked to indicate whether corporate business entities should support schools financially. Figure 4.46 shows their responses.

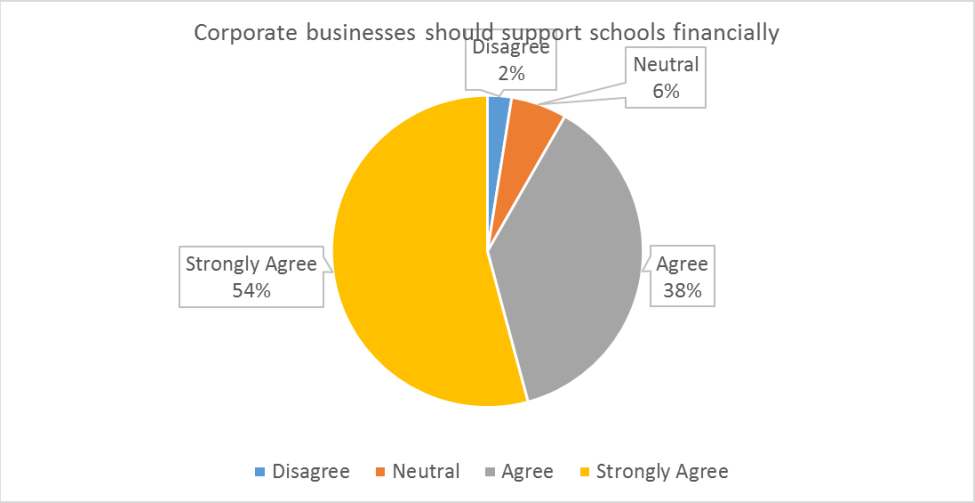

Figure 4.46. Corporate businesses should support schools financially

Ninety-two per cent of the respondents agreed that corporate business entities should support schools financially, while 6% were neutral and the remaining 2% disagreed. As is the case with the Ministry of Education, Arts and Culture as well as parents, the majority of respondents believe that the business community should also fund educational activities in public schools in Ompundja Circuit.

Figure 4.47 shows the responses of respondents to the statement, whether the School Development Funds (SDFs) should be re-introduced in schools.

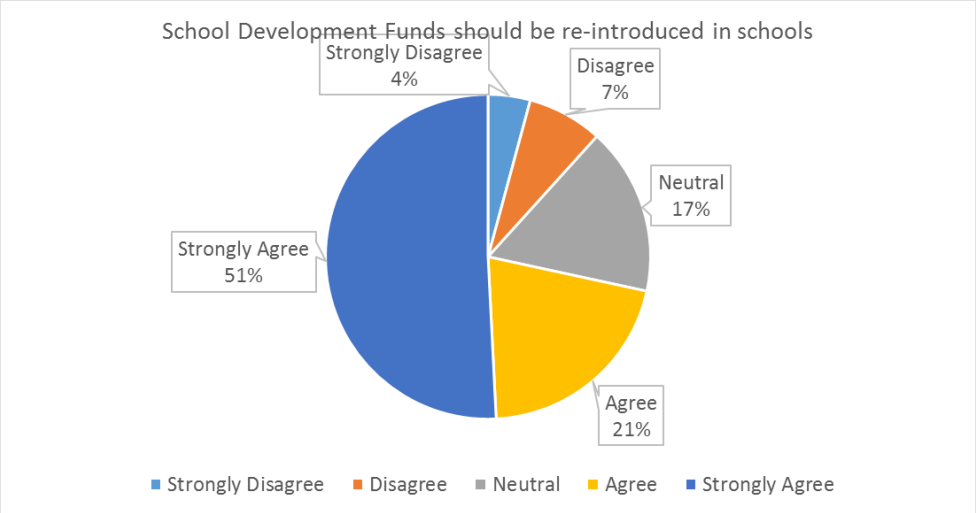

Figure 4.47. SDFs should be re-introduced in schools

Figure 4.47 show that a large number of respondents, (72%) agreed that the government should re-introduce the SDFs in schools. Seventeen percent of the respondents neither agree nor disagree with the call for the re-introduction of SDFs. Few respondents (11%) disagreed with the statement.

4.6.2 Challenges related to funding or financial resources

A researcher asked the participants to share the challenges related to funding or financial resources that hinder the implementation of the revised curriculum. Participants were also asked to suggest ways in which the challenges could be addressed. This is the discussion of how they responded.

Participant Kondja replied as follows:

> "*I cannot say really we experience any problem because currently, we rely on the funds from government and that depends on the number of learners that we are having. They do, although now that the money has been reduced. ... Sometimes*

this money does not arrive on time for the school to purchase necessary equipment or necessary resources."

Furthermore, the researcher probed Kondja starting by stating that schools are now surviving on fund mean to ensure Universal Primary Education (UPE) as well as on the majority of the respondents (63.3%), who agreed that the removal of School Development Funds (SDFs) seems to hamper the implementation of the revised curriculum in the circuit Kondja responded as follows:

"Yes, I also want to agree with the other people that it is true the removal of SDF really bring in a negative impact. Because, the government could not really afford everything that was supposed to be covered by the parents. My take is, it was not supposed to be abolished completely all the grades through like it is happening now from Grade 0 to Grade 12. Maybe, it was supposed to be, kind of subsidised like they have a minimum contribution that a school can ask from parents but not to have a zero contribution."

Participant Nomkumo was asked to share with the researcher the challenges that hinder the implementation of the revised curriculum. This is how he responded:

"*Yes, funding is a problem. The ratio provided on the amount of funds as per the learner is not quite sufficient thus far."*

When asked if there were any challenges related to funding and financial resources and their implication to the revised curriculum implementation, Etuhole gave the following answer:

"A Ministry provides us with UPE but in many cases, it is not sufficient for our needs and also the private stakeholders who use to sponsor schools nowadays are very scared."

Responding to the question on challenges related to funding and financial resources and their implication to the revised curriculum implementation, Participant Tuuda said the following:

> *"An economy of the state that has scrapped a bit has impacted our schools. One would say if the provision of funds could be made as it was done before the global economic downturn that we are experiencing now. Although it could not be enough, it could be better. But now with this, it is becoming worse because we are getting very little and again the big problem is that we are reminded not to at least solicit funds from the parents."*

The researcher presented to Participant Tuuda that it is common knowledge that the MoEAC is receiving a large chunk of the national budget allocation. The researcher then asked Participant Tuuda if this money is cascading down to public schools in Ompundja Circuit. Participant Tuuda answered:

> *"One can say this money is not being used to impact on teaching and learning possibility maybe they are much more allocated for salaries."*

This implies that although the MoEAC gets one of the biggest budget allocations from the government, it did not cascade to operations of public schools in Ompundja Circuit, but the salaries of the staff of the Ministry.

Participant Afrika did not associate the financial challenge to the ongoing implementation of the revised curriculum. This is how he reacted to the question:

> *"Okay, there are challenges, but allow me not to only associate these challenges to the revised curriculum. There are challenges in the whole operation of teaching and learning. The main thing is schools are expected to use what comes from the Ministry, which at times does not give the resources at the time where there is a*

need. For example, the whole of the first two terms nothing is deposited. And these are terms, which are supposed to be very busy."

The challenges that were raised are summed up as the UPE money allocated to schools is reduced and it is often not delivered on time. For instance, the first two terms of school are busy, but schools do not get the money deposited in their accounts in those terms. It is found that the removal of SDF has also negatively affected the implementation of the revised curriculum while private stakeholders who sponsored schools are reluctant to assist, which could be attributed to the struggling economy and this may affect the schools in Ompundja Circuit. Schools' inability to solicit funds from parents, as instructed by the government, affects curriculum management and implementation. This finding from qualitative data agrees with the finding from quantitative data in Figure 4.42, where the majority (63.3%) of respondents agreed that removal of School Development Funds has a negative effect on revised curriculum implementation.

4.6.3 Addressing challenges related to funding or financial resources

Suggested ways to address the financial challenges raised in 4.6.2 that interfered with revised curriculum management and implementation for basic education in Ompundja Circuit are discussed here. To stimulate ways of addressing the challenges of funds, Participant Kondja was probed about what he thinks should be the intervention from both the parents and the business community.

"I think this is the time to tell the truth that government alone cannot afford to support schools fully and community around should be made aware that we are in

a crisis of finance, and of course on the side of the school we have small fundraising activities like a tuck-shop. That is very small but of course, it can help to generate some money to support buying printer cartridges and papers. So, that is what the school can do, but of course, I want to agree that really the community need really to be made aware so that they can bring their contribution."

By this response, Kondja implies that the funds could be raised in schools through small fundraising activities such as running entrepreneurial activities like tuck-shops. The participant also implies that the community needs to be sensitised so that they bring their contributions to schools because the government alone cannot afford to support the schools financially.

Participant Nomkumo further went on to propose as follows:

"I advise the Ministry of Education, Arts and Culture to have a closer look on the UPE per head, which is not enough. That affects the resources that affect the implementation of the curriculum. So, I advise the Ministry to, at least, look at the best possible way to make finance available to all schools."

Although schools get money allocated to learners through UPE, Participant Nomkumo feels that it needs to be increased because it is not enough.

Participant Nomkumo was asked to react to the responses of a combined 63% of respondents, who agreed that the removal of SDF hampers the implementation of the revised curriculum. To arrest the situation, he proposed the following:

"I support the effort of the government of introducing the Universal Free Primary Education. For the past 12 years, I have been a school principal, when it comes to School Development Funds (SDFs) was not sufficient. If you have got a large population of learners enrolled, you are likely to benefit more and this accelerates the procurement of teaching and learning resources internally at school."

Participant Nomkumo indicated that his school is well off now that the government has introduced UPE funding. According to him, the SDFs were not quite enough to fund the activities of the public schools in Ompundja Circuit. The number of learners enrolled at the school dictates how much money the school gets from the UPE.

Participant Etuhole was then asked to propose some of the possible ways in which the financial resources at school can be addressed. Etuhole responded as follows:

> *"One of them is that the UPE may be extended per learner and also the stakeholders can be motivated by the regional director via various meetings to assist schools in their needs."*

Participant Etuhole has given examples of how the UPE can be extended as well as proposes another additional way of addressing the lack of funds:

> *"If it was N$100 or N$200 per learner it can be now N$350 per learner. Yeah in some cases I can also suggest that the School Development Fund should also be implemented again to assist the UPE."*

When Etuhole was asked to confirm if the SDF should be re-introduced again she responded as follows:

> *"Yes, it should be reintroduced again together with UPE especially in the rural schools. When you happen to ask parents from the rural area to come support, some understand the situation, but some do not want to take part."*

Etuhole's response is similar to Nomkumo who asked for the UPE per learner to be increased. Furthermore, Etuhole suggested that the Regional Directorate of Education, Arts and Culture should motivate the stakeholders to assist public schools in Ompundja Circuit. Etuhole also suggested that the SDF should be re-introduced together with UPE but for rural schools only.

A researcher probed Participant Afrika on what can be done to accelerate the delivery of UPE to schools. Afrika's response:

> *"I also know that there is a challenge with the budgetary constrain that is also giving problems. I believe that the parents are able to contribute and they contribute timely. Since I am from the old era, I can really tell the difference between now and the old eras when parents use to pay School Development Funds that is the direction to go, you can make that U-turns, re-introduce the SDF and the Ministry can cater for other things."*

Participant Afrika believes that the parents can make timely financial contributions through paying SDFs. Like Participant Etuhole, Participant Afrika shares the same sentiment of having the SDF re-introduced again. This could enable the Ministry to cater for other things.

To sum it up, the challenges related to funds can be resolved through various ways such as fundraising activities. Secondly, the community should be sensitised to support schools financially because the government alone cannot yield enough money to fund schools. Thirdly, schools get money allocated to learners through UPE and should be increased because it is not enough. Fourthly, contrary to the views held by other participants, one Participant indicated that his school is comfortably well off due to UPE, the SDFs were not quite enough to fund the activities of the school. Fifthly, the Regional Directorate of Education, Arts and Culture is requested to motivate the stakeholders to finance the activities of the public schools. Sixthly, the SDF should be re-introduced together with UPE, but for rural schools only. Finally, some feel that the parents can make timely financial contributions through paying SDFs.

4.7 Implementation of vocational related subjects

This part discussed the status of the implementation of vocational related subjects in schools in Ompundja Circuit. It also presents the challenges related to the implementation of vocational related subjects and proposed ways to address the identified challenges.

4.7.1 Status of implementation of vocational related subjects

This part presents the status of challenges linked to the implementation of vocational related subjects in schools in Ompundja Circuit. Figure 4.48 illustrates participants' responses on whether schools have enough teaching and learning aids for vocational related subjects.

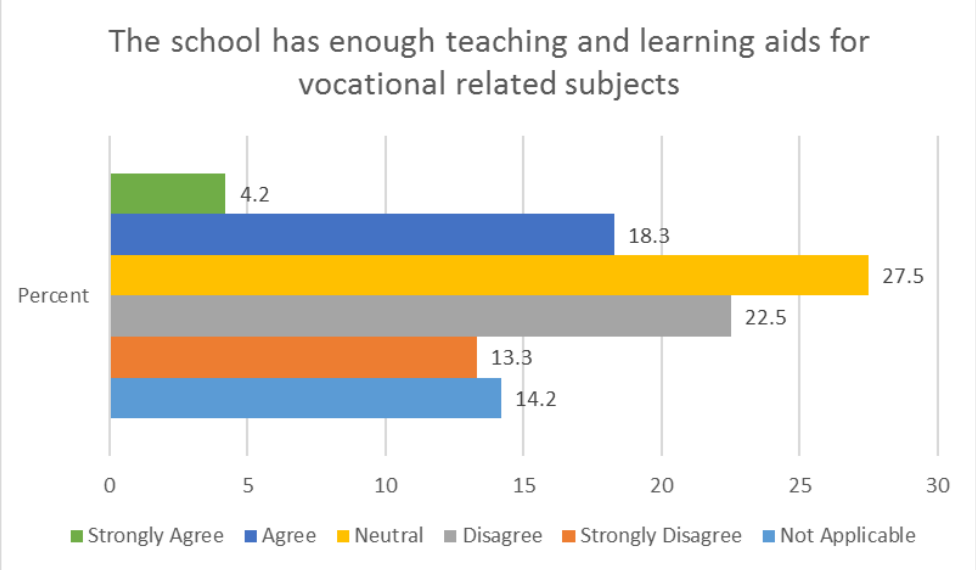

Figure 4.48. Enough vocational teaching and learning materials

Respondents were asked to indicate whether their schools had enough teaching and learning materials for vocational subjects. In Figure 4.48, only 22.5% agreed with the

statement while 27.5% of the respondents gave a neutral answer that the school has enough learning and teaching aids for vocational related subjects. The 35.8% of respondents disagreed with the statement. The statement, nonetheless, did not apply to 14.2% of the participants. There is no clear majority regarding whether the schools have adequate teaching and learning materials for vocational subjects.

Vocational education requires workshops for learners to practise the theory learned. The respondents were asked to indicate whether schools had equipped workshops to enable the implementation of vocational subjects. Thus, Figure 4.49 illustrates responses on whether schools have equipped workshops to enable the implementation of vocational subjects.

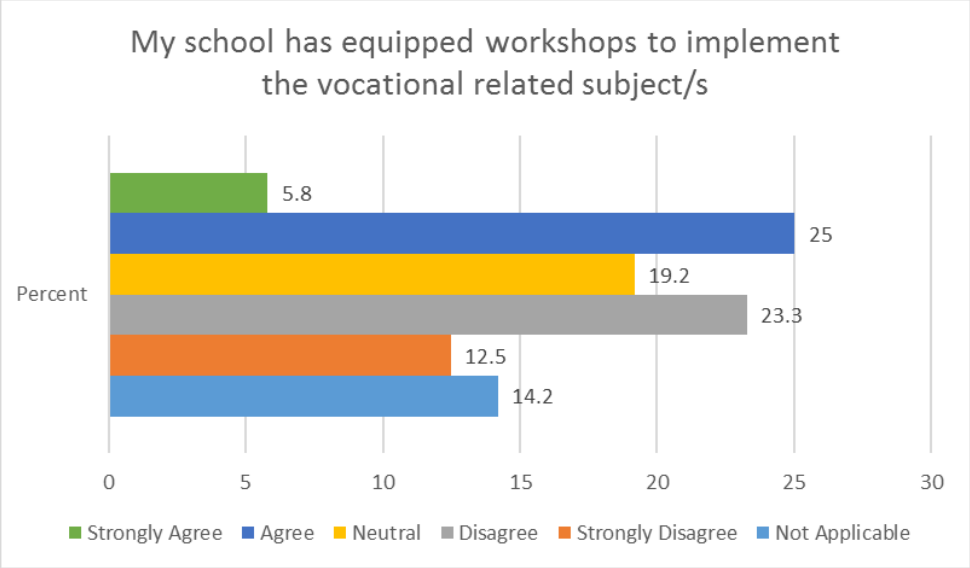

Figure 4.49. Equipped vocational workshops

It is indicated in Figure 4.49 that 30.8% of the respondents agreed that their school has equipped workshops to implement the vocationally related subject/s while 35.8% of the respondents disagreed with the statement. The statement did not apply to 14.2% of

participants. Here respondents indicated that there is no absolute majority on whether their schools possess sufficiently equipped workshops.

Respondents were asked to indicate whether teachers were trained to enable them to implement vocational subjects in the revised curriculum. Figure 4.50 represents if teachers were trained to enable them to implement vocational subjects in the revised curriculum.

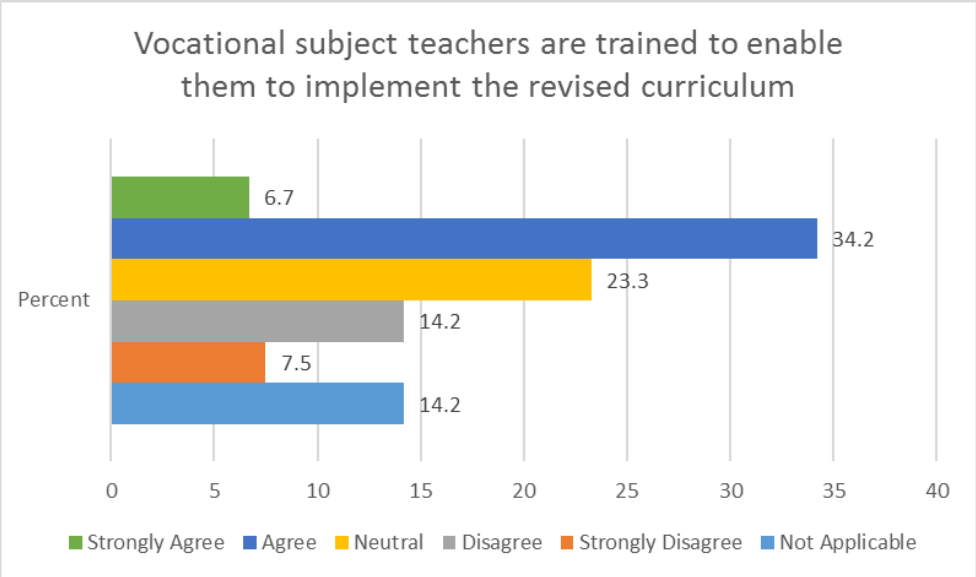

Figure 4.50. Trained vocational subject teachers

Respondents were asked to indicate whether vocational subject teachers were trained to enable them to implement the revised curriculum. Figure 4.50 specifies that 40.9% of the respondents agreed that vocational subject teachers were trained to enable them to implement the revised curriculum. The second most respondents, 23.3% were neutral. The respondents that disagreed with the statement made up 21.7%. There is also no absolute majority on whether vocational subject teachers were trained on the implementation of the revised curriculum.

Respondents were asked to rate whether qualified teachers for vocational subjects were available to effectively implement the revised curriculum. This is depicted in Figure 4.51.

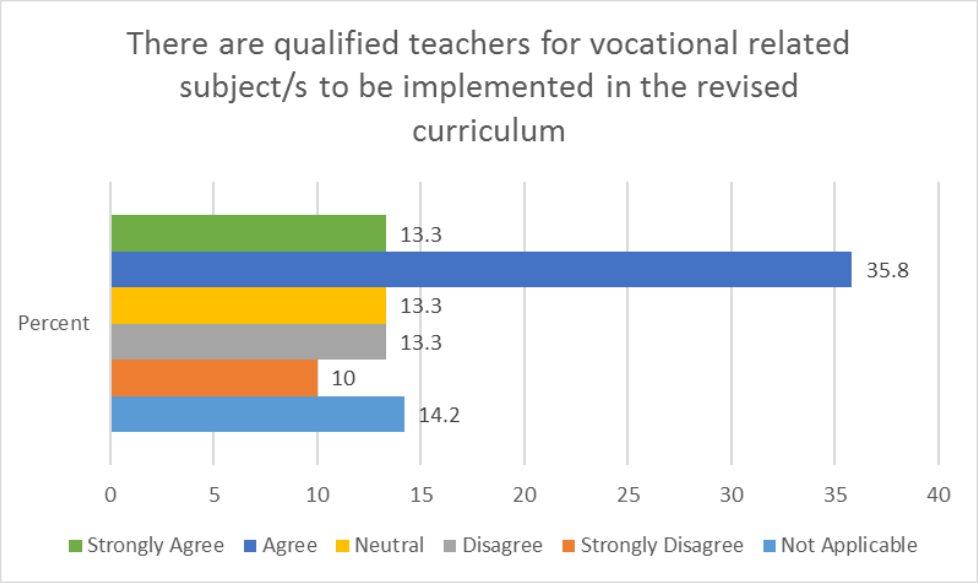

Figure 4.51. Qualified vocational subject teachers

Respondents that agreed that there were qualified teachers for vocational subjects to be implemented in the revised curriculum made up 49.1% of the respondents while 23.3% of the respondents disagreed. The 13.3% of the respondents were neutral with the statement. A reduction in the percentage of responses could be attributed to the fact that the provision of the vocational subjects does not apply to some of the respondents while some respondents opted to be neutral.

Figure 4.52 reveals the responses on whether the vocational related subject activities were well funded in respondents' respective schools.

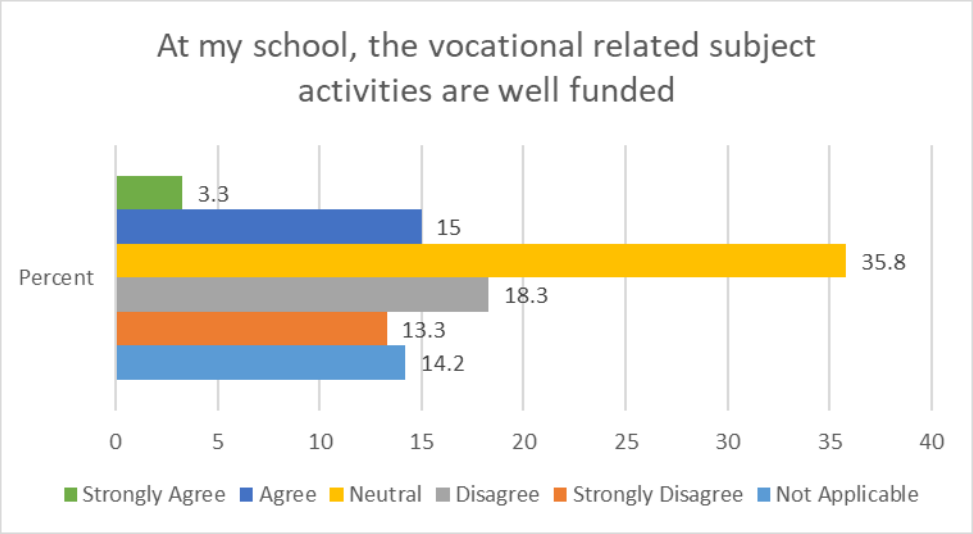

Figure 4.52. Funding of vocational subject activities

Respondents were asked to indicate whether the vocational subjects were well-funded. It is revealed in Figure 4.52 that 18.3% of the respondents agreed with the statement and 35.8% were neutral about the vocational related subject activities being well funded at their respective schools. Respondents that disagreed were 31.6% while the statement did not apply to 14.2% of the participants. This shows that vocational subjects are not well funded.

Respondents were asked to indicate whether learners pursuing the vocational discipline could put the theory learned into practice. Figure 4.53 shows the responses to the statement.

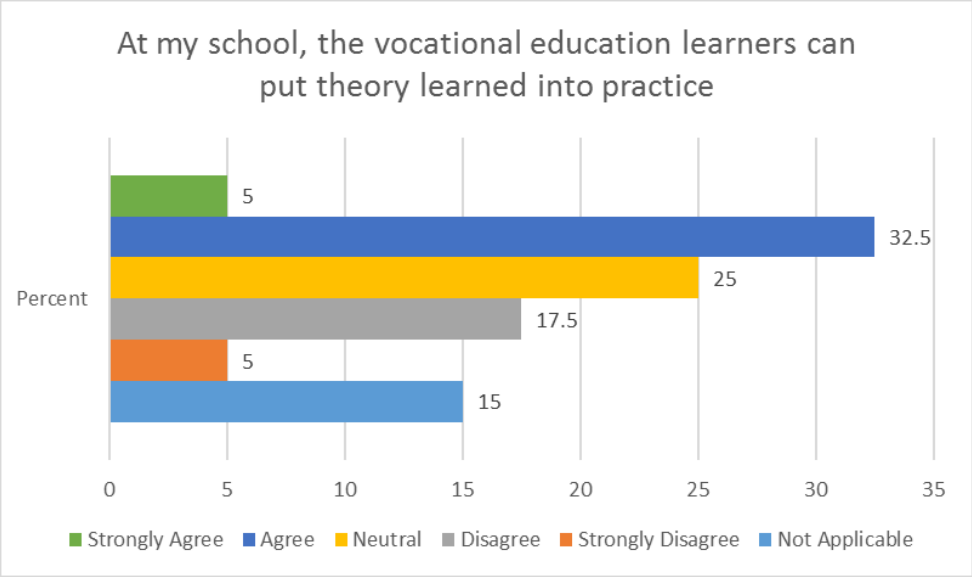

Figure 4.53. Putting vocational theory into practice

Figure 4.53 shows that the statement did not apply to 15% of the respondents. Nevertheless, 37.5% of the respondents agreed with the statement. Twenty five percents of the respondents were neutral. Only 22.5% of the respondents disagreed with the statement.

Demonstration of vocational subjects' practical to learners is an effective teaching strategy.

Figure 4.54 shows how the respondents responded to the statement whether teachers can demonstrate vocational subjects' practical to learners.

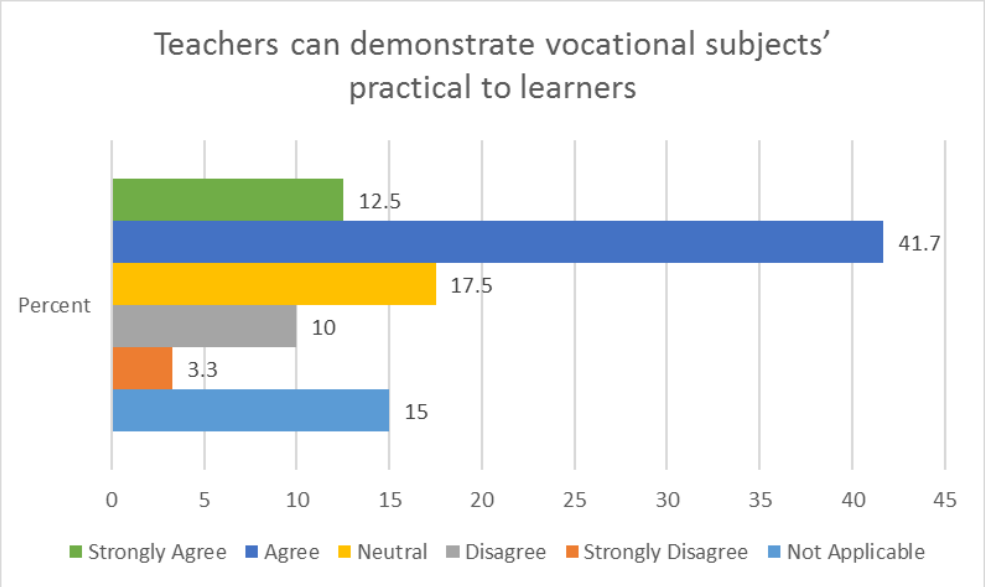

Figure 4.54. Demonstration of vocational subjects practical by teachers

It is expressed in Figure 4.54 that the majority of the respondents (54.2%) agreed with the statement "teachers can demonstrate vocational subjects' practical to learners." Respondents that were neutral were 17.5%. The statement did not apply to 15% of the respondents. This illustrates that the majority of teachers feel that they can demonstrate to learners the theory learned through practical activities.

Technical and vocational skills enhance entrepreneurship and employment creation. Thus, respondents were asked to give their views regarding whether in-service teachers' training should be organised for teachers in the vocational education setting. Their responses are provided in Figure 4.55.

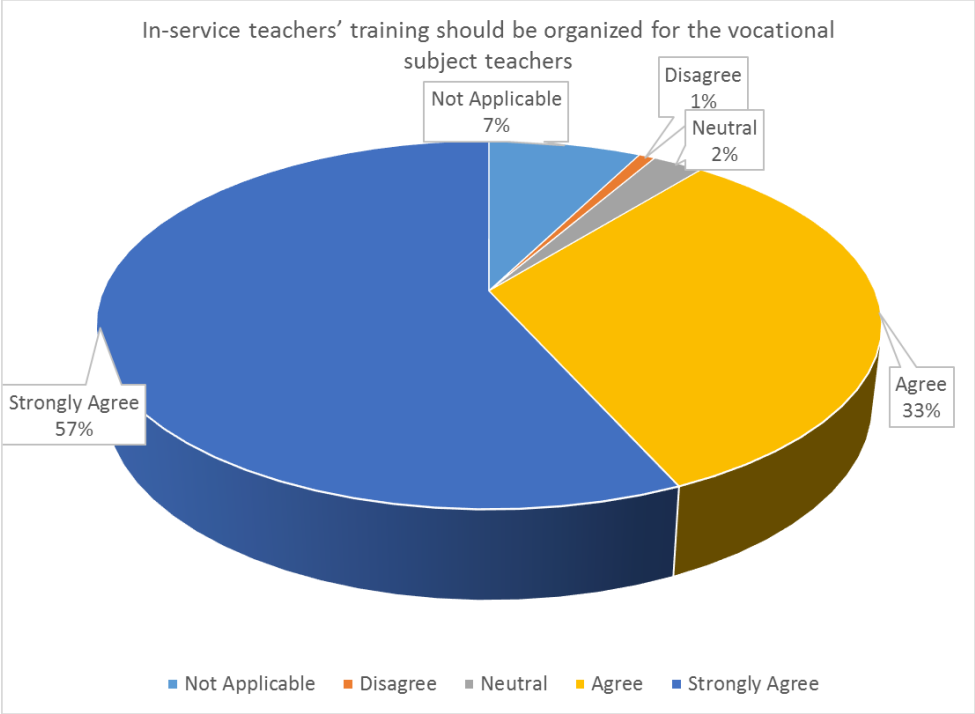

Figure 4.55. Organise in-service teachers' training for vocational subjects

Majority of respondents, (90%) agreed with the statement that stated that in-service teachers' training should be organised for the vocational subject teachers. The statement did not apply to 7%, 2% were neutral and 1% disagreed. This means that a bulk of respondents value in-service training for vocational subject teachers.

Figure 4.56 presents the responses to the statement whether postgraduate educational or teacher-training programmes should train vocational education teachers.

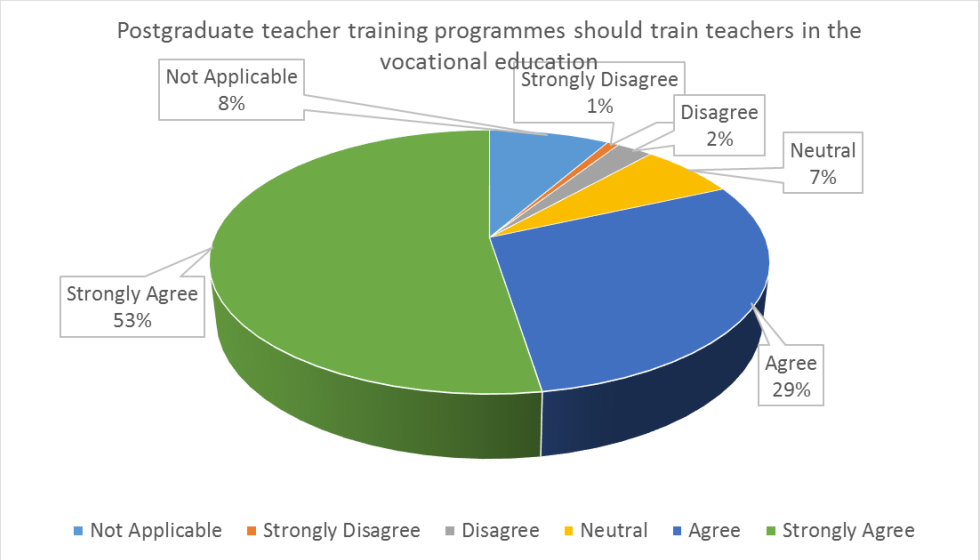

Figure 4.56. Postgraduate educational programmes should train vocational education teachers

Most respondents, (82%) agreed with the statement teacher-training programmes (e.g. Advanced Diploma in Education [Professional Training]) should train teachers in vocational education. The statement did not apply to 8% of the respondents and 3% disagreed. This means that the majority of respondents feel that a shortage of teachers in vocational discipline can be addressed through the introduction of postgraduate teacher training programmes in institutions of higher educations.

Respondents were asked to indicate whether schools should have vocational workshops where learners can practise the theory taught. Figure 4.57 illustrates participants' responses to this statement.

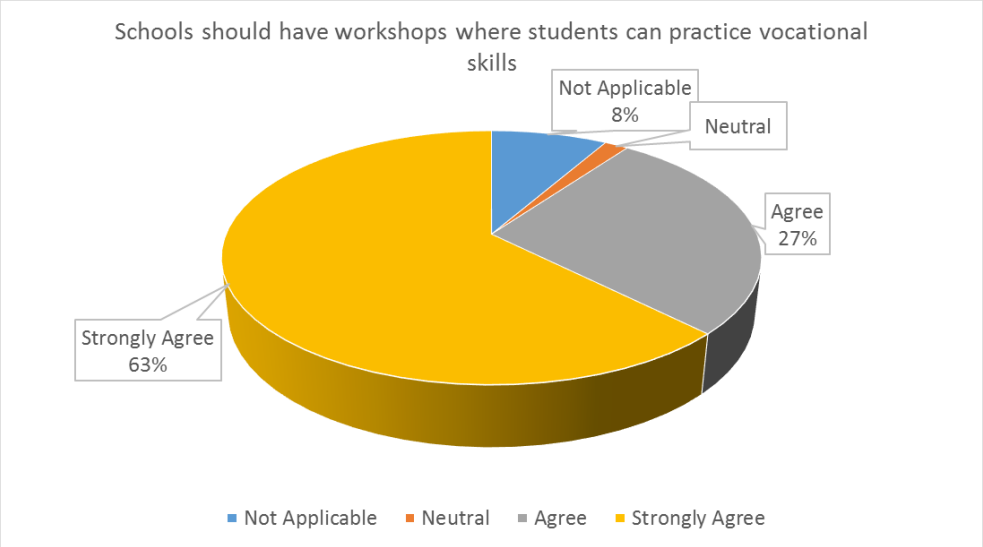

Figure 4.57. Schools should have vocational workshops

The highest number of participants, 90% agreed with the statement while it did not apply to 8% of the respondents. Two percent of the respondents were neutral. Majority of respondents believe that workshops, where leaders could put the theory learned into practice, can improve effective vocational subject teaching and learning.

Respondents were once again asked to indicate whether they agreed with the statement that vocational education programmes should be marketed to create positive attitudes among learners. Figure 4.58 demonstrates the responses of respondents about the marketing of vocational subjects.

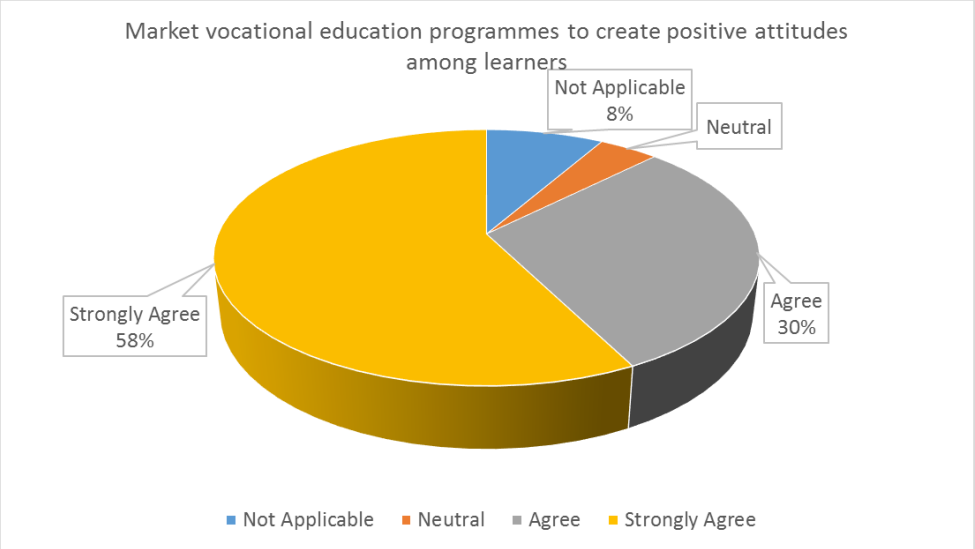

Figure 4.58. Marketing of vocational programmes

Figure 4.58 shows participants' responses to the statement "market the vocational education programmes to create positive attitudes towards vocational education among learners." That statement did not apply to 8% of the participants. The highest number of participants, (88%) agreed. This suggests that respondents feel that the vocational field should be vigorously marketed to stimulate positive attitudes towards the vocational field of studies.

Respondents were also asked about the acceptable teacher-learner ratio in a vocational education setting context. Their responses are expressed in Figure 4.59.

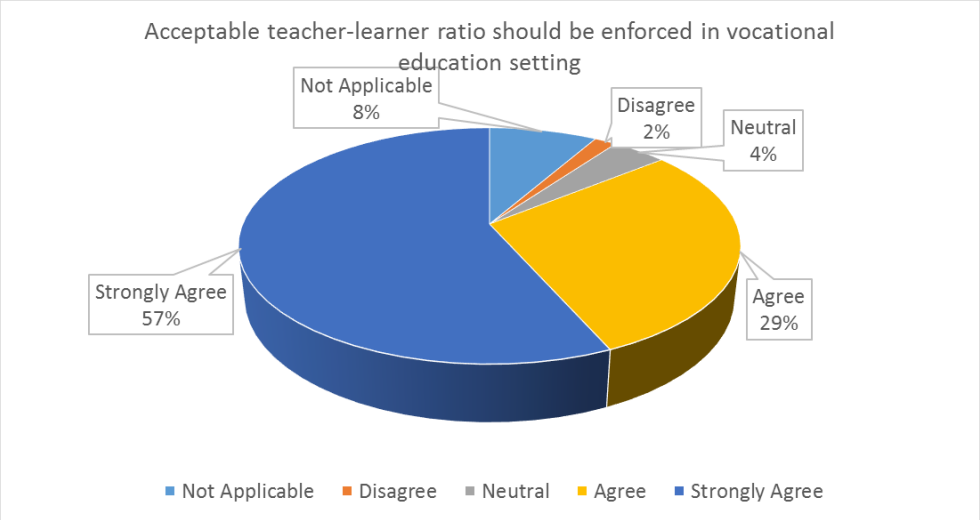

Figure 4.59. Acceptable teacher-learner ratio in vocationalised context

Most respondents agreed with the statement "acceptable teacher-learner ratio should be enforced in the vocational related education setting." They were represented by 86% of the participants. Nonetheless, 8 % of respondents responded that the statement did not apply to them while 4% were neutral and 2% were in disagreement. This infers that the highest percentage of respondents support the enforcement of an acceptable teacher-learner ratio in a vocational setting.

4.7.2 Challenges related to the provision of vocational education

Firstly, each Participant was asked about the challenges related to the offering of the vocational education stream in public schools in Ompundja Circuit. Secondly, they were asked to suggest how the challenges could be addressed. The responses are as follows:

Participant Kondja indicated that they offer Agriculture at their school, but there were challenges that they experienced. These are as follows:

> *"The challenge is this year there was no rain. We have a garden that we just fenced off but there is nothing yet in that garden. We were hoping that we would start working on it (garden) but just to find that it is dry. And, using water from the tap will increase the water bill for the school."*

Participant Kondja did not provide a direct remedy to the challenges faced by their school. He went on further to add to the list of challenges and said:

> *"Well, it is very difficult for the time being because vocational subjects really need more planning, or more financial support for you to have machines, rooms and even a teacher, I do not think we have a teacher at school that can teach other vocational subjects, like Woodwork, Bricklaying, Hospitality, Home Ecology and so on."*

According to Participant Kondja, Agriculture is a vocational subject. Thus, the natural calamity of drought has interfered with the Agricultural activities at the school. The other challenge is that the school cannot use tap water to irrigate the garden because it increases the water bill for the school. The school did not have teachers to teach vocational subjects such as Woodwork, Bricklaying, Hospitality as well as Home Ecology, which are part of the revised curriculum.

Nomkumo responded briefly as follows:

> "*I strongly believe that sufficient training was not provided. We do not have sufficient number of human resource personnel in these pre-vocational subjects such as Design and Technology."*

This response signifies that there is no enough teachers trained to teach pre-vocational subjects.

Participant Tuuda indicated that their school offers three vocational related subjects Entrepreneurship, Agriculture and Home Economics, which some of the subjects are not practical-based. He singled out a challenge, without offering a remedial suggestion, as follows:

> *"So, we will not complain on the Home Economics but on other subjects, also depending on the ability of the Agriculture teacher, because it is supposed to have gardening and so forth. But then if the teacher is not that much active enough, then sometimes it poses challenge to full implementation of it."*

This participant indicated that their school did not have a problem with Home Economics as a vocational subject. The challenge is based on the ability of the Agriculture teacher to initiate activities such as gardening.

It can be concluded that there were challenges related to the implementation of vocational education, as part of the revised curriculum for basic education, in Ompundja Circuit. Some of the challenges such as drought affect Agriculture activities at the schools. Some schools do not have teachers for some vocational subjects. In addition, there are not enough teachers trained to teach pre-vocational subjects. The ability or inability of teachers may hamper the implementation of gardening activities in public schools in Ompundja Circuit.

4.7.3 Addressing challenges related to implementation of vocational subjects

Participant Nomkumo made suggestions on addressing challenges related to the provision of vocational education as follows:

"So, I advise the Ministry of Education to train a high number of teachers on Design and Technology, which is a very important subject that promotes learners to become skillful when it comes to vocational training subjects."

The researcher gave a scenario that there seems to be a gap in the supply of teachers for vocational subjects by higher education institutions (HEIs). Then the participant was probed, what should be done to ensure that HEIs produce enough teachers for this discipline. Moreover, Participant Nomkumo answered:

"They should continue training teachers in those areas of pre-vocational subjects, because those are the only subjects that will be a driving force towards the realisation of Vision 2030 and other National Development Programmes (NDPs). So, if institutions are training, they are on the right direction."

This response indicates that there is a need to train teachers in pre-vocational and vocational subjects such as Design and Technology, which is aligned with achieving the national developmental agenda through Vision 2030.

Etuhole responded as follows:

"Yeah… now the challenge we are facing here is that in Elementary Agriculture we are required to have practical or projects. For example, asking pictures of a leopard or a lion. Therefore, whereby you find the learners did not bring something up because they cannot go anywhere to find that specific animal you ask them. On the other hand, if a teacher asks learners to come up with a poster that is now the most practical especially photographs. For example, showing picture of predators our school is in rural area learners cannot get some of the learning materials. They will tell you they do not have magazines, newspapers hence the practical will fail"

Some specific challenges were given in Elementary Agriculture. When learners were asked to bring pictures of wild animals for a project, they find it difficult to get newspapers and magazines to take these pictures in rural area schools, and this leads to the failure of practical activities. Teachers are now left to suspend the activities and improvise to substitute them with an alternative activity.

Participant Afrika shared some suggestions despite not having provided any challenges. Afrika suggested as follows:

> *"Yes, at our school, our vocational activities are not that much. Then, we have serious practical suggestions, which I think they are very good to say there should be practical activities, there should be school gardens (eee …). And then when you think of that now, it (practical activities and gardening) needs further funding for it to be implemented."*

According to Participant Afrika, for the Agriculture practical activities to be carried out, there is a need for funding to ensure it is successfully implemented.

A researcher asked Participant Afrika where schools get the supply of the vocational subject teachers. He responded with a suggestion on the supply of vocational subject teachers as follows:

> *"Then one would possibly request or possibly expect that the serious engagement is made between the supplier of teachers, which is institutions of higher learning, and now the consumer of teachers, which are schools and the Ministry of Education. Yeah, I believe a serious arrangement need to be done such that we could then be able to offer vocational subjects as per our wish."*

This means that there is a need for serious engagement between the institutions of higher learning that trains teachers and the Ministry of Education to escalate the training of teachers in vocational subjects.

Suggested ways to address challenges related to the provision of vocational education are summarised as follows. There is a need to train teachers in pre-vocational and vocational subjects. Some learners in rural schools find it difficult to get pictures from magazines and newspapers to complete the Elementary Agriculture practical activities. There is a need for funding to enable practical activities and gardening to be carried out. The Ministry of Education and the teacher training institutions should train teachers for vacation subjects through postgraduate education diploma courses.

4.8 Teacher-learner ratio

This part presents the status of the teacher-learner ratio in public schools in Ompundja Circuit. It also presents the challenges linked to the teacher-learner ratio and proposed ways to address the identified challenges.

4.8.1 Status of teacher-learner ratio

Teacher-learner ratio in Namibia for pre-grade is 1:25, primary school is 1:35 and secondary schools 1:30. It has been part of the educational discourse in Namibia. It may have negative or positive effects on the quality of teaching and learning. Respondents

were asked to indicate whether overcrowded classrooms hinder the implementation of the revised curriculum. Figure 4.60 shows the responses.

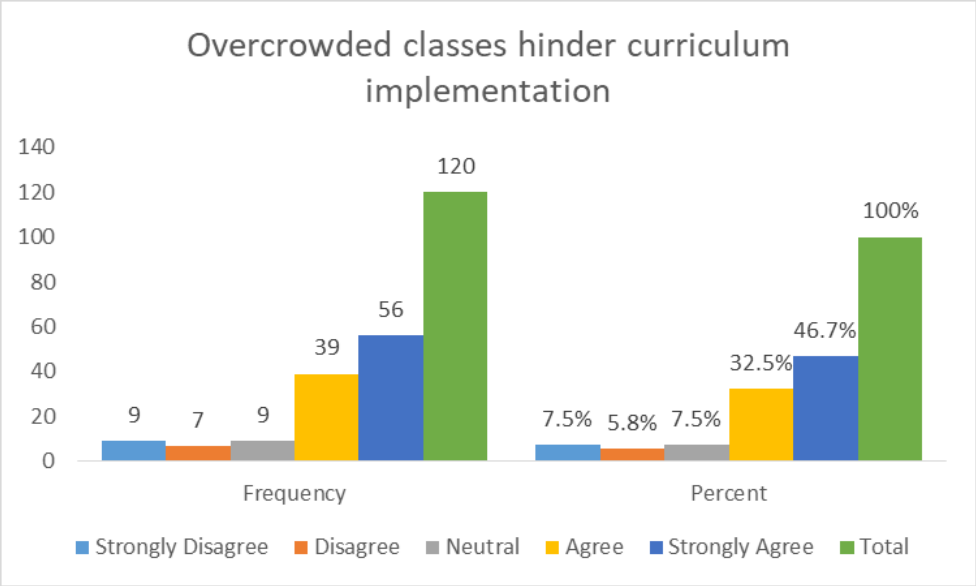

Figure 4.60. Overcrowded classes' hindrance of curriculum implementation

Majority of the participants, (79.2%) agreed that they feel overcrowded classrooms could hinder the implementation of the revised curriculum. Fewer respondents, (13.3%) disagreed with the statement. This infers that the overcrowded classrooms hinder the effective implementation of the RCBE in public schools in Ompundja Circuit.

An acceptable teacher-learner ratio in Namibian schools is 1:25 for pre-grade, 1:35 for primary schools and 1:30 for secondary schools respondents were also asked to indicate whether their school has an acceptable teacher-learner ratio. Figure 4.61 illustrates responses from teachers regarding whether their schools have an acceptable teacher-learner ratio.

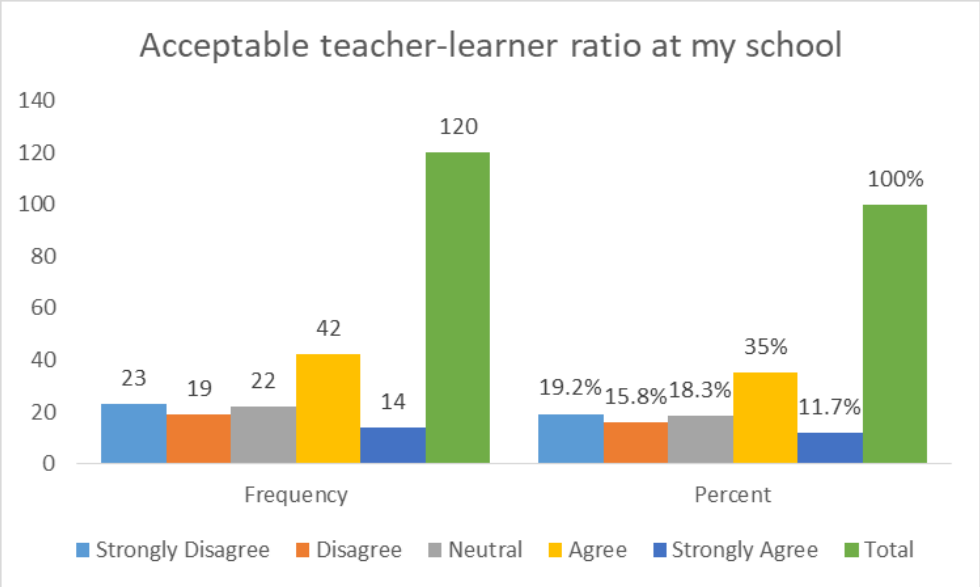

Figure 4.61. Acceptable teacher-learner ratio

Figure 4.61 shows that 46.7% of the respondents agreed that their schools have an acceptable teacher-learner ratio. Thirty-five percent of the respondents disagreed while 18.3% were neutral on this subject. By implication, there is no absolute majority regarding the acceptable teacher-learner ratio.

Respondents were asked to indicate whether the teacher-learner ratio in their schools allows teachers to provide essential learner support. Responses in Figure 4.62 demonstrate if the teacher-learner ratio enables teachers to provide the necessary support to learners.

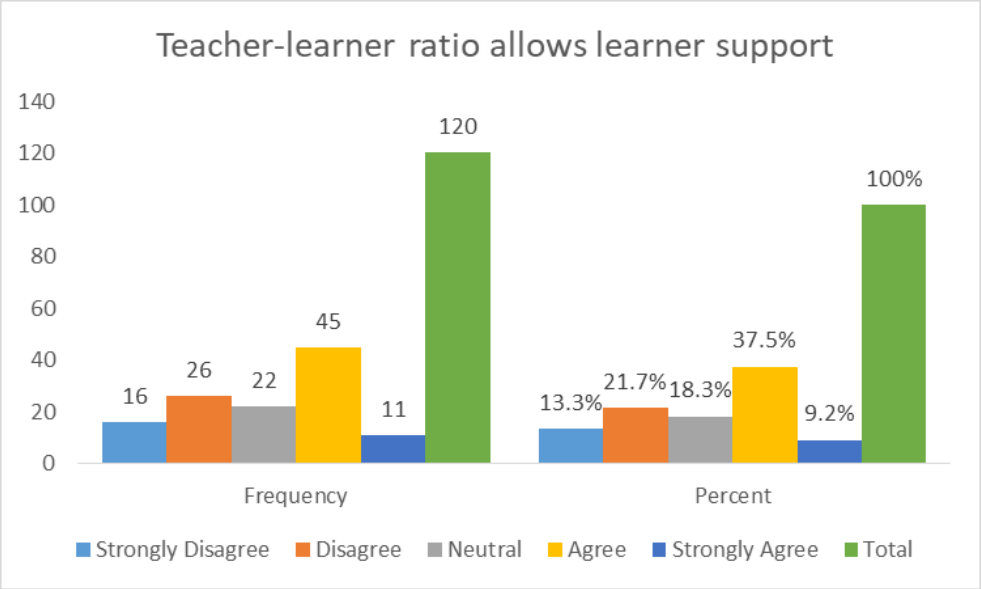

Figure 4.62. Teacher-learner ratio allows learner support

Figure 4.62 shows that 46.7% of the respondents agreed that the teacher-learner ratio at their school allows teachers to provide necessary learner support. Approximately 21.7% of the respondents disagreed with this statement. The 18.3% of respondents neither agreed nor disagreed with the statement. This means, there is no outright majority on whether the teacher-learner ratio enables student support.

Teacher-learner ratio should enable teachers to give special attention to learners with special needs. Figure 4.63 communicates the perception of teachers regarding if the teacher-learner ratio facilitates the assistance needed by learners with special needs.

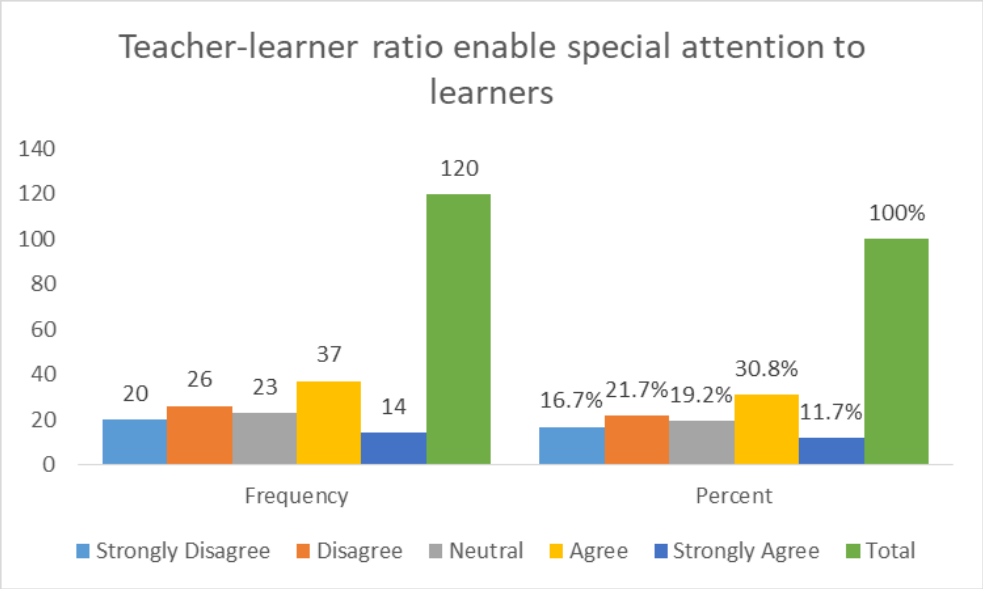

Figure 4.63. Teacher-learner ratio allows special attention

Figure 4.63 summarises that only 42.5% of respondents agreed that the teacher-learner ratio in their schools enables teachers to give special attention to learners with special needs. While 38.4% of respondents disagreed with this statement the 19.2% of respondents neither agreed nor disagreed with the statement. This implies that the teacher-learner ratio is a concern that affects effective revised curriculum management and implementation.

Respondents were asked whether the teacher-learner ratio for Pre-grade should be kept around 25 learners per teacher. Figure 4.64 indicates the responses.

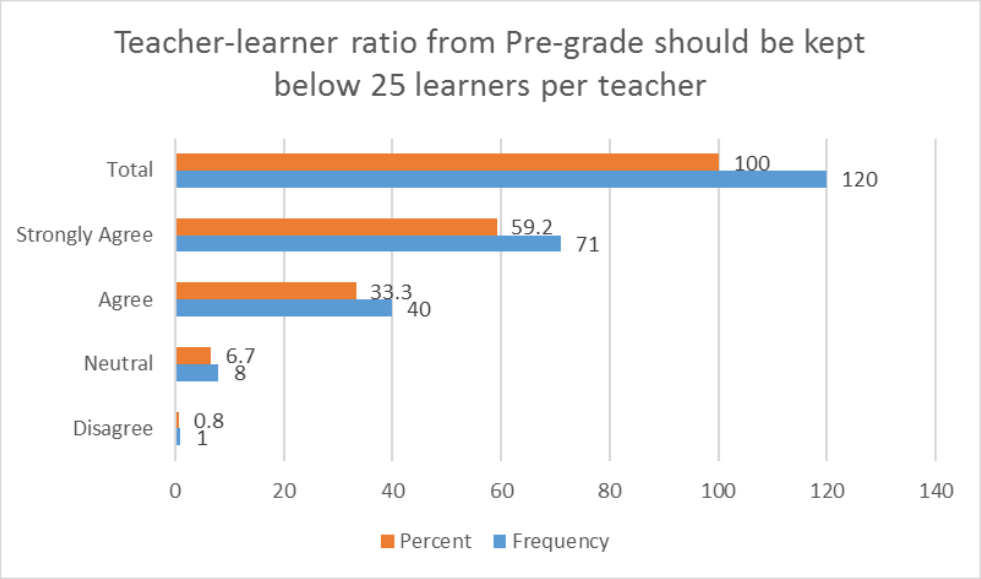

Figure 4.64. Teacher-learner ratio for Pre-grade

Figure 4.64 revealed that 92.5% of the respondents agreed that the teacher-learner ratio for Pre-grade should be kept around 25 learners per teacher while 6.7% were neutral and 0.8% disagreed. Majority of the respondents support the 1:25 teacher-learner ratio for pre-grades.

For effective teaching and learning to take place in Namibian schools, the prescribed teacher-learner ratio should be respected. Respondents were required to indicate whether the teacher-learner ratio for Grade 1-7 should be kept around 30 learners per teacher.

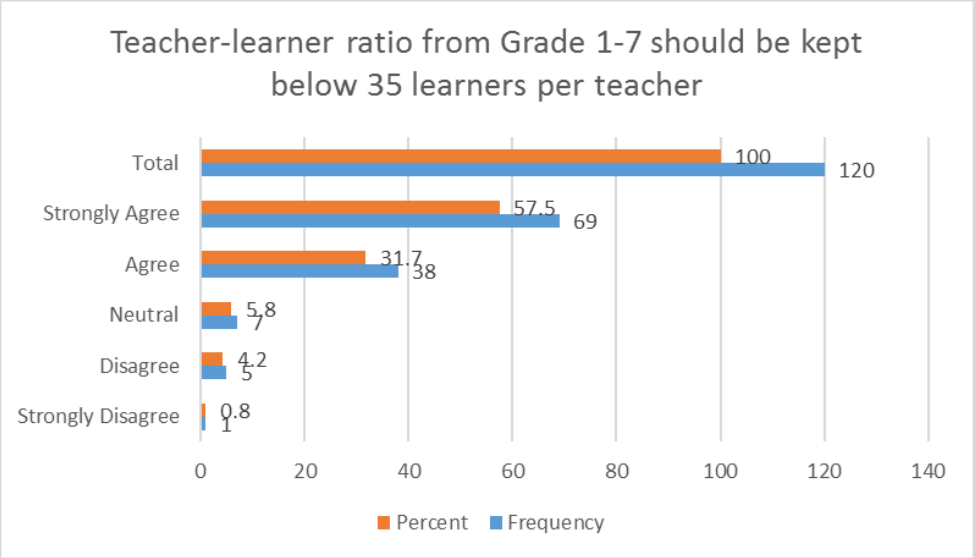

Figure 4.65. Teacher-learner ratio from Grade 1-7

Figure 4.65 presented that the majority of the respondents (89.2%) agreed that the teacher-learner ratio from Grade 1-7 should be kept around 35 learners per teacher. Neutral respondents were 5.8% and 4.2% disagreed. This means that the teacher-learner ratio for primary school grades (Grade 1-7) should keep an acceptable ratio.

Respondents were also asked to indicate whether the teacher-learner ratio for Grade 8-12/13 is ideal to be kept at 30 learners per teacher. Figure 4.66 depicts the responses of participants.

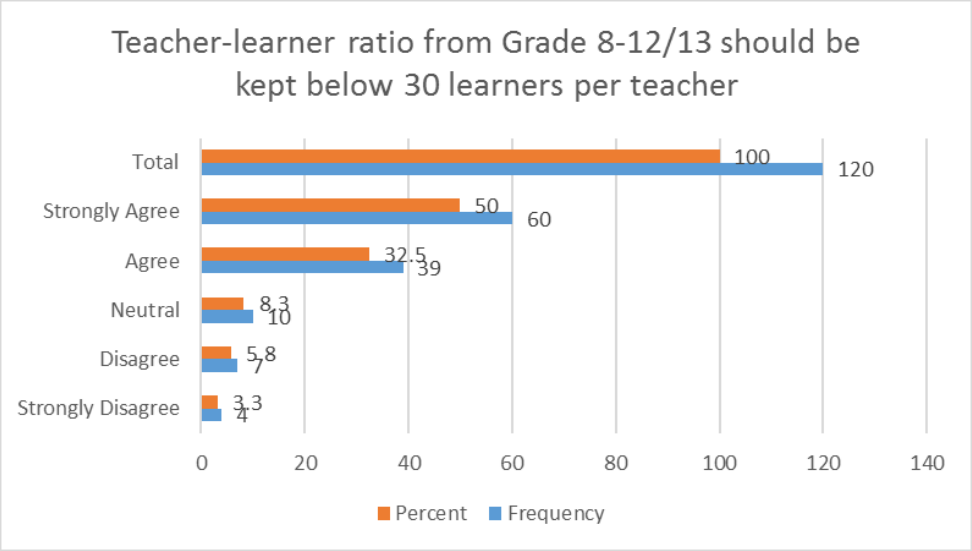

Figure 4.66. Teacher-learner ratio from Grade 8-12/13

According to Figure 4.66, the majority of the respondents (82.5%) agreed that the teacher-learner ratio from Grade 8-12/13 should be kept at around 30 learners per teacher. Neutral respondents were 8.3% while the 9.1%disagreed. Similar to Figure 4.65, the majority of respondents indicated that the teacher-learner ratio for Grade 8-12/13 should be kept within the prescribed ratio in secondary schools.

An inclusive school setting requires effort from a teacher to ensure effective learning and teaching is taking place. Respondents were asked to indicate whether the teacher-learner ratio for inclusive classrooms should be kept around 30 learners per class. The participants' responses are presented in Figure 4.66.

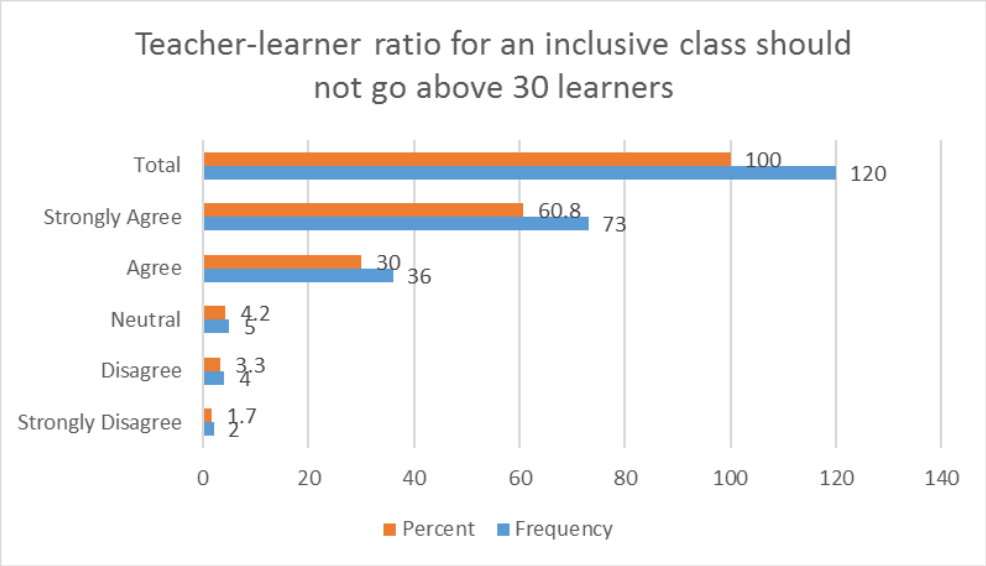

Figure 4.67. Teacher-learner ratio for an inclusive class

According to Figure 4.67, the majority of partakers in the study (90.8%) agreed that the teacher-learner ratio for a class that practise inclusive education should not go above 30 learners per class. Josua (2013) concurs with this finding.

Increasing the number of teachers in the service may also help arrest the situation of a high teacher-learner ratio in schools. Respondents were asked to indicate if more teachers are needed to reduce the teacher-learner ratio. Their responses are shown in Figure 4.68.

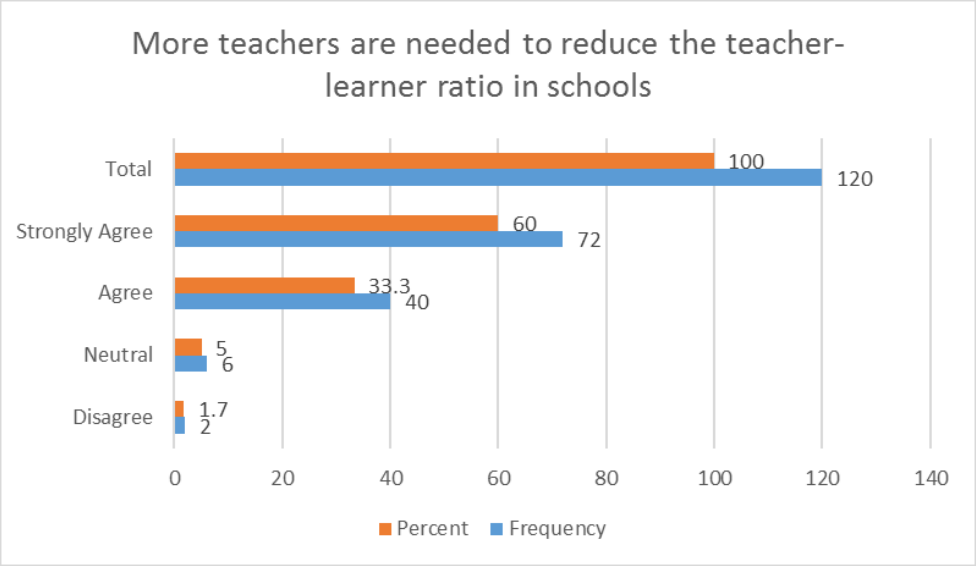

Figure 4.68. Decreased teacher-learner ratio requires more teachers

As per Figure 4.68, 93.3% of the respondents agreed that more teachers were needed to reduce the teacher-learner ratio in schools. Five per cent of the respondents were neutral while 1.7% disagreed. This specifies that more teachers are needed to decrease the teacher-learner ratio.

Respondents were asked to indicate if more classrooms should be built to facilitate social learning. Figure 4.69 shows their responses to the statement.

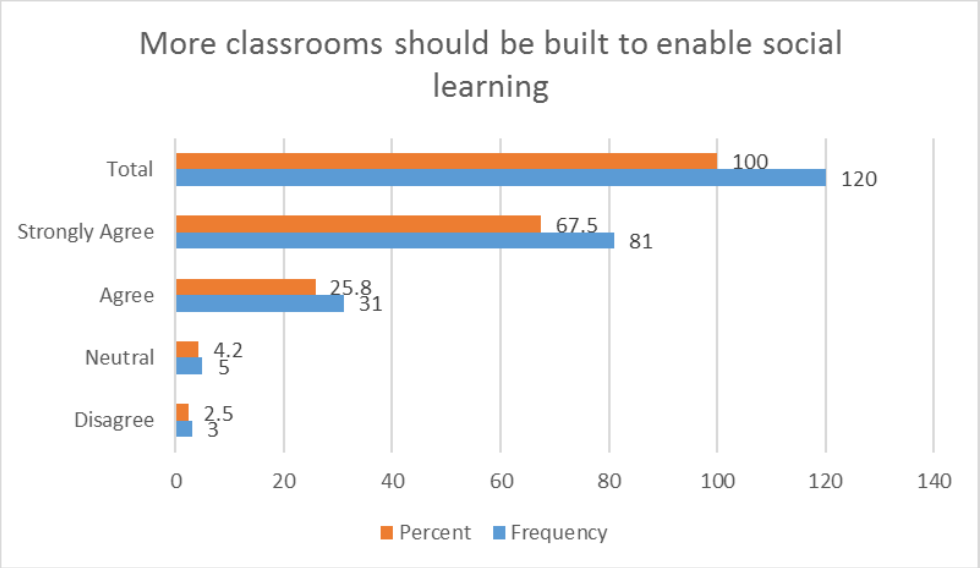

Figure 4.69. Built more classrooms to enable social learning

It is shown in Figure 4.69, the majority of the respondents in the study (92.5%) agreed that less crowded classrooms enable social learning and thus, more classrooms should be built to enable social learning. This response concurs with Figure 4.23, which agreed that the Ministry of Education, Arts and Culture should build classrooms in public schools in Ompundja Circuit. This has the potential to support social learning.

4.8.2 Challenges linked to teacher-learner ratio

A researcher asked all participants to give any challenges that may hamper the implementation of the revised curriculum in public schools in Ompundja Circuit that are related to the teacher-learner ratio. Similarly, the participants were asked to propose possible solutions to those challenges.

Participant Kondja although indicated that the teacher-learner ratio is fine at their school because it is 1:28, which is way below the recommended teacher-learner ratio of 1:35 for

primary grades and 1:30 for secondary grades. Participant Kondja shared a concern about the future of the school due to the dwindling teacher-learner ratio as follows:

> *"You may think that overstaffing may be hitting the school because if the number of learners became less then there will be more teachers than learners. …. We do not know what the future is having for us and also our school is a little bit in rural areas."*

Participant Kondja's response about the teacher-learner ratio of 1:28 seems contradictory because the schools with dwindling teacher-learner ratios are at risk of being closed as it may be considered uneconomical. He stated that they do not know what the future has for their school.

Participant Kondja, a principal of a rural school, emphasised that the children from rural communities are transported to urban schools every day. This is how he stated it:

> *"Parents may prefer to take their children to other schools, because you may have parents in this community, but their children are being transported to the schools in Ongwediva and Oshakati, with taxis, every day."*

He meant that parents prefer to take their children from rural to urban schools, leaving the rural schools with a dovetailing teacher-learner ratio, which puts the school at risk of being closed down.

Participant Nomkumo, a principal of an urban school, share the challenges related to the teacher-learner ratio, which influences the successful implementation of the revised curriculum in the circuit as follows:

> *"At this point in time we have a very high number of learners per teacher. Each class might have 45 learners per one teacher, which is a problem because a teacher cannot be able to have a hand on each and every learner equally."*

A researcher asked Participant Nomkumo whether the high teacher-learner ratio is a concern in urban, semi-urban and rural schools. This is how Responded Nomkumo replied:

> *"The high teacher-learner ratio is a concern for urban schools while rural schools are becoming non-economical due to low teacher-learner ratio. You know the possibility of others to be closed is very high."*

According to Participant Nomkumo, the urban schools were faced with a high number of learners per teacher. This retards the teachers from giving individual attention to learners.

Participant Etuhole, a principal of a rural school, shared the challenges related to the teacher-learner ratio as follows:

> *"Yeah, in some schools in rural area teacher-learner ratio is a concern because you might have the school with fewer learners only in the area according to the Ministry policy… Therefore, the staff member has to be transferred to another school. Now when a staff member is transferred to another school let me say, the staff member is having a certain field of study when he or she transfer to another school she might find her field of study is already occupied. Such a staff member has to be provided with something new, and then to me this is causing the failure."*

Participant Etuhole's response supported Participant Kondja's decreasing teacher-learner ratio in rural schools. This may lead to teachers being transferred to other schools. When teachers are transferred they risk being placed to teach subjects that they were not qualified to teach, which may escalate learners' failure.

Participant Tuuda, a principal of a semi-urban school has expressed the challenges of the teacher-learner ratio as follows:

"Because some of the Grade 9s they are having up to 42 learners per class. This is not normal it is abnormal if we really want to render quality service to our learners whereby effective assessment can be made."

Furthermore, Participant Tuuda emphasised his point by saying:

"A teacher teaching 42 or 37 or 38 learners and is not one class, then you are expecting a teacher to at least give all the activities and give feedback to the learners on a timely basis it becomes horse-work."

Participant Afrika expressed the teacher-learner ratio as follows:

"Senior secondary curriculum is targeted to fever schools and unfortunately, there is an additional grade; the senior. There are very large numbers of learners searching for Grade 10 specifically this year. And, I know that will still continue, next year it will be in Grade 11."

Participant Afrika expressed how the teacher-learner ratio affects student assessment as follows:

"The more the learners, it is a bit of impossibility in terms of assessment. And that does not give a teacher any picture of how successful is the implementation and also to say given the individual attention."

Answers from Participant Nomkumo, Participant Tuuda and Participant Afrika indicate a challenge about the high teacher-learner ratio. They indicated that it affects the assessment of students' activities. A teacher will not be able to give timely feedback to assessment activities, which did not give a teacher any picture of how successful the implementation of the revised curriculum is.

To conclude this section, the response that the teacher-learner ratio is fine at a school with a 1:28 ratio seems self-contradictory because a school with decreasing teacher-learner

ratio is uneconomical and risk of being closed down. In contrast, the participant indicated uncertainty about the future of their school. Another challenge for rural schools is that parents prefer to take their children to urban schools, which decreases the teacher-learner ratio. Nevertheless, urban schools have a high teacher-learner ratio, which retards the teachers from giving individual attention to learners and delay feedback for assessment activities. A decrease of learners per teacher may lead to teachers being transferred to other schools, where they risk being placed to teach subjects that they were not qualified to teach and eventually result in learners' failure. Only 46.7% of the respondents agreed that there is an acceptable teacher-learner ratio at their respective schools (see Figure 4.61).

4.8.3 Addressing challenges linked to teacher-learner ratio

Participant Kondja suggested ways to address the challenges of learners migrating to urban schools as follows:

> *"I think it is still an awareness that parents around the community need to be told that they are taking their children away from the community where there is a school. They are minimizing the number of learners at school, which will experience overstaffing that will lead to some of the teachers to be transferred to the schools where there are more children."*

This response communicates that parents should be sensitised by creating awareness that when they take their children away from rural schools, this could lead to overstaffing. Subsequently, teachers at overstuffed schools may be transferred to other schools.

Participant Nomkumo shared remedies on how to deal with the challenges he raised. This could be addressed as follows:

> *"So, I suggest that the Ministry of Education should try by all means to either expand schools through infrastructural development or create new primary and secondary schools in regions or recruit more teachers, so this situation of teacher-learner ratio can be contained successfully in the successful implementation of the curriculum."*

Reacting to the high teacher-learner ratio implies that it could be addressed through the expansion of schools and recruiting more teachers.

Participant Nomkumo went on to suggest that the MoEAC should research the teacher-learner ratio, which is a concern in urban, semi-urban and urban schools. This is how he expressed it:

> *"But, I think the Ministry should do a thorough research in this regard on how to either solve the problem of teacher-learner ratio in schools in town."*

This signifies that the MoEAC should research to find a research-informed solution to the challenge of the teacher-learner ratio in schools.

Participant Etuhole was asked how the concern of teacher-learner ratio in rural schools could be addressed. This participant made the following suggestion:

> *"I suggest the Ministry should re-look at the teacher-learner ratio policy."*

In rural schools, the teacher-learner ratio is nose-diving. Thus, it is suggested that the Ministry of Education should look into a teacher-learner ratio policy to enable teachers to

be contained at rural schools. It seems that the low teacher-learner ratio is affecting rural schools more than urban schools.

Tuuda indicated that the teacher-learner ratio should be addressed through policy review. Tuuda remarked that:

> *"I think the policymaker have to re-look at the teacher-learner ratio policy. It needs to be revised."*

This response supports Etuhole who suggested that the teacher-learner ratio policy needs to be reviewed.

Participant Afrika also suggested that:

> *"We can upgrade schools where we think there are… we do not need to think of qualified teachers at those schools, but think of upgrading many schools especially the school in the urban centres. So that they can continue taking on their senior secondary curriculum and then we allow the senior secondary schools to cater then for the few that will be coming from the other side."*

This proposed remedy suggests that more schools in urban settlements should be upgraded to secondary schools to relieve secondary schools from the burden of the high number of learners.

This is part concludes with suggested manners in which the challenges related to the teacher-learner ratio could be addressed. Firstly, parents need to be sensitised not to take their children away from rural schools, which may lead to the number of learners enrolled in the rural schools dropping. This agrees with the response of a principal who indicated that the teacher-learner ratio is at 1:28, which is way below the prescribed 1:30 for primary school grades and 1:35 for secondary school grades (see 4.8.2, paragraph 2). Resultant,

the school may be staffed beyond the norm and teachers may be reassigned to other schools. Secondly, schools could be expanded and more teachers should be recruited. Thirdly, the MoEAC is advised to research in order to find solutions to the teacher-learner ratio. Fourthly, the MoEAC is advised to critically look at the teacher-learner ratio policy to permit teachers to stay in rural schools' settings. Lastly, it is proposed that more urban schools should be promoted to secondary schools to reduce the high number of learners per teacher in existing secondary schools.

4.9 Learner support

This part presents the status of learner support in public schools in Ompundja Circuit. It also presents the challenges and ways to address challenges linked to learner support.

4.9.1 Status of learner support

Learner support is crucial in a school. Thus, Figure 4.70 shows the responses of teachers to the statement, whether their schools have the expertise to support learners during the implementation of the revised curriculum.

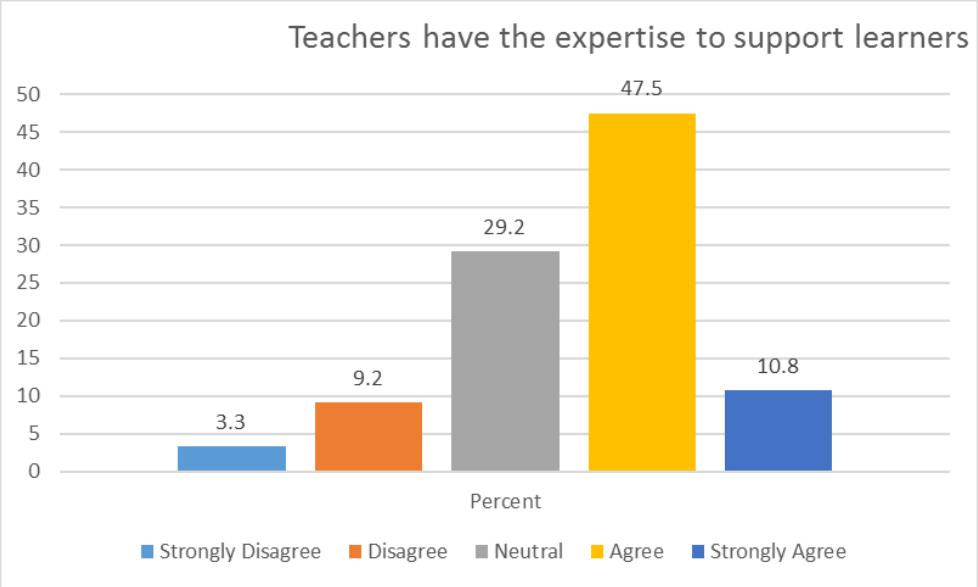

Figure 4.70. Teachers have the expertise to support learners

It is outlined in Figure 4.70 that a large share of the respondents, (58.3%) agreed that the teachers at their schools have the expertise to support learners during the implementation of the revised curriculum. A second-largest number of respondents, (29.2%) were neutral and only 12.5% disagreed. The majority of respondents are of the view that teachers have the required expertise to provide learner support service.

A purpose of the statement is to show the degree to which respondents believe the gifted learners were provided with enrichment programmes at their schools. Figure 4.71 shows the responses of the respondents to the statement.

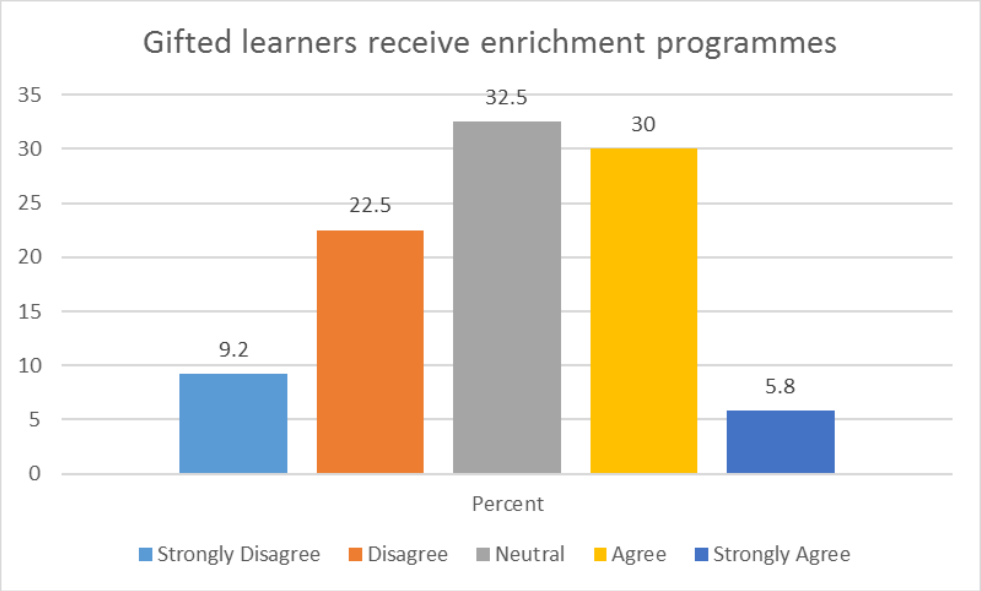

Figure 4.71. Gifted learners receive enrichment programmes

The 35.8% of respondents agreed with the statement while 31.7% disagreed. The 32.5% of the respondents took a neutral stand to the statement. Here there is no complete majority on whether gifted learners receive enrichment programmes.

Schools may also have at-risk learners who should receive enrichment programmes from teachers at their schools. Figure 4.72 displays the responses that at-risk learners should receive enrichment programmes.

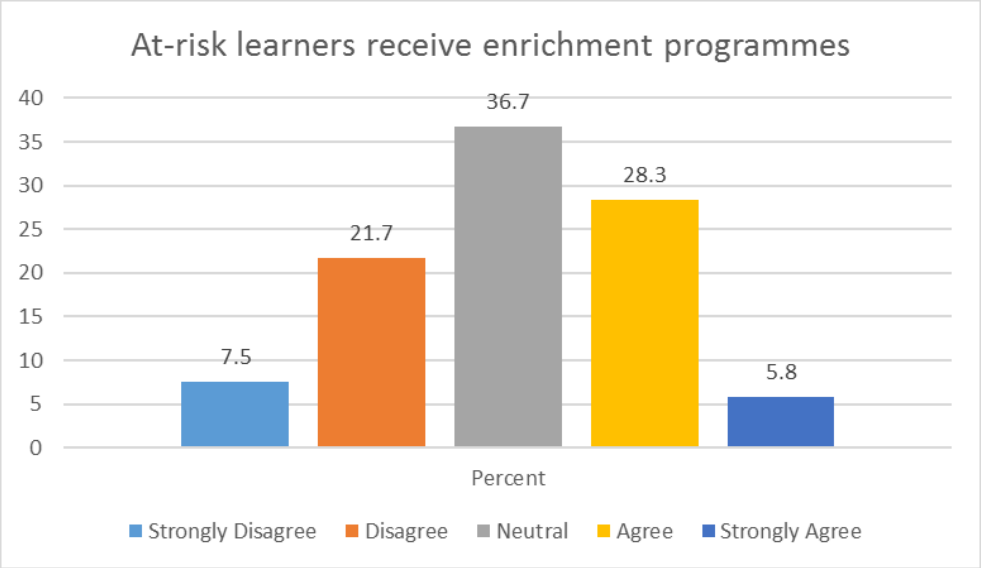

Figure 4.72. At-risk learners receive enrichment programmes

It is sketched in Figure 4.72 that the second-largest number of respondents, (34.1%) indicated that they agreed that their schools offered enrichment programmes to the at-risk learners. While 36.7% of the respondents were neutral about the at-risk learners receiving enrichment programmes from teachers at their schools. Furthermore, only 29.2% of the respondents disagreed with the statement. Like in Figure 4.71, enrichment programmes should be offered to at-risk learners.

Figure 4.73 shows views of the Participant on the provision of learning support offered to learners with special needs in Ompundja Circuit.

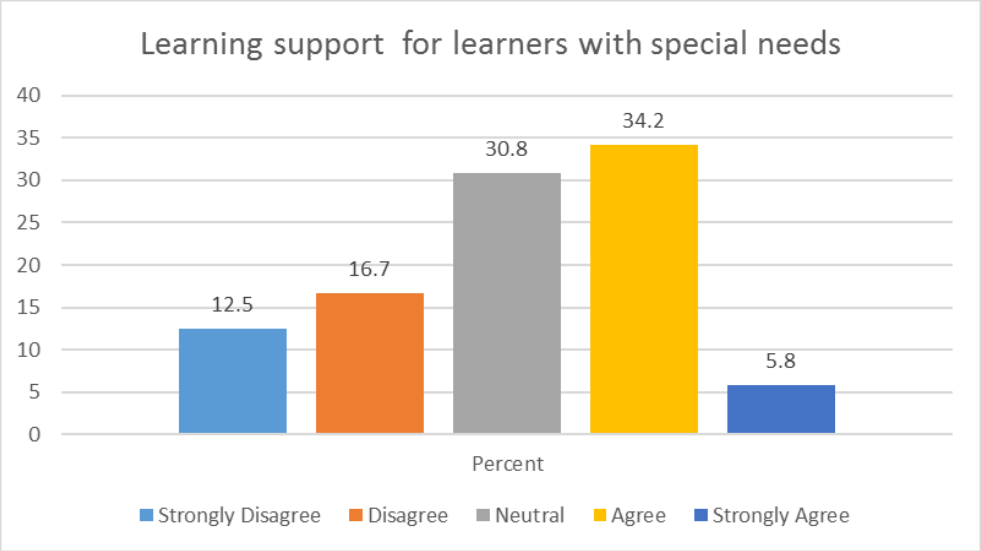

Figure 4.73. Learning support for learners with special needs

Figure 4.73 sketches that 40% of the respondents agreed that the learning support provision for learners with special needs is adequate at their schools to ensure inclusivity. The 30.8% of respondents were neutral with this statement while 29.2% were in disagreement. This implies that the learning support provision for learners with special needs to ensure inclusivity is not sufficient in public schools in the Ompundja Circuit.

Figure 4.74 shows how respondents agree and disagree on whether Life Skills lessons were provided to learners at their schools.

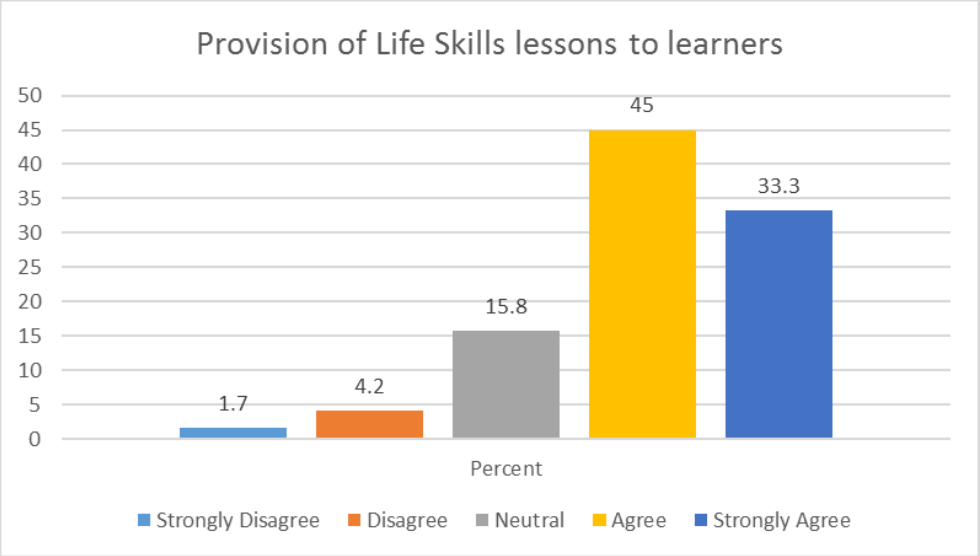

Figure 4.74. Life Skills lessons for learners

Figure 4.74 outlines that the majority of the participants, (78.3%) agreed that Life Skills lessons were provided to learners at their schools. A mere 5.9% were in disagreement while 15.8% were neutral. This suggests learner support is provided through Life Skills lessons in public schools in Ompundja Circuit.

Teachers were asked to indicate whether schools should be equipped with relevant expertise to support learners during the implementation of the revised curriculum. Figure 4.75 displays the responses on whether the schools should be equipped with relevant expertise to support learners.

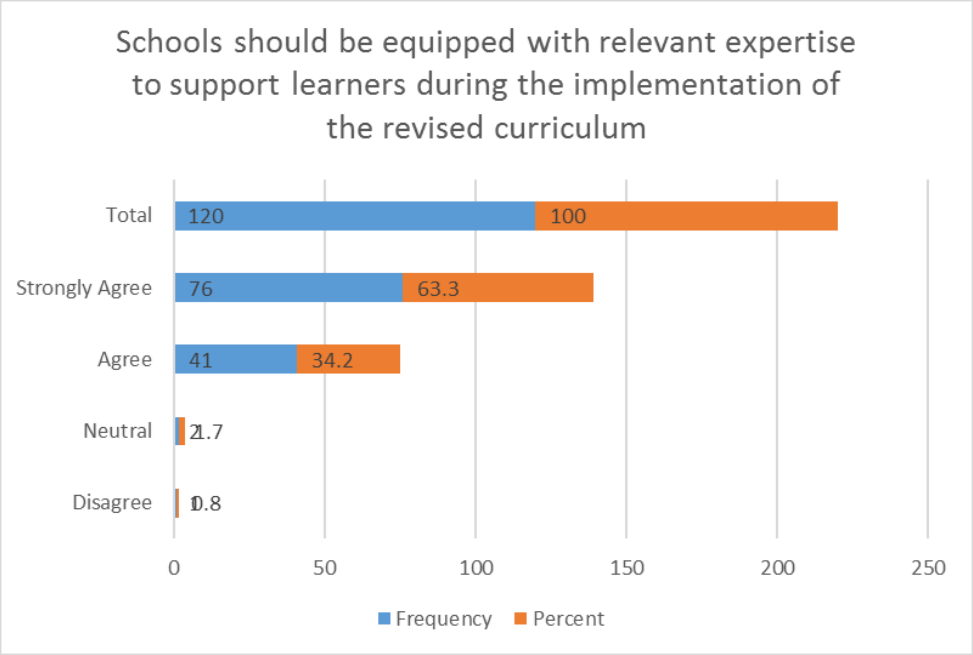

Figure 4.75. Equip schools with relevant expertise to support learners

Figure 4.75 shows that the majority of respondents in the study, (97.5%) agreed that schools should be equipped with relevant expertise to support learners during the implementation of the revised curriculum. The 21.7% of respondents took a neutral stand while 0.8% disagreed. This supports qualitative data, where Respondent Tuuda hinted that two teachers where one is dealing with learners with special needs should be introduced.

Teachers should respond to specific learner needs such as the gifted learners. Respondents were asked to indicate their views on whether gifted learners should be provided with enrichment programmes. Their responses are presented in Figure 4.76.

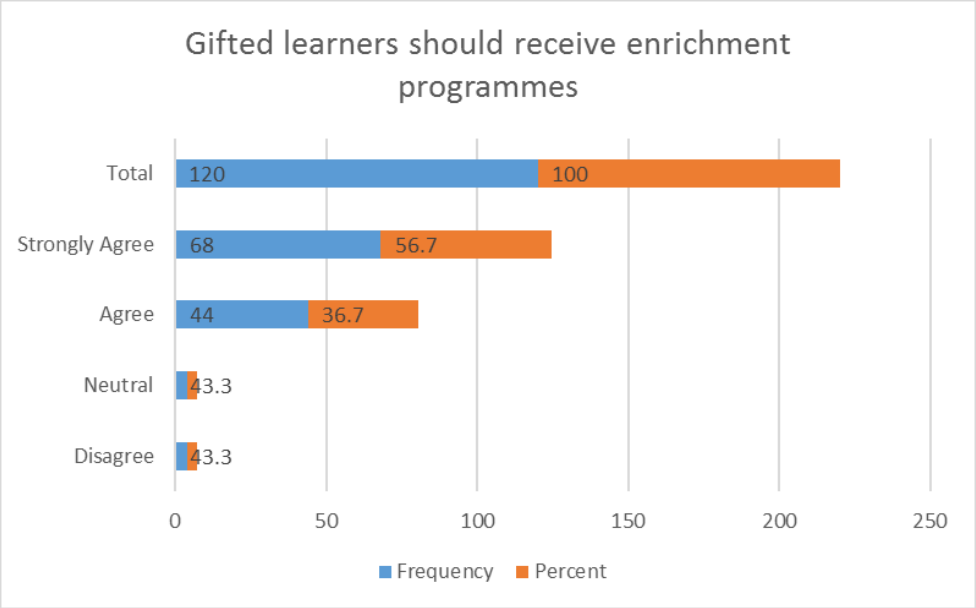

Figure 4.76. Gifted learners should receive enrichment programmes

Regarding the statement, whether gifted learners receive enrichment programmes, Figure 4.76 points out that the majority of participants, (93.4%) agreed that exceptional learners should receive enhancement programmes. The 3.3% of respondents were neutral while 3.3% were in disagreement. Gifted learners should be given enrichment programmes to support their learning.

Remedial support is needed for at-risk learners. Figure 4.77 shows the responses of teachers to the statement, whether at-risk learners should be provided with enrichment programmes.

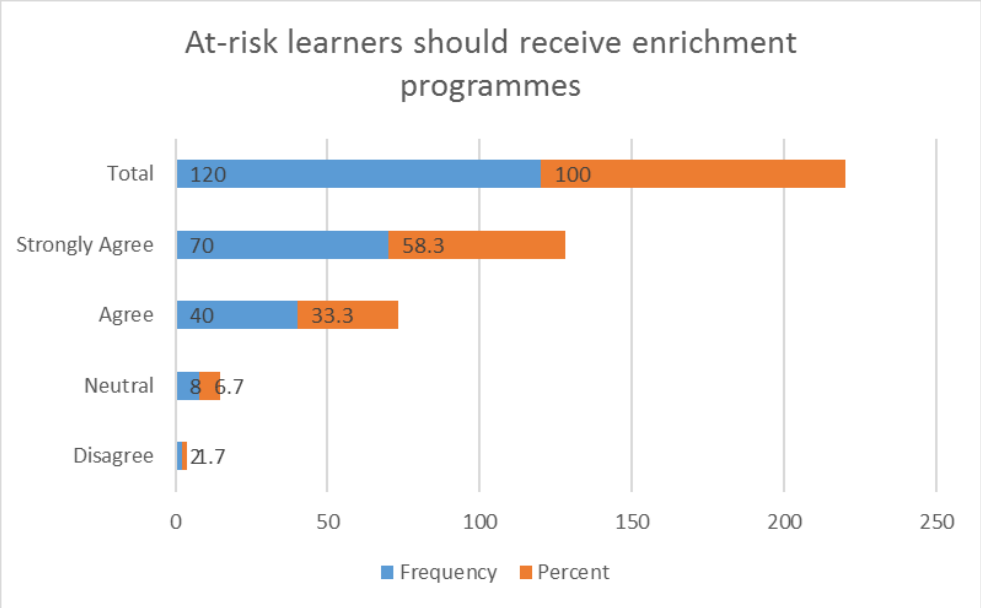

Figure 4.77. At-risk learners should receive enrichment programmes

Figure 4.77 demonstrates that most respondents, (91.6%) agreed that at-risk learners should get enrichment programmes. The 6.7% of respondents were neutral while 1.7% were in disagreement. At-risk learners should be given enrichment programmes to support their learning.

There are also learners with special needs, who need support to succeed in the revised curriculum for basic education in Ompundja Circuit. Respondents were asked to indicate whether learners with special needs should receive support to ensure they succeed amid the implementation of the revised curriculum. Figure 4.78 shows the responses of the participants.

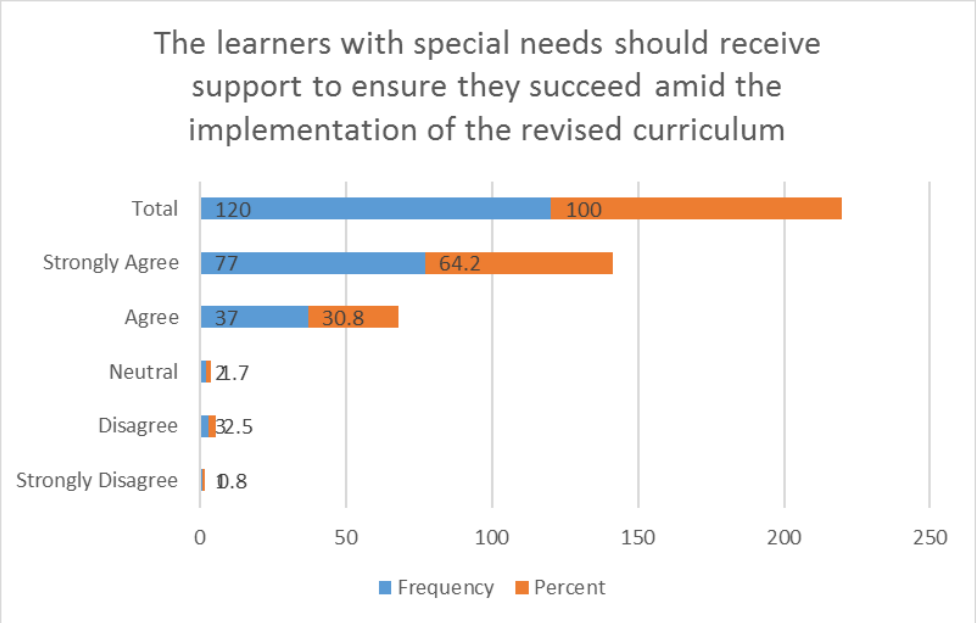

Figure 4.78. Provide support to learners with special needs

As revealed in Figure 4.78, 95% of the respondents agreed that learners with special needs should receive support to ensure they succeed amid the implementation of the revised curriculum. Teachers that disagreed were 3.3%, while 1.7% have taken a neutral option. The majority of respondents believe that learner support to learners with special needs is a precondition to effective revised curriculum management and implementation process. Stakeholders in curriculum implementation should have adequate information about the curriculum. Respondents were asked to indicate whether information on the implementation of the revised curriculum should be shared with learners as stakeholders. Thus, Figure 4.79 displays the responses of respondents about sharing of information with learners as stakeholders in learner support.

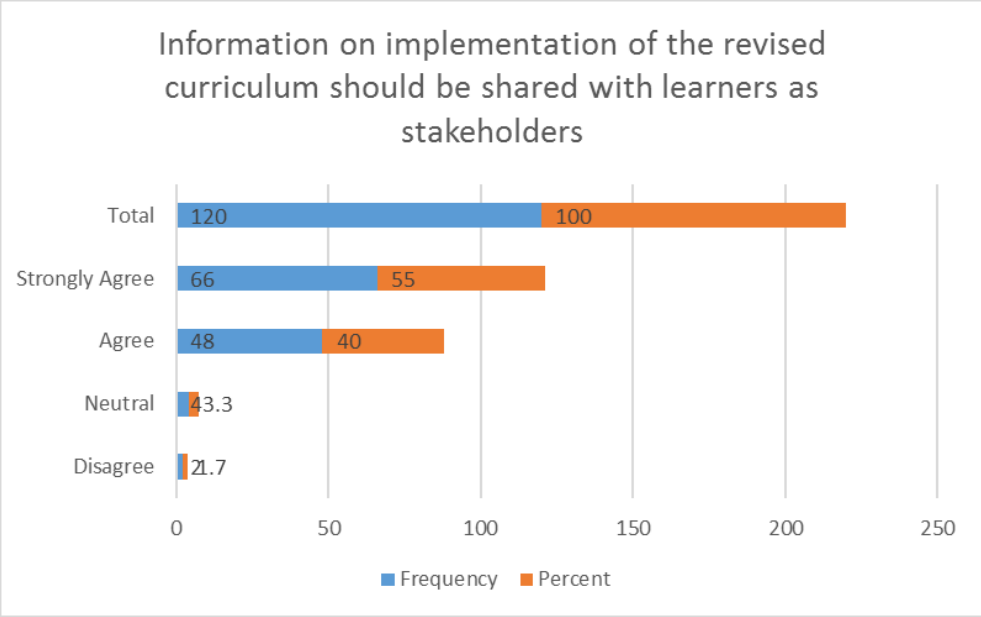

Figure 4.79. Share information on curriculum implementation with learners

Figure 4.79 displays that 95% of the respondents agreed that information on the implementation of the revised curriculum should also be shared with learners as stakeholders. The 3.3% of respondents were neutral while 1.7% disagreed. Leaners are stakeholders in curriculum management and implementation; therefore, they should not be left out from the provision of information on curriculum implementation.

Figure 4.80 shows the results of teachers' responses, whether the community should provide support to learners.

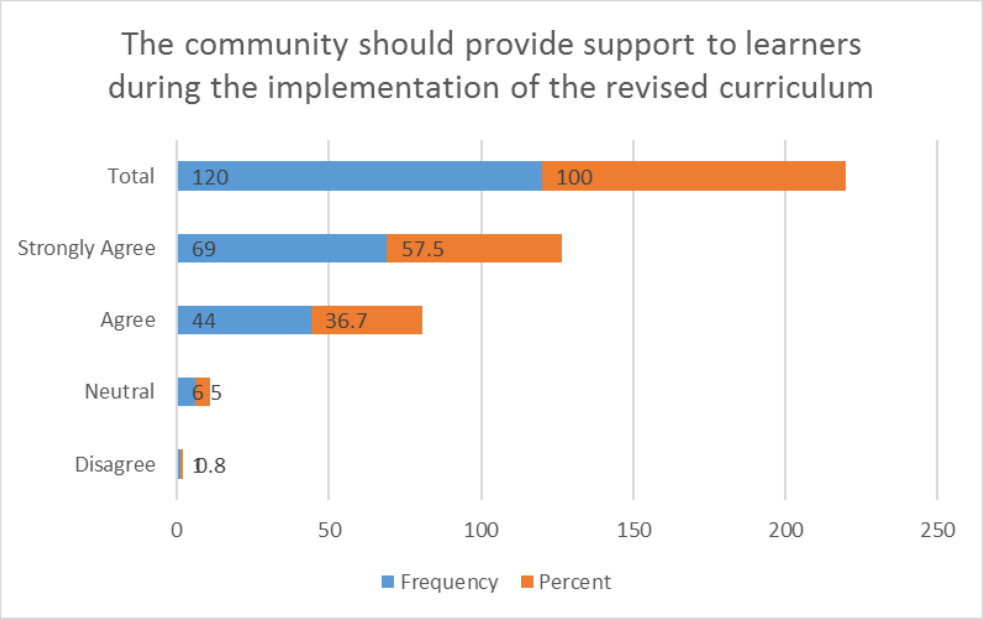

Figure 4.80. Community should provide support to learners

Figure 4.80 illustrates that the majority of respondents (94.2%) agreed that the community should provide support to learners during the implementation of the revised curriculum. Only five per cent of the teachers were neutral while 0.8% disagreed with the statement. The majority of respondents feel that members of the community can provide the required learner support.

4.9.2 Challenges related to learner support

Here some challenges on the provision of learner support that were raised in interviews with school principals are presented. Participant Kondja indicated that some learner support activities are such as taking students for educational excursions. The excursion is highlighted as a challenge, which he expressed as follows:

"Apart from normal teaching, we also have really encouraged teachers to take learners out for tours and educational excursions. Challenges are money related. Tour involves a large portion of money for accommodation, paying entrance fees, we find ourselves, really, being junked on that one. Since we got a straight directive from the Director of Education, Arts and Culture that the money that we are getting from the government we are not supposed to spend them on tours and excursions."

This Participant implies that taking learners to tours and excursions is one of the learner support initiatives. The response further indicated that the challenge is the lack of funds because the schools are instructed not to use the UPE money for such initiatives.

Participant Nomkumo did not point out any challenges related to learner support. Moreover, when he was probed about the curriculum, which is set that Continuous Assessment (CA) is being used in combination with the examination. His response was as follows:

"*The Ministry of Education has got clear policies on assessment and evaluation as per the phase be it Pre-Primary, Junior Primary and Senior Primary as well as Secondary."*

This participant seems to urge for the use of the existing assessment and evaluation policy of the Ministry of Education.

Participant Etuhole did point out a challenge related to learner support. Her response was as follows:

"Sometimes the Advisory Teachers Service, which is there to train staff members through the new ideas, they went through reading it without proper training."

This participant seems to suggest that the Advisory Teachers do not train teachers on learner support properly. According to her, some teachers were a challenge towards the

provision of learner support. Moreover, some teachers were reluctant to provide the necessary support to learners.

When asked about the challenges that impact the revised curriculum implementation that are related to learner support, Responded Tuuda related learner support to inclusive education, which he answered as follows:

> "*Yeah, that is quite a sensitive topic in the sense that it is talking about inclusive education and some of these things they are theoretical and not practical."*

Responded Tuuda elaborated by stating the following:

> *"I cannot see how best, of course, you may blame the teacher that they are not doing enough. But it is not really practical for a teacher to be able to give a lesson, planning a lesson to an extent that he planned making sure that he is including this very slow learners who never passed a grade in his/her life time."*

This participant equated learner support with inclusive education, which he indicated is theoretical instead of being practical. He went on further to indicate that it is a challenge for a teacher to plan lessons, which are inclusive of learners who are struggling academically.

When asked if there are, any challenges related to learner support, Responded Afrika answered as follows:

> *"Yes, learner support is an issue; especially with graduating teachers or possibly some serving teachers. The exposure to the concept of learner support is possibly something, which they only come to meet at school level. And of course, even themselves, they have got their professional perception and everybody feels this is how I believe a teacher is supposed to be."*

This seems to be interpreted that learner support is a slippery term, which is understood differently by different teachers.

Challenges related to learner support are summarised in this paragraph. Firstly, taking learners to tours and excursions is taken as a learner support initiative. The challenge is the lack of funds because schools were instructed not to use the UPE money for tours and excursions. The second challenge is the Advisory Teachers that do not provide proper training to teachers on learner support. Thirdly, some teachers were reluctant to providing learner support. The fourth challenge is the lack of support towards learners with special needs, which is deemed theoretical instead of practical. Quantitative data in Figure 4.73, where only 40% of the respondents agreed that learner support is provided to learners with special needs confirms this finding from the interviews. The fifth challenge is teachers struggling to plan lessons, which are inclusive of learners who need special attention from the teacher. A fact that emerged from the challenges that they shared is that learner support seems to be interpreted differently by different teachers.

4.9.3 Addressing challenges related to learner support

According to Participant Kondja, lack of funds for student excursions could be addressed as follows:

> *"Parents in the community, including the business people need to be educated on their role. So that when the government is coming from the other side, then they meet the government halfway."*

This suggests that the community should be enlightened about their role of contributing financially toward learners' educational trips. They should meet the government halfway by making a financial contribution to schools.

Participant Kondja was asked to provide his take on the compulsory subjects, which are in Grade 8 and 9, only English, which is compulsory, and Grade 10-12 both English and Mathematics, are compulsory. Kondja responded as follows:

> *"If I am asked to change, I would rather make all the two subject compulsory from primary school to senior secondary for example Mathematics, you can make it compulsory throughout."*

This response hints that both subjects, Mathematics and English should be made compulsory from primary school to the senior secondary school level. This advice challenges the status quo where only English is compulsory in Grade 8 and 9 while both English and Mathematics are compulsory from Grade 10 to 12.

Participant Etuhole made the following suggestions on how to address the challenges, which are:

> *"Teachers are committed, but the challenges can only be overcome through the principal's motivation."*

This Participant believes that the principal can motivate teachers to provide learner support.

In addition, Participant Etuhole highlighted the need for teachers' training to enhance learner support as follows:

"Advisory teachers need to come in to conduct workshops regarding the learner support to make teachers aware of it, especially those who do not know what it is all about."

This means that Advisory Teachers should train teachers on learner support through workshops. Training initiatives could create awareness among the teachers who do not know what learner support is all about.

A researcher asked Participant Tuuda to suggest an intervention to address the challenge that he identified. This is how Tuuda answered back:

"Yes, a very serious one, these learners who are really behind (learners with special needs) they are not going to benefit anything. One of the things that they can do is to look at the teacher - learner ratio. For example, maybe there could be even two teachers for instance; there is a teacher who can be well trained to deal with those learners. Maybe it will help a bit."

Participant Tuuda who equated learner support with inclusive education proposed how the learners with special needs could be handled. This may mean that two teachers could be recruited to teach in one class at the same time where one teacher is trained to deal with learners with special needs only.

When asked how to mitigate the challenges he shared, Participant Afrika stated the following:

"So, possibly a bit of orientation can help. This to indicate the importance of meeting the learners' other needs before thinking of the learning needs."

This participant supports the response of Participant Etuhole who suggested that learner support could be strengthened through teachers' training.

Participant Afrika was given a scenario and a probing question that in Grade 8 and 9 there is Continuous Assessment (CA) marks and Examinations; in Grade 10-12 there are no CA marks, but only Examinations, while Post-Secondary has a combination of CA marks and Examinations. There seems to be a mismatch at the Junior Secondary Level (where CA mark is not required). Afrika was then asked to provide his take on the given scenario and responded as follows:

> *"It is very true in fact, one would think we need to consider one method if we have to use Continuous Assessment (CA) of which one would not really discourage much because it gives a chance for learning and also individualised leaning to be used for assessments."*

This response suggests that one method of assessment should be used throughout instead of partitioning it as presented in the given scenario.

He warned the danger of relying on only one type of assessment such as CA, as follows:

> *"But the danger about it is that now goes to the next level where the Continuous Assessment is not being used. You find that a person who use to perform well based on what the will achieve during the year may not be able to handle examination only. Moreover, this is the fact that, with the examination method of assessment one expected to master the content not necessary to apply what have been learned. One would say examination-based marks throw away any application of the subject. And it is only based now on the mastering of the content."*

Participant Afrika continued to elucidate that none of the two assessment techniques is more superior to the other. Afrika stated as follows:

> *"Of cause people that use to achieve through Continuous Assessments at the end of the day they are disadvantaged. Not everybody will be able to reproduce instead of applying and constructing."*

This researcher asked Participant Afrika to give a final position on which assessments combinations that the participant is recommending and responded as follows:

> *"As I said, I would y go for one if it is Continuous Assessment let it be applied throughout. If it is Exam-based, marks let it be applied throughout. I am proposing that we should use one of the two one must be scrapped whichever to be scrapped I do not want to prescribe."*

This response suggests that the combination of assessment, the Continuous Assessment and Exam-based assessment could be addressed by choosing only one, which the Participant did not want to prescribe.

A researcher elucidated the issue of compulsory subjects that in Grade 8 and 9 only English, which is compulsory and Grade 10-12 both English and Mathematics are compulsory. The researcher then, asked Participant Afrika to react to the compulsory subjects' state of affairs. Afrika responded to the follow-up question, which subject should be compulsory, with the following explanation:

> *"I would rather say if we think these subjects are critical in a way let them be compulsory throughout and if we think all subjects are critical."*

Regarding which subject should be compulsory should be determined by the criticality of the subject. Giving freedom to learners to decide on which subjects to choose could lead to some fields of studies not attracting enough students. This may lead to a lack of knowledge and skills in some fields.

Ways to address the challenges related to learner support are condensed in this paragraph. First, this hints that the community should be educated about their part of contributing financially towards learners, educational trips and meets the government halfway. Second,

Mathematics and English should be made compulsory from primary school to the senior secondary school level. Third, it is believed that the principal can motivate teachers to provide learner support. Fourth, Advisory Teachers should train teachers on learner support to create awareness among the teachers about what learner support entails. Fifth, as part of learner support, the learners with special needs could be addressed by recruiting two teachers where one of them is simply dealing with learners with exceptional demands. Sixth, the schools should adopt one method of assessment throughout the grades. Last, regarding which subject should be compulsory should be determined by the criticality of the subject. Granting freedom to learners to decide on which subject combination to choose could lead to some fields of studies attracting a small number of learners.

4.10 Feelings and views on the revised curriculum

This part discusses the status of the feeling and views of teachers on the revised curriculum in Ompundja Circuit. Furthermore, the challenges related to feelings and views as well as ways to address the identified challenges are presented.

4.10.1 Status of teachers' feelings and views on the revised curriculum

Respondents were asked to indicate whether they feel the design of the revised curriculum in public schools was done in a top-down approach. Figure 4.81 reports the results of respondents' feeling whether the revised curriculum is designed top-downward.

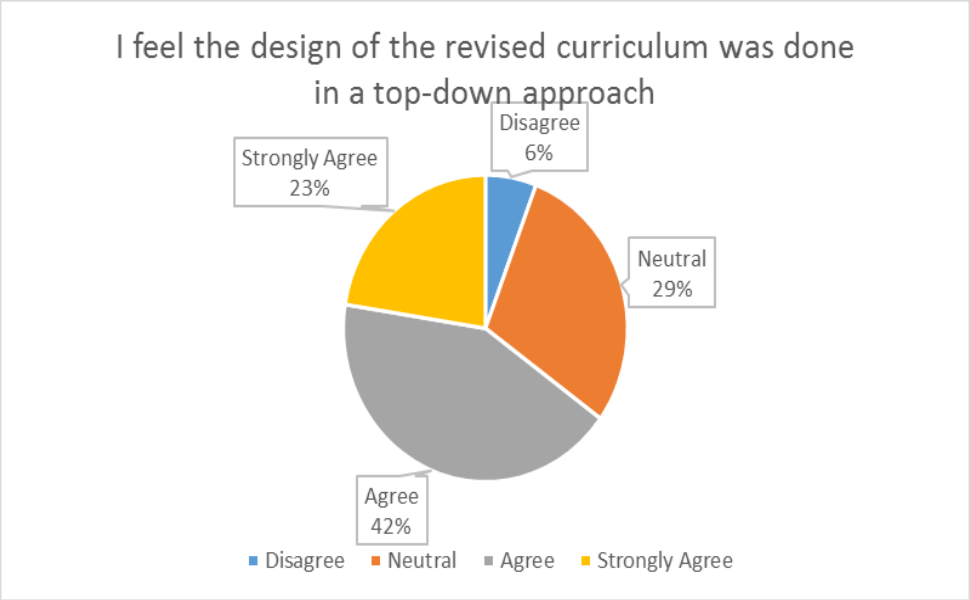

Figure 4.81. Top-down approach of revised curriculum design

It is reported in Figure 4.81 that (65%), which is the majority of the respondents agreed that they feel the design of the revised curriculum was done in a top-down approach. Only 29% of respondents were neutral and 6% disagreed. This shows that the majority of respondents believe that the revised curriculum was developed from top-down with little involvement of teachers who are involved with curriculum management and implementation daily.

Respondents were asked to rate whether they felt they were key stakeholders in the implementation of the RCBE. In Figure 4.82, their responses are presented.

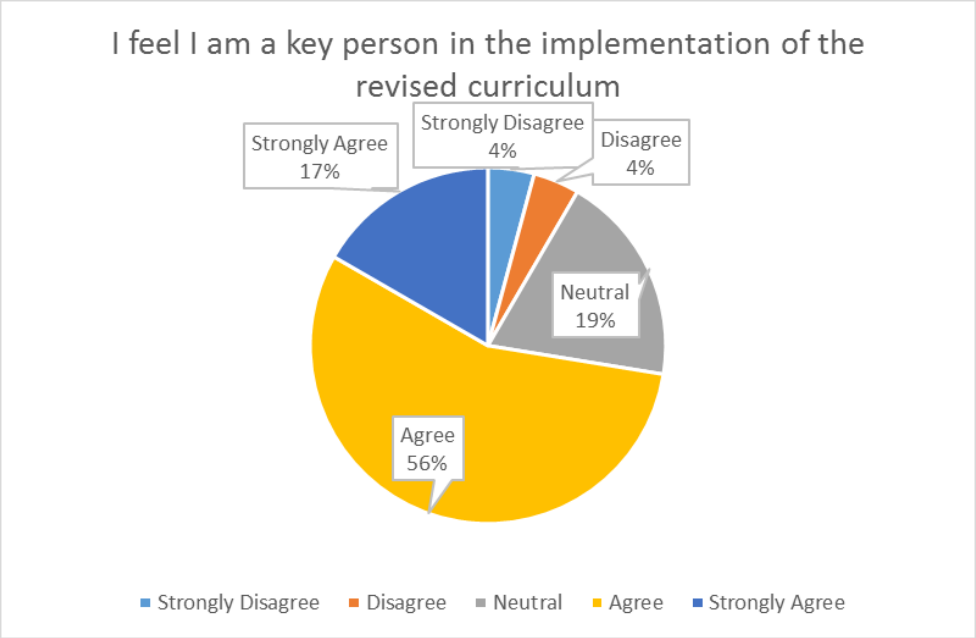

Figure 4.82. Key person in revised curriculum implementation

Majority of respondents, (73%) agreed that they feel they were key persons in the implementation of the revised curriculum. The 19% were neutral while 8% were in disagreement. This represents that majority of respondents feel that they are key stakeholders in the curriculum management and implementation process.

Respondents were asked to indicate if they feel that the physical infrastructures at their respective schools motivate them to implement the revised curriculum, which is presented in Figure 4.83.

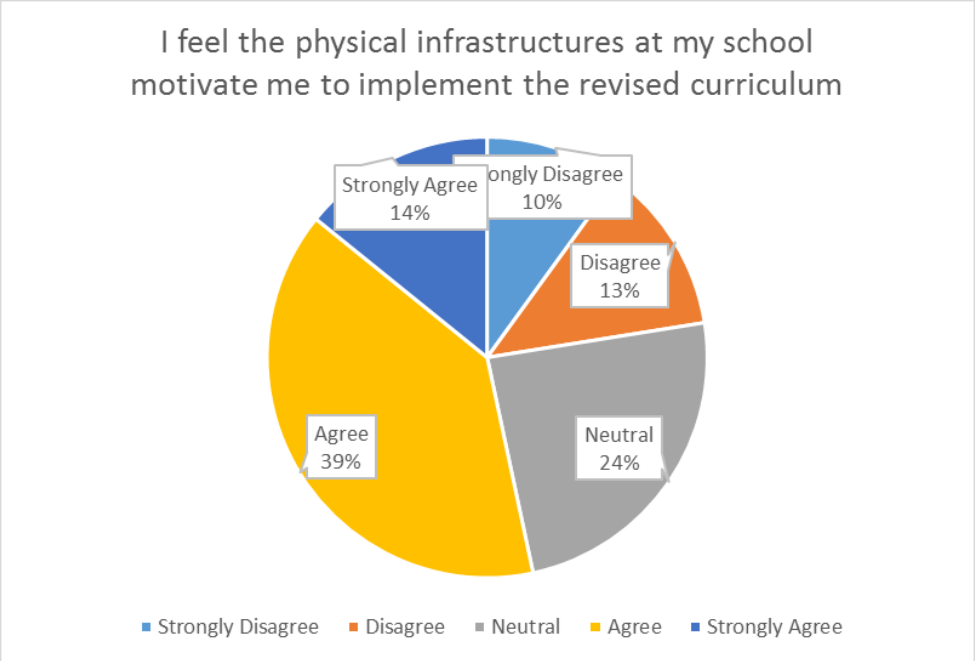

Figure 4.83. Physical infrastructure motivate teachers

According to Figure 4.83, 53% of the respondents agreed that they feel the physical infrastructure facilities of their schools motivate them to implement the revised curriculum. Twenty-four percent of the respondents were in disagreement while 24% were neutral. This implied that public schools in Ompundja Circuit generally have good infrastructure facilities.

Respondents were also asked to indicate whether they feel the working environment at their school motivates them to implement the revised curriculum. Their responses are shown in Figure 4.84.

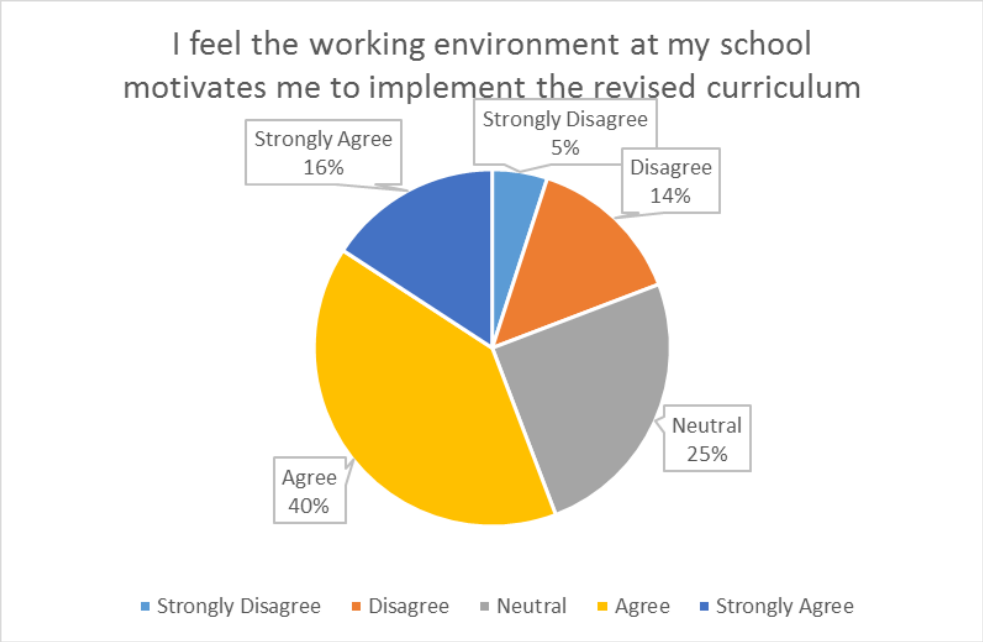

Figure 4.84. Working environment motivates teachers

Figure 4.84, shows that the majority of the respondents (56%) agreed that they feel the working environment at their schools motivates them to implement the revised curriculum. Twenty-five percent of respondents were neutral while the remaining 19% disagreed with the statement. The majority of respondents are of the view that the working environment of their schools motivates them to implement the revised curriculum.

Respondents were asked to indicate whether they felt that the location of their school motivated them to implement the RCBE. Their responses are shown in Figure 4.85.

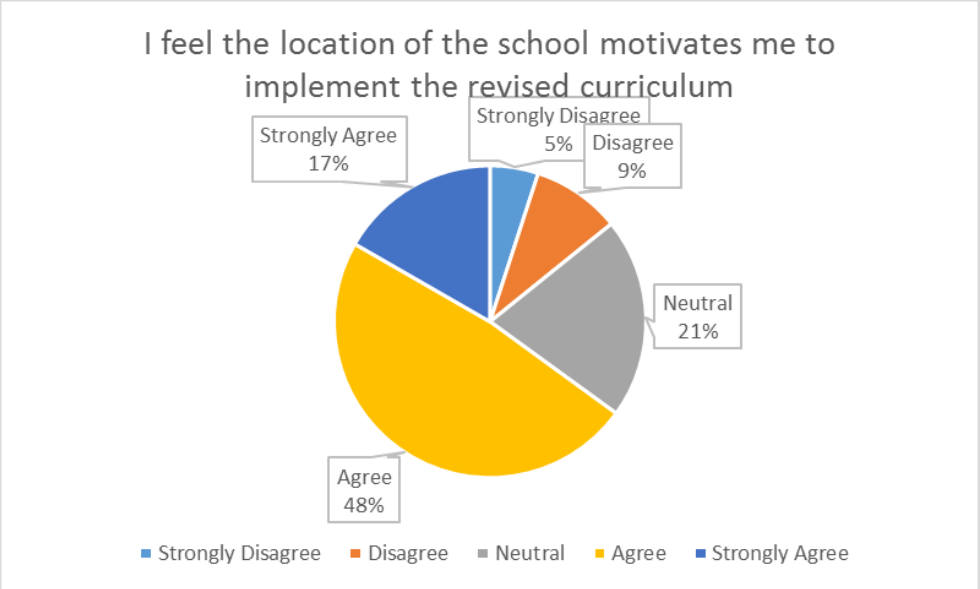

Figure 4.85. Location of the school motivates teachers

As illustrated by Figure 4.85, 65% of the respondents agreed that they feel the location of their schools motivates them to implement the revised curriculum. Twenty-one percent of respondents were neutral and the remaining 14% were in disagreement. The majority of respondents believe that the location of their schools motivates them to implement the revised curriculum.

Teachers were also asked to indicate whether they had positive attitudes towards the revised curriculum and their responses are provided in Figure 4.86.

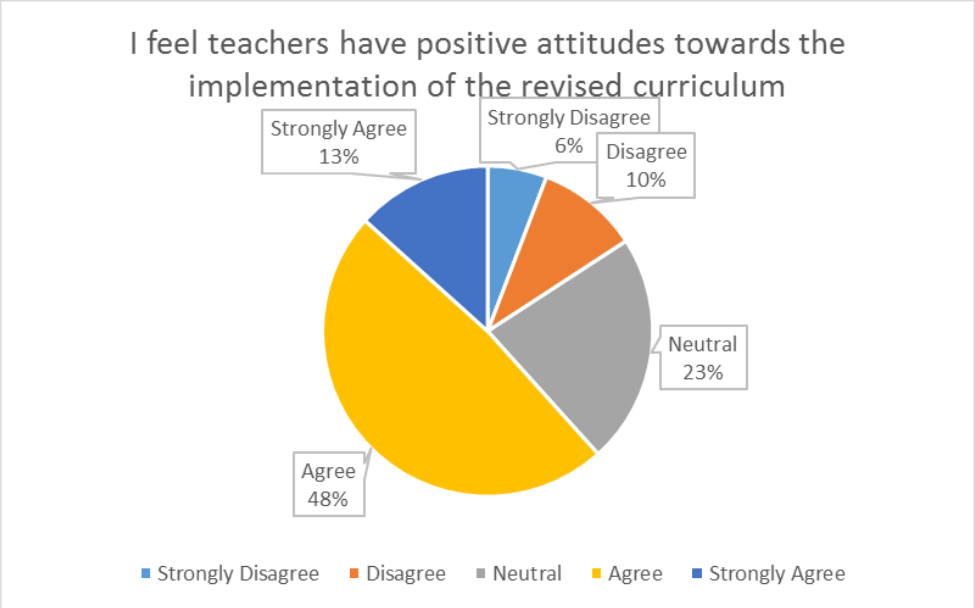

Figure 4.86. Positive attitude of teachers towards a revised curriculum

As shown in Figure 4.86, the majority of the respondents (61%) agreed that they feel that teachers have positive attitudes towards the implementation of the revised curriculum. Twenty-three percent the respondents were neutral while 16% were in disagreement. This agrees with the position that a positive attitude is a prerequisite to effective teaching and learning.

Teachers are important stakeholders in curriculum management and implementation. They are also stakeholders in the design of the curriculum. Respondents were asked to rate how they agree with involving teachers in the curriculum development process. Figure 4.87 depicts the participants' responses regarding involving teachers in curriculum development.

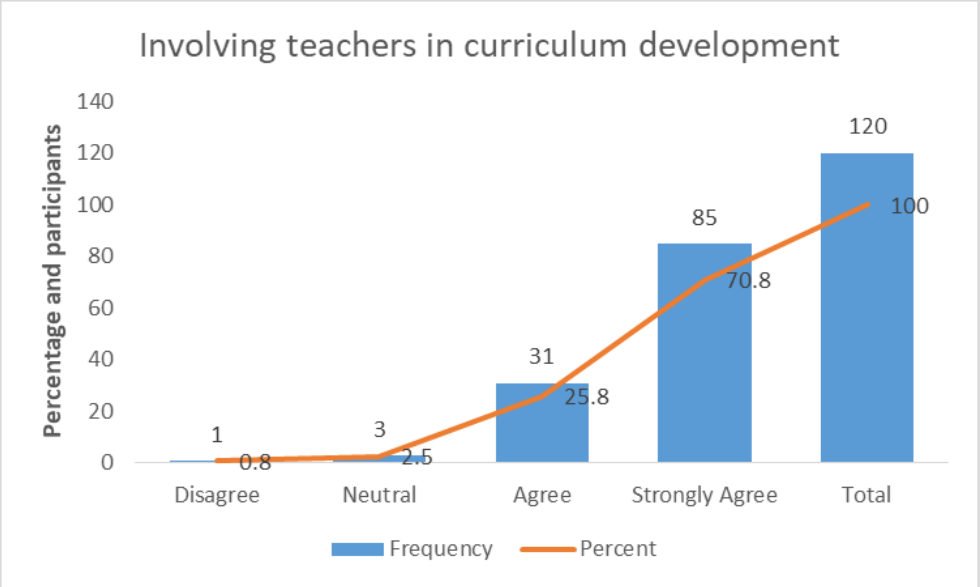

Figure 4.87. Involve teachers in curriculum development

Figure 4.87 indicates that 96.6 % of the respondents agreed with the view that teachers should be involved in the curriculum development process of the revised curriculum that is being implemented. Only 0.8% were in disagreement while 2.5% were neutral. This supports the findings by researchers who indicated that teachers should be involved in curriculum design or development process as found in some studies (see studies by Amunkete, 2020; Nghihalwa, 2018; Tubaundule, 2014).

Respondents were asked to indicate whether the infrastructures of schools should motivate teachers to implement the revised curriculum. Their responses are shown in Figure 4.88.

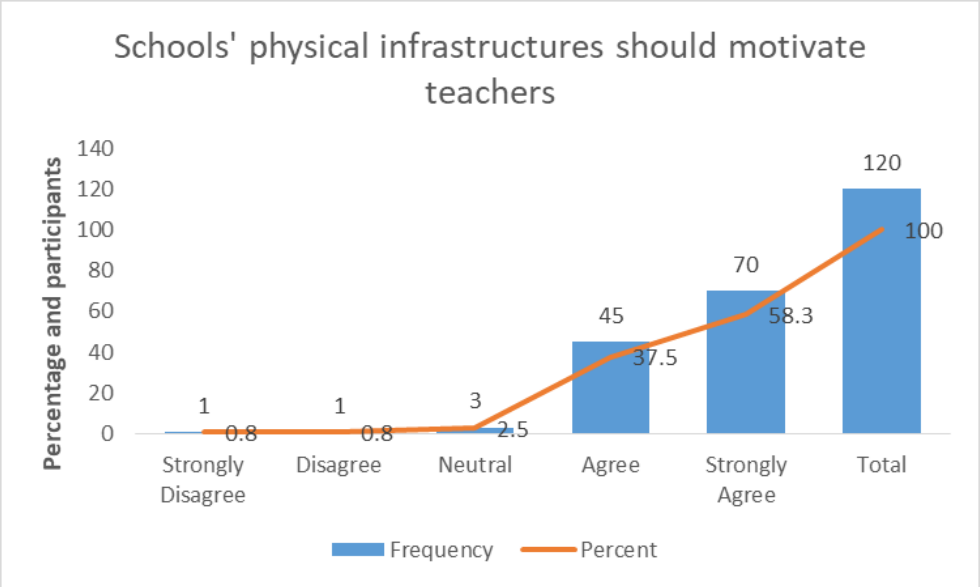

Figure 4.88. School's physical infrastructure should motivate teachers

Figure 4.88 showed that the majority of participants, (95.8%) agreed that the physical infrastructure of schools should motivate teachers to implement the revised curriculum. The 2.5% of the respondents were in disagreement while fewer (1.6%) were neutral. This supports the responses provided in 4.4.3 that school infrastructures should be availed to enable effective teaching and learning.

Teachers were asked to indicate whether the working environment at their respective schools should motivate teachers to implement the revised curriculum. Figure 4.89 shows how the respondents responded.

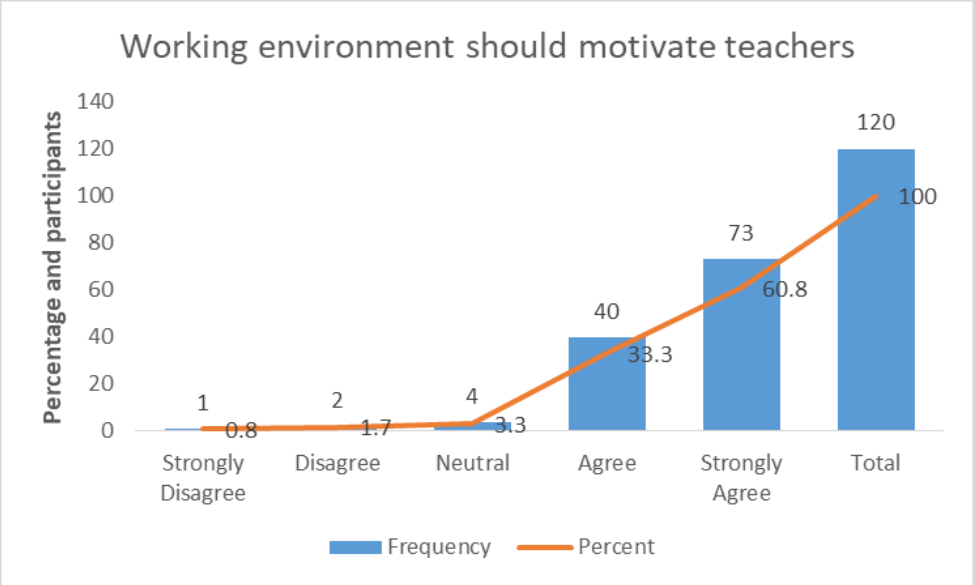

Figure 4.89. Working environment should motivate teachers

As shown in Figure 4.89, the majority of respondents, (94.1%) agreed with the statement that the working environment should motivate teachers when implementing the revised curriculum. The 3.3% of the teachers were neutral while 2.5% were in disagreement. The motivating environment is a characteristic of instructional leadership as a motivating factor to effective implementation of the revised curriculum in Ompundja Circuit.

Respondents were asked to indicate whether the location of the schools should motivate teachers when implementing the revised curriculum. Figure 4.90 displays their responses.

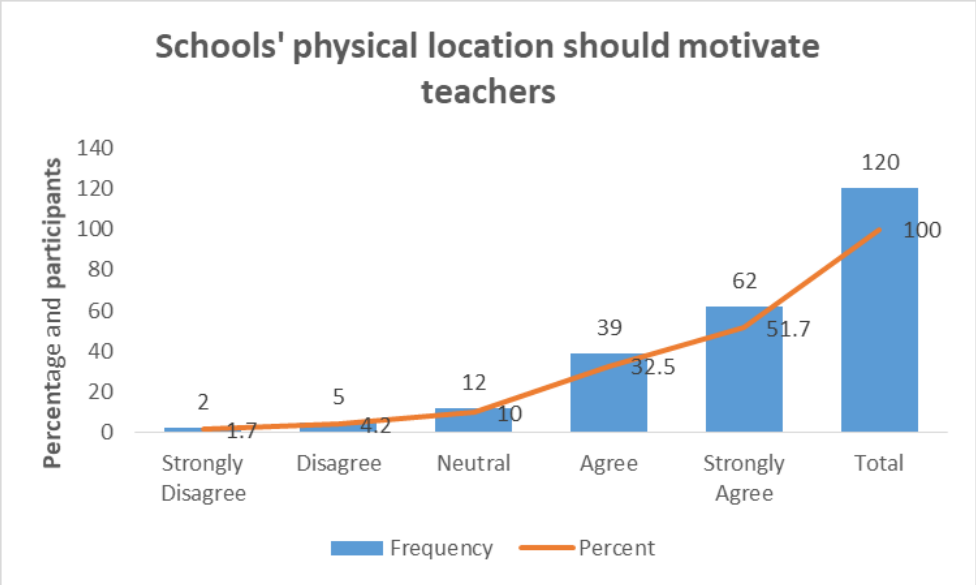

Figure 4.90. Location of schools should motivate teachers

Figure 4.90 presents that most respondents, (84.2%) agreed that the physical location of the school should motivate teachers to implement the revised curriculum. Ten percents of the respondents were neutral and 5.9% were in disagreement. The majority of respondents find the location of their school to have an impact on revised curriculum management and implementation.

Figure 4.91 displays how the respondents responded to the statement of whether teachers should have positive attitudes towards the implementation of the new curriculum.

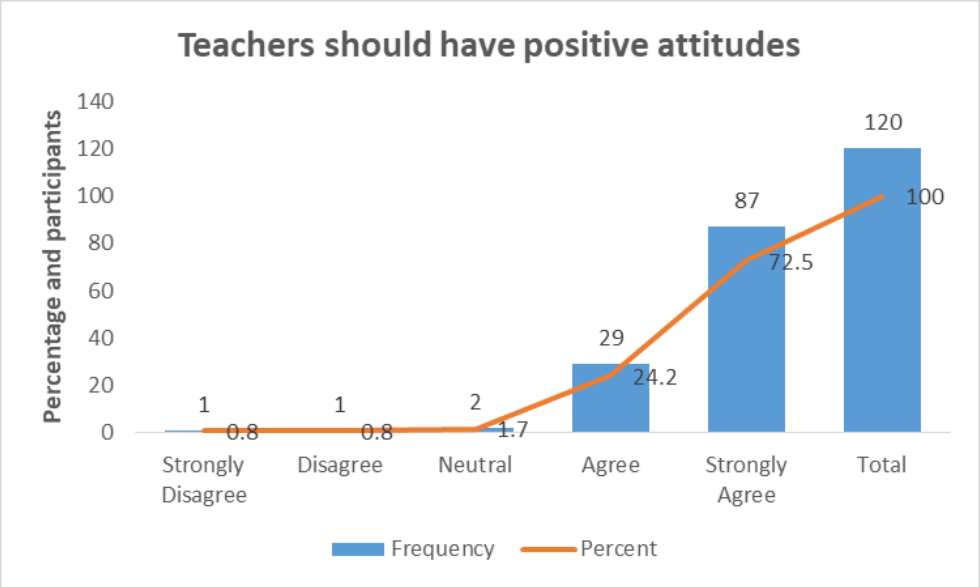

Figure 4.91. Teachers should have positive attitudes

Figure 4.91 shows that most respondents, (96.7%) agreed that the teachers should have positive attitudes towards the implementation of the revised curriculum. The respondents who were neutral were 1.7% while 1.6% disagreed. The majority of respondents believe that teachers should have a positive attitude towards the implementation of the revised curriculum in public schools in Ompundja Circuit.

4.10.2 Challenges related to feelings and views on the revised curriculum

At this point, the researcher asked participants to share the challenges related to teachers' feelings and views towards the implementation of the revised curriculum.

Participant Kondja answered as follows:

> *"When they discuss there are those that feel that the transition of the topics from grade to grades, there are those that feel that there is a gap. You know, like a gap between if a learner is from Grade 1 to Grade 7. This learner was doing Natural Science and in Grade 8 is doing Physical Science; they feel there is a gap between*

Natural Science and Physical Science. It is like; in between there was some steps - you know like - omitted that make the learner not to cope."

This response reveals that the revised curriculum has presented a knowledge gap when learners are promoted from a grade, for instance; from Grade 7, Natural Science to Grade 8, Physical Science the gap seems to be wide.

According to Participant Etuhole, the challenge related to teachers' attitudes and perceptions towards the implementation of the revised curriculum is as follows:

"There is an attitude that teachers are always adamant to accept changes. They always struggle to accept, but anyhow we cannot do anything to change."

The challenge here is the teachers' reluctance to accept change, which they have no control over.

According to Participant Tuuda, the challenge related to teachers' attitudes and perceptions towards the implementation of the revised curriculum is explained as follows:

"There are those at our school not having that confidence to teach the senior grades. They feel they are not really having enough content, but it was made difficult by the curriculum itself that any teacher who qualifies with BETD and further diploma will be able to teach, which is a bit rhetorical if I can put it that way. You need somebody who is really having enough content. So, that it is a challenge."

The challenge is the lack of courage to teach advanced grades because of inadequate subject content knowledge by teachers. When the revised curriculum was introduced, teachers were told that whoever had a BETD and further diploma can teach. It seems this viewpoint is more rhetorical than practical.

Afrika's response to challenges related to teachers' attitudes and perceptions seems to imply that some stakeholders have to know about curriculum transformation through self-discovery. This is how he responded:

> *"But, I can say that hearing about why the curriculum has to be adjusted these are some of the things that I have to read when I got a chance and I came across a material talking about it. Its things that I have to hear through the media in other words the aspects of ownership of the revised curriculum I have to indicate that it was not well sought after."*

This response seems to suggest that the reason for reforming the curriculum was not properly communicated to some teachers and principals. They only learn about it through self-discovery and media. This constrained them from taking ownership of the revised curriculum of the basic education in Ompundja Circuit.

Challenges related to teachers' attitudes and perceptions towards the revised curriculum in Ompundja Circuit are summed up as follows. Firstly, the revised curriculum is marked with a transition gap in knowledge. Secondly, teachers were hesitant to accept change. Thirdly, some teachers lack the courage to teach senior grades due to lack of subject content and some had BETD and further diplomas, which makes their ability to teach a bit rhetorical than pragmatic. Fourthly, the reason for changing the curriculum was inappropriately communicated to some teachers and principals. Some of them only learned about it through self-discovery and media, which lead to retarded sense of ownership of the revised curriculum. The last point contrasts the findings in Figure 4.9, where the majority of respondents (65%) have received training on the revised curriculum

and Figure 4.11, where the majority of respondents (87%) of the respondents indicated that they received the revised curriculum document.

4.10.3 Addressing challenges related to feelings and views on the revised curriculum

After Participant Kondja shared the challenges related to teachers' attitudes and perceptions, the participant proceeded to provide three possible solutions as follows.

A first possible solution:

> *"I said the training, so the people understand why a change, those are the things that we need to explain to our staff members that we cannot stay stagnant."*

This response underscores the importance of training to understand why a curriculum should change. This could enable them to explain it to their staff.

A second possible solution:

> *"The world is moving, thus; where teachers did well, they need to be praised, they need to be appreciated and things like awards, giving awards to those people, price and awards will make them you know to be on par."*

This answer suggests another way to motivate the teaching staff to boost their attitudes and perceptions.

A third possible solution:

> *"Of course, sharing of skills we have some people who are doing well in the cluster or circuit, those should be brought together and have their skills and knowledge and to cultivate a culture of positive in our people's mind."*

These could be interpreted as negative attitudes or resistance towards the revised curriculum among teachers, which could be addressed through sharing of experiences and skills to instil a culture of a positive mindset.

Participant Etuhole proceeded to suggest how the challenge related to teachers' attitudes and perceptions towards the implementation of the revised curriculum can be addressed.

> *"Then what we do to 'adamant teachers' is to motivate them, I have to consult those who do have the knowledge and I have to send them to the relevant people to be assisted. On top of that, I have to motivate them to search the relevant resources and to consult the teachers with the same subjects so that they come together and discuss the problem together. And then, after that I have to observe them while they are teaching."*

This participant suggested that teachers could be motivated through consulting knowledge experts, looking for information as well as doing a class visit to observe their lessons.

A researcher posed the following probing question: "*How do we ensure we encourage teachers that lack of confidence?*" In response, Participant Tuuda asserted as follows:

> *"That is a very challenging situation because some of these teachers …, of course, we have Grade 10 maybe sometimes they can be placed at Grades 8 to 9s where they can be able to teach."*

This principal feels that teachers that lack confidence can be transferred to lower grades where they feel comfortable. This is a daunting move, which may trespass in the conditions of employment.

Participant Tuuda proposes another solution as follows:

> *"In most cases maybe, the rights of people have to be coming in, the Labor Act will also come in. But, the little that you can do sometimes is to ask whether they can be relieved to go to school where they will feel confident and then somebody who is committed enough can be brought in."*

Alternatively, teachers that lack confidence could also be transferred to schools where they are feeling comfortable.

A researcher asked Participant Afrika the following question: "*What interventions should be done to ensure that we shape the attitudes of teachers*?" He responded as follows:

> *"As I said, these consultations, which are picked up here and there in the media could possibly be addressed in some formal type of writing. I know it is very difficult to call up meetings and so on but if we have some formal types of writing, fortunately, we have technology now they can easily reach. They do not necessarily have to be coming together at one point, but at least some sort of campaign just to let people know how important it is. And, what is the reason why we should move from A point to the B point, which is a good point."*

This seems to imply that if the Ministry of Education would like to introduce something, it should first conduct a need analysis to ensure that it takes an informed decision. The Ministry should also capacitate the staff through training initiatives.

This conclusive paragraph presents how to address challenges related to teachers' attitudes and perceptions towards the revised management and curriculum implementation in public schools in Ompundja Circuit. Firstly, it is important for principals to be groomed to understand why a curriculum should change. Secondly, the teaching staff needs to be motivated to hike up their positions and perceptual experiences. Thirdly, the negative attitudes and perceptions towards the revised curriculum among teachers could be addressed through sharing experiences and skills to infuse a culture of positive

expectations. Fourthly, it is advised that teachers that lack confidence can be shifted to teaching the lower classes or schools where they feel comfortable. Fifthly, when the Ministry of Education would like to introduce some curriculum reforms, it should primarily conduct an empirical study to ensure that it takes an informed decision. Lastly, the Ministry should also capacitate the staff through training initiatives. The essence of teacher training is depicted in responses as shown in Table 4.8.

4.11 Other challenges and proposed ways to address them

All participants were asked if they had any other comments, advice or suggestions on challenges facing teachers and principals regarding the implementation of RCBE in Ompundja Circuit and how these challenges could be addressed.

Participant Etuhole shared the following:

> *"You know the Ministry has this tendency of bringing new ideas to the staff members while the staff members do not know anything about it. The problem is that the Ministry does not consider those who do not know, for example, ICT."*

This participant feels that the Ministry of Education is not considerate towards staff members whenever they like to introduce new ideas. This is a challenge that leaves some staff members in the darkness.

Participant Tuuda was asked to provide any other comments, advice or suggestions on challenges facing teachers and principals regarding the implementation of the revised curriculum for basic education. Tuuda added a challenge as follows:

"Yeah, maybe the challenge is that we have the general perception of our teachers. Most of our teachers, they really lack intrinsic motivation."

According to Participant Tuuda, lack of intrinsic motivation among teachers is a challenge confronting the community of educationists in public schools in Ompundja Circuit.

Challenges raised under general comments could be summed up as follows. The first one is that the Ministry of Education in its holistic approach is not considerate towards staff members whenever they wish to present new thoughts. This challenge leaves some staff members in the darkness. Lastly, the lack of intrinsic motivation among teachers is another challenge that is facing educationists. The participant proceeded to propose some remedies to the additional challenges that they had denied as follows:

In an effort to provide a possible solution, Participant Tuuda stated that teachers need motivation. To transform our education to deliver what we want, motivation needs to be scaled up.

Providing comments, advice or suggestions on challenges facing teachers and principals regarding the implementation of the revised curriculum, Participant Afrika shared the following:

"Well, I believe the subject combinations need to be revisited so to say. We are given specific subject combination that is supposed to be brought in but then at the end, you find these subjects do not go well with the other subjects. What I am seeing now is we do not really having specialisations in some areas. You find a person has History, for example, and then they take Entrepreneurship on the other side."

About the free choice of field of studies, Participant Afrika has offered this intervention in the following manner:

".. Because learners are at liberty to take whatever subject they want to take. You find them take on commerce subjects, who are theoretical-based but now the Accounting, which is supposed to promote accountability is not even being offered as a subject at the end of the day. We are going to be a nation, which cannot account."

This implies that students should not be given much choice in the field of studies specialisation. This may affect the choice of courses at HEIs.

Finally, the manner in which challenges were raised under general comments could be summarised as follows. It starts with the viewpoint that teachers need motivation. To transform basic education to deliver what is needed, motivation needs to be scaled upwards. Then the subject combination should be reviewed to find an aligned combination of subjects that could enable students to choose future career specialisations. This implies that the pupils should not be given much choice in the field of studies specialisation. This may bear upon the choice of courses at institutions of higher education.

4.12 Summary

This chapter presented both the qualitative and quantitative information on the challenges facing teachers and principals in implementing the revised curriculum in public schools in the Ompundja Circuit in Namibia. The challenges identified are related to lack of in-service teacher training (support system), lack of infrastructures such as computers, advanced and intertwine convergence of media technology, science and vocation laboratories. There are also challenges related to lack of teaching and learning resources such as stationeries, textbooks and science laboratory equipment. There is a lack of funds

resulting from a lack of financial support from stakeholders to aid the process of revised curriculum management and implementation. There were also challenges related to the offering of pre-vocational and vocational subjects. A high and low teacher-learner ratio is a challenge to the management and implementation of the revised curriculum process. Furthermore, there are also challenges related to learner support. Finally, the negative views of teachers towards the revised curriculum implementation presented some challenges to the implementation process.

Besides, there were suggested ways to ameliorate the identified challenges. Teacher training challenges could be addressed through workshops, seminars and other in-service training on theme-based on particular subjects. Infrastructures and physical resources could be addressed through lobbying the funding from the private, business stakeholders. Lack of teaching and learning resources could be addressed by designing alternative indigenous ways of imparting knowledge. The lack of funds could be sourced from the Ministry of Education, Arts and Culture, business entities, parents and private entities. Equally, public schools could perhaps be granted permission to register trust to source funds within and without borders. Teacher-learner ratio requires an urgency of additional teachers, classrooms and a review of the teacher-learner ratio policy. Meanwhile, the learner support could be effectively addressed by building confidence among teachers and creating a sense of ownership by involving teachers in the design of the curriculum. Lastly, the negative views can be addressed through training and improved teaching environment as well as through continuous training. The next chapter discusses the findings of the study.

CHAPTER 5: DISCUSSIONS OF THE FINDINGS OF THE STUDY

5.1 Introduction

Chapter 5 starts with a discussion of the findings of the study on biographical information. Secondly, the findings on challenges facing teachers and principals in the process of managing the revised curriculum implementation in Ompundja Circuit are reflected. Thirdly, the chapter deliberates on the findings of suggested possible ways to address those identified challenges hampering teaching methodology whilst on the contrary monitoring the input and outpu.t learning indicators.

5.2 Biographical information

Results of the respondents' demographic information indicate that 35.8% of the respondents were in the 31-40 years' age category followed by 22.5% respondents who were between the ages categories of 41-50. This was an indication that the sample consisted of respondents of considerable maturity and hence had a clear understanding of challenges encountered (see 4.2.1 and Figure 4.4). In addition, this implied that mature respondents took an interest in participating in this scholarly work.

Female respondents made up 67.5% of the respondents, which meant that more female respondents fell into the sample of this study than 32.5% of their male counterparts (see section 4.2.2 and Table 4.3). The majority of the respondents (81%) held a position of an ordinary teacher followed by the 12% of respondents who held a position of a Head of Departments while principals made up 7% of the participants (see section 4.2.3 and Figure

4.6). Heads of departments and principals fell in the advanced age (above 41 years) categories because the position requires applicants to have some years of teaching experience before they could take up the position of Head of Department (HoD) and years of teaching experience plus service as an HoD for a position of a principal (see Figure 4.4 and 4.5).

The teaching experience of 26.7% of the respondents ranged between 11-15 years, 22.5% were over 20 years, 19.2% were between 16-20 years, 17.5% is between 6-10 years and 14.2% is between 0-5 years (see 4.26.). Again, 41.7% of respondents taught in the secondary school phase, located in an urban setting (see 4.2.5). The 32.5% of the respondents had at least a Bachelor of Education (Honors), followed by 24.2% with a teaching diploma while 20% held a postgraduate diploma in education. These data show that all respondents were professionally qualified to teach (see 4.2.8).

As indicated in Chapter 2 (2.7), vocational subjects are deemed as one of the pillars and enablers to fast-track Namibia to a desired standard of development by the year 2030 as stipulated in Vision 2030. Furthermore, most of the respondents (82%) indicated that their schools offered vocational subjects (see 4.2.4 and Figure 4.6). Most of these subjects were offered in schools even if they were not designated to offer vocational subjects. The majority of the respondents (70%) worked in urban schools (see 4.2.5).

Data also revealed that training about the RCBE was offered to most respondents (65%) (see 4.2.9 and Figure 4.9). The 36.7% of the respondents who indicated that they were offered some training on the RCBE indicated that the training offered was useful (see 4.2.10 and Figure 4.10). Furthermore, 26.7% of the respondents indicated that the training lasted for five days, 10.8% indicated that it lasted for four days and 10% said it lasted for three days (see 4.2.11). This signifies that the differentiated duration of training was

offered to teachers. Finally, the majority of the respondents (87%) indicated that they have received the revised curriculum documents (see 4.2.12 and Figure 4.11). This implies that more respondents have curriculum documents, a structure, provided to them.

The next part discusses the curriculum management and implementation challenges and suggested appropriate technical strategies to address challenges related to the management and implementation of the revised curriculum in Ompundja Circuit.

5.3 Teachers training challenges

By virtue of its ontology, the formation of teacher training is an inalienable component that constitutes and yields successful curriculum management and implementation process. It is reflected in the teachers' biographical information that all teachers are professionally qualified to teach. The study found that there was a lack of ongoing in-service training about the revised curriculum, which is a new concept and its level is higher than the qualification of some teachers. Lack of in-service training is found in several studies as one of the challenges that impede policies or curricula management and implementations (Iita, 2014; Lumadi M. , 2014; Makunja, 2016). Training on the revised curriculum was offered, but respondents and participants felt that the training duration was insufficient (see Table 4.7 and 4.3.2). Lack of continuous in-service training is a belief about the revised curriculum is a cultural constrain, which according to Quinn (2012) has a causal effect on things and may hamper effective revised curriculum implementation in public schools in Ompundja Circuit. Effective curriculum management and

implementation improves teaching and learning as a function of instructional management.

After identifying the challenges, the remedies were proposed such as provide a revised curriculum tailor-made continuous in-service training, provision of theme-based training by Advisory Teacher Services at a regional level as well as inducting novice teachers (see 4.3.3). The relevant structures or committees should offer these training initiatives to harness an enable cultural system. Although training on revised curriculum was offered, most respondents indicated that the maximum duration of training was five working days; the participants, on the other hand, felt that the duration should be extended. The next part discusses the findings of challenges related to infrastructure and physical facilities.

5.4 Infrastructure or physical resources challenges

Infrastructural resources are structural materials that can constrain or enable effective curriculum management and implementation, which are an important part of an educational setting, which if they are not available they may affect effective teaching and learning. These findings support the finding of studies (see e.g. Agih, 2015; Altinyelken, 2010; Lumadi, 2014; Magongoa, 2011 and Syomwene, 2013). There are some structural challenges related to infrastructure and physical resources that influence effective teaching and learning in public schools in Ompundja Circuit. They are such as lack of hostel accommodation, which is not directly linked to curriculum implementation challenges and lack of physical resources such as science and computer laboratories (see 4.4.1 and Figure 4.12, 4.16, 4.17, 4.19 and 4.21). The study revealed that most public schools in Ompundja

Circuit have enough office space for teachers and classrooms and are electrified (see Figure 4.13, Figure 4.16 and Figure 4.18). These results concur with that of studies by Ayasra (2015), Lumadi (2014) and Magongoa (2011). Once the teaching and learning are not successfully executed, the learners' academic performance is also in jeopardy. On the contrary, the public schools in Ompundja Circuit have enough offices for teachers as well as classrooms.

Previous paragraphs revealed some challenges related to infrastructure and physical resources. Lack of infrastructure and physical resources can be remedied through the construction of enough enabling structures such as practical workshops for vocational subjects, build enough science and computer laboratories, sports facilities, hostel facilities, constructing or renovating existing infrastructure by the Ministry of Education, Arts and Culture (MoEAC) (see Figure 4.20 – Figure 4.26 and 4.4.3). The next part discusses the findings on challenges related to teaching and learning resources.

5.5 Teaching and learning resources

Teaching and learning resources are cardinally a foundational cornerstone and a structural backbone of effective teaching and learning in schools. It was found that there are teachings and learning resources challenges that hamper an academic bumper harvest of teaching and learning indicators. Challenges range from lack of sufficient teaching and learning resources such as textbooks and stationeries, lack of ICT facilities, internet connectivity and ill-equipped science laboratories (see 4.5, Figure 4.29, Figure 4.30 and Figure 4.31 respectively). The quantitative data does not show a distinctive position on

the whether the public schools in Ompundja Circuit have enough ICT equipment (see 4.5, Figure 4.28). Shortage of teaching and learning resources is a structural hindrance to effective curriculum management and implementation. Furthermore, the realisation of the One Textbook per Child Policy is distant (see Figure 4.31). This confirms the findings of several studies, that a lack of teaching and learning resources is a hindrance to effective curriculum or education policy implementation (e.g., Achimugu, 2016; Ahmadi & Lukman, 2015; Badugela, 2012; Dzimiri & Marimo, 2015; Iita, 2014; Josua, 2013; Mkandawire, 2010; Quest, 2014; Tubaundule, 2014). Lack of teaching and learning aids hinder effective revised curriculum management and implementation as well as pedagogic instructional access in public schools in Ompundja Circuit.

Participants proposed ways in which the lack of teaching and learning resources could be addressed (see Figure 4.32 – Figure 4.37 and section 4.5.3). This can be remedied when the structure such as the Ministry of Education, Arts and Culture (MoEAC) provides teaching and learning resources as well as fast-tracking the delivery of stationeries to schools. Quinn (2012) concurred that the modification in the structures can contribute to transformative changes and paradigm shifts in the culture of organisations such as schools. Teachers can use alternative teaching and learning resources when MoEAC provides no teaching and learning aids. Parents should buy textbooks for learners. Libraries should be stocked up with necessary reading resources, ICT resources should be enhanced while internet connectivity should be broadened to broaden the scope of instructional resources among teachers.

5.6 Funding

Funds in an educational context can be a structural constraint or enabling resources. Challenges related to funding are such as lack of financial support from the business community and parents (see section 4.6, Figure 4.40 and Figure 4.41). The respondents do not seem to be aware if the government provide funds to their schools (see Figure 4.38). Most respondents took a neutral position whether their schools have enough funds for learning materials (see Figure 4.39). The removal of School Development Funds, low and untimely delivery of Universal Primary Education funding was cited as constraints (see Figure 4.42). The negative state of the global economy, during this study, and the inability of schools to solicit funds from parents led to a lack of finances (a structural constrain) to support effective teaching and learning activities in public schools in Ompundja Circuit (see section 4.6.2 – last paragraph). The findings that lack of funds jeopardise effective teaching and learning are congruent with studies as cited in the literature review (Ahmadi & Lukman, 2015; Dzimiri & Marimo, 2015; Mingaine, 2013 and Mkandawire, 2010).

Funding challenges could be addressed by motivating the private sector and parents to financially support schools as well as financing revised curriculum activities by the Ministry of Education, Arts and Culture (MoEAC) (see Figure 4.43 - Figure 4.47 and section 4.6.3). This substantiated the finding by Mingaine (2013) who stated that the ministry responsible for education is another stakeholder that can avail funds. It is suggested that the School Development Funds should be revisited and re-introduced on top of government funding, increase UPE funds per learner or schools should hold fundraising activities (see section 4.6.3 – last paragraph).

5.7 Provision of vocational education

Provision of vocational education is not unique to structural, cultural and agential constrain or enabling mechanisms. This study found that there are challenges related to the provision of vocational education or subjects in public schools in Ompundja Circuit. They are such as natural disasters such as drought as well as high cost of water that negatively influenced agricultural activities (see section 4.7.2). There are only about 36% of respondents that agreed with statements about vocational education (see Figure 4.48 – Figure 4.54). Further, the participants in the follow-up interviews revealed that lack of qualified vocational subject teachers has a negative effect on vocational curriculum management and implementation (see section 4.7.2). Notably, inadequate qualified vocational and technological education teachers are what Swanzy (2010) found to be a hindrance to the provision of quality vocational education. Lastly, lack of in-service training among vocational subject teachers is a self-evident challenge. The studies by Bamidele and Bakare (2015); Gwembire and Katsaruware (2013) as well as Tshabalala and Ncube (2014) categorically affirm the findings that the lack of in-service training among vocational subject teachers is a challenge to effective vocational curriculum management and implementation as well as improve academic performance in vocational subjects (see section 4.7.2 – last paragraph).

A participant proposed remedies to the challenges identified, such as the provision of in-service teacher training (see Figure 4.53 – Figure 4.59 and section 4.7.2). The vocational subject workshops (structural enabling facilities) should be built. This finding agrees with findings by Bandele and Faremi (2012) as well as Idris et al. (2012). This study found that there is a need to strengthen extensive marketing of vocational programmes to encourage

learners' participation in the vocational discipline (Figure 4.58). An acceptable teacher-learner ratio is needed in a vocational setting as well as the financing of vocational education activities (Figure 4.59). A manageable number of learners per teacher is a precursor to an appropriate teaching and learning setting. Where there is a lack of vocational subject resources, teachers are encouraged to use alternative resources (see section 4.7.3 – last paragraph).

5.8 Teacher-learner ratio

It was found that there are structural and cultural challenges related to the teacher-learner ratio in public schools in the Ompundja Circuit in Oshana Region. It is the structure (policy) that prescribed that an acceptable teacher-learner ratio is 1:35 for primary schools and the secondary schools are 1:30 (see Chapter 2, 2.9 – paragraph 4). Going against the prescribed teacher-learner ratio ignite the discourses in public schools in Ompundja Circuit. There is a high teacher-learner ratio in urban schools, due to the migration of learners from rural schools to urban schools. This is in line with Makunja (2016) who indicated that a higher teacher-student ratio leads to overloading of teachers, and unconducive teaching and learning environment. Meanwhile, Selepe (2016) found that the increased teacher workload denies learners individual attention from the teachers, which may have an adverse effect on learner academic performance. Some studies conducted in Namibia by Angula (2015) and Tubaundule (2014) support Selepe's (2016) study finding. In addition, Nakale (2017) contends that a higher teacher-learner ratio undermines the quality of teaching and learning. A higher teacher-learner ratio also delays feedback on

assessment activities. There is also a low teacher-learner ratio in rural schools, which renders schools uneconomical, which may lead to teachers being transferred to other schools (as espoused by participants in section 4.8.2).

Challenges related to the teacher-learner ratio could be addressed through striving to keep the teacher-learner ratio within the acceptable range as prescribed by structural provision (staffing norms) (see section 4.8.3). It could also be addressed by recruiting more teachers (see Figure 4.68) and constructing more structures (classrooms) (see Figure 4.69). Other suggested remedies require the school to convince parents to keep their children in rural schools and call for a revisiting of the existing teacher-learner ratio policy (see section 4.8.3 – last paragraph).

5.9 Learner support

There are challenges related to learners' support such as inadequate support to gifted learners and at-risk learners as well as learners with special needs (see Figure 4.71, Figure 4.72 and Figure 4.73). However, data sourced from participants reveals that learner support is interpreted differently in the participants' discourses. This may be a cultural constrain or enabling mechanism because some participants view it as providing support for learners with special needs while others relate it to educational excursions and tours (see section 4.9.2 – last paragraph). There are revised curriculum management and implementation challenges identified that are related to learner support. The challenges are such as lack of structures such as funds to take learners to educational tours and excursions, lack of training on learner support by Advisory Teacher Services, which is a

cultural constrain. Some participants view learner support to be more theoretical than practical exercise. Teachers' inability to plan inclusive lessons is also a challenge.

Some of the remedies to address learner support challenges that were recommended are such as the provision of enrichment programmes for both gifted and at-risk learners, support learners with special needs (see Figure 4.76, Figure 4.77 and Figure 4.78 respectively). Community members are urged to support learner support initiatives through monetary contributions or in kind. The Advisory Teacher Service should give learner support training to teachers as well as making some subjects such as Mathematics mandatory while combining forms of assessment (continuous assessment and examination-based assessment) (see section 4.9.3 – last paragraph).

5.10 Feelings and views on curriculum management and implementation

Findings from the research about the teachers' challenges related to the feelings and views on the revised curriculum management and implementation are discussed. Feelings and views can be cultural constrain or enabling mechanisms (Archer, 1996). Challenges are such as the curriculum is designed through a top-down approach which is a cultural constraining the implementing agents from improving effective teaching and learning in public schools in Ompundja Circuit (see Figure 4.81). A top-down approach to curriculum development contents with these studies (see Ahmadi & Lukman, 2015; Ogunbiyi, 2012; Tubaundule, 2014). As shown in Figure 4.83, were majority of respondents (53%) and Figure 4.84 indicated that physical infrustructure and the working enviroment motivate teachers supports the findings in section 4.4.1. The current study found that there is a gap

in subject content knowledge and resistance to change by some implementing stakeholders (see section 4.10.2 – fisrt paragraph). Some educators have no courage to teach senior grades, which is a cultural constraint. The subject or content knowledge deficiency and communicating curriculum change, which was ineptly done.

This paragraph discusses how to address challenges related to teachers' feelings and views towards the revised curriculum management and implementation in public schools in the Ompundja Circuit (see section 4.10.3 – last paragraph). It is recommended that all stakeholders, especially teachers and principals should be involved in curriculum design, create a motivating working environment and creating an understanding of why curriculum transformation is necessary. Furthermore, cultivating a positive attitude (culture) is required while re-training the teaching staff. Finally, share experiences and skills among teachers. These remedial interventions require structures with agents with the necessary powers and properties to enable the transformation to happen.

5.11 Summary

Chapter 5 interpreted, analysed and discussed the findings of the study on the views of teachers and principals to explore the challenges they have been experiencing in the implementation of the RCBE in the Ompundja Circuit. It also suggested how to address the challenges they experienced during the curriculum management and implementation process. The chapter made cross referencing to presentation of data in Chapter 4.

First, there are numerous structural, cultural and agential challenges related to inadequate in-service training while the revised curriculum level is higher than the previous curriculum. This study recommended ways in which these could be addressed, namely, through continuous in-service training and inducting new teachers.

Second, there are challenges linked to infrastructure such as lack of physical resources like classrooms, laboratories and workshops for vocational subjects. These challenges could be addressed through construction infrastructure by the Ministry of Education or renovating existing buildings. Third, there are challenges aligned to lack of sufficient teaching and learning resources such as textbooks and stationeries as well as lack of ICT tools and internet connectivity. It is suggested that stakeholders should use alternative teaching and learning resources. Fourth, challenges related to the financing of the RCBE, namely, lack of financing from stakeholders, removal of School Development Funds and unfavourable economic conditions, hinders effective revised curriculum management and implementation. These challenges could be halted by ensuring stakeholders support schools financially and through the re-introduction of School Development Funds while increasing the UPE funding per learner.

Fifth, the study also found natural disaster such as drought and high cost of water resources affects Agriculture Projects at public schools, lack of vocational subject teachers and their training. These challenges can be addressed through training, building workshops and funding the vocational activities. Sixth, the high and low teacher-learner ratio is a challenge to curriculum management and implementation, which can be remedied through keeping the ratio within the acceptable range per phase, building more classrooms or recruiting more teachers.

Seven, there are challenges related to learner support that result from a lack of funds for training. These could be addressed through the provision of enrichment interventions for both gifted and at-risk learners as well as providing support for learners with special needs. Finally, the challenges related to feelings and views of the teachers towards the revised curriculum are such as curriculum designed from top-down approaches and resistance to change that is inaptly communicated to curriculum implementing agents. Participants suggested various remedies such as involving stakeholders in curriculum design, creating a motivating working environment and providing training and motivation to teachers. Teachers are the first line of managers and implementers but they are less involved in the curriculum design process that puts learners' pedagogic access in jeopardy. The next chapter presents the conclusion, recommendations and a model design for addressing curriculum management and implementation challenges.

CHAPTER 6: CONCLUDING REMARKS, RECOMMENDATIONS AND SUMMARY OF THE STUDY

6.1 Introduction

In this chapter, some concluding remarks and recommendations are provided. A part of the recommendations and a proposed Model Design for addressing curriculum management and implementation challenges is provided. Finally, the summary of the study is given to wrap up the study herein.

6.2 Conclusions on curriculum management and implementation

This study sought to explore the challenges that public-school teachers and principals have been experiencing in the implementation of the revised curriculum in the Ompundja Circuit in Oshana Region in Namibia. It also aimed to suggest how the identified challenges in the curriculum management and implementation process could be addressed. A model to enhance the effective implementation of the revised curriculum is designed. School principals can use the model design to direct targeted decision-making and enhance the successful implementation of RCBE in their schools.

The study addressed the following research questions:

1. What are the challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia?

1.1 What challenges do teachers and principals of public schools in Ompundja Circuit experience with the management and implementation of the newly revised curriculum?

1.2 How can these challenges be addressed to ensure successful management and implementation of the revised curriculum?

2. Which model could be developed to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit?

Furthermore, the study attempted to achieve the following main objective:

1. To establish challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia.

1.1 To identify challenges experienced by public school teachers and principals in Ompundja Circuit with the management and implementation of the newly revised basic education curriculum.

1.2 To determine how the challenges could be addressed to ensure successful management and implementation of the revised curriculum.

2. To develop a model to enhance the successful implementation of the revised basic education curriculum in Ompundja Circuit.

A target population of this study was all the 409 (382 teachers and 27 principals) from the 26 public schools in the Ompundja Circuit in Oshana Region. A special school in the circuit had two principals. Respondents and participants were sampled using multi-staged sampling techniques. Firstly, the sample in the first round of data collection was selected from schools that were stratified random sampled, while the 120 respondents (teachers, HoDs and principals) were selected using random sampling. Schools, from which the respondents were selected, were three primary schools, three combined schools and three

secondary schools. A sample in the second round of data generated consisted of five purposively sampled principals.

An Explanatory Sequential Mixed Methods approach was used in the study, which started with a quantitative research design followed by a qualitative research design. Quantitative data were collected using a three-sectioned closed-ended questionnaire. Three sections are namely, Section A: biographical information and Section B: Likert Scale statements measuring the challenges experienced by teachers and principals. Section C: Likert Scale statements measuring the way experienced challenges can be addressed. These data were interpreted using the SPSS to produce tables, graphs and percentages. After the data were interpreted, qualitative data were generated from selected principals with a follow-up semi-structured interview guide. Data from interviews were used to get in-depth information from the principals (Creswell, 2014). Qualitative data were analysed using the content analysis method. The interpretation of merged results followed.

Research questions and objectives were used as the basis to present the findings of this study and write the recommendations of the study. Hence, some concluding remarks have been provided concerning challenges and proposed ways how they could be addressed. The remarks are related to training and professional development, infrastructure and physical resources, teaching and learning resources, funding, vocational education, teacher-learner ratio, learner support as well as feelings and views.

In this section, the researcher discussed conclusions drawn from findings of the study. Conclusions regarding challenges emerging from these themes: teacher training, infrastructure and physical resources, teaching and learning resources, funding, vocational education, teacher-learner ratio, learner support as well as feelings, attitudes and views.

After the conclusions were presented, the ways to address the identified challenges related to these themes are presented.

6.2.1 Teachers training

This study concluded that all respondents were professionally qualified to teach the subjects offered in the revised curriculum, which is an agential enabling mechanism for teachers to manage and implement the revised curriculum effectively. There was a lack of in-service training, minimal Continuous Professional Development (CPD) as well as revised curriculum being a new concept and it is believed to be pitched higher than the level of training that some teachers have received, which could be addressed with continuous training initiatives. Teachers should be given adequate training because they are central in the process of curriculum management and implementation. Training is an important component of instructional leadership that empowers teachers who are at the frontline of curriculum management and implementation. Some respondents and participants deemed the duration of the training was as inadequate. The duration should be extended because the trainees do not capture all the information at the same pace and time.

Participants recommended different remedies to the challenges related to teacher training such as workshops, in-service training, which should be conducted by the advisory teachers, to fill the theme-based gaps in knowledge. Other suggested remedies are such as the teachers' induction and inclusion of RCBE topics in the curriculum of the pre-service

teacher training programmes. Continuous professional development for teachers and principals is a catalyst for improved academic performance. Proposed training initiatives should target both teachers and principals in Ompundja Circuit.

6.2.2 Infrastructure and physical resources

This study also concluded that some schools in Ompundja Circuit are well furnished with infrastructure and physical resources. Other schools were not well resourced with infrastructure and physical resources. These are such as furniture, science and computer laboratories, classrooms, sports facilities and electricity. This study further revealed that accommodation facilities do not have a significant impact on the management and implementation of the revised curriculum in Ompundja Circuit. Infrastructural facilities are needed to enable favourable teaching and learning environment.

Infrastructure and physical resources are a forerunner of an effective teaching and learning environment, which instructional leaders such as teachers and principals must promote at their respective schools to improve academic performance. Schools should have enough workshops for vocational field subjects, science and computer laboratories, classrooms and sports facilities. It was further suggested that the existing building could be re-worked to contain the changes to the revised curriculum. Infrastructure such as computer laboratories could also be lobbied by the Good Samaritans.

6.2.3 Teaching and learning resources

Again, this study concluded that there were some challenges related to teaching and learning resources in schools in Ompundja Circuit. These included a lack of Information Communication and Technology equipment, internet connectivity and science laboratories equipment. Although the respondents gave a neutral stand on the availability of stationeries it was found that the One-Child-Textbook ratio was not in place. The textbooks were procured and delivered to schools late, which makes their availability insufficient.

Ministry of Education, Arts and Culture (MoEAC) should provide vocational education and other necessary teaching and learning resources to public schools in Ompundja Circuit. Parents could buy textbooks or schools could make copies of the textbooks provided they secure copyrights to do so. In addition, Information Communication and Technology and internet connection should be enhanced in public schools in the Ompundja Circuit to supplement the lack of textbooks. Again, the MoEAC was advised to deliver textbooks on time. It was further suggested that schools should use alternative resources and teachers should be trained on how to develop and design alternative teaching and learning resources. The subjects seem to be unaware that the teacher training includes a component of teaching and learning material development including indigenous resources. Adequate learning support materials should be provided although it was not clearly specified who should do it. School libraries and science laboratories should be sufficiently stocked up with the necessary resources.

6.2.4 Funding

It was concluded that some respondents were neutral on the statement if their schools were getting adequate funds from the government. It was further found that private stakeholders were not funding schools' activities in Ompundja Circuit. This may have been attributed to the current state of the global economic downturn experienced at the time of data collection as well as generation. Furthermore, it was concluded that the removal of the school development funds (SDFs) and the late delivery of the Universal Primary Education fund negatively influence the implementation of the revised curriculum in public schools in Ompundja Circuit. The law that prohibits schools from requesting parents to contribute towards education affects the implementation of the revised curriculum in Ompundja Circuit. Shortage of funds is a structural constraint to revised curriculum management and implementation in public schools in Ompundja Circuit.

Concerning funding challenges, the participants proposed that the Ministry of Education, Arts and Culture should finance activities of the revised curriculum management and implementation in the circuit, re-introduction of School Development Funds should be re-considered, organise fund-raising activities or sensitise the communities about the importance of making a financial contribution to the development of public schools in Ompundja Circuit. It is proposed that the Universal Primary Education funds be increased. The Regional Directorate of Education, Arts and Culture should source funds from stakeholders, while it was proposed that Universal Primary Education funds per learner should be increased while Scholl Development Funds should be reintroduced for rural schools only.

6.2.5 Implementation of vocational education

Moreover, the study concluded that challenges found to be related to vocational subjects included lack or shortage of teaching and learning resources for vocational subjects, insufficient workshops and shortage of the necessary resources. These are structural challenges and constrain that hampers effective pre-vocational and vocational curriculum management and implementation. It was also found that the vocational subject teachers were poorly trained to implement the revised curriculum. Some challenges were also a result of a natural calamity such as the drought that affected irrigation projects for Agriculture. Schools could not use tap water for irrigation due to the cost involved to pay the water bills. It was established that some schools did not have the teachers properly trained to teach the vocational subjects. Lack of trained teachers is an agential constraint to effective pedagogic access in pre-vocation and vocational subjects.

Based on the training related challenges found, the study recommended that the Ministry of Education, Arts and Culture and teacher training institutions should address the shortage of pre-vocational and vocational subject teachers in schools, the latter should provide postgraduate diploma in education that addresses the shortage of vocational subject teachers at the secondary education level. There should also be continuous in-service training for vocational subject teachers, and there should also be workshops where learners can practise the theory learned. It was further suggested that vocational disciplines should be marketed widely to stimulate interest among learners. In addition, funds should be sourced for gardening activities that need funding.

6.2.6 Teacher-learner ratio

Concerning the teacher-learner ratio, the study concluded that overcrowded classrooms tempered with revised curriculum management and implementation in public schools in Ompundja Circuit. High teacher-learner ratio is a constraint to effective teaching and learning, which is attributed to teacher overload resultant from an inadequate supply of teachers. Overcrowded classrooms are attributed to non-adherence to the policy prescription, where schools are populated beyond the prescribed norm. This is a structural limitation, which may hamper effective curriculum management and implementation in schools in the circuit. It was again concluded that if the teacher-learner ratio falls below the acceptable norm, schools risk closure because they were considered uneconomical, which might result in teachers being transferred to understaffed schools.

To respond to the challenge of the teacher-learner ratio, the study suggested that the teacher-learner ratio for pre-grades should be kept at around 25 learners per teacher, for primary schools (Grade 1 to 7) at around 35 learners per teacher and secondary schools should be kept at around 30 learners per teacher. Participants also suggested that more teachers and schools or classrooms are needed to address the high teacher-learner ratio. Respondents suggested that the teacher-learner ratio for inclusive education settings should be below 30 learners per teacher.

6.2.7 Learner support

It was concluded that Life Skills lessons were provided in most public schools in Ompundja Circuit. Educational tours and excursions were identified as part of learner support, however, they require funds. Once again, it was a challenge because advisory services personnel did not offer training to teachers on learner support. Although learner support was interpreted differently, it was more associated with special needs education, which is more theoretical. The study also found that some teachers were reluctant to provide learner support.

It is concluded that teachers must be equipped with skills to support learners. That support must target both gifted learners as well as at-risk learners through individual interventions. Again, the study concluded that learner support for learners with special needs must be strengthened to ensure inclusivity in a democratic instructional environment. Information about the revised curriculum must be shared with learners who are also stakeholders in education. The other conclusion of this study was that communities must be educated on the importance of making a financial contribution towards the educational expeditions. Principals are encouraged to motivate teachers to offer learner support. Participants suggested that learner support training through workshops should be provided to teachers by the advisory services' staff. Schools must choose one assessment instead of having both continuous assessment and examinations. It was proposed that specialist teachers of learners with special needs should be recruited.

6.2.8 Feelings and views

Overall impression from the respondents and participants is that the revised curriculum was generally designed from a top-down approach even though teachers and principals are key stakeholders in the process of curriculum management and implementation. Involving teachers in curriculum planning and design create an inclusive educational setting and improve learners' pedagogic access. Teachers' contribution to curriculum development should be considered equally important as those of other stakeholders. Being part of the curriculum design process enable them to understand the curriculum that they are going to implement through the delivery of the content to learners. This enables the realisation of the revised curriculum goals as well as the national developmental plan.

To address challenges related to feelings and views, the participants proposed that teachers must cultivate a positive attitude towards curriculum as well as be involved in the process of curriculum development. These are features of teamwork and cooperative relationships in an instructional leadership where learning is placed at the centre. It also proposed that the infrastructure, location and general work environment must be conducive to motivate teachers. Collaborative, participatory and inclusive instructional leaders can create a harmonious working environment. This study further concluded that a negative attitude could be addressed through the sharing of experiences and skills among staff in the circuit. It offered that before the Ministry of Education, Arts and Culture reforms a curriculum, research must be conducted first to provide researched evidence. The ministry responsible for education must also empower staff through continuous training about the new curriculum. Continuous training is another component of instructional leadership.

6.2.9 Other challenges and ways to address them

When the Ministry of Education, Arts and Culture introduces a curriculum reform it had minimally involved the teaching staff in the design of the curriculum. Participants suggested that how these challenges could be addressed is through the robust motivation of teaching staff. Furthermore, the participants proposed that learners must not be at liberty to choose the subject combination because they turn to choose the easy combination of subjects. The opposite may lead to critical fields of studies having a gap.

6.3 Recommendations

Based on the findings of the study, several recommendations were made. Recommendations made to different stakeholders based on the findings and consideration of some of the suggestions made by the respondents and participants are presented. Table 6.9 presents the observed findings, implications, recommendations and responsible agents.

6.3.1 Recommendations for stakeholders

Table 6.9. The observed findings, implications, recommendations and responsible agents

Observed finding	Implication/s	Recommendation/s	Responsible agent/s
-Inadequate continuous training on curriculum management and implementation provided.	-It implies that there is subject content and pedagogical skills gap among teachers.	-Organise in-service training through expertise-sharing workshops and seminars. -Teacher training must address the revised curriculum needs.	-Advisory teachers -Circuit management -Cluster centres -Teacher training institutions -MoEAC -Educational planners
-Lack of teaching and learning resources.	-Teachers struggle to find teaching and learning aids.	-Provide necessary teaching and learning resources.	- MoEAC -Community members -School management
	-Teachers rely on MoEAC to provide teaching and learning materials.	-Develop alternative teaching and learning resources. -Encourage teachers to improvise on teaching and learning resources.	-Teachers -Advisory teachers -Expert teachers
-High and low teacher-learner ratio in schools.	-Constrains effective teaching and learning. -Threats to close schools.	-Implement context acceptable teacher-learner ratio (for inclusive classrooms, vocational setting, special, rural and urban schools).	-MoEAC
	-It instils fear and insecurity among teachers, which obstruct effective teaching and learning.	-Revise the teacher-learner ratio policy.	-MoEAC -Inspector of Education

	-Rural school learners migrate to urban schools.	-Improve the standard of rural schools and motivate parents to keep their children there.	-Principals -Teachers -Parents -MoEAC (specifically Director of Education, Arts and Culture)
-Lack of funds for education excursions, resources and school development.	-Limit learning inside and outside the classroom setting.	-Mobilised funds or assistance in kinds of educational activities from stakeholders.	-MoEAC -Stakeholders (corporate businesses, private sectors and parents)
	-Limit teachers from sourcing SDFs from the parents.	-Revise the policy that prevents schools from soliciting funds from parents and using UPE funds to fund educational excursions.	-MoEAC -Principals -Teachers
	-May affect effective curriculum management and implementation, due to a lack of School Development Funds (SDFs).	-Reintroduce the SDFs. -Motivate parents to contribute voluntarily towards school development funds.	
-Lack of infrastructures (laboratories and workshops)	-Lack of infrastructure could hinder effective revised curriculum management and implementation.	-Provide the necessary infrastructures such as laboratories, classrooms, and ICT and internet facilities.	-MoEAC -Stakeholders -Parents
	-High teacher-learner ratio in schools designated to offer secondary education.	-Upgrade urban combined schools to senior secondary schools to address overcrowding in the existing senior secondary schools. -Do away with combined schools and introduce specialised schools, for example, junior primary, senior	-MoEAC -Stakeholders -Parents

		primary, junior secondary and senior secondary schools only.	
-High water bills for schools that offer Agriculture.	-Schools get discouraged from agricultural practices.	-Find alternative irrigation methods that require less use of water. -Government should introduce Agricultural specialised schools and subsidise them on bills.	-Principals -Teachers -Communities
-Non-involvement of teachers in curriculum development.	-Teachers lack a sense of ownership.	-Involve teachers in the curriculum development process and decision making.	-MoEAC -Principals -Curriculum developers - National Institute for Educational Development (NIED)
-Lack of qualified vocational subject teachers.	-Graduates from Vocational Centres find it difficult to enter the teaching profession. -Schools find it difficult to get qualified teachers for vocational subjects.	-Design a postgraduate course for graduates from Vocational Centres to equip them with didactic skills. -Introduce vocational schools and place qualified teachers in these schools. -Introduce skills subjects in existing teacher training courses.	-Teacher training institutions -MoEAC

6.3.2 Recommendation for future research

Further research recommendations are provided. They are as follows:

1. A study should be conducted to establish the level of implementers' participation in the planning and design of the RCBE.
2. A study should be conducted to see the impact of transferring teachers from overstaffed schools to understaffed schools on the pedagogy of learners.
3. A study should be conducted to establish how low teacher-learner ratio in rural schools is a point of concern that risks the rural schools to be declared uneconomical and how it could be addressed.
4. A study should be conducted to establish the extent that the educators are equipped to implement ICT tools in teaching and learning.
5. A study to assess the structural, cultural and agential constraints on the use of ICT tools in providing quality teaching and learning.

6.4 A model for addressing curriculum management and implementation challenges

Social Realism Theory's domain of Structure, Culture and Agency and Instructional Leadership theoretical framework are used as lenses through which the study is viewed. The primary question of the study is "What are the challenges experienced with the management and implementation of the newly revised basic education curriculum in the Ompundja Circuit in Namibia as well as what model can be designed to address the identified challenges?" While the primary objective is "To establish challenges experienced by teachers and principals in implementing of the newly revised basic education curriculum in the Ompundja Circuit in Namibia as well as design a model to

address the identified challenges". The response to the main question and objective found several challenges that could constrain the effective implementing of the revised curriculum for basic education in public schools in Ompundja Circuit. These challenges are categorised into the three domains of Social Realism, which are structure, culture and agency. To address the primary question and objective of the study, the research questions and objectives were addressed.

Constraints discussed here respond to the following sub-research question as well as sub-objective. The question is 1.1 "What challenges do public school teachers and principals in Ompundja Circuit experience with the implementation of the newly revised basic education curriculum?" While the objective is 1.1 "To identify challenges experienced by public school teachers and principals in Ompundja Circuit when implementing the newly revised basic education curriculum". The next paragraphs present these constraints or challenges. Constraints are categorised in the three domains of Margaret Archer's Social Realism theory, namely; structure, culture and agency.

6.4.1 Structural constraints and enabling interventions

Structural constraints or challenges are the material interests, which are physical and human material resources (Archer, 1996). These material interests can constrain or enable effective curriculum management and implementation. The next part discusses the structural constraints as well the suggested enabling interventions.

6.4.1.1 Structural constraints

Archer (1996) has defined the structure as the world out there with physical and human material interests and roles, which may be unequally distributed in a social realm such as schools. Structures are such as policies, regulations, physical and human material mechanisms. The changes in physical and human material contribute to changes in the culture (beliefs, norms, attitude, values or views) and agency (people or actors). Some of the physical material constraints are such as lack of teaching and learning resources, which hinder effective teaching and learning and subsequent successful revised curriculum management and implementation. In support of this finding, Taole (2015, p. 274) indicated that the "availability of resources plays a critical role in the efficient delivery of the curriculum". Lack of ICT resources and internet connectivity as well as ill-equipped science laboratories are a challenge to effective teaching and learning. In addition, the lack of textbooks and slow delivery of the purchased textbooks are a hindrance to successful teaching and learning. Lack of textbooks results in learners sharing textbooks. This renders the one-child one-textbook policy to be a wild dream and has a negative effect on the management and delivery of effective teaching and learning. A shortage of teaching and learning resources is a hindrance to creating a conducive climate for effective teaching and learning resulting in non-achievement of learners improved academic performance (see Altinyelken, 2010; Dzimiri & Marimo, 2015; Iita, 2014; Josua, 2013; Mkandawire, 2010; Tjihenuna, 2015). The primary purpose of schools is effective teaching and learning, which should get adequate support than other activities in schools.

Other structural constraints are related to the infrastructure and physical resources that are in short supply (see Agih, 2015; Altinyelken, 2010; Ayasra, 2015; Lumadi, 2014; Magongoa, 2011; Syomwene, 2013). These are such as lack of classrooms, science and computer laboratories, hostel accommodation facilities and vocational practical workshops. The shortage of physical resources

impedes effective teaching and learning, which derail effective academic performance. Most respondents in the study have indicated that they are provided with the curriculum documents (structures). Documents may enable or constrains the implementation of educational policy in schools.

Another structural challenge is related to the non-availability of funds. Funds are enabling mechanisms of effective curriculum management and implementation. This supports studies that found that shortage or lack of funds inhibits effective curriculum implementation (see Altinyelken, 2010; Dzimiri & Marimo, 2015; Mingaine, 2013). Money pays for learners' excursions and educational tours. Educational tours enable real-life and social learning. Free education declaration has also contributed to the lack of funds at schools. Schools are now provided with Universal Primary Education funds but some participants feel they are not timely delivered while some participants are divided on whether the funds are sufficient or insufficient. Some participants feel that the situation that prohibits schools from soliciting funds from parents inhibits effective teaching and learning. Funds, if available, can be used to expose teachers to professional development. The economic downturn has also contributed to a shortage of funds at schools. Lack of funds hampers successful teaching and learning because some educational activities depend on the availability of funds to facilitate effective teaching and learning activities.

6.4.1.2 Enabling interventions for structural constraints

After discussing the constraints or challenges, enabling interventions that are suggested by the participants are discussed below to respond to the sub-question and sub-objective for the study. Sub-question is 1.2 “How can the challenges experienced by public school teachers and principals

be addressed to ensure successful management and implementation of the revised basic education curriculum in Ompundja Circuit?" In addition, the sub-objective is 1.2 "To determine how the challenges could be addressed to ensure successful management and implementation of the revised basic education curriculum in Ompundja Circuit".

Shortage of teaching and learning resources is found, by some scholars, to be a hindrance to effective teaching and learning (Altinyelken, 2010; Badugela, 2012; Dzimiri & Marimo, 2015; Iita, 2014; Tubaundule, 2014). This study suggested several enabling interventions to address the shortage of teaching and learning resources. Teachers are advised to use alternative or indigenous teaching and learning resources at their disposal. A Ministry of Education, Arts and Culture is requested to avail teaching and learning resources on time. Schools that offer vocational discipline subjects are advised to ensure that assistive teaching and learning resources for vocational subjects are made available. It is also suggested that all school libraries should be stocked up with teaching and learning resources. Lastly, schools are advised to have functional ICT resources and internet connectivity that enhances effective teaching and learning.

Regarding the supply of adequate infrastructure and physical resources, the study findings suggest that practical workshops should be built at schools that offer vocational subjects. Additionally, more classrooms, computer and science laboratories should be constructed. A ministry responsible for education should chip in to construct educational infrastructure as well as renovation of existing buildings to contain the activities of RCBE.

Lack of funds could be addressed as suggested by the participants. Stakeholders such as the corporate community and parents should support schools financially. The ministry of education should finance revised curriculum activities. Some participants proposed the re-introduce of the School Development Funds (SDFs) or for the Universal Primary Education (UPE) funds per child

to be increased. Some participants called for the provision of both Universal Primary Education (UPE) funds and School Development Funds (SDFs) for schools.

6.4.2 Cultural constraints and enabling interventions

According to Archer (1995), cultural constraints emerges from ideas, beliefs, theories, values, ideologies and concepts which comes from the discourses used in a particular setting. Culture can be constituted in policies, institutional documents or espoused in discourses in the context. Culture can constrain or enable successful curriculum management and implementation. The next section discusses the cultural constraints as well as the suggested enabling mechanism.

6.4.2.1 Cultural constraints

Culture is made up of beliefs, opinions, ideas, theories, values, concepts, and myths, which may exist independently with or without agents being aware or unaware of them (Archer, 1995). Culture is manifested through discourses used by specific agents within a structural social setup. In addition, culture is articulated in policy documents, schools' vision, and mission statements or discourses within an organisational setup. Culture can either enable or constrain effective curriculum implementation in a social setting such as a school. This study found several cultural constraints such as the lack of teacher training, which contribute to a knowledge gap among teachers. Inadequate training was stated by participants as a constraint to school academic effectiveness. A level of RCBE is rated higher than the previous curriculum. Thus, some

participants believe that the revised curriculum is a new concept which teachers should acquaint with so that they could implement it with success.

Different participants understand learner support differently. Some take it as educational excursions while others relate it to inclusive education practice in schools. There are several challenges found by the study, namely; the inability of teachers to plan inclusive lessons, lack of training on learner support among teachers, which should be done by advisory teacher services, and some participants deem learner support provided more theoretical than practical. Learner support is an effort towards effective teaching and learning takes place (Bhengu & Mkhize, 2014).

Other cultural challenges are related to feelings and views, which are accentuated in teachers' discourses. Teachers hold the view that the new curriculum was designed top-down without the involvement of teachers who are the key implementers (see Amunkete, 2020). Teachers are at the forefront of ensuring effective teaching and learning takes place in a classroom. Teachers feel they are made to implement a curriculum that is planned by those that do not teach. Therefore, it concurs with Nghihalwa (2018), who praised the importance of involving teachers in curriculum development because teachers continuously engage with learners daily. Another talk in the revised curriculum context is the lack of in-service training given to teachers. In-service training offered to teachers, according to Bhengu and Mkhize (2014) contributes to the professional development of teachers at the school level. Teachers are not appropriately equipped with relevant knowledge and skills to implement the revised curriculum. Some participants feel that the training offered was done within a short duration while some teachers are hesitant to accept the new curriculum reform. Some teachers lack the courage to teach senior grades and others have insufficient subject knowledge. Curriculum change was inaptly communicated to teachers, an act that is against instructional leadership practice.

6.4.2.2 Enabling interventions for cultural constraints

These studies found that lack of teachers training has a negative impact on curriculum implementation (Altinyelken, 2010; Badugela, 2012; Iita, 2014; Josua, 2013; Lumadi, 2014; Magongoa, 2011; Makunja, 2016; Olateru-Olagbegi, 2015). Here the interventions to improve on the challenges of teacher training are proposed by the participants. The study suggested that continuous in-service training should be provided to teachers in their respective disciplines. In addition, theme-based training should be organised for teachers by advisory teacher services. There is a need to induct novice teachers on the revised curriculum while schools are urged to recruit qualified teachers, especially in vocational subjects. Lastly, the teachers are encouraged to share experiences and skills in their departments, schools, cluster or circuit.

Concerning learner support, the study proposed the following interventions to remedy the challenges that are related to learner support. There should be enrichment programmes targeting gifted as well as at-risk learners. This will keep every category of learners in check. It is found that learners with special needs in public schools in Ompundja Circuit need additional support from teachers. The study revealed that some subjects do not attract a desirable number of students even though they are considered important. Therefore, some of these subjects (e.g Accounting, Economics and Business Studies) should be made mandatory to all learners. Another point made is that teachers need training on learner support. Lastly, learners need to have combined forms of assessment, which have a continuous assessment and examination-based assessments.

Archer (1995, 1996, 2003) describes culture as ideas, norms, beliefs, theories, values and ideologies which are demonstrated through discourses or are found in policy documents of a social context such as schools. Here, some studies suggested ways to address the challenges that are

related to feelings and views. Amunkete (2020) claims that teachers work with learners daily and are aware of their shortcomings, but they are less involved in the process of curriculum design. This brings negative attitudes towards the curriculum, which they are going to manage and implement. Therefore, it is ideal to involve teachers as much as possible in curriculum planning and design. Principals as instructional leaders are challenged to create a motivating working environment for teachers. They are also urged to cultivate a positive attitude among teaching staff. Most teachers were not made aware of why the curriculum had to change, thus it is suggested that an understanding has to be created why the curriculum has to change. Since the knowledge of oneself gives one confidence, a knowledgeable teacher is a motivated teacher, who could be made through regular training provided to teachers. Some teachers feel they are forced to teach areas that they are not comfortable with; thus, in the new regime of the revised curriculum, teachers should choose to teach where they are comfortable.

6.4.3 Agential constraints and enabling interventions

Agency refers to people who can be primary or corporate agents. The latter can use their personal powers and properties to transform into corporate agents, who can enable or constrain the cultural or structural context (Quinn, 2012). The next part discusses the curriculum management and implementation agential constraints and the suggested enabling mechanism.

6.4.3.1 Agential constraints

This study found that there are agential constraints that impede revised curriculum management and implementation. Agents are groups of people or individuals who operate within a particular structure and cultural system (Vorster & Quinn, 2017). According to Boughey (2012), agency refers to personal and psychological makeup of the actors, how they relate socially as well as how they use their capacity to act voluntarily. The social interaction of actors in a particular context can bring structural or cultural changes (i.e. morphogenesis) or may keep things unchanged (i.e. morphostasis). Agents should be equipped with emergent personal powers and properties that could be employed as people interact with parts (structure and culture) (Archer, 2003). Managing and implementing agents in the revised curriculum for basic education in public schools in Ompundja Circuit are such as teachers, principals, inspectors of education, directors of education, learners, and parents or members of the community.

It is found that some of the agential constraints are a result of non-adherence to the implementation of the favourable teacher-learner ratio. The ministry has set an acceptable teacher-learner ratio or staffing norm for mainstream schools that is one teacher for every 35 primary learners while for the secondary school learners is one teacher for every 30 learners (Ministry of Basic Education, Sport and Culture, 2001b). This challenge is aligned to actors in education where a high teacher-learner ratio is recorded as a result of the low number of teacher supply or a high number of learners per teacher. Meanwhile, the low teacher-learner ratio renders schools uneconomical resulting in the transfer of teachers to overcrowded schools. This has often resulted in teachers being assigned to teach subjects that they are not qualified to teach. Parents are agents in the curriculum implementation, and they are advised to enrol children (agents) in rural schools. The fewer

enrollments of learners in rural schools bring down the teacher-learner ratio, which brings relief to teachers with high workloads (Taole, 2015).

Harambee Prosperity Plan (HPP) (2016) stressed that vocational education is a pillar of skills, knowledge and relevant technologies that are required to enable productivity in knowledge-based and transitional societies for the ear of a twenty-first century. Vocational education discipline is therefore a prominent reform in the revised curriculum under implementation. The success of the vocational stream in schools can be halted by the lack of vocational subject teachers (agents). This success of vocational subject management and implementation depends on the availability of qualified teachers as enabling agents or actors.

6.4.3.2 Enabling interventions for agential constraints

This study suggested some interventions to address the constraint related to the teacher-learner ratio. Schools should firmly abide by the acceptable teacher-learner ratio that is prescribed in the staffing norm policy (structure). Where there are more learners, schools should recruit more appropriately qualified teachers to cater for the learners. Staffing norms practice of needs to be re-looked at to take out the burden resulting from the teacher-learner ratio. Ompundja Circuit has witnessed the migration of learners from rural schools to urban schools, which leaves rural schools with a low number of enrolled students. Therefore, parents are advised and encouraged to keep children in rural schools in their communities.

Quality of vocational education is dependent on the availability of qualified vocational subject teachers. This study found that there is a shortage of vocational subject teachers in public schools in Ompundja Circuit. It proposed that high education institutions that train teachers should

introduce postgraduate programmes that train vocational teachers (agents) in pedagogical methodologies. Training can also be through in-service teacher training within the circuit, cluster or schools.

6.4.4 Models for curriculum development and management

Curriculum management and implementation is a process and not a product in itself, which is necessitated by the urge to improved quality education. Curriculum change is often met with resistance if the purpose of the curriculum reform is no efficiently communicated to stakeholders such as teachers who are often involved in the implementation and management of teaching and learning daily. Mandukwini (2016) defines a model as an essential pattern that guides action. There is authorship on curriculum development models. Some curriculum development and management models exist. They are such as Tyler, Taba, Zais and Oliva models. In the next section, four types of curriculum implementation models, namely, Overcoming-Resistance-to-Change Model, Concern-Based Adoption Model, System Model and Organisational-Development Model are discussed.

6.4.4.1 Overcoming-Resistance-to-Change Model

This model is characterised by addressing fear and doubts among the implementing agents or stakeholders (Mandukwini, 2016). It also ensures that the values and perspectives of the implementing agents are taken into consideration while ensuring that both school administrators or leaders and teachers are accorded equal power. Principals should understand that teachers must

change first before the change comes to the school. Teachers' concerns must be addressed and they must be involved in the process of curriculum from planning, design, managing, implementation and evaluation. Some researchers have singled out teachers' non-involvement in the design of the curriculum as a hindrance to effective teaching and learning or curriculum management and implementation (see Gwembire & Katsaruware, 2013; Ogunbiyi, 2012; Tubaundule, 2014). School leaders should be seen supporting the reformed curriculum management and implementation activities.

6.4.4.2 Concern-Based Adoption Model

This theory is developed for teachers, who are core in the process of curriculum management and implementation. Therefore, it is vital to change the behaviours of individual teachers first. A change of individual's behaviour over time will catapult into a change in the institution. That individual must find personal and professional value and relevance in the change. Individual teachers should adopt the curriculum change and should participate in the process of perfecting the change. This model view curriculum transformation and implementation as a process than a once-off event.

6.4.4.3 System Model

This model treats schools as a system, which could be either closed or open. This promotes a cordial working relationship between school leaders and teachers (Mandukwini, 2016). All structures should support each other reciprocally. From the Director of Education, Arts and Culture (Oshana Regional Educational Directorate) to Inspector of Education (Ompundja Circuit),

principals and teachers, no one of these structures can single-handedly implement the curriculum without the support of teachers who are involved in curriculum management and implementation in the classroom level daily (see Amunkete, 2020).

6.4.4.4 Organisational-Development Model

This model focuses on different ways to increase the productivity and effectiveness of a school as an organisation. This model aims to improve the school problem solving and renewal process. It values teamwork (see Bhengu & Mkhize, 2014; Hoerr, 2008) and positive organisational culture. Curriculum management and implementation process are viewed as continuous and interactive. The interaction should be between the school leaders and teachers.

6.4.5 A model design in practice

As depicted in Figure 6.94, A Model Design for addressing curriculum management and implementation challenges that is developed by Lukas Matati Josua, the study identified structural, cultural and agential constraints or challenges. It also suggested interventions to effective management and implementation of the revised curriculum for basic education in public schools in Ompundja Circuit. This part presents how the model design was developed as a response to the second research question, which model design could be developed to enhance the successful implementation of the revised basic education curriculum in Ompundja Circuit? In addition, this also responds to the second research objective, which is to develop a model that can be used to enhance the successful implementation of the revised basic education curriculum in Ompundja

Circuit. The next paragraphs present how a model design for addressing curriculum management and implementation challenges in the Ompundja Circuit in Oshana Region in Namibia was developed.

Firstly, the study identified challenges or constraints that hinder the effective implementation of the revised curriculum in public schools in Ompundja Circuit. Constraints are categorised into three domains of Social Realism theory (Archer, 1995, 1996, 2003) (see Chapter 2, 2.2.1). These domains were analysed separately, cognizant of the interplay between them, to avoid conflating them (Archer, 1995; Boughey, 2012; Vorster & Quinn, 2017). Secondly, the study proposed ways to address the identified challenges per social realist domains of structure, culture and agency. Proposed interventions should be employed to see if they could address the challenges or not. Once a challenge is addressed effectively, then it should be ticked off from the list of challenges. If the challenge is not addressed, then that unsolved challenge should be plotted on the list of challenges while monitoring and evaluating how the constraints were addressed should be done. New ways of addressing the challenge could be devised or it should be re-addressed with some improvements. Once the suggested interventions are tried based on the outcome indicators, the process of monitoring and evaluation should take place to take stock of what has worked and has not worked. If the implementation is successful, then the intervention should be adopted and if it has not worked let the intervention be repeated on an ongoing basis. What has not worked could be re-implemented with or without improvements. If through monitoring it is found that some challenges are not fully addressed, then one has to go back to the challenges that are not fully addressed and re-implemented the suggested remedies. It is further advisable that regular analysis of results should be done. A model design for addressing curriculum management and implementation challenges and using remedies suggested enhancing the successful management and implementation of the revised curriculum in Ompundja Circuit. There is a need to monitor the implementation of

proposed remedies to ensure successful curriculum management and implementation that produces improved academic performance among learners while providing job satisfaction among teachers and principals.

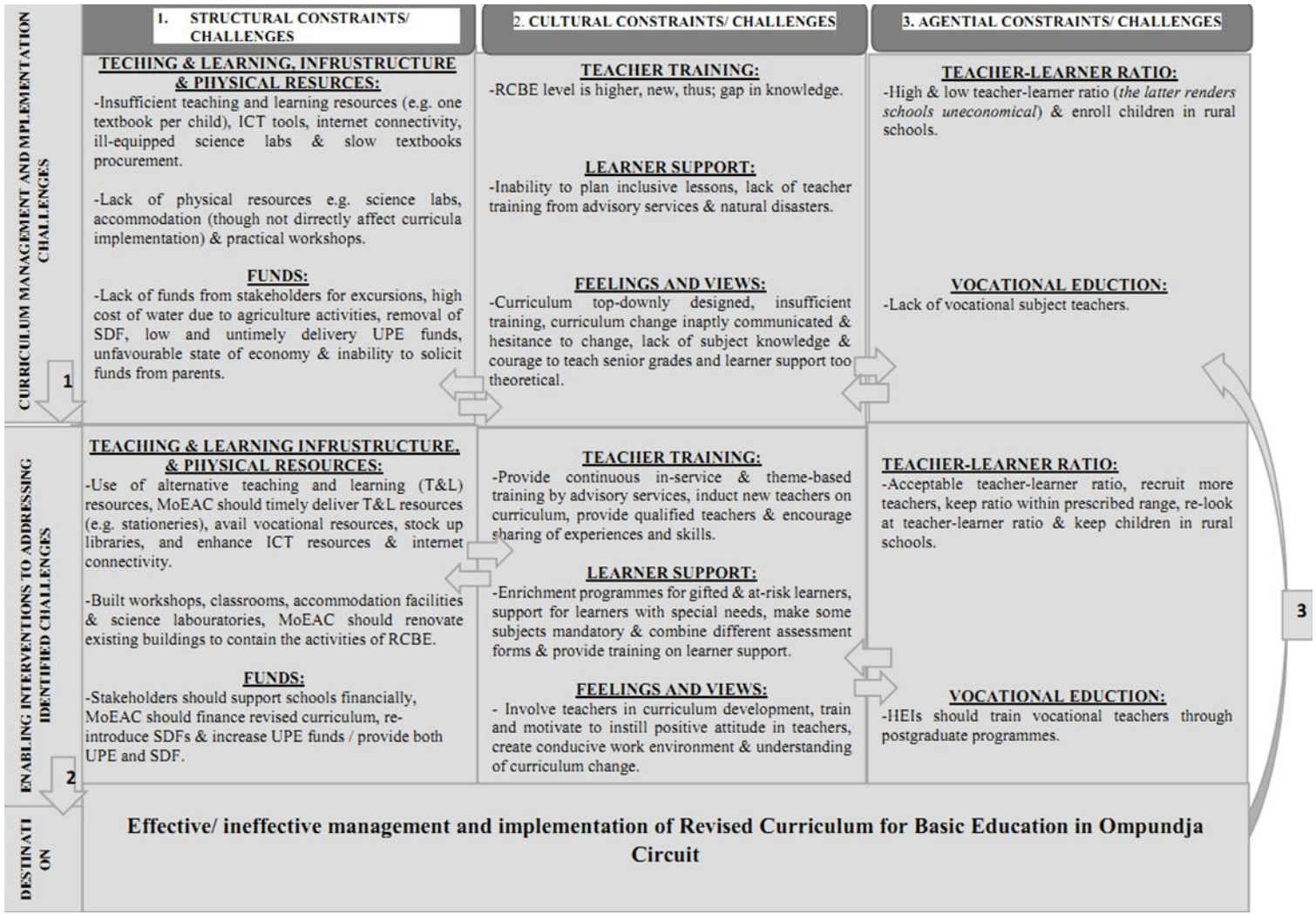

Figure 6.92. A Model for addressing curriculum management and implementation challenges developed by Lukas Matati Josua

6.5 Summary of the dissertation

This study explored challenges that teachers and principals encountered in the management and implementation of the revised curriculum for basic education (RCBE) in public schools in Ompundja Circuit, Oshana Region in Namibia and suggested how the challenges can be addressed. The following is the main essence of the philosophical research questions and objectives alongside the sub-questions and objectives as they were addressed. To explore the challenges experienced by teachers and principals regarding the management and implementation of the RCBE in public schools in the Ompundja Circuit in Oshana Region in Namibia and to suggest how such challenges in the curriculum management and implementation process can be addressed, the study attempted to answer to these main questions and sub-questions:

1. What are the challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia?

1.1 What challenges do teachers and principals of public schools in Ompundja Circuit experience with the management and implementation of the newly revised curriculum?

1.2 How can these challenges be addressed to ensure successful management and implementation of the revised curriculum?

2. Which model could be developed to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit?

The study equally addressed the objectives, with some sub-objectives:

1. To establish challenges experienced in the management and implementation of the newly revised basic education curriculum in Ompundja Circuit in Namibia.

1.1 To identify challenges experienced by public school teachers and principals in Ompundja Circuit with the management and implementation of the newly revised basic education curriculum.

1.2 To determine how the challenges experienced by public school teachers and principals could be addressed to ensure successful management and implementation of the revised curriculum.

2. To develop a model to enhance successful management and implementation of the revised basic education curriculum in Ompundja Circuit.

Using an Exploratory Mixed Methods research design, a multistage sampling was used to select nine schools that were stratified random sampled (three schools each per strata) the 120 respondents from a population of 409 participants (teachers and principals), which were selected from schools selected. The 120 respondents (teachers and principals) were randomly selected to complete the questionnaire while five out of 27 principals were purposively selected for a semi-structured interview. A Likert scale questionnaire and semi-structured interview guide were used sequentially to collect and generate data. Quantitative data were analysed using the SPSS and qualitative data were analysed using the content analysis method. The main findings of the study were that training on RCBE was offered to teachers; however, it needs to be enhanced through in-service training.

It is found that some schools are well furnished with infrastructure and physical resources. Nevertheless, some schools need workshops, laboratories, classrooms and sports facilities. The study found that there are teaching and learning resources challenges, which could be addressed when various stakeholders contribute financially or in-kind towards school development. It was

also found that private stakeholders do not fund school activities. Resultantly, the study contemplated that the School Development Funds must be re-introduced while Universal Primary Education funds per learner must be increased. In addition, the study found that schools lack vocational subject teachers, which could be addressed when teacher training in pedagogy and subject content is offered.

It became evident that there is a low teacher-learner ratio in rural schools and a high in urban schools. Rural school risks being closed down or having teachers transferred to other schools. In order to address overcrowding, the study advised that urban combined schools should be promoted to senior secondary schools as well as more classrooms and teachers should be provided. The study found that there is a need to fund educational excursions and offer training to teachers on learner support. It was found that the revised curriculum was designed top-down. To address the teachers' negative attitudes, perceptions and views towards the revised curriculum, the study found that teachers should be involved in the curriculum development process.

After challenges and suggested remedies were identified, the study made the following recommendations: Firstly, the study recommended that stakeholders in education should provide schools with financial, teaching and learning resources, infrastructures, ICT tools and internet connectivity or media technology and communication. Secondly, it also recommended that schools should find alternative irrigation to reduce the water charges in schools that offer Agriculture, which hinders the implementation of vocational subjects. Thirdly, it further recommended that regular in-service training on RCBE, pre-vocational and vocational subjects should be enhanced. Fourthly, the study recommended that expertise-sharing workshops and seminars in the circuits, as well as the involvement of teachers and principals in curriculum design should be explored. Fifthly, it is recommended that tertiary institutions should integrate the content of the revised

curriculum in their education programmes to ensure that graduate teachers are equipped with the necessary skills. Lastly, the study recommended further researches to establish the level of implementers' participation in the planning and design of the RCBE and to assess the structural, cultural and agential constraints on the use of ICT tools in providing quality teaching and learning. Very important, the study led to the development of a model that can be used in addressing the various challenges identified to be hampering the implementation of the RCBE.

To sum the study up in one paragraph, this study found that there are structural, cultural and agential constrains that could hinder the successful management and implementation of revised curriculum in public schools in Ompundja Circuit. These challenges may derail the purpose of instructional leadership, which seek to improve learners' academic performance. Although the domains are separately analysed it is important to note the interrelationship among these social contextual constrains. Further, the study found suggested remedies to address the challenges. Due to the interrelationship a suggested way to address challenges may address challenges in different domains.

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APPENDIX A: ETHICAL CLEARANCE CERTIFICATE

UNAM
UNIVERSITY OF NAMIBIA

ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: FOE /449/2019 **Date: 23January, 2018**

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project: CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS WHEN IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA

Researcher: LUKAS MATATI JOSUA

Student Number: 9803335

Supervisor(s): Prof. R Auala (Main) Dr. H. Miranda (Co)

Faculty: Faculty of Education
Take note of the following:

(a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.
(b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.
(c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.
(d) The UREC retains the right to:
(i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,
(ii) Request for an ethical compliance report at any point during the course of the research.

UREC wishes you the best in your research.

Dr. H.M Kapenda

Ms. P. Claassen

APPENDIX B: LETTER TO THE DIRECTOR OF EDUCATION, ARTS AND CULTURE, OSHANA REGION

LUKAS MATATI JOSUA

P.O. Box 188, OSHAKATI, NAMIBIA **Cell: +264 (0) 81 272 18 26**

E-mail address: ljosua@unam.na

Date: January 24, 2019

To: **Ms. Hileni Amukana**

DIRECTOR OF EDUCATION, ARTS AND CULTURE

Oshana Regional Council

Private Bag 5518

Oshakati

Dear Ms. Amukana,

RE: REQUESTING PERMISSION TO CONDUCT RESEARCH IN PUBLIC SCHOOLS IN OMPUNDJA CIRCUIT, OSHANA REGION

I, Lukas Matati Josua, Student Number: 9803335, a Doctoral student in Educational Management and Administration at the University of Namibia (UNAM) hereby request permission to conduct:

1. A pilot study with a more or less similar sample in Oshana Region, as well as
2. Detailed academic research in public schools in Ompundja Circuit.

This is to fulfil a requirement of the completion of a Doctor of Philosophy in Education degree. The research study will **explore the challenges experienced by schools in Ompundja Circuit, during the implementation of the revised curriculum for basic education. It is hoped that some recommendations on how these challenges can be addressed will be provided towards the end of the study.**

Enclosed: *Copy of Ethical Clearance Certificate, Proposal and Research Instruments (Questionnaire and Interview Guide)*

The study will consist of a 40-minute questionnaire to be completed by teachers and principals as well as follow-up semi-structured interviews of about 35 minutes with principals only**.** The targeted population is all teachers and principals of public school in Ompundja Circuit. Whereas, the sample will be drawn from the population of teachers and principals of public schools in the Ompundja Circuit using multistage sampling procedures.

Please note that the respondents' participation is voluntary, that they will not be forced to take part and there will be no penalty of any kind if a participant decides to terminate his or her participation in the study at any time. Any information obtained from them during this research will be treated strictly confidential as fully permitted by applicable research ethics. To ensure confidentiality, a code number or *pseudonym* will be assigned to the participant and it will be used throughout the report.

I will ensure that lessons are not disrupted because the questionnaires and interviews will be administered after official teaching hours. Upon completion of the Doctoral Studies, the Dissertation will be available in the UNAM Library.

NB: The UNAM Postgraduate Studies Committee and UNAM Research and Ethics Committee (UREC) have approved this research study and further information regarding the study can be obtained from the supervisors:

- **Main Supervisor: Prof. Rehabeam Katengela Auala (rauala@unam.na)**
- **Co-Supervisor: Dr. Helena Miranda (hmiranda@unam.na)**

Your positive consideration of this request for permission will be highly appreciated. I look forward to hearing from you on this request. I thank you very much.

Sincerely yours,

_____

Lukas Matati JOSUA

STUDENT NUMBER: 9803335

Enclosed: *Copy of Ethical Clearance Certificate, Proposal and Research Instruments (Questionnaire and Interview Guide)*

APPENDIX C: PERMISSION LETTER FROM DIRECTOR OF EDUCATION, ARTS AND CULTURE, OSHANA REGION

REPUBLIC OF NAMIBIA
OSHANA REGIONAL COUNCIL

DIRECTORATE OF EDUCATION, ARTS AND CULTURE

ASPIRING TO EXCELLENCE IN EDUCATION FOR ALL

Tel: 065 - 229800/25
Fax: 065 - 229834
Enquiries: Hileni M. Amukana
Ref. 13/2/9/1

Private Bag 5518
Oshakati

Mr. Lukas Matati Josua
P.O. Box 188
Oshakati
Cell: 081 272 182 6

SUBJECT: PERMISSION TO CONDUCT PILOT STUDY AND ACADEMIC RESEARCH IN PUBLIC SCHOOLS IN OMPUNDJA CIRCUIT, OSHANA REGION.

Your letter dated 24 January 2019 on the above caption bears reference.

Kindly be informed that permission is hereby granted to conduct a Pilot Study and Academic Research in public schools in Ompundja Circuit, Oshana Region.

This permission is subject to the following strict conditions: **(i)** There should be minimal or no interruption on normal working schedule **(ii)** Ethical issues of confidentiality and anonymity should be and respected and retained throughout this activity i.e. Voluntary participation, and consent from participants and **(iii)** the permission is valid for the entire academic year 2019.

Both Parties should understand that this permission could be revoked without explanation at any time.

Furthermore, we humbly request you to share your research findings with the Directorate of Education, Arts and Culture, Oshana Region. You may contact Mr. G.S. Ndafenongo, the Deputy Director: Programs and Quality Assurance (PQA) for the provision of summary of your research findings.

We wish you the best in conducting your study.

Yours sincerely,

OSHANA REGIONAL COUNCIL
DIRECTORATE OF EDUCATION, ARTS & CULTURE
OFFICE OF THE DIRECTOR
28 JAN 2019
Private Bag 5518
OSHAKATI
REPUBLIC OF NAMIBIA

29/01/2019

HILENI M. AMUKANA
REGIONAL DIRECTOR

Cc: Inspector of Education: Ompundja Circuit

All Official Correspondence must be addressed to the Regional Director

APPENDIX D: LETTER TO THE INSPECTOR OF EDUCATION, ARTS AND CULTURE, OMPUNDJA CIRCUIT

Delivered by e-mail

LUKAS MATATI JOSUA

P.O. Box 188, OSHAKATI, NAMIBIA **Cell: +264 (0) 81 272 18 26**

E-mail address: ljosua@unam.na

Date: January 30, 2019

To: **Mr. Hofni Kapolo**

INSPECTOR OF EDUCATION, ARTS AND CULTURE

Ompundja Circuit

Ompundja

Dear Mr Kapolo,

RE: INFORMING THE OFFICE ABOUT RESEARCH ACTIVITIES IN PUBLIC SCHOOLS IN OMPUNDJA CIRCUIT

I, Lukas Matati Josua, Student Number: 9803335, a Doctor of Philosophy in Education (Management and Administration) at the University of Namibia (UNAM) hereby informing your office that I was granted permission to do the following:

- A pilot study as well as a detailed academic research in public schools in Ompundja Circuit.

This is to fulfil a requirement of the completion of a PhD degree titled: CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS WHEN IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA.

The study will cover ten public schools in Ompundja Circuit where two schools are selected for pilot study and nine schools for an actual study.

Enclosed: *Copy of Ethical Clearance Certificate and a copy of a letter from the Director of Education, Arts and Culture of Oshana Directorate of Education*

I pledge to ensure that teaching and learning activities are not going to be interrupted.

NB: The UNAM Postgraduate Studies Committee and UNAM Research and Ethics Committee (UREC) have approved this research study and further information regarding the study can be obtained from the supervisors:

- **Main Supervisor:** **Prof. Rehabeam Katengela Auala (rauala@unam.na)**
- **Co-Supervisor:** **Dr. Helena Miranda (hmiranda@unam.na)**

Your positive consideration of the permission is highly appreciated. I thank you very much.

Sincerely yours,

_____

Lukas Matati JOSUA

STUDENT NUMBER: 9803335

Enclosed: *Copy of Ethical Clearance Certificate and a copy of a letter from the Director of Education, Arts and Culture of Oshana Directorate of Education*

APPENDIX E: INFORMATION LETTER AND CONSENT FORM FOR QUESTIONNAIRE

Information Letter and Consent Form (QUESTIONNAIRE)

Researcher's Name:	Lukas Matati Josua
Researcher's Student No:	9803335
Course:	Doctor of Philosophy in Education: Educational Management and Administration
Research Title:	CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS IN MANAGING AND IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA

Dear Respondent,

You are kindly invited to participate in the research study that is aimed at exploring the challenges that schools experience in the implementation of the revised curriculum for basic education in the Ompundja Circuit in Oshana Region in Namibia. It is hoped that your participation will contribute to the recommendations on how the challenges in the curriculum implementation process can be addressed.

Even though you may receive no direct benefit for participating in this study, it is believed that successfully addressing the identified challenges will have a positive effect on your experiences as a part of the concerned community. Please note that your participation is voluntary, that you will not be forced to take part and there will be no penalty of any kind, if you decide to terminate your participation in the study at any time. Any information obtained from you during this research will be treated strictly confidential as fully permitted by applicable research ethics. To ensure

confidentiality, a code number or *pseudonym* will be assigned to you, and it will be used in the report.

Kindly mark with a cross (X) in the appropriate choice below to indicate whether you agree to take part in the study:

I agree to participate in the first round of the study as described above.	Cross (X)
YES	
NO	

I thank you very much for your time and your willingness to be a part of this research study.

Respondent's signature and date: _____
Researcher's signature and date: _____

NB: The UNAM Research Ethics Committee has approved this research study and further information regarding the study can be obtained from the supervisors:
Main Supervisor: Prof. R. K. Auala (rauala@unam.na)
Co-Supervisor: Dr H Miranda (hmiranda@unam.na)

APPENDIX F: INFORMATION LETTER AND CONSENT FORM FOR INTERVIEWS

Information Letter and Consent Form (INTERVIEW)

Researcher's Name:	Lukas Matati Josua
Researcher's Student No:	9803335
Course:	Doctor of Philosophy in Education: Educational Management and Administration
Research Title:	CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS IN MANAGING AND IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA

Dear Participant,

You are kindly invited to participate in the research study that is aimed at exploring the challenges that schools experience in the implementation of the revised curriculum for basic education in the Ompundja Circuit in Oshana Region in Namibia. It is hoped that your participation will contribute to the recommendations on how the challenges in the curriculum implementation process can be addressed. Even though you may receive no direct benefit for participating in this study, it is believed that successfully addressing the identified challenges will have a positive effect on your experiences as a part of the concerned community. Please note that your participation is voluntary, that you will not be forced to take part and there will be no penalty of any kind, if you decide to terminate your participation in the study at any time. Any information obtained from you during this research will be treated strictly confidential as fully permitted by applicable research ethics. To ensure confidentiality, a code number or *pseudonym* will be assigned to you, and it will be used in the report.

Kindly mark with a cross (X) in the appropriate choice below to indicate whether you agree to take part in the study:

I agree to participate in the second round of the study as described above.	Cross (X)
YES	
NO	

In case of the interview, kindly mark with a cross (X) in the appropriate choice below to indicate whether you agree to have the interview recorded.

I agree to have the interview recorded.	Cross (X)
YES	
NO	

I thank you very much for your time and your willingness to be a part of this research study.

Participant's signature and date: _____

Researcher's signature and date: _____

NB: The UNAM Research Ethics Committee has approved this research study and further information regarding the study can be obtained from the supervisors:

Main Supervisor: Prof. R. K. Auala (rauala@unam.na)

Co-Supervisor: Dr H. Miranda (hmiranda@unam.na)

APPENDIX G: QUESTIONNAIRE FOR TEACHERS (ORDINARY TEACHERS, HEADS OF DEPARTMENTS AND PRINCIPALS)

CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS IN MANAGING AND IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA

NB: FOR ANONYMITY AND CONFIDENTIALITY, PLEASE DO NOT WRITE YOUR NAME OR ANY IDENTIFICATION INFORMATION ON THIS QUESTIONNAIRE.

Introduction

My name is Lukas Matati Josua (Student Number: 9803335), I am a Doctoral student at the University of Namibia in the Department of Educational Foundations and Management. The purpose of this study is to extensively explore the challenges that schools experience when implementing the Revised Curriculum for Basic Education (RCBE) in the Ompundja Circuit in Oshana Region, Namibia and to make recommendations on how these challenges in the curriculum implementation process can be addressed.

Please note that your participation is voluntary, that you will not be forced to take part and there will be no penalty of any kind, if you decide to terminate your participation in the study at any time. It will be appreciated if you participate in this important study. Any information obtained from you during this research will be treated strictly confidential to the full extent permitted by applicable research ethics. To ensure confidentiality, a code number or *pseudonym* will be assigned to you, and it will be used throughout the report.

The questionnaire will take approximately 40 minutes to complete. It has three sections, namely Section A, which requires biographical information, Section B is about the challenges experienced by teachers during the implementation of the revised curriculum in schools, Section C, deals with how the challenges posed by the revised curriculum for basic education implementation may be addressed to ensure successful implementation. Thank you very much for your willingness to take part in this research.

Instructions

- Please feel free to respond to all questions in the questionnaire to the best level of your ability.
- There are no right or wrong answers to questions contained in this questionnaire.

SECTION A: Biographical information
Please, do not write your name or any identifying information anywhere on this questionnaire.

Code/ *pseudonym*: _____ (*To be entered by the researcher*)

A1. Indicate your age category. (*Choose only one of the options, cross (X) one answer only.)*

Categories	Age categories	Cross (X)
1	Below 20	
2	21-30	
3	31-40	
4	41-50	
5	51- 60	

A2. Indicate your gender. (*Cross (X) one answer only.*)

Categories	Gender group	Cross (X)
1	Male	
2	Female	

A3. Indicate the position you hold at the school. (*Cross (X) one answer only.*)

Categories	Position at the school	Cross (X)
1	Teacher	
2	Head of Department	
3	Principal	

A4. Does your school offer any vocational related subject/s (*Cross (X) one answer only.*)?
[*Examples of vocational related subjects in the revised curriculum: Design and Technology, Elementary Agriculture and Home Ecology, Agricultural Science, Computer Studies, Office Practice, Visual Art, Integrated Performing Arts, Home Economics, Fashion and Fabrics, Hospitality, Technical Drawing and Technical Studies A, B and C, Woodwork, Building Studies, Metalwork and Welding and Motor Mechanics*]

Categories	Does your school offer any vocational related subject/s?	Cross (X)
1	Yes	
2	No	

- If your answer to this question is YES, then respond to statements in Section B (B5) and Section C (C5) and if the answer is NO, then skip Section B (B5) and Section C (C5).

A5. Indicate the location of your school. (*Cross (X) one answer only.*)

Categories	Location of your school	Cross (X)
1	Urban	
2	Semi-urban	
3	Rural	

A6. Indicate the category of the years of teaching experience. (*Cross (X) one answer only.*)

Categories	Category of years of teaching experience	Cross (X)
1	0-5	
2	6-10	
3	11-15	
4	16-20	
5	Over 20	

A7. Indicate the phase in which your school fall. (*Cross (X) one answer only.*)

Categories	Phase of school	Cross (X)
1	Pre-grade, Grade 1-7	
2	Combined School (Pre-grade, Grade 1-12)	
3	Secondary School (Grade 8-12)	

A8. Indicate your highest professional qualification. (*Please cross (X) one answer only.*)

Categories	Highest professional qualification	Cross (X)
1	Diploma in Education	
2	Postgraduate Diploma in Education	
3	Bachelor Degree in Education	
4	Bachelor Degree in Education (Honours)	
5	Master of Education	
6	Doctoral Degree in Education	

A9. Did you receive any training or workshop about the revised curriculum implementation? (*Cross (X) one answer only.*)

Categories	Was a training or workshop about the revised curriculum implementation provided?	Cross (X)
1	Yes	
2	No	

If your answer to this question is <u>NO</u>, then skip <u>Question A10</u> and <u>Question A11.</u>

A10. If the answer to Question A9 is YES, how useful was the training or workshop about the revised curriculum implementation? (*Cross (X) one answer only.*)

Categories	Usefulness of the training or workshop received.	Cross (X)
1	Highly useful	
2	Very useful	
3	Moderately useful	
4	Slightly useful	
5	Not useful at all	

A11. How long was the training or workshop? (*Cross (X) one answer only*.)

Categories	The duration of the training or workshop offered.	Cross (X)
1	One day	
2	Two days	
3	Three days	
4	Four days	
5	Five days	
6	More than five days	

A12. Do you have the revised curriculum document/s? (*Cross (X) one answer only.*)

Categories	Provision of revised curriculum document	Cross (X)
1	Yes	
2	No	

SECTION B: Challenges experienced by teachers and principals during the implementation of the newly Revised Curriculum for Basic Education in the Ompundja Circuit of Oshana Region. Kindly provide information on your perception regarding the challenges experienced with the implementation of the revised curriculum in your school. You are only required to cross (X) one option per statement.

B1. Challenges related to teachers training

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. I am adequately trained to implement the revised curriculum.					
2. I am qualified to help with the implementation of the revised curriculum.					
3. Teachers, at my school, are qualified to teach subjects that are to be implemented in the revised curriculum.					
4. At my school, there is a Continuing Professional Development to aid implementation of the revised curriculum.					
5. At my school, in-service training on the implementation of the revised curriculum is offered to teachers.					
6. At my school, all teachers are professionally qualified to teach.					

B2. Challenges related to infrastructures/ physical resources

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. My school has enough furniture to facilitate smooth implementation of the revised curriculum.					
2. My school has enough office for teachers.					
3. My school has a well-equipped computer laboratory in order to expose learners to modern day technology.					
4. My school has enough science laboratories for the implementation of the revised curriculum.					
5. My school has enough classrooms for the implementation of the revised curriculum.					
6. My school has enough sport facilities for the implementation of the revised curriculum.					
7. My school has electricity that facilitates the implementation of the revised curriculum.					
8. My school needs hostel accommodation to facilitate the implementation of the revised curriculum for basic education.					

B3. Challenges related to teaching and learning resources

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. My school has sufficient teaching and learning aids to implement the revised curriculum.					
2. My school has enough Information and Technology equipment to implement the revised curriculum.					
3. My school has stationeries for the implementation of the revised curriculum.					
4. The science laboratory in my school is well equipped for implementing of the revised curriculum.					
5. My school's One-Child-Textbook policy is in place as required by the newly revised curriculum.					

B4. Challenges related to funding or financial resources

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. My school receives enough funds from government to implement the revised curriculum.					
2. My school has adequate funds for learning materials aimed at the implementation of the revised curriculum.					
3. Parents support the school financially.					
4. Private stakeholders support the school financially.					
5. The removal of School Development Fund has a negative effect on the implementation of the revised curriculum for basic education.					

B5. Challenges related to implementation of vocational related subjects

- *If your answer to Section A, Question A4 is YES, then respond to the statements below (B5 only) and if the answer is NO, then skip this part, Section B (B5).*

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. The school has enough teaching and learning aids for vocational related subjects.					
2. My school has equipped workshopsto implement the vocational related subject/s.					
3. There are qualified teachers for vocational related subject/s to be implemented in the revised curriculum.					
4. Vocational subject teachers are trained to enable them to implement the revised curriculum.					
5. At my school, the vocational related subject activities are well funded.					
6. At my school, the vocational education learners can put theory learned into practice.					
7. Teachers can demonstrate vocational subjects' practical to learners.					

B6. Challenges related to teacher-learner ratio

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. I feel overcrowded classrooms could hinder the implementation of the revised curriculum.					
2. My school has an acceptable teacher-learner ratio.					
3. At my school, the teacher-learner ratio allow teachers to provide necessary learner support.					
4. At my school, the teacher-learner ratio enable teachers to give special attention to learners with special needs.					

B7. Challenges related to learner support

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. Teachers at my school have the expertise to support learners during the implementation of the revised curriculum.					
2. At my school, gifted learners receive enrichment s from teachers.					
3. At my school, at-risk learners receive enrichment s from teachers.					
4. At my school, the learning support provision for learners with special needs is adequate to ensure inclusivity.					
5. Robust Life Skills lessons are provided to learners at our school.					

B8. Challenges related to feelings, attitudes and views

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. I feel the design of the revised curriculum was done in a top-down approach.					
2. I feel, I am a key person in the implementation of the revised curriculum.					
3. I feel the physical infrastructures at my school motivate me to implement the revised curriculum.					
4. I feel the working environment at my school motivates me to implement the revised curriculum.					
5. I feel the location of the school motivates me to implement the revised curriculum.					
6. I feel teachers have positive attitudes towards the implementation of the revised curriculum.					

SECTION C: How may the challenges posed by the implementation of the Revised Curriculum for Basic Education be addressed to ensure its successful implementation? Kindly provide information on how the challenges of implementation of the revised curriculum for basic education can be addressed to ensure successful implementation.

C1. Addressing challenges related to teachers training

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. Teachers should be trained to ensure a successful implementation of the revised curriculum for basic education.					
2. Government should provide enough qualified teachers to implement the revised curriculum.					
3. Principals must be trained to ensure effective implementation of the revised curriculum.					
4. Oshana Region's Directorate of Education, Arts and Culture should conduct regular in-service training on implementation of the revised curriculum.					
5. Newly employed teachers should be given induction about the revised curriculum.					

C2. Addressing challenges related to infrastructures/ physical resources

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. The Ministry of Education, Arts and Culture should build enough workshops at schools that offers vocational subjects.					
2. The Ministry of Education, Arts and Culture should build enough science laboratories at schools.					
3. The Ministry of Education, Arts and Culture should build enough sport facilities for schools.					
4. The Ministry of Education, Arts and Culture should build enough classrooms for schools.					
5. All schools must be electrified (with electricity/generators/ solar energy).					
6. The school should have a Staff Room for teachers that facilitate the implementation of the revised curriculum.					
7. Hostel accommodation should be built for all schools.					

C3. Addressing challenges related to teaching and learning resources

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. The Ministry of Education, Arts and Culture should provide teaching and learning aids for the implementation of the revised curriculum.					
2. Teachers should use alternative sources where there are no teaching and learning aids.					
3. Resources for vocational related subjects should be made available for the implementation of the revised curriculum.					
4. The library should be stocked with resources for the implementation of the revised curriculum.					
5. Science laboratories must be stocked with adequate teaching and learning resources.					
6. Qualified vocational subject teachers should be involved in the successful implementation of the revised curriculum.					

C4. Addressing challenges related to financial resources

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. The Ministry of Education, Arts and Culture should fund the activities related to the implementation of the revised curriculum.					
2. Parents should support schools financially.					
3. Corporate businesses should support schools financially.					
4. The teaching and learning materials should be funded by the Ministry of Education, Arts and Culture.					
5. Government should re-introduce the School Development Funds in schools.					

C5. Addressing challenges related to implementation of vocational related subjects in the Revised Curriculum for Basic Education

- *If your answer to Section A, Question A4 is YES, then respond to the statements below (C5 only) and if the answer is NO, then skip this part, Section C (C5).*

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. In-service teachers' training should be organised for the vocational subject teachers.					
2. Teacher training programmes (*e.g. Advanced Diploma in Education [Professional Training]*) should train teachers in the vocational education.					
3. Schools should have workshops where students can practice vocational skills.					
4. Market the vocational education programmes to create positive attitudes towards vocational education among learners.					
5. Acceptable teacher-learner ratio should be enforced in the vocational related education setting.					

C6. Addressing challenges related to teacher-learner ratio

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. Teacher-learner ratio from Pre-grade should be kept around 25 learners per teacher.					
2. Teacher-learner ratio from Grade 1-7 should be kept around 35 learners per teacher.					
3. Teacher-learner ratio from Grade 8-12/13 should be kept around 30 learners per teacher.					
4. Teacher-learner ratio for a class that practice inclusive education should not go above 30 learners per class.					
5. More teachers are needed to reduce the teacher-learner ratio in schools.					
6. Less crowded classrooms enable social learning; therefore, more classrooms should be built.					

C7. Addressing challenges related to learner support

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
Schools should be equipped with relevant expertise to support learners during the implementation of the revised curriculum.					
Gifted learners should receive enrichment s.					
At-risk learners should receive enrichment s.					
The learners with special needs should receive support to ensure they succeed amid the implementation of the revised curriculum.					
Information on implementation of the revised curriculum should be shared with learners as stakeholders.					
The community should provide support to learners during the implementation of the revised curriculum.					

C8. Addressing challenges related to feelings, attitudes and views

KEYS:

STRONGLY DISAGREE (SD) 1; DISAGREE (D) 2; NEUTRAL (N) 3; AGREE (A) 4; STRONGLY AGREE (SA) 5

- *Please cross (X) one choice per statement.*

STATEMENT	SD	D	N	A	SA
1. Teachers should be involved in the curriculum development process of the revised curriculum being implemented.					
2. The physical infrastructures of schools should motivate teachers to implement the revised curriculum.					
3. The working environment should motivate teachers to implement the revised curriculum.					
4. The physical location of the school should motivate teachers to implement the revised curriculum.					
5. The teachers should have positive attitudes towards the implementation of the revised curriculum.					

I thank you for your time and valuable contribution.

APPENDIX H: INTERVIEW GUIDE FOR PRINCIPALS

CHALLENGES FACING SCHOOL TEACHERS AND PRINCIPALS IN MANAGING AND IMPLEMENTING THE REVISED CURRICULUM IN OMPUNDJA CIRCUIT IN NAMIBIA

Introduction

My name is Lukas Matati Josua (Student Number: 9803335), I am a Doctor of Philosophy (Educational Management and Administration) student at the University of Namibia. The purpose of this study is to extensively explore the challenges that schools experience when implementing the revised curriculum for basic education in the Ompundja Circuit in Oshana Region in Namibia and to make recommendations on how these challenges in the curriculum implementation process can be addressed.

Please note that your participation is voluntary, you will not be coerced to take part and there will be no penalty of any kind if you decide to terminate your participation in the study at any time. Any information obtained from you during this research will be treated strictly confidential to the full extent permitted by applicable research ethics. To ensure confidentiality and protection of your identity, a *pseudonym* will be assigned to you, and it will be used in the report, instead of your real name.

The interview will take about 35 minutes to complete. The interview guide started with an introduction as a recapitulation and warm up to the main interview. The interview has themes on the challenges experienced by teachers and principals on the implementation of the revised curriculum in schools. In each theme, the respondents are asked to suggest how the challenge can be addressed. In the last part, you will be given an opportunity to ask questions or give additional general comments.

Thank you for your willingness to take part in the interview for this research.

Code/ *pseudonym*: _____ (*To be entered by the researcher*)

SECTION A: Introduction

The implementation of the revised curriculum for basic education (RCBE) started in 2015 and it is still on going. As leader of this school, you may have experienced some challenges in the implementation of the RCBE and you may have devised ways to address those sophisticated challenges. Please allow me a chance to hear from you about the challenges experienced, if there are any, during the RCBE implementation process.

You are required to give challenges, if there are any, per theme and suggest ways to address it/them. The themes are such as training and professional development, infrastructures/ physical resources, teaching and learning resources, funding or financial resources, vocational related education, teacher-learner ratio and teachers' attitudes and perceptions about the revised curriculum implementation.

THEME 1: What are the challenges, if any, in the revised curriculum implementation process related to training and professional development?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 2: What are the challenges, if any, in the revised curriculum implementation process related to infrastructures/physical resources?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 3: What are the challenges, if any, in the revised curriculum implementation process related to teaching and learning resources?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 4: What are the challenges, if any, in the revised curriculum implementation process related to funding or financial resources?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 5: What are the challenges, if any, in the revised curriculum implementation process related to vocational education?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 6: What are the challenges, if any, in the revised curriculum implementation process related to teacher-learner ratio?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 7: What are the challenges, if any, in the revised curriculum implementation process related to learner support?

_____

_____

- How could the challenge/s be addressed?

_____

_____

THEME 8: What are the challenges, if any, in the revised curriculum implementation process related to teachers' attitudes and perceptions about the revised curriculum implementation?

_____

_____

- How could the challenge/s be addressed effectively?

_____

_____

SECTION B: Questions and or general comments. If you have any other comments, advice or suggestions on challenges facing teachers and principals regarding the implementation of the revised curriculum for basic education in Ompundja Circuit and how these challenges can be addressed, please feel free to share them.

_____

_____

_____

_____

_____

_____

_____

This is the end of the interview; I thank you for your time.

APPENDIX I: CONFIRMATION OF LANGUAGE EDITING

JML

P. O Box 98462, Windhoek latendamtuleni@gmail.com
Cell: +264 811289616

PROFESSIONAL PROOFREADING & COPY-EDITING

09 August 2021

To whom it may concern:

RE: Confirmation of proofreading and editing

This letter serves to confirm that the document detailed below has been proofread and edited by Dr Justina Amakali for the second time after some changes were made. Upon the completion of the document, two documents were sent to the author, the document with the track changes and the ready-to-submit document.

Title: Challenges facing school teachers and principals in implementing the revised curriculum in Ompundja Circuit in Namibia

Author: Mr Lukas Matati Josua

Sincerely,

Dr Justina Amakali

Justina Amakali, PhD (English Studies) UNAM; MPhil (Second Language Studies) Stellenbosch University; B. Hons (ETD)UJ; Further Diploma (English Language Teaching) UJ; Diploma (Proofreading & Copy-editing) Black Ford Centre, UK.