INVESTIGATION ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT, LIMPOPO, SOUTH AFRICA

by

PHYLLIS TSIKU

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SUPERVISOR:
DR A.T NESENGANI

CO – SUPERVISOR:
PROF T.S MASHAU

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DECLARATION

I, **PHYLLIS TSIKU,** declare that the proposal titled:

INVESTIGATION ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT

is my own work and that all sources that I consulted or quoted have been clearly indicated and acknowledged by means of references.

Phyllis **24-06-2022**

TSIKU P **Date**

DEDICATION

I would like to dedicate this work to my husband, Akani Mishack Chauke and my children, Rhema, Preddi and Wavhudi, who will always have a special place in my heart.

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I want to express my sincere gratitude to:

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- My mother Mrs Kwinda T.E, thank you for your support and encouragement.
- I want to thank God for helping me with this research and for his grace that enables me to overcome all challenges that I went through during the research period.

ABSTRACT

Shamavunga Circuit's teaching and learning resources were investigated. Teaching and learning resources include classroom materials, financial, physical, and human resources that support education in public schools. The study collected data quantitatively by surveying participating principals, department heads, teachers, and school board members. We used a random sampling approach. The study's target population included all ten schools on Shamavunga Circuit, as well as their administrators, teachers, board members, and department heads. There were 10 principals, 20 department heads, 40 teachers, and 30 school board members. The sample consisted of 100 students from ten Shamavunga Secondary Schools. The new democratic administration in South Africa inherited a very divided and uneven education system, which impacted student achievement. Investing in a school's physical, teaching, and learning resources has been shown to impact student and teacher motivation.

Keywords: School Resources, Resource Allocation, Spending Patterns, Equity, Predictors and School Resource Disparities

LIST OF ACRONYMS

ADD	:	Attention-Deficit Disorder
BED	:	Bachelor of Education (Honours)
BEDFET	:	Bachelor of Education in Further Education and Training
CCL	:	Centre for Child Law
CMC	:	Computer Mediated Communication
DoE	:	Department of Education
JSID	:	Jacksonville Independent School District
LRC	:	Legal Resources Centre
NCS	:	National Curriculum Statement
NNSSF	:	National Norms and Standards for School Funding Policy
OECD	:	Economic Co-operation Development countries
PGCE	:	Postgraduate Certificate in Education
RSA	:	Republic of South Africa
SASSA	:	South African Social Security Agency
SGBs	:	School Government Bodies
SMTs	:	Senior Management Teams
SPSS	:	Statistical Package for Social Science
STD	:	Senior Teachers Diploma
UNESCO	:	United Nations Educational, Scientific and Cultural Organization
WPET	:	White Paper on Education and Training

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CHAPTER ONE

ORIENTATION OF THE STUDY

1.1 INTRODUCTION

Teaching and learning materials are essential in both developing and rich countries for improvement of education. These resources must be supplied in adequate quantities and at the appropriate times to be effective in the classroom (Greenwald, Hedges & Laine, 2016). It is critical that schools implement efficient and effective processes for allocating and distributing resources to enhance student achievement. Verger et al. (2014:253) define teaching and learning resources as financial, physical, and human resources supplied to support education in public schools. This includes learner support materials (textbooks and stationary), money, infrastructure, educators and non-teaching staff in this study (Verger & Curran, 2014:253). The Shamavunga Circuit's schools are not equally resourced. Many schools lack adequate resources to help students excel academically.

Manyooe (2015:80) states that educational resources are inputs required to educate students. These inputs are often seen as a “basket of resources” that enable students access basic education. According to Reback, Rockoff, and Schwartz (2014:207), many schools in South Africa still lack the ‘basket of resources' required for basic education. This is especially true in historically poor institutions, where a lack of critical resources hinders learning and teaching, and denies students their access to basic education. Since 2008, civil society organizations like the Centre for Child Law, Legal Resources Centre, Section 27 and Equal Education have led various initiatives to improve education in historically disadvantaged public schools, including investigating educational resource distribution.

Botha (2014:361) asserts that education is a social good in all societies. Education transmits knowledge, skills, and values from generation to generation. This ensures a country's economic, political, and social stability and progress. They note that the new South African democratic democracy inherited a severely divided and uneven education system, especially in terms of school resource allocations and student

accomplishment. Racial disparities in spending were eliminated dramatically prior to 1994. Spending per pupil in white schools was 2.5 times that of black students in urban areas and 5 times that of black students in the poorest countries.

For Beeby (2016:37), assisting public schools in meeting high-performance targets requires four actions: providing adequate resources, allocating those resources fairly among schools or students and using resources productively. Scherer, Siddiq, and Teo (2015:202) argue that public schools must now improve student outcomes as an imperative that is independent of resource levels.

Despite the competing demands for resources, education spending has increased in recent years (Adams, 2017). According to Olutola (2015:210), between 2001 and 2010, average expenditure per primary, secondary, and postsecondary non-tertiary student climbed by 40% in OECD countries (OECD).

Limpopo is one of South Africa's three poorest provinces, and its rural nature necessitates immediate attention. Kwazulu-Natal and the Eastern Cape are the two poorest provinces (Mistry, 2010:259). therefore the new democratic administration had to focus on these three rural provinces. More resources, including educational equipment and supplies, were to be provided to address the apartheid doctrine of separate development (Mistry, 2010:259).

Resources and student accomplishment are major challenges in South African schools according to school management, governing bodies, community members, administrators, and policy officials (Seidel & Shavelson, 2017:454). There is still significant inequity in the allocation, distribution, and utilisation of educational resources and student accomplishment in public schools, particularly for those in marginalised rural regions (Lee, 2015:947).

Teaching and learning resources are basic factors that can bring about strong academic achievement in students, according to Kimani, Kara, and Njagi (2013:1). They believe that all institutions and organizations consist of people and non-human resources. Lee (2015:947) says that the correct mix of human resources can influence other resources to achieve institutional goals. As a result, every

organization should try to attract and retain top talent. Economic austerity and the goal to expand access to education have combined to make resource allocation increasingly difficult for educational planners globally.

1.2 STATEMENT OF THE PROBLEM

The Limpopo Province of South Africa has a difficulty with resource distribution in public schools. The poor academic performance of learners in rural secondary schools in Limpopo Province has also been a long-standing concern. This study considered how teaching and learning resources are allocated in Shamavunga Circuit secondary schools. The Shamavunga Circuit schools are located in rural locations and lack basic instructional resources like as laboratories, libraries, computer labs, classrooms, overhead projectors, textbooks, etc. Ineffective teaching and learning result.

1.3 AIM OF THE STUDY

This study will be guided by the following research aim, objectives and questions:

1.3.1 Research Aim

The aim of the study was to investigate how teaching and learning resources are allocated at Shamavunga Circuit, Limpopo, South Africa.

The aim of the study was supported by the following objectives:

1.3.2 Objectives of the Study

The objectives of the study were developed as follows:

- To determine the relationship between the allocation of school resources and learner achievement in public schools.
- To assess whether the equal allocation and distribution of school resources in rural public schools would improve the quality of results produced by learners.

- To establish whether the availability of learning resources enhances effectiveness of learning.

1.4 RESEARCH QUESTIONS

The main research question of this study was: *How are teaching and learning resources allocated at Shamavunga Circuit?* The following are the sub-questions emanating from the main question:

- Is there a significant relationship between the allocation of school resources and learner achievement in public schools?
- How can equal allocation and distribution of school resources in rural public schools improve the quality of results produced by learners?
- How does the availability of learning resources enhance the effectiveness of learning in rural public secondary schools?

1.5 HYPOTHESIS

According to Nguyen, Barton and Nguyen (2015:190), a hypothesis refers to a researcher's prediction about the research findings. It is a statement of the researcher's expectations about the relations among variables in the research topic. This study was guided by the following three hypotheses:

- There is a significant relationship between the allocation of school resources and learner achievement in public schools.
- Equal allocation and distribution of school resources in rural public schools improves the quality of results produced by learners.
- Availability of learning resources enhances the effectiveness of learning.

1.6 PRELIMINARY LITERATURE REVIEW

This literature review outlines different views raised by academics and scholars in relation to the topic. Researchers like Tarus, Gichoya and Muumbo (2015:1) have written about the allocation of learning resources in public secondary school. Below

is a discussion about some of the views expressed by other scholars and academics on the area under study.

1.6.1 The Link between Educational Resources and Learners' Achievement at School

Scholars disagree on whether educational resources affect students' intellectual achievement. Other scholars contest Rice's interpretation of the study evidence for cases of smaller classes. Picus and Fazal (2015:79) claim that no link exists between educational investment and outcomes. They also point out that poor data quality has prevented researchers from properly examining the connections between school outputs and resources.

1.6.2 Teaching and Learning Resources and Performance

Vassilakaki and Moniarou-Papaconstantinou (2015:337) define teaching and learning resources as material, physical, and human. Studies on educational resource availability demonstrate that schools do not always have resources available. Educators have been concerned about the lack of teaching and learning resources. Teaching and learning materials are essential to academic success, according to Tsang (2017:318).

1.6.3 Influence of Adequacy of Physical Resources on Learners' Performance in Public Schools

Whitworth and Chiu (2015:121) advise communities, parents, and sponsors to establish and maintain physical resources in educational institutions because a lack of such resources hinders learning. Wanner and Palmer (2015:354) suggest that inequalities in school resources explain for differences in academic attainment. Learning resources are crucial for teaching and learning. This is because they assist in the simplification of content and providing concrete evidence in the educational discourse. Learners are perceived to learn best when they are provided opportunities to interact with facilities and resources. This is especially critical for learners in rural areas that have limited media to access both at home and school (Tsang, 2017:318).

1.6.4 Role of Resources in Promoting Teaching and Learning

Tam (2015:22) asserts that resources are required for effective curriculum implementation. As a result, the South African Department of Education should provide for such needs in schools to promote student attendance and performance. A school needs resources like a thriving library, computers, and a laboratory to effectively adopt a new curriculum. These are vital in encouraging active involvement and hence maximising student progress.

1.6.5 Role of School Library

Vassilakaki and Moniarou-Papaconstantino (2015:37) state that research in many countries, including Australia, focuses on students' reading and study skills, as well as other parts of the school library program. The school library helps students locate required academic literature without having to travel far.

1.6.6 Computer Technology in Teaching and Learning

Sung, Chang, and Liu (2016:252) claim that research on the impact of classroom computers on student achievement has yielded conflicting results, but it is critical to understand the variables involved. To assess the findings' validity, factors such as the frequency of computer use, the learners' backgrounds, and the tasks themselves should be considered.

1.6.7 Technological Impact on Specific Learning Areas

Because cognitive and metacognitive activities are generally concealed and private, using computer-mediated collaborative tools may encourage learners to make their thinking apparent. Researchers can gain deeper insights into learners' present knowledge and understanding by observing and analyzing their body language and other nonverbal communication (McEwan, 2015:353).

Some talents and insights can only be developed in the laboratory, say Conklin, Morris, and Nolte (2015:153). Students' conceptual knowledge and experimental skills are developed when teachers use kits to execute experiments, say Freitas et al (2015:1175). The scientific kit also improves teachers' content delivery abilities and students' understanding when used in classrooms to exhibit phenomena and explain ideas.

1.6.8 International Perspectives on Resource Allocation in Public Schools towards Learners' Academic Performances

Inequality in school resource allocation exists in both rich and developing nations (Pruet, Ang & Farzin, 2016:1131). In terms of school funding, South Africa, like the US, has two distinct provinces and states. Some provinces are wealthy, rich in resources, and growing rapidly. Conversely, some provinces or states are poor due to a lack of fundamental resources and a reliance on the national purse.

1.7 CONCEPTUAL FRAMEWORK OF THE STUDY

Most studies employ diagrams to clearly define the structures or variables of the research issue and their interactions. According to Latham (2017:69), the variables, relationships, and context must all be consistent.

This study examines how teaching and learning resources are allocated in public secondary schools in Mopani District's Shamavunga Circuit.

Figure 1.1 Latham's resource allocation framework depicts the impact of teaching and learning resources on student achievement in public schools.

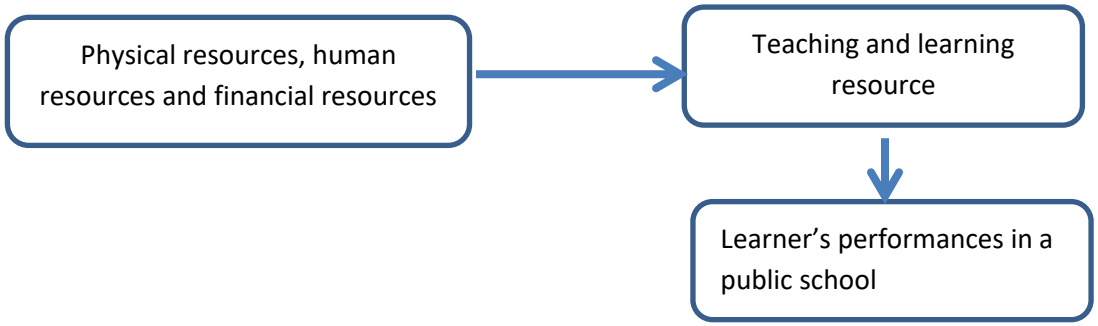

Figure 1.1: The Influence of Learning Resources on Learner Performance

Ample teaching and learning materials, physical resources and qualified teachers are independent variables (dependent variable). Excursions/field trips are available as well as computers and the internet. According to Latham (2017:69), these resources help students finish assignments, cover the syllabus, and improve grades. There are physical resources such desks and chairs, dormitories, dining halls and offices. There are also libraries and agricultural and home science facilities and computer rooms. Others directly affect curriculum implementation. A school with adequate physical resources is likely to achieve higher educational outcomes than one without. Teachers and other human resources are expected to use teaching and learning materials and physical resources to improve student results.

1.8 DEFINITION OF CONCEPTS

For the purpose of this study, the following definitions will apply to the terms selected as key to the study:

1.8.1 School Resources

School resources include critical classroom resources (learning materials), financial, physical, and human resources that support the teaching and learning process in public schools. These included student resources (textbooks and stationery), funding, infrastructure, instructors, and non-teaching employees (Verger & Curran, 2014:253). In this study, school resources refer to all the materials, facilities, equipment and staff members that collectively contribute to the teaching and learning in schools.

1.8.2 Resource Allocation

Resource allocation is the practice of providing school resources to public schools using a fair criterion based on the school community environment. Here, it refers to

how public schools get resources (Darling-Hammond, Wilhoit & Pittenger, 2014:22). In this study, resource allocation relates to the process of providing learning resources in schools, based on the environment of those institutions such as geographic location, historical background and number of learners.

1.8.3 Spending Patterns

Spending patterns describe how school resources are allocated and used locally (Lockheed, Vail & Fuller, 2016:379). This study looked at resource distribution and use in schools. In this study, expenditure patterns relate to how schools employ resources to fulfil institutional goals.

1.8.4 Equity

Equitable distribution of educational resources includes uniformity of resources, environment, and equal inputs for all students (Merchant, Goetz, Cifuentes, Keeney-Kennicutt & Davis, 2014:29). The term equity in this research entails fairness in the allocation of resources. This suggests that schools should be given resources according to their individual needs.

1.8.5 Predictors

Predictor variables are variables that can predict outcomes. This study will use school resourcing to predict student success in public schools (Tsingos, Bosnic-Anticevich & Smith, 2015:492). Halupa (2015:1) demonstrates that social and emotional competency predicts children's future success better than standardized test scores. Past behaviour is the best indicator of future behaviour for a recruiter or the next level of development.

1.8.6 School Resource Disparities

School resource disparities are differences in the allocation of resources in public schools (Tarus, Gichoya & Muumbo, 2015:1). This study will look at resource inequities in South Africa from pre- to post-democracy. In this study, resource

disparity is concerned with differences in the allocation of resources among school such as that which exists between rural and urban schools.

1.9 RESEARCH PARADIGM

A research paradigm is a collection of shared views and agreements among scientists about how to solve challenges. There are three main models for verifying theoretical claims; positive, negative and critical paradigms (Scotland, 2012:9). This study used the positivist paradigm. Positivism thinks there is a single, quantifiable reality that can be known and measured. Because actual knowledge is based on sense experience, it can only be advanced by observation and experimentation (Cohen et al., 2000). The study's research questions and objectives focus on the links between resources of interest and student performance. This paradigm was used in this study as it allows for the scientific analysis of variables that are contributory to the performance of learners in schools.

1.10 RESEARCH DESIGN AND METHODOLOGY

Research methodology examines and discusses the rationale for research methods and approaches (Sertic, 2015:1). This study used a quantitative method and a descriptive design. Other topics covered in this part include the study instrument and data gathering technique.

1.10.1 Research Design

As defined by Cohen and Sherman (2014:333), a study design is a combination of conditions, overlapping plans for data collecting and analysis, and relevance of the research purpose. According to Creswell (2009:18), a research design is a plan and technique for research that covers general assumptions to specific data collecting and analysis procedures. The quantitative descriptive research design was adopted in this study.

1.10.2 Research Methodology

Methodology refers to a variety of methodologies used in research to collect data for analysis, explanation, and prediction (David, 2015:23). Included in research technique are target population, sample size, sampling method and instrument validity and reliability.

1.10.2.1 Population

A population is a group of elements or cases that meet certain criteria and can be used to generalize study findings (McMillan & Schumacher, 2010:489). The study's target audience was secondary school principals, department heads, teachers, and school council members in Shamavunga Circuit, Mopani District.

1.10.2.2 Sampling procedure

A random sampling approach was used to pick individuals from a population from which data will be collected. Hoy and Adams (2015) describe random sampling as the process of selecting a sample from a bigger population when each person is chosen at random and has the same chance of being chosen.

1.10.2.3 Sample

A sample is a subset of a larger population chosen for measurement (David, 2015:23). The subjects in this study were chosen to achieve the study's goal. 100 participants from ten (10) schools in Shamavunga Circuit, Mopani District, completed questionnaires: 10 principals, 20 department heads, 40 educators, and 30 school governing body members.

1.10.3.4 Data collection procedure

Questionnaires helped collect data. According to Kumar (2011:394), a questionnaire is a written list of questions that participants respond. The participants read the questions, assessed the expectations, and jotted down their answers. So, the researcher used personal questionnaires to acquire data from participants. The questionnaires were due in three days. According to Bakker and Van Eerde (2015), questionnaires are a popular data collection approach in education research due to their ease of construction and cost-effective administration to large samples.

1.10.2.5 Research instruments

Questionnaires were used to collect data from the selected participants of the study. Bakker and Van Eerde (2015) observe that questionnaires are a popular method of data collection; they are cost-effective and suitable for large samples. The questionnaire schedule was divided into two sections - Section A comprised of biological information and Section B consisted of items on the allocation of resources. A four-point Likert-type questions made up of: A= *Strongly Agree,* B=*Agree,* C= *Strongly disagree* and D= *Disagree* were used to solicit data from participants.

1.11 MEASURE OF QUALITY CONTROL IN THE QUANTITATIVE APPROACH

1.11.1 Validity of the Instrument

Bakker and Van Eerde (2015:429) define validity as the instrument's ability to accurately capture the study's variables. Construct validity is the degree to which a test measures what it claims to measure, allowing for genuine operationalization in a study. A systematic questionnaire was used in this study to achieve uniform responses.

1.11.2 Reliability

Reliability concerns the degree to which a particular procedure gives similar results over a number of repeated trials (Fox & Alldred, 2015:399). In this study, tests were conducted on the questions in the piloting schools in a span of two weeks apart; a correlation coefficient between the first and second results were computed using the Pearson product correlation coefficient which was generated using the Statistical Package for Social Science (SPSS) version 25 software to determinncee reliability.

1.12 DATA ANALYSIS

This involves the analytical and logical evaluation of data collected by research tools. The data were analysed using SPSS version 25. That is, preparing the questionnaires, coding and entering the variables into the computer for statistical representation. The obtained data was computed and presented as graphs, pie

charts, and percentages. This was done to provide a pictorial view of reality. The numerical representation outcomes are susceptible to complementation through narrative descriptions.

1.13 SIGNIFICANCE OF THE STUDY

This study's findings will expose the South African Department of Education to the flaws in providing quality education to all South Africans, regardless of race, color, or background. The study might work to improve the performance of learners or enhance the quality of education in rural areas. This is envisaged to take place through improved allocation of needed resources aimed at developing communities and reducing poverty.

1.14 DELIMITATION OF THE STUDY

The survey only included principals, educators, department heads, and members of school governing bodies from ten schools in the Shamavunga Circuit in Mopani District.

1.15 ETHICAL CONSIDERATIONS

Adams (2017:234) claims that anyone can do education research. Before undertaking any type of research, researchers must acquire authorization from the Education Department or other relevant authorities. The following ethical guidelines were followed throughout the research process (Carpenter & Krutka, 2014:414).

1.15.1 Permission to Collect Data

The researcher requested permission from the University of Venda Research Ethics Committee and the Mopani District Education office to collect data from schools in Shamavunga Circuit. Once permission was granted, the researcher collected data from the selected participants (Adams, 2017:234)

1.15.2 Informed Consent

Participants were asked to sign consent forms confirming their willingness to participate in the study before the data collection processes started. The participants were fully informed about the study purpose. Carpenter and Krutka (2014:414) believe that participants to a study need not be forced into participation but should make informed decision to participate. They have to be provided with clear information regarding the purpose of the study and the manner in which research data will be used.

1.15.3 Anonymity

Participants were informed that the collected data would only be used for this study and no names or any form of identification were used in the report, thus, their anonymity will take top priority. The names of educators who would have participated in the study were not disclosed. This is supported by (Adams, 2017:234), who posits that participants of the study should be made anonymous such that the information they provide cannot be linked to any particular individual.

1.16 OUTLINE OF CHAPTERS

The chapters were arranged as follow:

1.16.1 Chapter One: Orientation of the Study

This chapter will outline the introduction, problem statement, motivation to conduct the study, aim of the study, research objectives and research questions. The chapter will also focus on the significance of the study, definition of concepts, conceptual framework and delimitations of the study.

1.16.2 Chapter Two: Literature Review

In this chapter, literature review was discussed that presents predictors of adequate resource provisioning and learner achievement in public schools. The international,

continental and national perspectives on resource allocation will be detailed in the study.

1.16.3 Chapter Three: Research Design and Methodology

This chapter presented the research paradigm, research methodology, research design, area of study, population, sampling method, research sample, data collection procedures, data collection instruments, ethical considerations and delimitations of the study.

1.16.4 Chapter Four: Data Analysis and Results

The collected data was analysed, and the results presented in this chapter. This was done through data reduction, data display, conclusion drawing and verification. Findings of the study were categorised into the link between resource provisioning and learner achievement in public schools.

1.16.5 Chapter Five: Findings, Recommendations and Conclusion

This chapter summarises the major findings which were categorised into home and school environments. The chapter also proposed recommendations, make implications for further research and outlined conclusions of the study.

CHAPTER TWO

LITERATURE RIVIEW

2.1 INTRODUCTION

This chapter reviews the relevant literature on the research issue. The documents discussed in this chapter include books, journals, articles, and websites. During the process, it was discovered that research on resource allocation in public secondary schools is lacking. In this chapter, the literature review will be organised based on the purpose and objectives of the study.

2.2 SCIENCE EDUCATIONAL RESOURCES AND SCHOOL ACHIEVEMENT

Scholars disagree on whether educational resources affect student achievement. Rice (2007:309) concludes that total school resources are not closely associated to student achievement, and questions this in light of research findings supporting smaller class sizes. Picus and Fazal (2015:79) conclude that the link between educational expenditure and outcomes has not been demonstrated, citing low data quality and a failure to adequately evaluate school inputs and performance interactions.

According to Levin (2015:59), practically all departmental visits in the school where this study was conducted concern whether the required scope of work has been covered (quantity). They don't even look at the resources or the procedures involved in teaching and learning. Hedges, Laine and Greenwald (2014:5) say that focusing just on educational outcomes ignores the importance of school facilities, curricula, educational resources, teachers' instructional strategies and teacher development activities.

Hanushek (2016:141) underlined that unsightly school structures, packed classrooms, lack of playing fields, and unappealing surroundings can contribute to poor academic performance. Grissmer, Flanagan and Williamson (2008:15) agree, stating that lack of basic resources and high overcrowding in many developing

nations' schools means that other factors (such teacher topic expertise) may initially have a lower influence. They also argue that as budgets improve, more resources do not always translate into better educational outcomes, either because school and classroom management may not have adjusted well to the new resources, or because there may be threshold levels beyond which adding more resources does not result in significant educational gains.

A study titled Teaching and Learning Resources and Academic Performance in Mathematics in Secondary Schools in Bondo, Nigeria (Yara & Omondi, 2010) found that textbooks, classrooms, teaching aids (chalk, board, ruler and protractor), stationeries, and laboratories affect students' academic performance. Lessons are strengthened when there are enough reference resources such as textbooks, practice books, teaching aids, and classrooms, and academic accomplishment demonstrates per excellence the correct use of these materials, according to Halupa (2015:1). A school culture and high-quality instruction are validated by Greenwald, Hedges, and Laine (2016:361). He demonstrates how a shortage of resources affects the quality of training.

Adams (2017:234) noticed in another study on teachers' efficacy and students' academic performance in public secondary schools in Nigeria that resources available to instructors, general conditions of infrastructure, and instructional materials are low. These situations would surely affect the quality of instruction in public schools, resulting in poor academic performance, attitude, and values among secondary school pupils.

Ballou (2008:1) claims that disadvantaged schools generally have less resources due to budget constraints or inequitable resource allocation. Additional resources are needed, but they must be accessible in the proper combination, and the school and classroom must adapt to their use. Chambers (2015:21) discovered that black children attended schools with fewer resources that seemed to be most connected to student achievement. Compared to white schools, these schools had fewer laboratories, libraries, and textbooks. Black kids' schools had fewer instructional resources and poorer success levels than white schools, suggesting a resource-achievement correlation.

According to Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld and York (2016:21), students in classrooms with libraries or reading corners performed better on a literacy test (the Progress in International Reading Literacy Study) than students in other classrooms.

Ballou (2018:61) claims that the shifting nature of the selected school's performance can be linked to numerous factors. This study focused on one issue, the effect of learners' and teachers' resources in determining school performance. This should be a focused effort to expose a gap in education in under-resourced schools.

2.3 TEACHING AND LEARNING RESOURCES

Resources for teaching and learning include material, physical, and human resources. In the past, studies have shown that educational materials are not always available in classrooms, causing anxiety among educators. Tsang (2017:318) states that learning is a complicated process involving students' motivation, physical facilities, teaching resources, teacher skills, and curricular demands. The availability of teaching and learning resources improves school effectiveness since they are the foundation for student academic success. Resources for teaching and learning include materials, human resources (teachers and support personnel), and physical facilities (laboratories, libraries, and classrooms).

Students are less likely to miss school when they have fun, meaningful, and relevant activities. For effective teaching-learning, schools should provide quality and quantity of these materials. Several research have examined the impact of educational materials (Stiefel, Berne, Iatarola & Fruchter, 2010:27).

The resources available for instruction were related to student accomplishment in school certificate exams. As stated by Izadpanah and Asadi (2015:554), material resources have a substantial impact on student achievement because they encourage abstract thinking and prevent rote learning. Insufficient teaching and learning resources undermine education, resulting in low academic attainment, high

dropout rates, problem behaviours, low teacher motivation, and unmet educational goals.

2.3.1 Access to Teaching and Learning Materials Influences Students' Public School Performance

Access to teaching and learning resources is perceived to influence positively the performance of learners in schools. Eguchi (2015:54) cites textbooks, charts, maps, audio-visual and electronic educational materials such as radio, tape recorder and television as material resources. Also included in this category are paper supplies and writing materials such as pens and erasers.

Halupa (2015:1) agrees that teaching and learning materials affect students' performance. According to the author, institutions with proper teaching and learning materials and equipment score better in exams than those without.

2.3.2 Physical Facility Adequacy and Student Performance in Public Schools

Communities, parents, and sponsors should continue to create and maintain educational facilities. Lack of school infrastructure hinders learning, as stated by Okongo, Ngao, Rop and Nyongesa (2015:132). School amenities are thought to account for achievement differences. Learning is enhanced when physical resources are available in sufficient quantity and quality (Lai, 2015:74). Poor academic performance can be caused by unsightly school buildings, packed classrooms, lack of playgrounds, and unappealing surroundings (Okongo, et al., 2015).

2.4 RESOURCES IN PROMOTING SCIENCE TEACHING

According to Tam (2015:22), resources are required to effectively execute any new curriculum. As a result, the Department of Education should provide for such needs in schools to encourage regular school attendance and increase student

performance. A school library, computers, and a laboratory are crucial to fostering students' active engagement and hence their academic success.

According to Lai (2015:74), if resources (teachers, textbooks, laboratories, chemicals, tools and equipment) are scarce, teaching tends to be teacher-centered. Because resources are scarce, effective teaching and learning are compromised, as is self-discovery learning, a key component of the new curriculum. A person's ability to learn through personal experience and natural investigation, frequently motivated by curiosity, as defined by Shannon (2016:28). A parent, for example, might inspire self-discovery. Learning occurs when we actively employ our senses and form mental connections. By asking questions and linking information, youngsters can learn far more than a teacher can teach them. The toddler is teaching himself. Unlike lectures and reading, practical learning retains a lot of information (Savery, 2015:5).

2.4.1 School Library Role

According to Vassilakaki and Moniarou-Papaconstantinou (2015:37), the Australian research tradition focuses on students' reading, study skills, and other parts of the school library program. The review divided student achievement into:

- academic achievement (as measured by tests);
- reading skills (including leisure reading);
- broadening learning (information skills, self-concept);
- other (such as impact on particular sub-groups).

According to Delaney and Bates (2015:30), many public schools and colleges are struggling to offer libraries for their students. Despite the fact that the review was conducted before 1990 (Delaney & Bates, 2015), the findings revealed the following:

- Students do better on exams of fundamental research abilities in schools with good libraries and school librarians.

- Students score better in reading comprehension and ability to convey thoughts related to reading.
- A school library encourages reading.
- A librarian's guidance appears to have a considerable impact on student information-gathering skills.
- Schools with good libraries and full-time librarians outperform schools with poor or no library services in reading comprehension, knowledge, and use of reference materials.

- In seventh grade, schools with professional librarians outperformed schools without them in reading, study skills, and newspaper usage.

The lack of libraries has hampered school life and made achieving educational goals difficult. The National Education Infrastructure report by Hew (2016:320) indicated that South African student results lag behind those of developed countries and even those of less developed Sub-Saharan Africa. The Annual National Assessment results by Motshekga (2011:9) confirmed that the country‘s schooling system performs well below its potential and that improving basic education outcomes is a prerequisite for the country‘s long-range development goals.

The establishment of a functional school library (supplied, maintained, and adequately funded) will add between 10% and 25% to average student results, according to Equal Education (2010). In Massachusetts and Texas, high-achieving kids attended schools with good libraries, according to assessments and research done in 2000 and 2001.

According to Higgins et al. (2016:7), school libraries are linked to improved student achievement. The mean pass percentage for schools without a library is 47%, whereas the mean pass rate for schools with a library is 66%. It is widely agreed that well-stocked school libraries with skilled librarians boost student achievement at all levels of education.

A school library is not a luxury, but a need, yet the situation of school libraries in South Africa is abysmal. According to Manathunga and Hernández-Leo (2015:357), innovative educators experiment with resources. He thinks every school deserves a good library and computer lab, even if the teachers aren't there.

“Anecdotal research reveals that the high schools with the worst results are bordered by primary schools that lack the means to teach effectively,” said former Education Minister Naledi Pandor in 2006. Resources do not always mean money; they can include teacher competence or a lack of a library.

The critical backlog in South African school infrastructure led to the development of the National Policy for an Equitable Provision of an Enabling School Physical Teaching and Learning Environment and the National Minimum Norms and Standards for School Infrastructure (Biesta, Priestley & Robinson, 2015:624).

In November 2008, the Department of Education published the National Policy and the Minimum Norms and Standards in the Government Gazette, No. 31616, Notice 1438 and Notice 1439. According to EE Report (2009:9), six national school library policy drafts have failed to be adopted and implemented since 1997. No wonder there has not been much movement in the last 15 years, without a National Policy to deal with the backlog. They will be fully adopted by the end of 2009 and implemented phase-by-phase starting in 2010**.** Unlike the National Policy, this document is still a draft despite the dates for acceptance and implementation. The Department of Basic Education has similarly not publicly communicated the status of this proposal. The Minister of Basic Education should publicly state the status of the Minimum Norms and Standards and explain the delay in implementing them (Chrusciel, Wolfe, Hansen, Rojek & Kaminski, 2015:24).

2.5 USE OF COMPUTER TECHNOLOGY IN TEACHING

The use of computer technology has continued to increase in importance in the education and performance of learners. Student accomplishment was studied by Sung, Chang, and Liu (2016:252). Every study's conclusion must be understood in terms of the real variables. To verify the findings, evaluate the frequency of

computer use, the learners' background, and the tasks given. This section begins by describing the difficulties researchers have had proving the benefits of computer-aided instruction. This is critical in this study as computer integrated learning is a pivotal aspect of 21 century classrooms.

According to Henderson, Selwyn and Aston (2017:1567), technology is a vital component of learning at all levels: primary, secondary, higher, and professional. This is further backed up by Garganté, Narango and Tamarit (2015:9) who state that computers allow for electronic data storage, saving paper, and are small.

Bayne (2015:5) states that computer technology benefits both teachers and pupils. Presentations, notes, and test papers may be conveniently kept and transferred. Similarly, kids can submit homework electronically. The procedure becomes paperless, saving paper and making data storage more durable. Electronically erasable memory devices are reusable and provide dependable data storage and retrieval.

According to Tarhini et al. (2015:30), teachers and students are increasingly using computers. Computers are tools used by students and teachers in today's academic setting. Students should study more using computers and improve their test results while learning faster.

Albayrak and Yildirim (2015:155) argue that a computer-mediated method allows for significant student knowledge co-construction and negotiation. Thus, well-designed CMC settings should not hinder learning. Getting students to collaborate on problems in an asynchronous CMC setting can also provide a fertile field for gleaning students notions in real contexts. More sophisticated automation in pedagogy, rich authoring tools for multimedia, quicker Internet access, and more opt-in learning environments, say Scherer and Siddiq (2015:202).

Pruet, Ang and Farzin (2016:1131) contend that new digital media (vs textbooks and lectures) provide for a more broadly designed environment. Digital media are

adaptable, transformable, markable, and networkable, according to the writers. These are potentially important features of technology-mediated learning settings.

2.6 TRADITIONAL IMPACT ON LEARNING AREA

Howard, Chan and Caputi (2015:360) contend that computer-based learning is more individualized, student-centered, and thus less embarrassing for ELL students. Preconceptions and thinking processes in physics are explored by Pruet, Ang and Farzin (2016:1131). In another CMC study, Vrasidas (2015:370) showed how conversation logs of physics students participating in synchronous computer-mediated problem-solving learning generated extensive data about the students' mental processes. This revealed students' ignorance of numerous science subjects and revealed their thinking processes.

According to Kearney, Burden and Rai (2015:48), the two studies above provide two key findings. First, a computer-mediated environment should be rich enough to allow significant knowledge co-construction and negotiation between students. Another study found that encouraging students to collaborate on problems in an asynchronous CMC environment could be a great way to gather students' conceptions in a natural setting (Nguyen, Barton & Nguyen, 2015:190).

Since body language and other intangible modes of communication are no longer practical, using computer-mediated collaboration tools can encourage students to put more effort into making explicit their thoughts. Making students' cognitive and metacognitive actions visible allows researchers to better comprehend students' present knowledge and comprehension (McEwan, 2015:353).

The role of computers in low-resource schools is essential. This is based on the understanding that computer use and related internet service creates an information hub that can be conveniently accessed by learners once it has been set up. Computers are clearly a versatile teaching and learning tool. Computer technology's ability to accommodate, enrich, and mediate educational programs makes it a must-have in all classrooms. In the absence of science laboratories, computers can fulfil

many of the same functions as school libraries (Gaevi, Dawson & Siemens, 2015:64).

2.6.1 The School Lab and Science Education

It is a place where students can collaborate in small groups to examine scientific phenomena, according to Lee (2015:947). The author suggests that laboratory activities can improve positive attitudes, social interactions, and cognitive progress. Reasoning and responding to analytical comments are some of the abilities required.

Conklin, Morris and Nolte (2015:153) argue that only the laboratory can acquire specific abilities and understandings. Freitas et al. (2015:1175) state that when teachers utilize the kits to conduct experiments, both conceptual comprehension and experimental skills are developed. Using the science kit in the classroom also improves the teachers' teaching skills and the students' knowledge.

The lack of science laboratories in most poor schools has hampered the implementation of the NCS and upset teachers, causing some conventional teaching methods to persist (teacher centred). Instead of doing experiments, students must memorize scientific terms and processes (Alharbi, 2015:105).

According to Grant, Tamim, Brown, Sweeney, Ferguson and Jones (2015:32), creative schools realize that classroom learning mixed with laboratory experience yields the best results. This strategy enhances subject mastery, scientific reasoning, and subject interest.

2.7 INCLUSIVE EDUCATION PHILOSOPHY

The objective of inclusive education is to teach the whole class. Hornby (2015:234) states that all students receive adequate social and educational assistance. Teaching the whole class has many benefits. The main causes are:

2.7.1 Any Learner can Learn

This theory is based on the assumption that all students can learn foreign languages, math, and science. All students, including those with learning impairments, except those with severe brain injury, may master these skills. The only issue may be that they cannot study stuff in the usual manner (Anderson & Boyle, 2015:04).

2.7.2 Not all Learners Learn in the Same Way

For centuries, students have been instructed in a set manner. In the past, teaching methods were based on the best manner to teach a learner. Few of the strategies were designed to teach specific types of students. The hunt for a "magic" way to teach all students entailed (Mitchell, 2015:9). Some teaching methods work better than others. Educators have often intuitively taught individual students while claiming that the method itself is responsible for their success. In reality, no single teaching style fits all students, and such a method is unlikely to be discovered or established (Shyman, 2015:351).

2.7.3 No Unmotivated Learners

No unmotivated learners exist. The lack of understanding by instructors, parents, peers, and curriculum materials has demotivated many students, although they all started out wanting to study. When learning impediments are removed, motivation generally returns (Shogren, Gross, Forber-Pratt, Francis, Satter, Blue-Banning & Hill, 2015:243). Often, children grow up in less than perfect homes. Many students arrive at school without the parental drive that previous generations of educators could rely on. The school is the appropriate environment for students who are not demotivated by schooling (Thompson, Lyons & Timmons, 2015:121). This is regularly seen in schools across the country where students from broken homes, poor communities, and addicted parents excel academically and become first-generation college students. More students would achieve if they were taught in a way that helped them succeed rather than made them suffer (Freedman, 2016:32).

2.7.4 Educators should Help Students, not Abandon them

Because students can learn, educators must aid them. Demotivated high school students pose more obstacles to their teachers than demotivated younger students (Yeo, Chong, Neihart & Huan, 2016:69). Educators who fail to prevent or re-motivate students do not pose a problem to their successors since demotivated students do not enrol in institutions. It's time for everyone to gain access (Pavenkov & Rubtcova, 2016:13).

2.7.5 Teaching is more Important than Innate Ability for Student Success

Some talented students drop out, whereas some learning impaired students outperform expectations. Learners who excel in one class may struggle in another (Valentina & Olga, 2017:7). In many circumstances, low performance is due to a clash between the learner's learning style and method and the educator's, materials', or classmates' styles. Style wars are being fought in the classroom (Mintz & Wyse, 2015:117).

2.7.6 “Style Wars” Won

Knowing that learners differ creates a need to arrange input and activities so that they can learn differently (Ward, Bagley, Lumby, Woods, Hamilton & Roberts, 2015:333). It is important that teachers understand the diverse learners in their classrooms and master the way in which they need to be taught. The knowledge that learners require different learning styles to master concepts implies that teachers have to accommodate a lot of strategies such as the use of visual, sight, touch and senses in the teaching of learners in educational spaces.

2.7.7 The Learner Differences Chaos may be Organized

Some old systems are still in use today, and many educators are just beginning to implement them, despite the fact that these very simple designs inadequately address the complexity of learner differences "that are more situationally appropriate and effective than previous methods. Some instructors like to group learning styles

by type to better understand and control them (Forlin, Kawai & Higuchi, 2015:314). The most useful groups and clustered learner differences are divided into four categories:

- Sensory modalities: How students receive and absorb information. Visual, auditory, and motor learning methods are widespread. Visual learners gain new knowledge visually. Visual learners value clarity, contrast, texture, framing, and symmetry (Isosomppi & Leivo, 2015:686).

These are aural (they learn by listening to others) and oral (they learn by speaking) (they learn by talking and hearing themselves). When reading instructions, aural learners typically get disoriented because their patience for visual input wears out; their capacity is restricted (Cochran-Smith, Ell, Grudnoff, Haigh, Hill & Ludlow, 2016:67). Oral Learners Require Audio; they can't keep quiet as kids, which frustrates both parents and teachers. Oral learners are the simplest to understand since they inform others who are listening exactly what is going on in their heads (Danforth & Jones, 2015:121). Motor learners learn new knowledge by moving. Frequency, pressure, duration, and tensity are important distinctions. Motor learners can be classified as kinesthetic (using gross motor muscles) or mechanical (using fine motor muscles) (they learn through the use of fine motor muscles). A motor learner, for example, dials phone numbers to memorize them. A student cannot often tell another the number without picking up the phone (or an imaginary phone) and dialing. To accommodate a modality, first determine each learner's preference (Moria, 2017:3). School problems develop when a pupil prefers one modality but is compelled to learn in another (Wexler & Luethi-Garrecht, 2015:21).

2.8 IMPLICATION OF INCLUSIVE EDUCATION IN COMMON SCHOOLS

Borkan (2015:41) states that instructors are the key to success in inclusion education. The inclusive teacher is a dedicated educator who cares deeply about their community. Teachers must be responsive to students' and the environment's demands. The school should be seen as a place of meeting for all members of the community and meaningful relationships among the components that effect kids' learning. Remove impediments, promote high expectations, and create a good

environment based on continual progress and ideals. Dialogue, involvement, and collaboration promote complete community awareness and hence successful inclusion. So, the teacher must be involved (Sims, 2015).

According to Powers (2015), large classes make it difficult for teachers to organize. Enrollments of 25 or more were deemed excessive. 54.2% of all students in the region were enrolled in classes of 25 or less. The other 45.8% were in classes over 25.

Classes of 40-50 students are not unusual; this is certainly too many children for one teacher. Even a great teacher would struggle to meet everyone's needs. Classes should be smaller and instructors' workloads more realistic (Powers, 2015). The standard set was that schools did not categorize children by aptitude, but rather by diversity, in keeping with an inclusive approach. Only 38.7% of the study's students attended schools that did not use ability groups. The other 61.3% of kids went to schools that used ability grouping (Mclaren, 2015).

Every day, teachers in inclusive classrooms encounter numerous hurdles. They need help in many ways, indicating a growing need to integrate special education into the general system (Cook, 2015:57). Special education resources are intentionally steered into mainstream schools to enable better inclusion for students with diverse needs. To ensure the success of inclusion education, educational managers must provide teachers with different and systematic supports (Ashton, 2016:16).

According to Korani (2015), inclusion classrooms are a beautiful concept but require a lot of teacher training, patience, and compassion. In fully inclusive classrooms, kids range from generally developing to severely and profoundly challenged, making it difficult for teachers to establish a balance to serve all students.

2.9 EDUCATORS FACE IN INCLUSIVE CLASSROOM

2.9.1 Lack of Inclusive Experiences

Some teachers have never taught in a low-resource classroom, which can be detrimental. Educators must collaborate and understand classroom needs in skill development and lesson planning (Zanderski, 2016:1).

2.9.2 Inexperience with Severely Disabled People

Disability students require more modification and medical care than average students. Teachers must be able to handle severe difficulties and adapt lessons to each child's abilities. Inexperience might hinder a child's development or cause health issues (Vanderwthusein, 2015:11).

2.9.3 Involvement of all Audients

Diverse classrooms must be able to involve all kids. Students are encouraged to participate. Lack of adaptive communication and language tools makes it difficult for teachers to establish a cohesive classroom (Ekstrand, 2015:459).

- **Teaching Students with Mild Impairments**

When a classroom is full of children of all abilities, the middle children can easily become lost. Their diagnoses range from learning problems to ADD and language issues. Providing adequate attention and adaptation can be difficult when student-teacher ratio is high (Choi, 2015:01).

- **Death and Grief**

In a resource inclusive classroom, there may be students with chronic illnesses, and teachers may have to deal with their deaths (Ballantine, 2015:01).

2.9.4 Teacher Aide Shortage

Inclusion classrooms usually feature two teachers. Due to the nature of the classroom and its size, an adequate number of teacher-aides is required (Selinus, 2015:34). An increase in the number of teachers in the classroom is intended to

assist in catering for the differences of learners in the classroom. Teachers need to have assistants or aides to provide help to ensure that all learners are supported in their differences. This support is usually non-existent in developing countries, and worse still in rural school contexts. This makes the issue of resource allocation very important in the teaching and learning in schools.

- **Teaching Students Compassion**

Teachers face a hurdle since not all kids have been exposed to disabled people. Teachers must not accept insensitivity or cruelty and teach respect for all pupils regardless of ability (Wing, 2015:635). Learners have to appreciate the existence of their own differences so that they are able to respect and accept their counterparts living with disabilities. This entails that teachers have to teach critical values that cultivate independent learning and hard work.

2.9.5 Customized Lessons

Teachers have to customise teaching and learning discourses Teachers may struggle to meet the academic demands of each student because classes have varied capabilities (Ganai, 2015:4). The methods of instruction are important in the performance of learners. It is however, pertinent that teaching is individualised so that it is carried out cognisant of the preferences and abilities of each learner. The all-size-fits-all approach is not the best in the education of learners with disabilities.

- **Coordinating Modal**

A well-organized inclusion classroom allows children to attend therapy sessions, but this becomes a difficulty in creating daily activities and keeping all students engaged and learning. Many schools are moving towards inclusive classrooms, yet there are several issues or hurdles to address. Preparing and training teachers is the first stage (Maes, 2015:107).

Skiba (2015:12) estimates that approximately six million pupils have disabilities, yet this is only one of the challenges teachers confront. Teachers must also deal with an

increasing number of kids from low-income homes and culturally diverse backgrounds.

2.10 TEACHING AND LEARNING RESOURCES

Resources for teaching and learning include material, physical, and human resources. These findings support previous research by Coleman et al. (2016) that teaching and learning resources are not always available in schools. Educators have been concerned about the lack of teaching and learning resources. Tsang (2017:318) states that learning is a complicated process involving students' motivation, physical facilities, teaching resources, teacher skills, and curricular demands. The availability of teaching and learning resources improves school effectiveness since they are the foundation for student academic success. Resources for teaching and learning include materials, human resources (teachers and support personnel), and physical facilities (laboratories, libraries, and classrooms).

Students are less likely to miss school when they have fun, meaningful, and relevant activities. These resources should be available in schools in sufficient quantity and quality. Several researches have examined the impact of educational materials (Stiefel, Berne, Iatarola & Fruchter, 2010:27).

The School Certificate Examination results were tied to instructional resources. Izadpanah and Asadi (2015:554) concluded that material resources affect student achievement because they encourage abstract thinking and inhibit rote learning. Insufficient teaching and learning resources lead to poor academic attainment, high dropout rates, problem behaviours, low teacher motivation, and missed educational goals.

2.10.1 Public School Students' Performance and the Availability of Teaching and Learning Materials

Eguchi (2015:54) cites textbooks, charts, maps, audio-visual and electronic educational materials such as radio, tape recorder and television as material

resources. Also included in this category are paper supplies and writing materials such as pens and erasers.

Halupa (2015:1) agreed that the quality and amount of teaching and learning resources affect students' performance. According to the author, institutions with proper teaching and learning materials and equipment score better in exams than those without.

2.10.2 Physical Facility Adequacy and Student Performance in Public Schools

Communities, parents, and sponsors should continue to create and maintain educational facilities. Because lack of such facilities hinders learning. Okongo, Ngao, Rop and Nyongesa (2015:132) stress the importance of school amenities in ensuring great education. School infrastructure would be deemed to account for achievement differences. Classrooms, lecture halls, auditoriums, an administration block and libraries are among the physical facilities. The authors claim that unsightly school buildings, packed classrooms, lack of playgrounds, and unappealing surroundings can contribute to poor academic performance.

2.11 RESOURCES FOR TEACHING AND LEARNING

Tam (2015:22) asserts that resources are required for effective curriculum implementation. As a result, the Department of Education should provide for such needs in schools to encourage regular school attendance and increase student performance. A school library, computers, and a laboratory are essential for encouraging active learning and maximising student accomplishment.

As stated by Lai (2015:74), where resources and facilities are lacking, the teaching strategy tends to be teacher-centered. Because resources are scarce, effective teaching and learning are compromised, as is self-discovery learning, a key component of the new curriculum. A person's ability to learn through personal experience and natural investigation, frequently motivated by curiosity, as defined by Shannon (2016:28). A parent, for example, might inspire self-discovery. Learning occurs when we actively employ our senses and form mental connections. By

asking questions and linking facts, a child's learning will go much beyond what a teacher can teach him/her. Unlike learning through lectures and books, experiential learning has a high rate of retention (Savery, 2015:5).

2.11.1 The School Library's Role

Vassilakaki and Moniarou-Papaconstantinou (2015:37) stated that research tradition that exists in Australia have no equivalent, as it centres on students' successes in reading, study abilities, and other areas of the school library programme. In their review, student accomplishment was divided into:

- academic success (as represented in standardised tests)
- literacies (including reading for pleasure)
- broadening learning (information skills, self-concept);
- other (such as impact on sub-groups).

Delaney and Bates (2015:30) state that due to the digital age of e-books, many public schools and colleges are struggling to offer libraries for their students. Although his research was done before 1990 (Delaney & Bates, 2015), his findings revealed:

- Students do better on exams of fundamental research abilities in schools with good libraries and school librarians.
- Students score better in reading comprehension and ability to convey thoughts related to reading.
- A school library encourages reading.
- A librarian's guidance appears to have a considerable impact on student information-gathering skills.
- Students with full-time librarians perform better in reading comprehension and knowledge of reference materials than students with limited or no library service.
- In seventh grade, schools with professional librarians outperformed schools without them in reading, study skills, and newspaper usage.

The lack of libraries has hampered school life and made achieving educational goals difficult. The National Education Infrastructure report by Hew (2016:320) indicated that South African student outcomes lag behind those of developed countries and even those of less developed Sub-Saharan Africa. The Equal Education report argues that every public ordinary school should have a well-stocked library, serviced by a qualified full-time librarian.

According to Equal Education (2010), major international studies have determined that a fully stocked, staffed, and funded school library will add between 10% and 25% to average learner outcomes. VIn Massachusetts and Texas, high-achieving kids attended schools with good libraries, according to assessments and research done in 2000 and 2001.

According to Higgins et al. (2016:7), school libraries are linked to improved student achievement. The typical pass percentage for schools without a library is 47%, compared to 66% for schools with one.V It is widely agreed that well-stocked school libraries with skilled librarians boost student achievement at all levels of education.

A school library is not a luxury, but a need. Regardless, the status of South African school libraries is bleak. According to Manathunga and Hernández-Leo (2015:357), creative educators' experiment. The author feels that every school deserves a good library and computer lab, but that occasionally resources alone aren't enough.

Former Education Minister Naledi Pandor stated in 2006 that "Anecdotal evidence suggests that the high schools with the worst results are surrounded by primary schools that lack the resources to teach effectively." Resources do not always mean money; they can include teacher competence or a lack of a library.

Following the Department of Education's admission that progress is inadequate and uneven, the National Policy for an Equitable Provision on an Enabling School Physical Teaching and Learning Environment (and the National Minimum Norms and Standards for School Infrastructure) was developed (Biesta, Priestley & Robinson, 2015:624).

In November 2008, the Department of Education published the National Policy and the Minimum Norms and Standards in the Government Gazette, No. 31616, Notice 1438 and Notice 1439. According to the EE Report (2009:9), six national school library policy drafts have failed to be adopted and implemented since 1997. No wonder there has not been much progress in the last 15 years without a National Policy to address the backlog.

They will be fully adopted by the end of 2009 and implemented phase-by-phase starting in 2010. Unlike the National Policy, this document is still a draft despite the dates for acceptance and implementation. The Department of Basic Education has similarly not publicly communicated the status of this proposal. The Minister of Basic Education should publicly state the status of the Minimum Norms and Standards and explain the delay in implementing them (Chrusciel, Wolfe, Hansen, Rojek & Kaminski, 2015:24).

2.11.2 Laboratory Role

Conklin, Morris and Nolte (2015) argue that schools need to have modern, high-quality scientific labs. Students will need to look beyond the textbooks and traditional classroom teaching methods to understand science concepts. Real materials and artifacts are required for effective science learning and teaching. According to Oberle, Domitrovich, Meyers and Weissberg (2016), classroom knowledge is useless unless students can observe the process and understand the link between action and reaction. In science, successful teaching and learning need constant demonstration.

According to Picus and Fazal (2015), schools mix classroom teaching with laboratory activities to ensure students fully grasp each idea. It is also considered that laboratory teaching and experimentation will help students understand concepts better. Children recall knowledge far better when they can observe the experiments being done.

According to Monk and Rice (2016), scientific lab equipment will allow students to immediately interact with collected data. They will learn by doing experiments on

their own. Students use models to learn scientific concepts and theories. According to Tam (2015), school science lab supplies and equipment make studying and teaching much easier. Many scientific notions and theories are difficult to describe in textbooks. Physics, Anatomy, and Chemistry Science kits can help children learn otherwise complex scientific subjects.

Tsingos et al. (2015:492) state that schools may contribute significantly to future scientific discoveries by providing the greatest and most advanced materials and supplies. The advancements in medical science and technology would not be possible without excellent and motivated scientists and researchers.

2.12 INTERNATIONAL PERSPECTIVES ON RESOURCE ALLOCATION IN PUBLIC SCHOOL TOWARDS LEARNERS ACADEMIC PERFOMANCES

Many authors in education research have focused on school resources and student achievement, particularly in developed and developing countries. These studies demonstrate that school resources influence teaching and learning, and that governments worldwide should pay close attention to this issue (Lavy, 2015:588; Cobb-Clark & Jha, 2016:251; Monk & Rice, 2016).

Nisar (2015:289) established that certain schools have more fundamental resources than others. There is evidence that the national government provides vastly different resources to teachers and schools. This issue is compounded by factors such as student socio-economic status, which can affect school finances.

Les élèves from wealthy households have more access to fundamental educational resources at home and school than those from impoverished families, limiting their learning and teaching options (Cobb-Clark & Jha, 2016:251). Tobin, Lietz, Nugroho, Vivekanandan and Nyamkhuu (2015:01) reaffirmed that access to school resources for students from impoverished households is contingent on the government's restricted school funding allocations through the National Norms and Standards for School Funding Policy (NNSSF) (DoE, 2006). This Policy on National Norms and Standards for School Funding provides for “No Fee” schools in quintiles one (1) to three (3) and “Fee Schools” in quintiles four (4) and five (5) to assist individuals who

cannot afford school fees. The policy had good intentions, but the gap between theory and practice made implementation difficult (Anderson & Boyle, 2015:4). The argument that is resistant in this case is that it is the adequate and proper allocation of resources that has the capacity to improve the academic performance of learners. Oberle, Domitrovich, Meyers and Weissberg (2016:277) observe that some teaching approaches may not be able to compensate for the current discrepancies in fundamental educational resources between well-resourced urban schools and under-resourced rural schools. Inequitable resource allocation and varying student accomplishment can occur between two countries or within one

School resource allocation is sometimes uneven and inequitable, both in wealthy and developing nations (Tobin et al., 2015:01). Like the USA, South Africa has two distinct classifications of provinces/states in terms of school resourcing: affluent and poor.

The discrepancies in affluent countries were similar to those in poor countries, where family background and poverty level were important factors in accessing excellent learning and teaching (Ma, Han, Yang & Cheng, 2015:26). And in developing nations, school resource inputs were associated to schooling outcomes, Jennings (2015:732). The importance of school resources such as textbooks, student writing tools, teacher tertiary education, and school facilities was also stressed.

There is a need to understand how educational resources are allocated, distributed, and used within districts and schools, as data demonstrate that glaring discrepancies at the provincial level do not exist locally. This study examined discrepancies in resource allocation, distribution, and utilisation at school and local levels in Limpopo Province (Vos, 2015:57).

According to Kivunja (2015:1), no substantial or consistent association exists between disparities in school resources and student achievement. Baleni (2015:228) argues that increasing school resources will not improve school or student performance. Sadly, he failed to advance his point by ignoring the impact of resource allocation and utilisation on student accomplishment in public schools, particularly in developing nations. However, he was relying on most studies conducted in rich

countries. Adding resources does not improve educational outcomes, he concluded in all his reviews (Baleni, 2015:228).

Wanner and Palmer (2015:3564) state that access to school resources does not boost student achievement but rather allows schools to employ resources more efficiently. This means that how educational resources are allocated, distributed, and used determines whether they are effective in improving student accomplishment. It's worth noting that the preceding claim is based on studies undertaken in wealthy countries and has not been tested in developing countries (Wanner & Palmer, 2015:3564).

All the studies discussed above agree that school resources important and that more research should be done on them (Wanner & Palmer, 2015:3564). According to Whitworth and Chiu (2015:121), there is a considerable body of literature suggesting money alone will not boost student learning. Whitworth and Chiu (2015:121) suggest that while more money is spent on educational resources in poor nations, little is known about how useful these resources are in assisting students in completing their studies and acquiring important skills.

As is the case in most poor nations, especially South Africa, it is important to understand how school resources are allocated, distributed, and used in Limpopo secondary public schools. Thus, our study focused on school resourcing and student accomplishment in public schools (Barber, King & Buchanan, 2015:59).

- **National Views**

The WPET addresses constitutional principles by stating that state resources would be used to ensure quality education for all students (RSA, 1995). The South African Schools Act (Act 84 of 1996) also imposes further responsibilities on the state regarding school resourcing (RSA, 1996). Ensuring that learners' rights to education are properly exercised and that historical inequities in education provision are redressed is Section 34 (1) of SASA (Act (RSA, 1996a). The constitutional guarantees of equality and the right to remedy underpin governmental funding of public schools (RSA, 1996b).

National Norms and Standards for School Funding (NNSSF) Policy specifies that school resources will be dispersed equitably to ensure that students' rights to education are properly exercised (DoE, 2006). It does not direct school management or governing bodies how provincial education department resources should be distributed and used per class and per subject at the school level. Provincial governments think school administration and governing bodies can identify the most efficient and effective manner to distribute and use school resources within their educational institutions.

According to SASA, school boards must take all reasonable means to supplement state-supplied educational resources (RSA, 1996b). It is unfortunate that certain School Management Teams (SMTs) and School Governing Bodies (SGBs) that have received extra resources from both school allocation and fundraising are unable to use those resources to their full potential. In most public schools in Limpopo, learners' poor academic performance is attributed to inadequate resource allocation, distribution, and utilisation.

The DoE (2006) states that the education resource policy directs all public schools to ensure that allotted resources are efficiently distributed and used to provide quality education for all students. School resources support the government's commitment to international accords and the state constitution's need to guarantee equal access and quality education for all. Article 24 of the Universal Declaration of Human Rights 1948 expresses the right to education (Bakker & Van Eerde, 2015:429).

Other national tasks include redressing historical inequities and combating poverty through increased access to quality education. School administration and governing bodies should focus more on how government-allocated resources are distributed and used. The researcher examines predictors of student achievement and resource allocation, distribution, and utilisation in Limpopo public schools (Cross, 2015:353).

School resource provision and student accomplishment have garnered significant attention in recent years, particularly in developed and developing countries. There is no consensus on whether there is a direct relationship between school resources and student accomplishment (Fox & Alldred, 2015:399).

Sadly, most of these research that found no clear link between school resources and student achievement focused on wealthy countries and ignored the varying settings of poor countries (Chrusciel, Wolfe, Hansen, Rojek & Kaminski, 2015:24). Resources are vital for providing quality education, hence it is important to understand the determinants of school resourcing and student achievement in South African public schools. The relationship between resource allocation, distribution, and use in Limpopo public schools was studied.

For most black schools, the provision of school resources in public schools was inequitable and inadequate, according to Cobb-Clark and Jha (2016:251). Due to limited school resources, not all public schools, especially those serving African students, would get equitable funding. For many years, previous white schools benefited more than Coloured, Indian, and Black schools (Cobb-Clark & Jha, 2016:251).

Given the above historical realities, the new democratic government in 1994 had to focus on addressing shortages and inequalities in school resource provision and learner achievement to improve access, equity, redress, stability, and quality of education as part of overcoming apartheid's legacy, especially in rural and township public schools (Johnes, 2015:683).

Prior to the 1994 democratic elections, South African education resource allocation, distribution, and utilisation were highly uneven, owing largely to apartheid's separate development agenda. The apartheid administration was seen as favouring former white institutions while underfunding most black schools (Cross, 2015:353).

There has been a determined attempt by the government since the new democratic regime in 1994 to equalise school resource distribution and use (Monyooe, 2015:89). An increasing corpus of evidence confirms that there are still inequities and shortcomings in the allocation, distribution, and utilisation of school resources and student achievement across the education system (Jiyane, Fombad & Mugwisi, 2016:45).

Given the above, it is clear that research is required into the relationship between student accomplishment and school resource allocation, distribution, and use in South Africa, particularly in rural provinces like Limpopo. This study shows that little is known about the relationship between student accomplishment and resource allocation, distribution, and utilisation in public schools in rural provinces including Limpopo, Eastern Cape, and Mpumalanga (Jiyane, Fombad & Mugwisi, 2016:45).

This study intends to evaluate the relationship between school resource allocation, distribution, and utilisation and student achievement in Limpopo public schools. The findings on determinants of school resource provisioning (allocation, distribution, and utilisation) and learner achievement in Limpopo public secondary schools would address the information gaps indicated in the literature review (Martin, 2016).

Concerns over resource allocation, distribution, and utilization are growing in South Africa. Pre-apartheid educational resources were distributed based on race, causing inequities in resource allocation, distribution, and utilisation among different racial groups (Powell, Reddy & Juan, 2016:298).

In South Africa, the issue of race has ceased to plays a significant role in resource allocation, distribution, and utilisation, disparities in resource allocation, distribution, and utilisation seem to be continuing unabated, depending on class (Kearns, 2015:1). Prior to democracy, racial gaps in public school resource allocation and distribution were significant. A substantial number of schools, mostly in rural areas, have been declared “No Fee” Schools in post-democracy (Kearns, 2015:1).

The government allocates funding to “No Fee” Schools, therefore disadvantaged parents have no part in providing school financial resources (Reddy, 2016:86). A thorough examination of post-apartheid studies revealed that priority on school resource allocation has shifted from local to national and provincial levels (Vaz, 2015:1).

2.13 STUDY FRAMEWORK

The study used EPT. No standardized unit of outputs or inputs is used in education since there is no agreed-upon educational goal that can be translated into operational and measurable objectives. Inputs include qualified teachers and school infrastructure. The output is the students' achievement. In this study, inputs include head teachers' and instructors' experience and qualifications, physical facilities, and all materials utilized in teaching and learning, while outputs include students' exam grades. The challenge with input measures is that qualitative qualities are difficult to identify and measure.

2.14 CONCEPTUAL FRAMEWORK OF THE STUDY

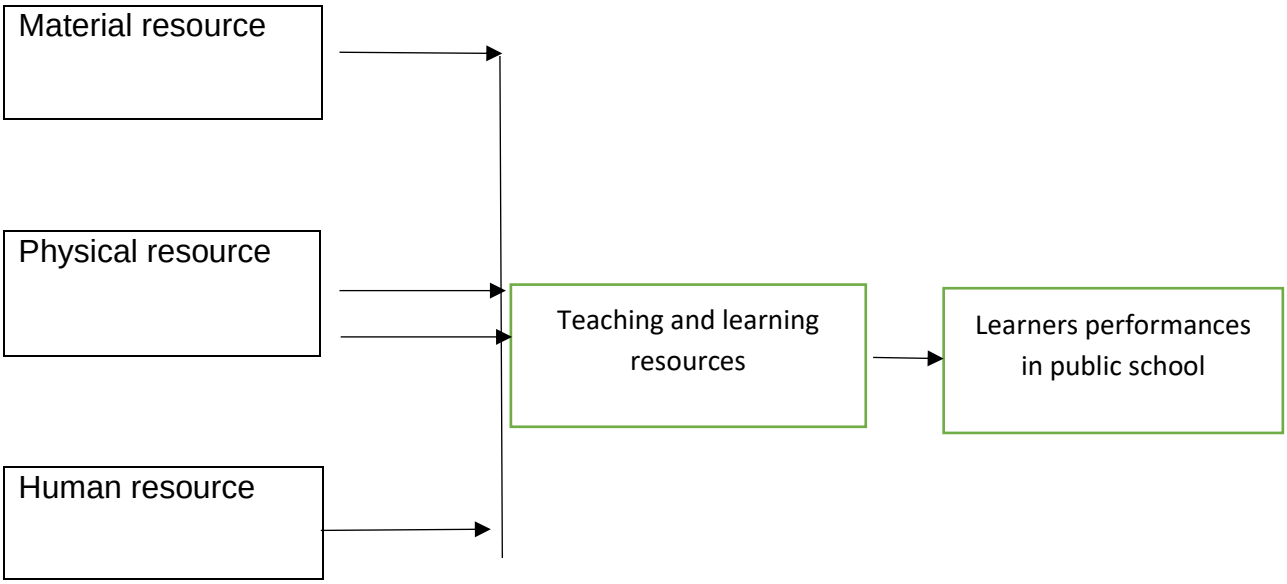

Figure 2.1: Latham's Concept of Resource Allocation

The conceptual framework depicts the impact of teaching and learning resources on student achievement. Independent variables include suitable teaching and learning materials, physical facilities, and qualified teachers (dependent variable). Teaching and learning materials include textbooks, teachers' guides and reference books. Excursions and field trips are also available. Their availability allows students to finish tasks, cover the course, and improve academic achievements. It is important to note that some physical facilities help create a conducive learning environment

while others directly hinder curriculum implementation. A school with proper physical infrastructure is likely to achieve higher educational results than one without. Teachers and other human resources are expected to use teaching and learning materials and physical facilities to improve student results.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter describes the study's design, methodology, data collection tools, population, sampling, and data processing methodologies. It also explains how the device was used to test the project's feasibility. Finally, the study's school profile is supplied. The study will discuss the research design, research approach, target population, sampling, validity of the instruments, validity, data analysis, ethical consideration and summary of the chapter.

3.2 RESEARCH DESIGN

Blythe (2014:703) defines a research design as a conceptual image or architectural representation of the study outcome. A research design identifies and outlines a researcher's procedures and steps for gathering information. The study's goal was to evaluate resource allocation issues in rural secondary schools.

3.3 THE RESEARCH APPROACH

Choosing a research strategy is crucial. Instead of just informing research design, the research approach allows the researcher to critically evaluate how each strategy contributes to or limits his/her study, allows him/her to meet the stated objectives, and develop an approach that best meets the research ‘s criteria (Lu, Berchoux, Marek & Chen, 2015:168). The investigation was quantitative. This form of research seeks to comprehend challenges from the perspectives of many people (Chandrasegaran et al., 2013:204).

The study used a descriptive survey design. Because educational activities take place in a social setting, descriptive research survey designs are suited for evaluating educational programs. This study design is a fact-finding study, according to Chandrasegaran et al. (2013:204). This methodology was perfect for this study

because it requires direct replies from participants while examining an existent occurrence without changing factors. The approach also allows participants to describe and comment on variables in detail (Raffelt, Schmitt & Meyer, 2016:204).

3.4 TARGET POPULATION

Zhao, Tian, Cai, Claggett and Wei (2013:527) define the target population as all relevant units of study or data. The study's target population included all 10 schools in Mopani District's Shamavunga Circuit. About 100 people were involved in the study, which targeted all secondary schools in Shamavunga Circuit, Mopani District, whose principals supervise the allocation of educational resources and implement educational methods in their schools. As implementers of the new learning curriculum, department heads were in the greatest position to give credible information on teaching and learning resource availability, utilization, and sufficiency.

3.5 SAMPLING

Purposeful sampling method was used for example, Robinson (2014:25) describes deliberate sampling as “selecting cases without needing or wishing to generalize to all similar cases”. As stated by Broome et al. (2013:794), the researcher must first critically assess the population's parameters before selecting a sample. Participants were chosen for this study based on their abilities to contribute to school resource allocation. Time and expense constraints made it impossible to include the entire population in the study, hence probability sampling was adopted (Crespi et al., 2016:545).

3.5.1 Sampling Criteria

Then there's Ellison, Colwell and Gotelli (2014:545) according to Ceulemans et al. (2014:151), some characteristics of the target demographic should be examined. The utilization of big numbers results in accurate information because with good sample organisation, time and effort can be focused to generate superior quality research. As an educator in one of the schools where the study was done, the researcher was better positioned to find data-rich informants.

3.5.2 Sample Size

As defined by Bengio et al. (2015:1171) and Majid (2016:11), a quantitative study involves statistical methodologies and large, typically random samples. So, from the entire population, 100 people were to be handed questionnaires. Quantitative research collects detailed responses to structured or closed-ended questionnaires. 100 participants were selected to ensure findings are generalizable to the wider population and contexts.

3.6 RESEARCH INSTRUMENTS

According to Bakker and Van Eerde (2015), questionnaires are a popular form of data collecting in education studies due to their relative ease of construction and administration to large populations. Data was collected using questionnaires and content analysis.

3.7 VALIDITY OF THE INSTRUMENTS

According to De Oliveira, Dexter, Bialek, and McCarthy (2015:208), validity refers to how correctly the study's data represent the variables. To measure construct validity, a test must actually measure what it promises to measure, i.e., give a true operationalization of theoretical constructs in a study. To verify validity, the researcher gave the equipment to experts to analyze. The feedback helped enhance the instruments. Based on the results of the piloting, vague or specific items, erroneous responses, or apparent shortcomings were modified or removed.

3.8 RELIABILITY

Reliability is the degree to which a technique produces consistent results over time (Huber & Mellace, 2016:398). The instruments used for both piloting and study were identical. The Pearson product correlation coefficient was obtained between the first and second results using the Statistical Package for Social Scientist (SPSS) software to measure dependability.

3.9 DATA ANALYSIS

Data analysis is the process of analyzing and assessing data produced by research instruments. After data collection, the instruments were examined for completeness and faults, sorted, coded, and entered into the computer using SPSS for analysis. This involves using descriptive statistics to generate frequencies and percentages in tables, charts, and graphs. The SPSS was preferred as it has the potential for the computation of correlational measures and associations Tables were created using open-ended questions and observations.

3.10 ETHICAL CONSIDERATION

The Shamavunga Circuit in Mopani District issued an Ethical Clearance. The acquisition of the ethical clearance preceded arrangements that were made to obtain permission to conduct the study at the context of study. The participants were given consent forms to complete (Guetterman, Fetters & Creswell, 2015) . This was to solicit voluntary participation from them that would avoid causing people damage or discomfort. The respondents were respected and informed that their participation was optional. The purpose of the study was explained to them so that they register their participation with full knowledge of the intended aim of the study (Guetterman, Fetters & Creswell, 2015). Respondents were assured that their information would be kept private and that data will be kept safe under lock and key. Respondents were encouraged to be open and honest.

3.11 SUMMARY

This chapter described the study's methods in detail. The research instruments, sample protocols, and data processing methodologies used were all disclosed. Next, the questionnaire data is analyzed, interpreted, and presented.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter pertains to the presentation and analysis of data that was collected through the use of questionnaires; data was analysed using the SPSS, version 24. The analysis covered the biographical information of participants and the responses of participants related to the influence of the allocation of resources on the performance of learners. The research questions and literature review guided the analysis framework.

4.2 BIOLOGICAL INFORMATION OF EDUCATORS PARTICIPANTS

4.2.1 Gender

As indicated in Figure 4.1, the respondents of the study consist of 64% (46) females and 36% (26) males.

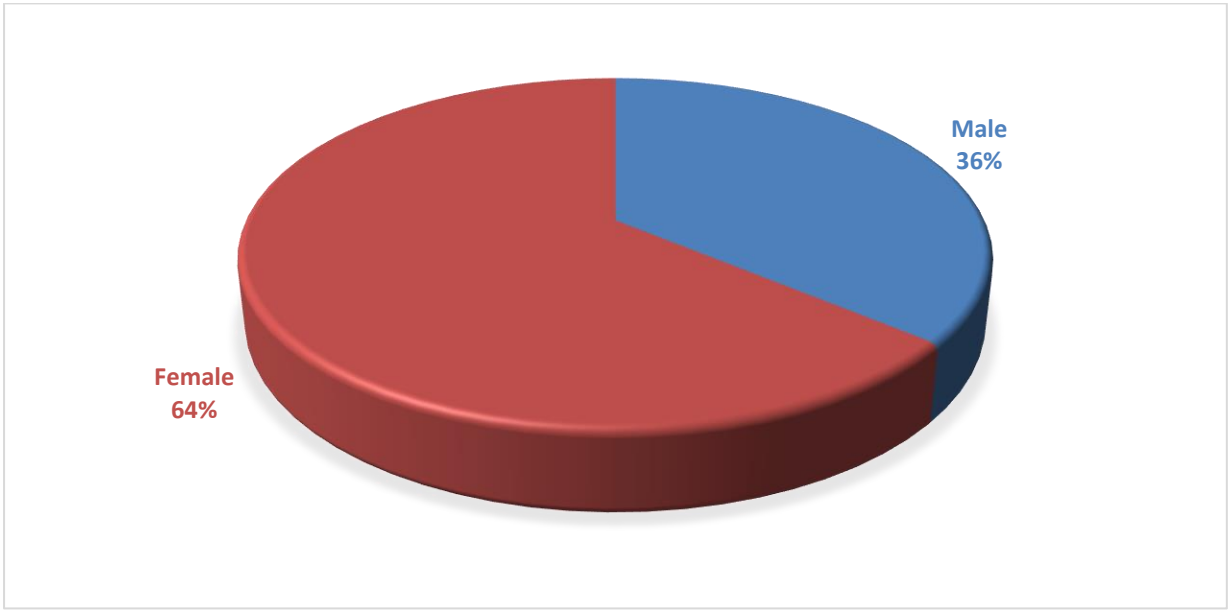

Figure 4.1: Gender

4.2.2 Highest Education Qualification

The highest education attained by participants is the common attribute used for profiling the respondents. Figure 4.2 indicates the findings on the level of education achieved by participants. The highest level of education, which is masters was 16.7%(12) of the participants; PGCE had majority at 292%(21); followed by honours at (22.2%). One participant had BEDFET; 2 had BETFET; while 8.3% (6) had accomplished BED; 5.6%(4) had attained JSID, whereas 6.9%(5) achieved STD and 6.9%(5) had achieved BEDFET.

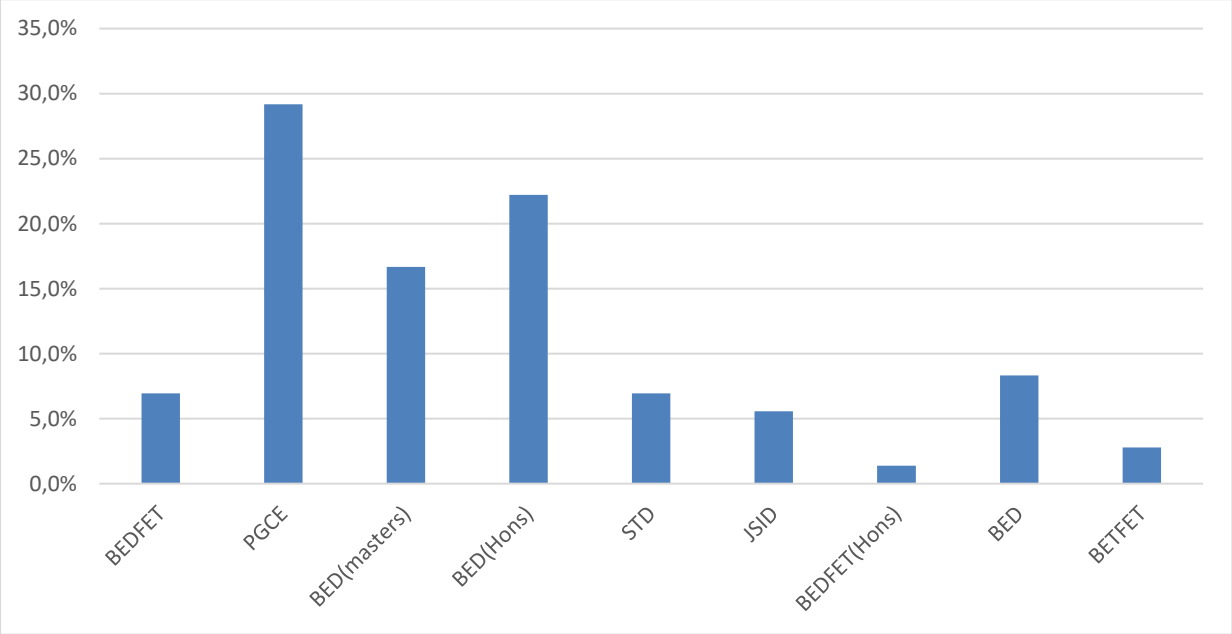

Figure 4.2: Highest Education Qualification

4.2.3 Age

Figure 4.3 indicates the age group of the participants. The study contains all the age groups within the teaching profession. The age group shows the youth, the young adult, the adult, and adults who are about to retire.

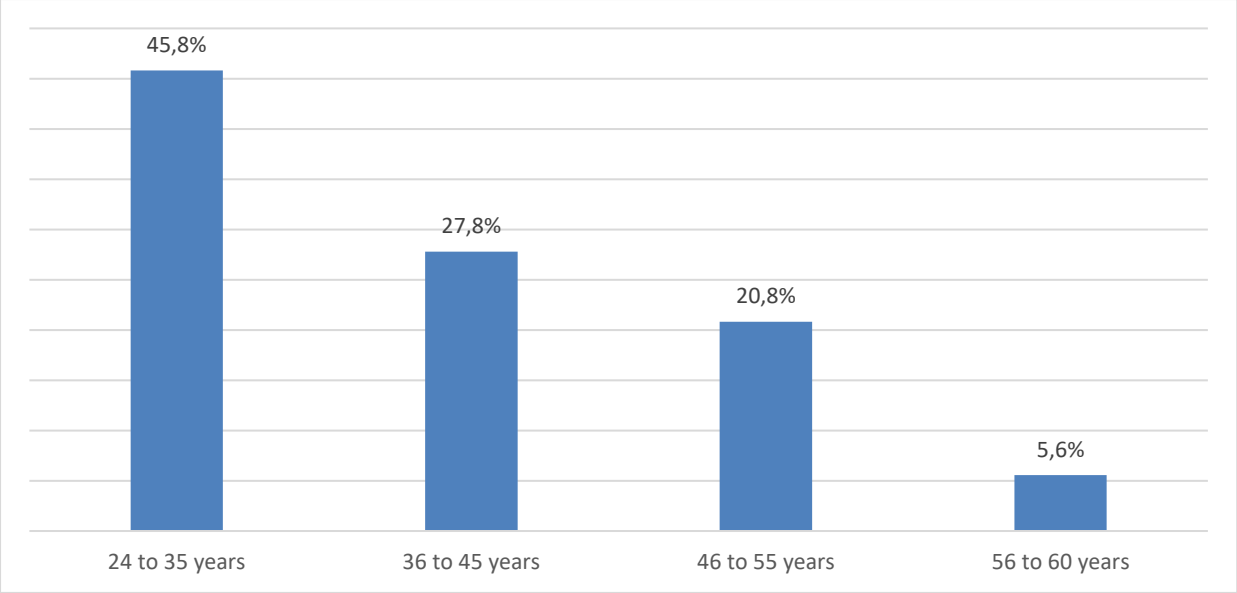

Figure 4.1: Age Group

The age group of 24 to 35 years had majority representation of 45.8% (33), followed by participants aged 36 to 45 years accounting for 27.8%(20), while the age group of 46 to 55 years had a representation of 20.8% and the 56 to 60 years had a representation of 5.6%. This characteristic is critical to reflect which age group is found to benefit more from the provided resources to leverage learner performance.

4.2.3 Reliability Analysis

Table 4.1: Reliability Analysis

Constructs	Cronbach's Alpha	Number of Items
1. Relationship between resource allocation and learner academic performance	0.468	4
2. Equal allocation and distribution of resources	0.245	5
3. Availability of learning resources enhances the effectiveness of teaching and learning	0.109	4
4. Challenges	0.364	4

The table shows the results of the Cronbach's alpha. It was observed that constructs 1 to 4 show Cronbach's alphas (measure of the internal consistency) less than the recommended 0.7, which implies that the items within the tool may not be measuring the same underlying construct, therefore, factor analysis or inferential statistics can be performed.

4.3 THE RELATIONSHIP BETWEEN ALLOCATION OF SCHOOL RESOURCES AND LEARNER ACHIEVEMENT

4.3.1 Views of Participants Regarding Resources Allocation

Table 4.2: Views of Regarding Resources Allocation

Variable	SA (%)	A (%)	UD (%)	D (%)	SD (%)	M	STD
There is a relationship between the availability of resources and learner academic performance in school.	33(45.8)	37(51.4)	0	0	2(2.8)	1.625	0.75875
There is a need for resources to be allocated on time to improve teaching and learning.	34(47.2%)	32(44.4%)	3(4.2%)	2(2.8%)	1(1.4%)	1.6667	0.80491
The cost of a resource for use in the classroom determines its effectiveness.	5(6.9%)	30(41.7%)	7(9.7%)	29(40.3%)	1(1.4%)	2.875	1.07386

Resources used in teaching and learning should be relevant to the content of teaching.	36(50%)	33(45.8%)	1(1.4%)	1(1.4%)	1(1.4%)	1.5833	0.72675
There should be enough resources such as classroom, library, laboratory, science centres to improve the understanding of learners	49(68.1%)	19(26.4%)	3(4.2%)	0	1(1.4%)	1.4028	0.70531

Table 4.2 shows the view of participants regarding resources allocation, majority, about 97% agreed that there is a relationship between the availability of resources and learners' academic performance in school, and only 2.8% disagreed. On the subject "There is need for resources to be allocated on time to improve teaching and learning" majority 91.3% agreed, while 4.2% were undecided and a mere 1% disagreed. About 48% were of the view that "The cost of a resource for use in the classroom determines its effectiveness", whereas 9.7% were undecided on the subject. Majority, 95.8% indicated that "Resources used in teaching and learning should be relevant to the content of teaching". That there should be enough resources such as classroom, library, laboratory, science centres to improve the understanding of learners, was according to 94.5% of the participants. This shows that there is a relationship between resource availability and learner performance.

4.3.2 Equal Allocation and Distribution of School Resources in Rural Public Schools Would Improve the Quality of Results

Table 4.3: Resource Allocation and Distribution

Variable	SA	A	UD	D	SD	Mean	STD
The allocation and distribution of resources to schools should be done in a uniform manner.	14(19.4)	29(40.3)	24(33.3)	5(6.9)	0	2.28	0.85
The availability of funding influences the allocation of resources.	4(5.6)	29(40.3)	11(15.3)	24(33.3)	4(5.6)	2.93	1.09
The socio-economic background of learners influences the allocation and distribution of resources in schools.	6(8.3)	28(38.9)	9(12.5)	25(34.7)	6(8.3)	2.90	1.14
The government policies ensure there is equal allocation and distribution of resources in schools.	11(15.3)	17(23.6)	5(6.9)	15(20.8)	11(15.3)	3.33	1.51

Majority of participants responded that the allocation and distribution of resources to schools should be done in a uniform manner, however, 33.3% were undecided and 6.9% disagreed. According to 45.9% of the participants, “The availability of funding influences the allocation of resources”, but 15.3% were undecided and 38.9% disagreed. Furthermore, 47.2% agreed that “The socio-economic background of learners influences the allocation and distribution of resources in schools”, while

34.7% were undecided. The study also revealed that participants at 38.9% agreed that “The government policies ensure there is equal allocation and distribution of resources in schools”, whereas 6.9% were undecided.

4.3.3 Availability of Learning Resources Enhances the Effectiveness of Learning

Table 4.4: Availability of Learning Resources

Variable	SA	A	UD	D	SD	Mean	STD
Physical resources are well allocated and distributed to enhance teaching.	9(12.5)	24(33.3)	4(5.6)	21(29.2)	14(19.4)	3.1	1.38
Human resources at schools including teachers have adequate skills for teaching and learning.	22(30.6)	28(38.9)	4(5.6)	10(13.9)	8(11.1)	2.36	1.35
There are quality material resources at my school to aid better learner performance.	7(9.7)	6(8.3)	5(6.9)	18(25)	36(50)	3.97	1.34
The availability of resources facilitates the use of learner-centred teaching methods.	29(40.3)	34(47.2)	4(5.6)	3(4.2)	2(2.8)	1.82	0.92
Schools that have adequate resources help to cultivate good behaviour in learners.	13(18.1)	19(26.4)	20(27.8)	15(20.8)	5(6.9)	2.72	1.19

The results indicate that the majority (45.8%) agree that “Physical resources are well allocated and distributed to enhance teaching”, while 5.6% were undecided and 48.6% disagreed. Approximately 70% of the participants mentioned that “Human resources at schools, including teachers have adequate skills for teaching and learning” while 5.6% were undecided. The study also revealed that the majority (75%) indicated that there is no quality material resources at their school to aid better learning performance; on contrary, the majority of the participants (87%) indicated that “The availability of resources facilitates the use of learner-centred teaching methods” and 44.5% mentioned that “Schools that have adequate resources help to cultivate good behaviour in learners”, while 27.7% disagreed with the statement.

4.3.4 Challenges Experienced in the Allocation of Resources

Table 4.5: Challenges Experienced in the Allocation of Resources

Variable	SA	A	UD	D	SD	Mean	STD
There are many teachers who are not familiar with teaching inclusive education.	13(18.1)	21(29.2)	14(19.4)	17(23.6)	7(9.7)	2.78	1.27
The resources for learners with specific learning needs are inadequate in schools.	15(20.8)	33(45.8)	9(12.5)	9(12.5)	6(8.3)	2.42	1.20
The understanding and participation of parents in the education of their children with special needs is inadequate.	17(23.6)	28(38.9)	12(16.7)	15(20.8)	0	2.35	1.06
Negative attitude about disability affects the allocation and distribution of resources at school	13(18.1)	31(43.1)	13(18.1)	12(16.7)	3(4.2)	2.46	1.10

The study revealed that there are many teachers who are not familiar with teaching inclusive education according to 47.2% of the participants; 19.4% were undecided and 33.3% disagreed. The number of 66.6% of the participants indicated that “The resources for learners with specific learning needs are inadequate in schools”, while 21.1% mentioned otherwise. Similarly, majority, 62.5%, indicated that understanding and participation of parents in the education of their children with special needs is inadequate. On the subject “Negative attitude about disability affects the allocation and distribution of resources at school”, majority, 61.2% agreed while 18% were undecided. It is therefore, established that it is not just the allocation of resources that influence learner performance but the attitude of teachers as well.

4.4 BIOLOGICAL INFORMATION OF SGB PARTICIPANTS

4.4.1 Gender for SGB Participants

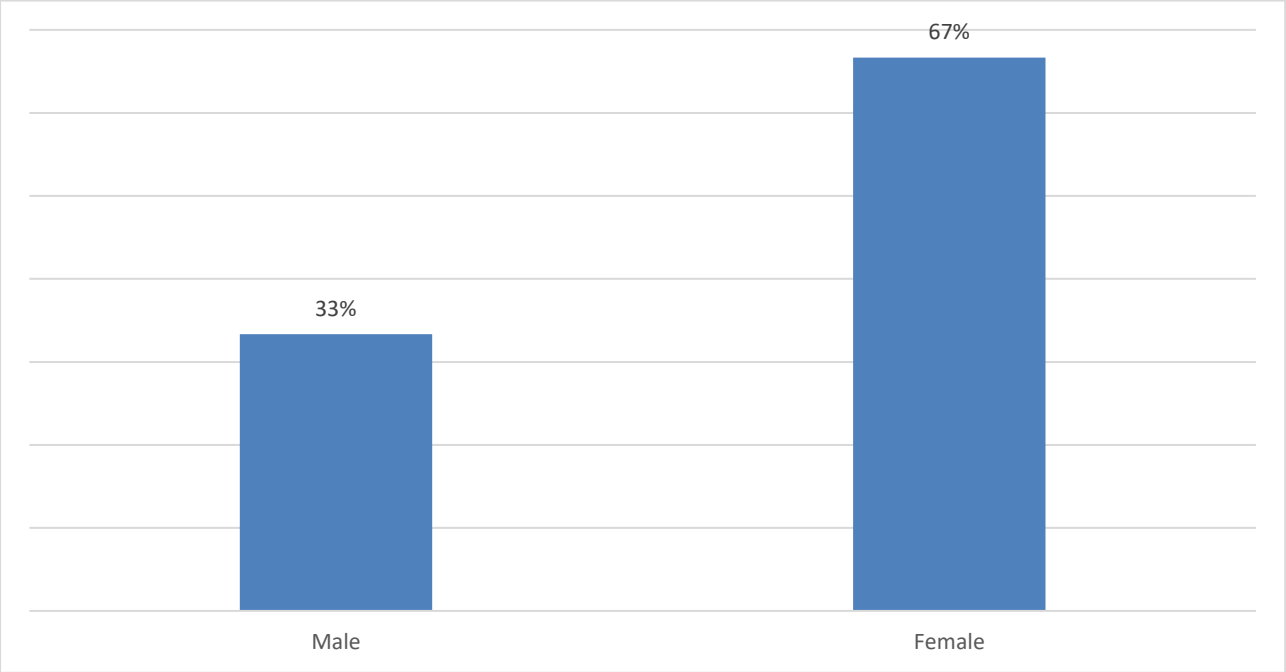

Figure 4.4: Gender of SGB Participants

A total number of 30 participants were used in this study, 33% were males and 67% were females.

4.4.2 Highest Academic Qualification for SGB Participants

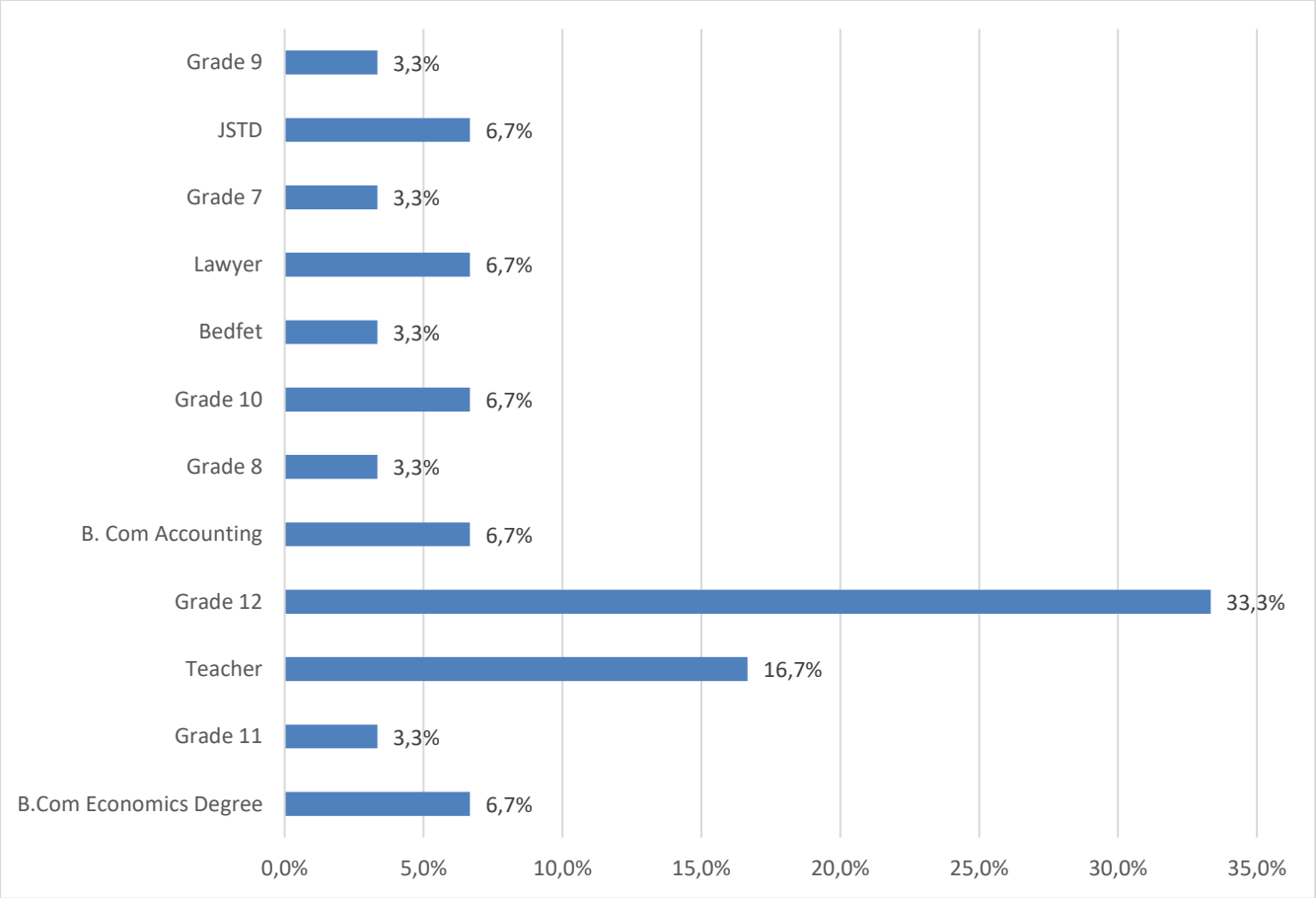

Figure 4.5: Highest Academic Qualification for SGB Participants

Majority (33.3%) of the participants in this group had attained Grade 12 as their highest education level, followed by 16.7% who had attained a teaching qualification, then participants who attained B.Com Economics degree, B.Com Accounting, lawyers and JSTD, each accounted for 6.7% of the participants. Finally, participants with Grade 9, 7, BEDFET, Grade 8 and Grade 11 each accounted for 3.3%.

4.4.3 Age for SGB Participants

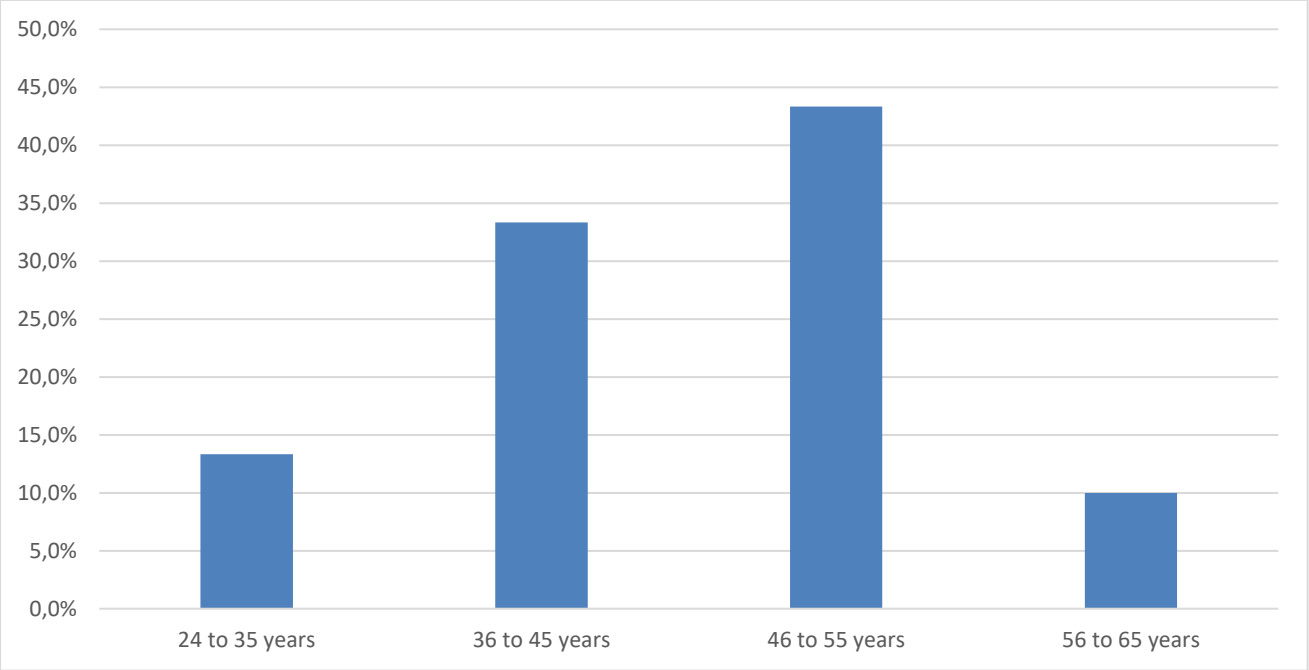

Figure 4.6: Age of SGB Members

In terms of the age groups, majority (43.3%) of the participants were from the 46 to 55 years age group; 33.3% denotes the 36 to 45 years age group, followed by the 24 to 35 years accounting for 13.3% and the 56 to 65 years age group accounting for 10%.

4.5 RELATIONSHIP BETWEEN THE AVAILABILITY OF RESOURCES AND THE LEARNER ACADEMIC PERFORMANCE IN SCHOOLS

4.5.1 Availability of Resources

Table 4.6: Availability of Resources

VARIABLE	SA	A	UD	D	SD	MEAN	STD

There is a relationship between the availability of resources and learner academic performance in schools.	13(43.3)	17(56.7)	0	0	0	1.57	0.50
Resources should be allocated on time to improve teaching and learning.	15(50)	13(43.3)	0	0	2(6.7)	1.70	1.02
The cost of a resource for use in classroom determines its effectiveness.	6(20)	13(43.3)	3(10)	6(20)	2(6.7)	2.50	1.22
Resources used in teaching and learning should be relevant to the content of teaching.	11(36.7)	15(50)	1(3.3)	2(6.7)	1(3.3)	1.90	0.99
We hold meetings to discuss procurement of resources and performance of learners.	11(36.7)	9(30)	3(10)	5(16.7)	2(6.7)	2.27	1.31
An assessment is made to check the allocation of resources and performance of learners.	3(10)	16(53.3)	3(10)	7(23.3)	1(3.3)	2.57	1.07

The results revealed that there is a relationship between the availability of resources and learner academic performance in schools, for participants (93.3%) recognised that resources should be allocated on time to improve teaching and learning. Majority, 63.3% stated that the cost of a resource for use in classroom determines its effectives; resources used in teaching and learning should be relevant to the content of teaching was mentioned by majority (86.7%). The results also revealed that SGBs

hold meetings to discuss procurement of resources and performance of learners, according to 66.7% participants.

4.5.2 Allocation of Resources

Table 4.7: Allocation of Resources

VARIABLE	SA	A	UD	D	SD	MEAN	STD
The allocation and distribution of resources to schools is done in a uniform manner.	5(16.7)	11(36.7)	3(10)	7(23.3)	4(13.3)	3.3	1.2
The availability of funding influences the allocation of resources.	1(3.3)	9(30)	5(16.7)	10(33.3)	5(16.7)	3.5	1.2
There is a resource allocation at school.	0	10(33.3)	2(6.7)	11(36.7)	7(23.3)	3.7	1.1
The government policies ensure there is equal allocation and distribution of resources in schools.	1(3.3)	5(16.7)	4(13.3)	13(43.3)	7(23.3)	2.8	1.3

According to 63.3% of the sample, the SGB assess to check the allocation of resources and performance of learners. Similarly, 63.3% alluded that the allocation and distribution of resources to schools is done in a uniform manner, but 36.6% indicated otherwise. It was 33.3% of the sample's view that the availability of funding influences the allocation of resources, but 16.7% of the participants were undecided on the subject while 50% disagreed. The study revealed that there is resource allocation at their school (33.3%), however, majority (60%) indicated otherwise.

4.5.3 Policies in Existence Regarding Allocation of Resources

Table 4.8: Policies in Existence Regarding Allocation of Resources

VARIABLE	SA	A	UD	D	SD	MEAN	STD
Physical resources are well allocated and distributed to enhance teaching.	7(23.3)	18(60)	2(6.7)	2(6.7)	1(3.3)	2.07	0.94
Human resources at school including teachers have adequate skills for teaching and learning.	4(13.3)	13(43.3)	4(13.3)	5(16.7)	4(13.3)	2.73	1.28
There are quality material resources at my school to aid better learner performance.	2(6.7)	6(20)	2(6.7)	8(26.7)	12(40)	3.73	1.36
The availability of resources facilitates the use of learner-centred teaching methods.	3(10)	17(56.7)	4(13.3)	3(10)	3(10)	2.53	1.14
Schools that have adequate resources help to cultivate good behaviour in learners.	10(33.3)	6(20)	4(13.3)	6(20)	4(13.3)	2.60	1.48

Table 4.8 illustrated the responses to the questions about policies in existence regarding allocation of resources. That the government policies ensured there is equal allocation and distribution of resources in schools was acknowledged by 20% of the sample, whereas majority, 66.6%, specified otherwise. Majority of the participants about 83% declared that physical resources are well allocated and distributed to enhance teaching. Pertaining to skills, most of the participants

(56.6%) avowed that “human resources at school including teachers have adequate skills for teaching and learning”, only 30% declared otherwise. Approximately 67% of the sample acknowledged that “The availability of resources facilitates the use of learner-centred teaching methods” and about 27% declared that “There is quality material resources at my school to aid better learner performance” whereas 66.7% affirmed negative. Nearly half of the sample (53.3%) acknowledged that “Schools that have adequate resources help to cultivate good behaviour in learners”. This behaviour may be propelled by the presence of resources which assists learners to master taught concepts, and not frustrated by learning difficulty which normally goes with resource shortage.

4.5.4 Teaching of Inclusive Education

Table 4.9: Inclusive Education Teaching

VARIABLE	SA	A	UD	D	SD	MEAN	STD
There are many teachers who are not familiar with the teaching of inclusive education.	5(16.7)	18(60)	1(3.3)	5(16.7)	1(3.3)	2.30	1.06
The resources for learners with specific learning needs are inadequate in schools.	12(40)	13(43.3)	1(3.3)	1(3.3)	3(10)	2.00	1.23
The understanding and participation of parents in the education of their children with special needs is inadequate.	4(13.3)	6(20)	5(16.7)	12(40)	3(10)	3.13	1.25
Negative attitudes about disability affect the allocation and distribution of resources at school.	9(30)	10(33.3)	4(13.3)	3(10)	4(13.3)	2.43	1.38

The result revealed that there are many teachers who are not familiar with the teaching of inclusive education (76.7%), whereas 16.7% of the sample was neutral on the subject. Similarly, majority, 83%, indicated that the resources for leaners with specific learning need are inadequate in schools; in addition, 33.3% mentioned that the understanding and participation of parents in the education of their children with special needs is inadequate. Negative attitude about disability affects the allocation and distribution of resources at school, was alluded to by 63.3% of the sample.

4.6 CHAPTER SUMMARY

This chapter analysed the research data collected through questionnaires. The presentation process began with an analysis of the biographical information and then questions related to the influence of resource allocation on the performance of learners. The analysis framework was guided by the research questions research objectives and literature related to the phenomenon under study.

CHAPTER 5

SUMMARY OF THE FINDINGS, CONCLUSION, RECOMMENDATIONS

5.1 INTRODUCTION

The chapter offers a summary of the findings of the study based on an investigation of how resources are allocated in rural secondary schools at Shamavunga Circuit schools. This chapter also provides conclusion and recommendations for the improvement of resource allocation to enhance the performance of learners, conclusions will be made derived from the results of the study and literature review recommendations will further be made taking cognisance of the research results, theoretical framework and literature review.

5.2 SUMMARY OF THE FINDINGS OF THE STUDY

This section discusses a summary of research findings as guided by the objectives of the study and literature review.

5.2.1 The Relationship Between the Allocation of School Resources and Learner Achievement

The study revealed a positive relationship between resource allocation and the academic performance of learners. A majority of learners agreed that there is a relationship between the provision of learning resources and the academic performance of learners in rural schools. However, only a few participants disagreed with this research item. The study also showed that resources need to be allocated on time to improve teaching and learning in schools. The cost of the resources was found to determine their effective. This was, however disputed by few participants who felt that the cost of resources does not guarantee their effectiveness. It also emerged that the teaching and learning resources should be relevant to the content of teaching. These resources have to be adequate for use in the classroom. Such resources include classrooms, libraries, laboratories, science centres to improve the

understanding of learners. SGBs indicated that they hold meetings on procurement of resources to facilitate the education of learners.

5.2.2 Equal Allocation and Distribution of School Resources in Rural Public Schools Improve the Quality of Results

Participants illustrated that the allocation and distribution of resources to schools should be done in a uniform manner. Very few participants disagreed with the research item that resources have to be allocated and distributed in a uniform to enhance the performance of learners. It was also shown that the availability of funding influences the allocation of resources. It is however, significant that many participants disagreed that equal allocation and distribution of resources influences the performance of learners in rural schools. It was further observed that the socio-economic background of learners influences the allocation and distribution of resources in schools. A number of participants were undecided on whether the socio-economic background of learners influences the achievement of learners in schools. The study also revealed that the government policies ensure there is equal allocation and distribution of resources in schools. SGB were shown to assess to check on the allocation of resources and performance of learners

5.2.3 Availability of Learning Resources Enhances the Effectiveness of Learning

The results of the study indicated that the majority of participants agreed that physical resources are well allocated and distributed to enhance teaching and learning in rural schools. A lot more participants refuted the view that resources are well distributed to support teaching. A majority of participants mentioned that human resources at school including teachers have adequate skills for teaching and learning. The study also revealed that a majority indicated that there are no quality material resources at schools to aid better learning performance. On the other hand, a majority of the participants indicated that the availability of resources facilitates the use of learner-centred teaching methods. In the same vein, schools that have adequate resources help to cultivate good behaviour in learners disagreed with the statement.

5.2.4 Challenges Experienced in the Allocation of Resources

The study revealed that there are many challenges, including teachers that are not familiar with the teaching of inclusive education. There were dome participants, however that did not view the issue of inclusive education as contributing to challenges in the allocation and distribution of resources. The study revealed that the resources for learners with specific learning needs are inadequate in schools. This posed an obstacle with regard to the allocation and distribution of resources. The understanding and participation of parents in the education of their children with special needs is inadequate was also shown as a challenge in resource distribution. This emanated from the negative attitude about disability which is perceived as affecting the allocation and distribution of resources at schools.

5.3 CONCLUSION OF THE STUDY

This section discusses the conclusion of the study on an investigation of the allocation of resources om the academic performance of learners.

5.3.1 The Relationship Between the Allocation of School Resources and Learner Achievement in Public Schools

The study concludes that there is a positive relationship between resource allocation and the academic performance of learners. This relationship suggests that schools with resources that are well allocated and distributed have learners that fare well academically, while those that have poor resource allocations experience low academic performance. It can be concluded that resources need to be allocated on time to improve teaching and learning in schools. There are mixed views on whether the cost of the resources determines their effective. It can also be concluded that the teaching and learning resources should be relevant to the content of teaching. The resources have to be enough for use in the classroom. Such resources include classrooms, libraries, laboratories, science centres to improve the understanding of learners. It is critical for members of the SGBs to hold meetings on procurement of resources to facilitate the education of learners.

5.3.2 Equal Allocation and Distribution of School Resources in Rural Public Schools Improve the Quality of Results

The study concludes that the allocation and distribution of resources to schools should be done in a uniform manner. There are however different perceptions on whether resources that are allocated and distributed in a uniform manner to enhances the performance of learners. It is also concluded that the availability of funding influences the allocation of resources. It is further believed that the socio-economic background of learners influences the allocation and distribution of resources in schools. There is lack of clarity on whether the socio-economic background of learners influences the achievement of learners in schools. The study also concludes that the government policies ensure there is equal allocation and distribution of resources in schools. SGBs play their role to assess and check the extent to which the allocation of resources is done properly to influence the performance of learners

5.3.3 Availability of Learning Resources Enhances the Effectiveness of Learning

The study concludes that proper and allocation and distribution of physical resources enhance teaching and learning in rural schools. This appears to carry weight despite reservations being made with regard to the positive influence of resource allocation on academic performance of learners it can be concluded that human resources at schools, including teachers have adequate skills for teaching and learning. The study also concludes that there is lack of quality material resources at schools to aid better learning performance. This situation is prevailing despite the availability of resources saving to facilitate the use of learner-centred teaching methods. Schools that have adequate resources are perceived to help to cultivate good behaviour in learners,

5.3.4 Challenges Experienced in the Allocation of Resources

The study concludes that there are many challenges, including teachers that are not familiar with the teaching of inclusive education. Some individuals however are not convinced that the issue of inclusive education contributes to a challenge in the allocation and distribution of resources. The study concludes that the resources for learners with specific learning needs are inadequate in schools. This causes a challenge also pertaining to the allocation and distribution of resources. The understanding and participation of parents in the education of their children with special needs is inadequate to help in the allocation and resource distribution in schools. This is caused by the negative attitudes that are flouted about disability further affects the allocation and distribution of resources at schools.

5.4 RECOMMENDATIONS

The recommendations of this study are guided by the research objectives, research questions and literature review as follows:

- The Department of Education needs to realise the positive relationship between resource allocation and the academic performance of learners to facilitate the procurement and distribution of needed resources in schools
- The schools should set up internal committees to preside over proper allocation and distribution of teaching and learning resources. They should ensure that quality resources are distributed equitably.
- The Department of Education, through school administrations need to ensure that resources are distributed on time. This must occur especially before opening of schools for the term to expedite instructional delivery.
- The SGBs should aggressively play the advocacy role to conscientise the school community on the need to avail relevant and effective resources to learners in schools.
- The Department of Education should increase financial allocations to schools for use in the development of resources and equipment, and further closely monitor schools to avoid cases of mismanagement. This is particularly urgent for schools in under resourced communities.

- The school need to encourage parents to participate actively in the education of their children. This would enable them to understand their needs and assist with needed materials
- The school should establish income generating programmes to source funding to compliment the efforts of government in the education of learners. This must be done to ensure learners with special needs are adequately accommodated in teaching and learning.

5.5 LIMITATIONS OF THE STUDY

This study, like most research endeavours experienced some challenges. The study comprised of only educators and members of the SGBs that participated in the provision of the needed research information. This presented limitations in the triangulation of data. The study also focused on schools in rural contexts, suggesting that some of the findings may not adequately relate to schools outside that research environment. Quantitative approaches, methods and processes were used in this study. This means that qualitative aspects were subdued in their use in investigating the allocation and distribution of resources in schools. The findings of the study are however, generalizable from the use of quantitative methods.

5.6 SUGGESTIONS FOR FURTHER STUDY

This study offers a rich avenue for further research. It provides opportunity for other studies to be conducted in the same field. A mixed method study or qualitative study can be carried out. Such studies could offer depth in terms of their communicative strength, for qualitative research, as well as complimentary power, for mixed methods research. Other stakeholders in the education of learners could be incorporated in the study to yield new and unique findings.

5.7 SUMMARY OF THE CHAPTER

This chapter presented a summary of research findings, conclusion and recommendations of the study. It also focused limitations of the study and

opportunities for further study. The findings were based on an investigation of the allocation and distribution of resources on the performance of learners in rural schools. The study generally showed that the allocation of resources has a relationship with the performance of learners. These resources need to be relevant, adequate and distributed on time for use by both educators and learners, in the quest to improve learner performance.

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APPENDICES

APPENDIX A: STATEMENT OF CONSENT

I have read the information provided above. I have had the opportunity to ask for information about the study to which I have been answered to my satisfaction. I voluntarily agree to participate in this study.

…… ……..

Signature of Participants Date

…… ……..

Signature of Researcher Date

APPENDIX B: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

P.O Box 1896
Malamulele
0982
06 March 2019

SHAMAVUNGA CIRCUIT
Private Bag X1195
Giyani
0826

Dear sir / Madam

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH IN YOUR AREA

This letter serves to request for permission to conduct study entitled**: INVESTIGATION ON HOW TEACHING AND LERANING RESOURCES ARE ALLOCATED.**

I hereby formally request permission to carry out the above study in Shamavunga Circuit particularly in Mopani District Municipality for the ***Master's degree of Education and Management*** in the school of education at the University of Venda.

The purpose of the study is to investigates**: INVESTIGATION ON HOW TEACHING AND LERANING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT** in different areas of in Shamavunga Circuit in Limpopo province of South Africa. This study is quite significant because the findings will not be used for academic qualifications only but can also be used to develop interventions to improve that educators should not resigned. Hoping that my request will be considered. For more enquiries contact **Mrs Tsiku Phylis: 0794078747**

Kindest regards

……

APPENDIX C: PERMISSION TO CONDUCT RESEARCH FROM DEPARTMENT OF EDUCATION

LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION

CONFIDENTIAL

Ref: 2/2/2 Enq: Makola MC Tel No: 015 290 9448 E-mail:MakolaMC@edu.limpopo.gov.za

Tsiku P
P O Box 1896
Malamulele
0982

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

1. The above bears reference.

2. The Department wishes to inform you that your request to conduct research has been approved. Topic of the research proposal: **"INVESTIGATION ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED "**

3. The following conditions should be considered:

3.1 The research should not have any financial implications for Limpopo Department of Education.

3.2 Arrangements should be made with the Circuit Office and the School concerned.

3.3 The conduct of research should not in anyhow disrupt the academic programs at the schools.

3.4 The research should not be conducted during the time of Examinations especially the fourth term.

3.5 During the study, applicable research ethics should be adhered to; in particular the principle of voluntary participation (the people involved should be respected).

Cnr 113 Biccard & 24 Excelsior Street, POLOKWANE, 0700, Private Bag X 9489, Polokwane, 0700
Tel:015 290 7600/ 7702 Fax 086 218 0560

The heartland of Southern Africa-development is about people

3.6 Upon completion of research study, the researcher shall share the final product of the research with the Department.

4 Furthermore, you are expected to produce this letter at Schools/ Offices where you intend conducting your research as an evidence that you are permitted to conduct the research.

5 The department appreciates the contribution that you wish to make and wishes you success in your investigation.

Best wishes.

Dederen KO
Head of Department

03/11/2021
Date

Cnr 113 Biccard & 24 Excelsior Street, POLOKWANE, 0700, Private Bag X 9489, Polokwane, 0700
Tel:015 290 7600/ 7702 Fax 086 218 0560

APPENDIX D: LETTER OF INFORMATION FOR PARTICIPANTS

CONSENT

Dear Participant

I am **TSIKU PHYLLIS**, currently completing my ***Master's Degree in Education and Management*** at University of Venda, within the school of education. I am carrying out**: INVESTIGATION ON HOW TEACHING AND LERANING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT.**

I humbly request you to answer the following questions as honestly as possible for the purpose of this research which will benefit the community and the whole country as well. I truly assure you that the information given will be treated with confidentiality and your details will not be revealed at any time.

Participation in this project is not compulsory. You are at liberty to stop from participating at any time if you may choose to do so. You do not have to answer all the questions you do not feel comfortable with throughout the duration of the study.

Your cooperation in this regard is most appreciated.

…… ……..

Signature of Participants Date

…… ……..

Signature of Researcher Date

APPENDIX E: LETTER OF CONSENT

PROJECT TITLE: INVESTIGATION ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT

I have received the letter of information and invitation to participate in your study and the details of study explained to me have satisfactory answered all my questions about the study and I understand that I may ask further questions as the study progresses. I understand that allowing for my responses to be used in this study I am contributing positively to a body of knowledge about*:* **INVESTIGATION ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT** and I also understand that I am free to withdraw from the study at any time, or to decline to answer any particular questions in the study.

I agree to provide information on the understanding that it is completely confidential; my real name will not be used in the dissertation, and that the information I provide will only be used for the purpose of this study.

I …….. Agree/Do not agree (tick the option desired) to be interviewed for the purposes of this study and to complete the interview guide / schedule.

Signature …… Date: …….

For further information, contact me at: 0794078747

APPENDIX F: QUESTIONNAIRE FOR EDUCATORS ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT

SECTION 1: BIOGRAPHICAL DATA

Kindly complete each item below by providing the required information:

1.1 Gender: Male ☐ Female ☐

1.2 Age (in years): .....

1.3 Highest academic qualification……..

SECTION 2: Statements that relate to an **investigation on how teaching and learning resources are allocated at Shamavunga circuit**

Select a category that closely represents your perception or understanding in regard to an **investigation on how teaching and learning resources are allocated at Shamavunga circuit. M**ark with an X in the appropriate space from strongly disagree, disagree, undecided, agree to strongly agree.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Statements based on the relationship between resource allocation and learner academic performance						
1. There is a relationship between the availability of resources and learner academic performance in schools.						
2. There is need for resources to be allocated on time to improve teaching and learning						
3. The cost of a resource for use in the classroom determines its effectiveness						
4. Resources used in teaching and learning should be relevant to the content of teaching						
5. There should be enough resources for use such as classrooms, library, laboratory, science centre to improve the understanding of learners						
Statements based on the equal allocation and distribution of school resources in rural public schools improve the quality of results produced by learners.						
1. The allocation and distribution of resources to schools should be done in a uniform manner.						
2. The availability of funding influences the allocation of resources.						
3. The socio-economic background of learners influences the allocation and distribution of resources in schools.						
4. The government policies ensure there is equal allocation and distribution of resources in schools						
Statements on whether the availability of learning resources enhances the effectiveness of teaching and learning.						
1. Physical resources are well allocated and distributed to enhance teaching.						
2. Human resources at school including teachers have adequate skills for teaching and learning.						
3. There is quality material resources at my school to aid better learner performance.						

4. The availability of resources facilitates the use of learner centred teaching methods.					
5. Schools that have adequate resources help to cultivate good behaviour in learners					
Statements based on challenges faced by teachers in teaching inclusive education					
1. There are many teachers that are not familiar with the teaching of inclusive education.					
2. The resources for learners with specific learning needs are inadequate in schools					
3. The understanding and participation of parents in the education of their children with special needs in inadequate.					
4. Negative attitudes about disability affect the allocation and distribution of resources at school.					

Thank you for filling out this questionnaire

APPENDIX G: QUESTIONNAIRE FOR SCHOOL GOVERNING BODIES (SGBs) ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT

SECTION 1: BIOGRAPHICAL DATA

Kindly complete each item below by providing the required information:

1.1 Gender: Male ☐ Female ☐

1.2 Age (in years): .....

1.3 Highest academic qualification……..

SECTION 2: Statements that relate to an **investigation on how teaching and learning resources are allocated at Shamavunga circuit**

Select a category that closely represents your perception or understanding in regard to an **investigation on how teaching and learning resources are allocated at Shamavunga circuit. M**ark with an X in the appropriate space from strongly disagree, disagree, undecided, agree to strongly agree.

	Strongly agree	Agree	Undecided	Disagree	Strongly disagree

Statements based on the relationship between resource allocation and learner academic performance						
6. There is a relationship between the availability of resources and learner academic performance in schools.						
7. Resources should be allocated on time to improve teaching and learning						
8. The cost of a resource for use in the classroom determines its effectiveness						
9. Resources used in teaching and learning should be relevant to the content of teaching						
10. We hold meeting to discuss procurement of resources and their use at school						
11. An easement is made to check the allocation of resources and performance of learners						
Statements based on the equal allocation and distribution of school resources in rural public schools improve the quality of results produced by learners.						
5. The allocation and distribution of resources to schools is done in a uniform manner.						
6. The availability of funding influences the allocation of resources.						
7. There is a resource allocation plan at the school						
8. The government policies ensure there is equal allocation and distribution of resources in schools						
Statements on whether the availability of learning resources enhances the effectiveness of teaching and learning.						
6. Physical resources are well allocated and distributed to enhance teaching.						
7. Human resources at school including teachers have adequate skills for teaching and learning.						
8. There is quality material resources at my school to aid better learner performance.						

9. The availability of resources facilitates the use of learner centred teaching methods.					
10. Schools that have adequate resources help to cultivate good behaviour in learners					
Statements based on challenges faced by teachers in teaching inclusive education					
2. There are many teachers that are not familiar with the teaching of inclusive education.					
5. The resources for learners with specific learning needs are inadequate in schools					
6. The understanding and participation of parents in the education of their children with special needs in inadequate.					
7. Negative attitudes about disability affect the allocation and distribution of resources at school.					

Thank you for filling out this questionnaire

APPENDIX H: UNIVERSITY ETHICAL CLEARANCE

ETHICS APPROVAL CERTIFICATE

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:
Ms. P Tsiku

STUDENT NO:
11532972

PROJECT TITLE: Investigation on how teaching and learning resources are allocated at Shamavunga Circuit.

ETHICAL CLEARENCE NO: SEDU/21/CSEM/08/2307

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr AT Nesengani	University of Venda	Supervisor
Prof TS Mashau	University of Venda	Co - Supervisor
Ms. P Tsiku	University of Venda	Investigator – Student

Type: Masters Research
Risk: Minimal risk to humans, animals or environment (Category 2)
Approval Period: July 2021 – July 2023

The Research Ethics Social Sciences Committee (RESSC) hereby approves your project as indicated above.

General Conditions
While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following.

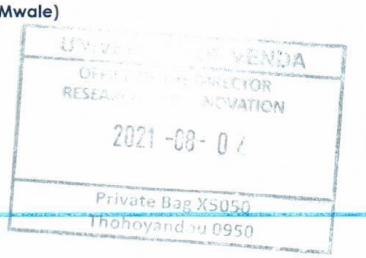
- The project leader (principal investigator) must report in the prescribed format to the REC:
  - Annually (or as otherwise requested) on the progress of the project, and upon completion of the project
  - Within 48hrs in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
  - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the REC. Would there be deviated from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date; a new application must be made to the REC and new approval received before or on the expiry date.
- In the interest of ethical responsibility, the REC retains the right to:
  - Request access to any information or data at any time during the course or after completion of the project,
  - To ask further questions; Seek additional information; Require further modification or monitor the conduct of your research or the informed consent process.
  - withdraw or postpone approval if:
  - Any unethical principles or practices of the project are revealed or suspected.
  - It becomes apparent that any relevant information was withheld from the REC or that information has been false or misrepresented.
  - The required annual report and reporting of adverse events was not done timely and accurately,
  - New institutional rules, national legislation or international conventions deem it necessary

ISSUED BY:
UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE
Date Considered: April 2021

Name of the RESSC Chairperson of the Committee: Dr M. Manjoro (Mwale)

Mwale

Signature: .....



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PRIVATE BAG X5050, THOHOYANDOU, 0950, LIMPOPO PROVINCE, SOUTH AFRICA
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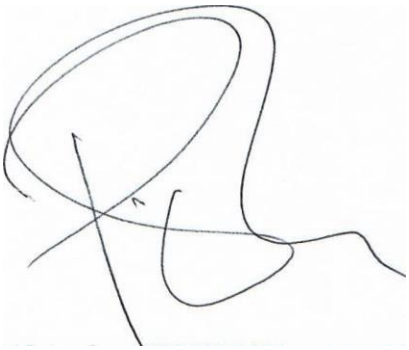
APPENDIX I: EDITOR'S LETTER

PROOF OF EDITING

14 March, 2022

This is to certify that I, Dr P Kaburise, of the English Department, University of Venda, have proofread the thesis titled - **INVESTIGATION ON HOW TEACHING AND LEARNING RESOURCES ARE ALLOCATED AT SHAMAVUNGA CIRCUIT** - by Phyllis Tsiku**.** I have indicated some amendments which the student has undertaken to effect before the final thesis is submitted.



Dr P Kaburise (0794927451/ 0637348805; email: phyllis.kaburise@gmail.com)

Dr P Kaburise: BA (Hons) University of Ghana (Legon, Ghana); MEd University of East Anglia (Cambridge/East Anglia, United Kingdom); Cert. Teaching English as a Foreign Language (Cambridge University, United Kingdom); Cert. English Second Language Teaching, (Wellington, New Zealand); PhD University of Pretoria (South Africa)