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With the title:

Evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo

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DECLARATION

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I, Alugumi Meshack Muthala, declare that this thesis: *Evaluation of Intervention Strategies for the Academic Performance of Grade 12 Learners in Secondary Schools in Vhembe District, Limpopo*, is a product of my own hand. All the sources that I have utilized or quoted have been indicated and acknowledged by referencing. This thesis has not been submitted to any institution except University of Zululand.

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SUPERVISOR'S SIGNATURE _____

CO-SUPERVISOR'S SIGNATURE _____

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DEDICATION

I like to devote this thesis to my late grandmother, Mrs Nyamuofhe Navhelani Muthala, for laying a good foundation in my life. She was my strength, my angel, and my pillar in her support; to my late mother and father, Mrs Mutshinyani Mellinah Muthala and Mr Salani Simon Muthala for their patience, guidance and mentorship; and to the Everlasting God, who gave me power and insight during hard times.

Let the Almighty God be glorified

ABSTRACT

The study adopted a mixed method to evaluate intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo province in South Africa. Intervention strategies for improving learner performance play an integral part in the school's endeavour to produce high quality results. The aims of the study were to determine how intervention strategies affect the academic performance of Grade 12 learners in secondary schools; to establish teachers' concerns about the effect of intervention strategies on academic learner performance; and to establish a model of intervention that could be used to improve the academic performance of Grade 12 learners in secondary schools. Activity theory underpinned this study. The great concern is bad performance by Grade 12 learners. Data for the study were collected through questionnaires and semi-structured focus group interviews from teachers and heads of department.

Forty two teachers were respondents to the questionnaires, 15 heads of department and 16 teachers for semi-structured focus group interviews were purposively sampled from 20 secondary schools. Data for the study were collected and transcribed, categorised and presented as themes with verbatim quotes from participants to support the themes. Data analysis, interpretation and discussion were directed by a mixed method research design, and a pragmatic paradigm that values the objective understanding of the teachers' views. Findings revealed that extra lessons for individual subjects are of paramount importance because they are geared towards improving performance.

Findings revealed that providing learners with more activities aimed at improving performance, such as formative activities, daily quizzes and weekly tests, is intended to enhance learners' performance, especially in mathematics. If teachers were to administer these weekly and monthly activities, the learners' performance could be improved drastically. This study confirms that there is a lack of parental support for academic learner performance. School Management Teams assist teachers with learner-teacher support material in order to enhance learners' performance. Findings revealed that monitoring learning and teaching is viewed as an important leadership measure for tracing faintness in the process in order to enhance instruction and

learners academic performance. Learner' indifference to the offering of extra scheduled lessons as shown in their absence, or late arrival, or the use of drugs, severely hampers the improvement in their performance.

The study is recommended that the Department of Basic Education should safeguard that, teachers implement various intervention strategies effectively to improve learners' performance. School Management Teams (SMT's) in secondary schools should strengthen their supervision and monitoring efficiently and effectively. Finally, the study recommends collaborative peer teaching in secondary schools for producing high quality results.

Keywords: academic, evaluation, Grade 12, intervention strategies, learners, performance

LIST OF ACRONYMS

APIP	Academic Performance Improvement Plan
CAPS	Curriculum and Assessment Policy Statement
DBE	Department of Basic Education
DoE	Department of Education
DSL	District Strategy on Learner Attainment
EEA	Employment of Educators Acts
FET	Further Education and Training
GET	General Education and Training
HOD	Heads of Department
HSRC	Human Science Research Council
ICT	Information and Communication Technologies
IQMS	Integrated Quality Management System
LAIS	Learner Attainment Improvement Strategy
NCS	National Curriculum Statement
NEEDU	National Education Evaluation and Development
NEPA	National Education Policy Act
NSLA	National Strategy on Learner Attainment
PSLA	Provincial Strategy on Learner Attainment
RSA	Republic of South Africa
SACE	South African Council of Educators
SASA	South African Schools Act
SGB	School Governing Body

SMT School Management Team

SPSS Statistical Package for Social Sciences

UNESCO United Nations Educational, Scientific and Cultural Organization

USA United States of America

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CHAPTER ONE

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

The underperformance in Grade 12 end-of-year results is a serious concern for almost all secondary schools under the Department of Basic Education, which includes, of course, the Limpopo Department of Basic Education and Vhembe District. Both the national and the Limpopo Department of Basic Education, together with Vhembe District, have made various intervention strategies in order to enhance learners' performance in Grade 12. However, the Grade 12 results and their quality remain unchanged and uninspiring in some of the schools. In various schools teaching and learning have regressed despite these strategies. It is uncertain if the challenge is in regard to the implementation of the intervention strategies, but there is certainly some poor implementation of intervention strategies in the schools, which may lead to poor results in Grade 12.

Underperformance by Grade 12 learners indicates that there are ongoing challenges that must be solved. According to Clarke (2007), the fundamental function of the school is to see to it that there is effective curriculum delivery. In other words, all secondary schools must have effective teaching and learning. However, some schools have a tendency to reflect characteristics of a poor culture of teaching and learning well defined by poor academic results and ill-discipline (Van Deventer & Kruger, 2003). In order to be effective, teaching and learning must be done in collaboration with various stakeholders within the schools in order to achieve good performance.

According to the findings of the Ministerial Committee on the National Education Evaluation and Development Unit (NEEDU), it was recognised that the present system of accountability and responsibility is very weak, because of a persistent culture of resistance to strong measures of accountability within the schools (Department of Basic Education, 2009). The school management teams (SMTs) are not able to conduct effective evaluations of curriculum delivery, and struggle to provide the necessary backing and guidance that teachers require (Bush &

Middlewood, 2013). However, it is vital for SMTs to manage the curriculum effectively, and that the support provided should lead to improved teaching, learning and assessment practices. Support must be provided from both district administration and from parents, as well as SMTs, so that learners' academic performance should be of good quality.

That is the rationale for the researcher seeking to evaluate various strategies for intervening in the academic performance of Grade 12 learners in secondary schools in Vhembe District. It also seeks to establish educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners. The findings obtained from this study may assist in establishing an effective model of intervention that could be used to enhance the academic performance of Grade 12 learners. Teachers should respect the allocated teaching and learning time and credible quality assessments. Both teachers and learners must not absent themselves from school. Some schools simply continue to underperform for years; their teachers do not have the desire to teach their learners effectively, because of challenges arising between teachers themselves, weak leadership within the schools, and lack of basic resources. The findings of the study revealed that if intervention strategies are implemented correctly, learners' academic performance will improve.

1.2 BACKGROUND TO THE STUDY

The following are the three levels in the development of the strategies to enhance learners' performance in the district: firstly, provincial strategy on learner attainment directed from the province; secondly, interventions by the district with the assistance of curriculum advisers, the SMTs and circuit coordinators; thirdly, intervention by teachers. All these are combined to form the intervention strategies to enhance learners' performance. The schools are required to develop intervention strategies to enhance learner performance above 65%, these are set as a benchmark for schools to improve learner performance.

The SMTs and school principals must ensure that effective intervention strategies are implemented to enhance learners' academic performance in secondary schools.

Supervisors from the district office are required to communicate the intervention strategies to the principal and staff, and thereafter monitor their effective implementation in secondary schools. Progress reports are submitted to the Department of Basic Education. However, after considering these measures that are in place, the effectiveness of the implementation of these strategies still remains a concern.

According to Shannon and Bylsma (2007), schools that perform well show a clear understanding of leadership that entails effective collaboration, good communication, good monitoring of teaching and learning, and a high level of community involvement. However, different levels of significance in various strategies of teaching and learning should be applied to improve learner performance in Grade 12. According to the National Protocol on Assessment for schools in the general and further education and training band (Grade R-12) (Department of Basic Education, 2011), assessment should provide evidence of learner performance relative to learning outcomes and assessment standards. It should be used to provide feedback that supports and enhances their learning experience. Assessment as a strategy for teaching and learning can provide information to leadership to make informed decisions (Southworth, 2004; Bush & Glover, 2012). Locally, the Department of Basic Education through the National Protocol for Assessment stresses that, all classroom activities need to be recorded and then analysed for assisting learner performance. This is to strengthen and evaluate the effectiveness of teaching.

An essential ingredient in the reform of learners' performance is embraced by the education field. In order to meet high standards, a progressive and successful secondary school will depend on having heads of department (HoDs) who are well equipped to enhance learners' performance. They are required to ensure that excellent teaching and learning is part of every classroom. It is the duty of HoDs to set the tone of the school, the climate for teaching, the morale of teachers, and a degree of concern for what the learners may or may not become (Clarke, 2007). However, school leaders are unwilling to set up policies that are fully functional, and this naturally affects performance (Sergiovanni, 2009).

Mentorship is about facilitating change by providing suitable support throughout the relationship period. It maximises the potential of the learners. In this regard, new teachers are to be counselled and coached by mentors in order to improve learners' performance. New teachers are often left alone, and this leads to the dysfunctionality of the school in regard to the performance of a learner (Department of Basic Education, 2015). Professional development of teachers should offer learning opportunities which will prepare such learners to meet the needs and standards of the world. Qualified teachers must show confidence, dedication and passion towards their profession, and they can thus influence positive outcomes in learners. Poor results are a result of teachers who are weak in subject content knowledge and the skills necessary to achieve good results in secondary schools (Van der Berg, 2011). All teachers are required to lead in effective learning and teaching by providing important information and knowledge to learners. Teaching and learning are compromised by teachers. Darling-Hammond (2006) indicates that teachers who are not sufficiently prepared are unable to plan curricular needs for learners, or implement teaching strategies.

The purpose of building teachers' capacity is to train and equip them with the necessary skills to impart knowledge and have confidence in their profession to face global competition. Evidence from industrialised countries suggests that teachers with no professional preparation for teaching learners struggle, thus ongoing and regular professional development enhances the teachers' knowledge and practice, and their learners' ability to learn (Chukwu, 2009). Furthermore, there is a strong constructive relationship between the learning and teaching time and the learners' academic performance. Teaching and learning time is the key for enhancing learners' performance and attitudes. Time that is put to good use by teachers and learners while in class will yield positive learning performance. According to the Human Sciences Research Council Report (2005), schools that use the teaching and learning time correctly, are bound to improve learners' performance. However, most extra-curriculum activities are done during teaching time, not in the afternoon. Teachers and learners are not respecting teaching time; they come to school very late, and this hampers learners' performance. The most obvious manifestation of mismanagement of class time in secondary schools occurs through learners' being

late or absent, and teachers' delaying to go to class according to the timetable, and attending training, workshops and union meetings.

According to Stroud (2014), benchmarking is a way of discovering what is the best performance being achieved, and using this information to identify the gaps in an organisation's processes in order to achieve a competitive advantage. All schools are required to perform at 65% and above for them to be classified as performing secondary schools when Grade 12 results are released (Department of Basic Education, 2013). This is to encourage high levels of performance across the districts. It puts a lot of pressure on underperforming secondary schools as they struggle to produce quality results owing to their large classes. District directors and circuit managers invite underperforming schools to make a presentation on quarterly results for Grade 12, and other corrective measures and intervention strategies for improving learner performance are highlighted (District Strategy on Learner Attainment, 2013). According to Chapman and King (2008), these types of intervention strategies assist teachers by identifying the mistakes they made during that quarterly assessment, and crafting an improvement plan. The progressive teacher then looks for the most suitable and easy ways of ensuring that the learners can master the difficult concepts and overcome the challenges (Department of Basic Education, 2013).

To bridge the subject content knowledge gap generated by changes in curriculum, zonal and cluster workshops on such gaps should be carried out. The curriculum advisers develop training workshop sessions for all subject teachers at the beginning of the first quarter to deal with challenging topics. Subject advisers select a leading teacher who facilitates discussions on those topics, and on teaching methodologies. It is highly beneficial for teachers to interact with chief markers and moderators for deeper understanding of the subject content. The technical report published in 2011 by the Department of Basic Education indicates that moderation at school level is lagging (Department of Basic Education, 2011). The chief markers and moderators are expected to give insight into the key examinable topics, and feedback from the moderation and marking of scripts. However, this is still a challenge in Vhembe District. Schools which are producing quality results should accommodate learners from struggling schools to enhance learner performance. These learners are taught

by experienced teachers who are producing good results. Twinning of schools is also of paramount importance because learners from under-privileged schools should benefit in terms of teaching aids. The benefits of twinning are massive (Belgrade, 2006): building capacity, sharing vital information and transferring skills, which improve learning performance and organisational effectiveness, and facilitate networking. However, twinning is harder in the Vhembe District owing to the scarcity of performing schools.

This background encapsulates the relevant strategies discussed, which are important because they provide additional support for both teachers and learners, which ultimately boost learners' academic performance. Remedial work is important for assisting weaker learners. Mentoring of learners should also be improved to enable learners to put more effort into learning (World Bank, 2012). Capacity-building strategies for teachers are important as they provide them with the skills to share their confidence and knowledge with their teaching fraternity. Teachers must be equipped with recent pedagogical information which will improve their confidence in imparting knowledge to their learners, and improving their performance.

However, as reflected in Table 1, the pass percentage of underperforming schools is still a challenge to schools and the Department of Basic Education. Although provincial and national Departments of Basic Education have developed and implemented intervention strategies to address this concern, the pass percentage continues to fluctuate, however there is a notable improvement with a fairly good percentage.

Table 1: The final results of Grade 12 learners in Vhembe District between 2013 and 2017

Years	Total number of schools which wrote exam	Schools with more than 60%	Pass %	Schools with pass rate less than 60% [underperforming schools]	Pass % of underperforming schools
2013	304	208	68 %	96	32 %
2014	304	231	75 %	73	25 %
2015	304	199	65 %	105	35 %
2016	304	220	72 %	84	28 %
2017	304	223	73 %	81	27 %

Source: Department of Basic Education (2017)

However, many secondary schools are still struggling, even when various intervention strategies were employed by SMTs to enhance learners' academic performance.

1.3 STATEMENT OF THE PROBLEM

Underperformance in Grade 12 end-of-year results is a serious concern for the national Department of Basic Education, the Limpopo Department of Basic Education and Vhembe District. They have considered various intervention strategies in order to enhance learners' performance in Grade 12, but outcomes have not been satisfactory. According to Leithwood, Harris and Strauss (2010), intervention strategies that have been made were aimed to uplift learners' performance in the most underprivileged schools, but most of these schools failed to take full responsibility by locating the blame for failure within those schools. Some secondary schools produced a high pass rate in one or two years, and dropped drastically in the following years. Some secondary schools were underperforming for

years, as indicated in Table 1. Furthermore, the number of passes remained low despite all these various intervention strategies.

The problem, as perceived by the researcher, is this: why do these schools continue to produce poor results year after year? This happens despite many intervention strategies by the Vhembe District Department of Basic Education, teachers and SMTs in these schools. The study therefore seeks a deeper understanding of the current intervention strategies.

1.4 AIM OF THE STUDY

The aim of this study is to evaluate intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo.

1.4.1 Objectives of the study

This study addressed the following objectives:

- To determine how intervention strategies affect the academic performance of Grade 12 learners.
- To establish educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners..
- To establish a model of intervention that could be used to improve the academic performance of Grade 12 learners.

1.4.2 Research questions

This study attempts to answer the following research questions:

- How do intervention strategies affect the academic performance of Grade 12 learners?
- What are educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners?
- What models of intervention could be used to improve the academic performance of Grade 12 learners?

1.5 INTENDED CONTRIBUTION TO THE BODY OF KNOWLEDGE

Intervention strategies can make a positive contribution by informing future curriculum design, and how best these strategies may be implemented. The establishment of an effective model of intervention may be used to improve learners' academic performance in Grade 12. An assessment of intervention strategies may support the Department of Basic Education, administrators, policymakers, SMTs and educators in addressing challenges and urgent concerns in an effort to promote and encourage best practices towards an improvement in academic performance. This study will also provide research-based guidance for implementing intensive intervention strategies to improve current practice, and may shed light on the need for systematic and differentiated instruction for those schools that are struggling to improve their Grade 12 learners' academic performance.

1.6 DEFINITION OF OPERATIONAL TERMS

1.6.1 School management teams

The school management team is defined as a structure with the sole function of giving leadership guidance, direction and assistance in teaching and learning which includes the principal, deputy principal and HoDs. The SMT should establish effective leadership, give appropriate directives and plans for timetabling and engagement of learners, read all curriculum circulars and refer them to the relevant departments in a school, and ensure that all teachers have the required curriculum policy documents (Sacred Heart CRD, 2003). The SMT gives direction to the subject teachers. It manages curriculum delivery, and effective teaching and learning, evaluation and monitoring. The SMT sees to it there is effective learner assessment, and learners are given regular feedback.

1.6.2 Intervention strategies

Intervention strategies are defined as actions carefully forming part of a long-term plan aiming to achieve or improve a good performance using performance and monitoring tools (Bradley, 2005). Intervention strategies are used to teach a new skill, or build confidence in a skill to deal with new situations or settings (Wright, 2012). They are a combination of ways or plans designed to enhance learners'

academic performance. Through the implementation of effective intervention strategies teaching and learning can be improved, and learners' performance can be of higher quality.

1.6.3 Quality teaching

Quality teaching is defined as the use of pre-planned behaviours, founded in learning principles and child development theory, and directed towards both instructional delivery and classroom management that increase the probability of a positive change in learners' behaviour (Levin & Nolan, 2009). Hessel and Holloway (2002) affirm that if a school is to be effective in its goal of providing quality education for all learners, the SMT should be empowered to monitor and evaluate the process of teaching and learning daily. Quality teaching occurs when teachers are teaching using various teaching aids and all the skills gathered for producing high quality results. Quality teaching goes hand-in-hand with commitment and devotion.

1.6.4 School improvement

Cooke and Vanstone (2000) define school improvement as a process through which schools set goals for improving learners' academic performance, and make decisions about how and when these goals will be achieved.

1.7 CHAPTER DIVISION

Chapter One

Chapter One serves as an orientation to the current study. It provides the study's background and context, and includes the introduction, the rationale of the study, the research problem, the purpose of the study, the research questions and objectives, definitions of operational terms, and finally a summary of the chapter.

Chapter Two

Chapter Two focuses on the theoretical framework in which this study is grounded: activity theory. The chapter also affords a comprehensive discussion of the literature that has been reviewed in order to ascertain theoretical perspectives about the study. The study also focuses on local and global debates around the research topic presented.

Chapter Three

Chapter Three focuses on the research design and methodology that the researcher used in conducting the research. It covers the paradigm, design, targeted population and sampling procedures. The procedures for selecting participants and ethical and safety issues are presented in this chapter, as are the techniques for collecting and analysing data.

Chapter Four

Chapter Four focuses on presentation and analysis of data collected from the participants. Generated data are analysed, and emerging patterns are presented. The chapter concludes with a summary.

Chapter Five

Chapter Five presents findings and recommendations drawn from the data collected in Chapter Four. It also includes suggestions for undertaking further research in areas not covered by the study, and conclusions for future improvements.

1.8 CHAPTER SUMMARY

This chapter provides the orientation and scope of the study, the background of the research problem, and the aims, objectives, and research questions. The operational concepts and chapter division are highlighted.

Chapter Two presents the theoretical framework that underpins the study, and a review of the related literature.

CHAPTER TWO

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

This chapter reviews relevant literature and research studies associated with the evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools. These are discussed throughout the chapter, and the general impact of these intervention strategies on learners' academic performance will be critically looked into. The literature review also focuses on the mechanism that the schools implement in order to enhance learners' academic performance in Grade 12. It includes national and international studies on intervention strategies that can improve learner attainment in Grade 12: developing an academic performance improvement plan for underperforming schools; setting targets; identifying content gaps; ensuring efficient time management; strengthening leadership and management capacity; and improving support for quality learning and teaching, and the use of information communication and technology (ICT). This chapter also highlights the limitations and gaps in several research studies related to intervention strategies for learners' academic performance, especially in Grade 12.

2.2 THEORETICAL FRAMEWORK

This study is underpinned by a prominent theoretical framework that encompasses the evaluation of intervention strategies on the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo. This framework is constructed according to the activity theory. The theory considers an activity system which includes teams and organisations, and it also accounts for environment, the history of learners, the culture of artefacts, motivations, and the complexity of real life.

2.2.1 Activity theory

The activity theory was originally developed by the Russian psychologist, Lev Vygotsky, and his colleagues, Alexei Leont'ev and Sergei Rubinstein, in the 1920s and 1930s (Verenikina, 2001). It has expanded globally during the past fifteen years. The activity theory is particularly concerned with the ways in which tools, collectivities, and historical and material conditions together form the actions and contexts of problem-solving and knowing (Star, 1998), a concern which seems most suitable for the current study.

2.2.2 Activity theory as a tool for pedagogic practices

Cole (1996) points out that this cultural-historical analysis of culture must include the social-institutional context of activity. Engestrom (1987), a leading activity theorist, creates a model activity system as an entire unit of analysis, while including the individual's object-oriented mediated action with cultural artefacts, which include social-institutional infrastructures and context as interrelationships between components of a collective activity, such as rules, community, and division of labour. The entire activity system is the unit of analysis, and is intended to investigate the system as an objectively given context of which individual actions, practices, and experiences are a part so that a larger unanalysed, dichotomised, independent variable neither remains to be treated as an immutable given, nor is barely described (Engestrom, 1993, p.78).

Activity theory is characterised as a developing theory. It is involved in making changes in human practices, which makes it relevant to the current study. Activity theory, which is emerging as a new field in research, targeting practices, human action, learning and development, can thus be considered a new theory related to pedagogic practice. The theory dynamically evaluates the historical changes and development of activity systems through the mediation of culture, and takes an innovative approach to the creation of new cultures for human activity. It also provides a methodology for specific intervention and support of changes and development of current given practices – that is, a methodology for accomplishments in pedagogic practice. In other words, activity theory can be considered a theoretical

tool for making changes and providing support for human development through formative experiments and social designs for a new activity system, as in the current study.

Activity theory uses the whole work activity as the unit of analysis, where the activity is broken into the analytical components of subject, tool and object, where the subject is the person being studied, the object is the intended activity, and the tool is the mediating device by which the action is executed, which seems very appropriate in relation to the implementation of intervention strategies at schools (Engestrom, 1993).

2.2.3 Activity theory towards a third generation

In this theory, an activity is a form of human life that is linked to and associated with various actions oriented towards an object (purpose and motive) in an environment, and structured socially, culturally and historically. In other words, activity is an integral unit of humans' social lives, and is regarded as a unit of everyday social actions of humans motivated by an object. This can be referred to as object-oriented activity (Leont'ev, 1978). Engestrom (1995) discusses the historical development of activity theory based on the idea of three generations.

The first generation is represented by Vygotsky (1978), who showed that the development of this behaviour is above all intermediated by the creation and use of cultural artefacts. This leads to a way of thinking where human behaviour is understood as culturally mediated, historically developing practical activity.

The second generation started with Leont'ev (1978). The novelty of this activity concept was that it was an activity associated with a new component of division of labour and cooperation of humans, and showed that activities encouraged by purpose and objects are established not in the individual dimension, but in a collective dimension. Thus, in the current study, this may be regarded as the school and all the necessary stakeholders that collectively provide the necessary support. Engestrom goes on to develop a systemic model of the understanding of human activity opened up by these two earlier generations: the understanding of collective

activity oriented towards objects intermediated by cultural artefacts. This is the collective activity system model shown in Figure 1, a model of a system of object-oriented collective activity mediated by artefacts, community, rules and division of labour.

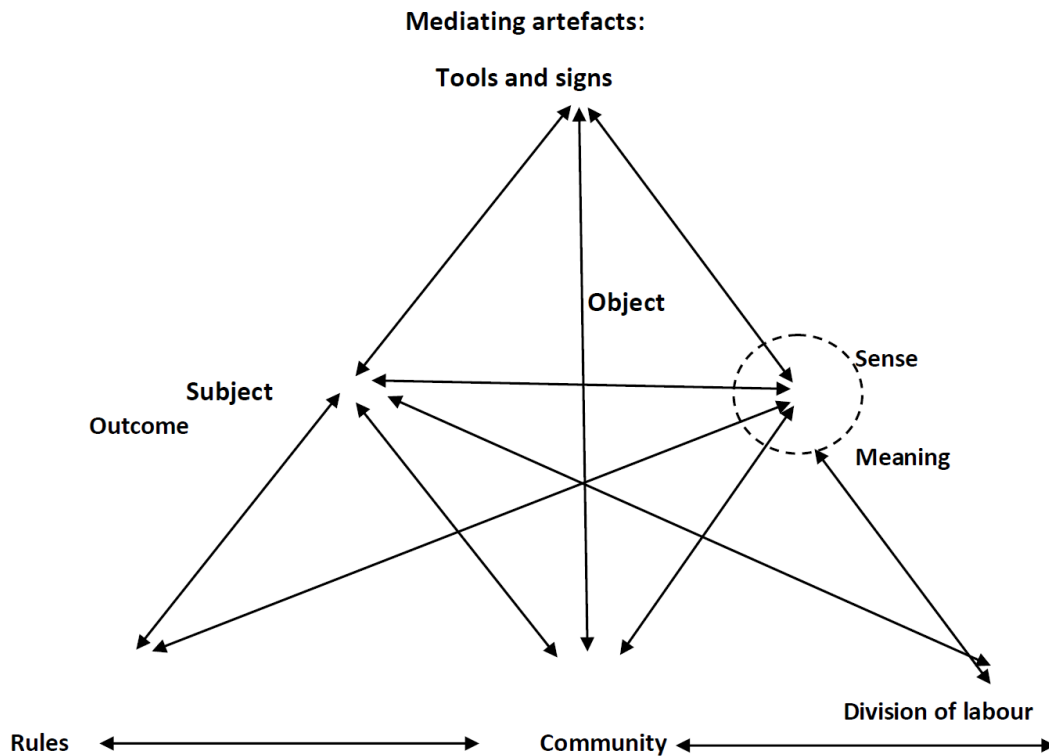


Figure 1: Model of a collective activity system (Engeström, 1987, p.78)

This model of a collective activity clearly shows that human cognition, learning, emotion and volition are socio-historical processes that occur in the context of a culturally mediated activity system, and that the human mind and consciousness are situated, disseminated and shared in an activity system. That is, human learning occurs through collective activity, and learning involves not only learning within the activity system, but also learning about the activity system. Similarly, the Grade 12 academic performance would need to be viewed from this perspective. (Engeström, 1987, p.78)

2.2.4 Expansive learning transcending the institutional boundaries of schools

Expansive learning theory, which has been debated since Engestrom's conceptualisation, is strongly rooted in Vygotsky's zone of proximal development and Bateson's three levels of learning, as well as in activity theory. Expansive learning based on an activity is one of the most influential concepts regarding human cooperative learning activity. It is learning that creates culturally new patterns of activity that do not yet exist; it is learning for practitioners to master, and break through the inner contradictions in and between their activity systems; it is learning used to master their own lives and future. It is also realised in the learner's commitment of something new in a social life-world. Engestrom characterises the object and motive of such expanded learning activities as follows: the object of learning activity is the societal productive practice or the social life-world, in its full diversity and complication (Engestrom (1987)).

Therefore, traditional teaching and learning is still a series which is more or less disconnected though systematically repeated learning actions, according to Engestrom (1987). The culture of teachers' work in the traditional school retains the strength of static elements that stress the programme of predefined content. In the light of much criticism of the traditional culture of school, it is clear that the involvement of such an expansive learning model is extremely important for the transformation of existing pedagogic practices. Extensive learning focuses on the new, expanded object of learning, where the problem is being created from problematic situations such as the moving beyond information given from above, and escalating the discrete, internally inconsistent learning actions. Activity theory provides a method of understanding and analysing a phenomenon, finding patterns and making interpretations across interactions, describing phenomena and giving phenomena through a built-in language and rhetoric. A particular activity is a goal-directed or purposeful interaction of a subject with an object through the use of tools. This activity theory is relevant to the current study, because it involves the interaction of a subject through the use of various intervention strategies to reach goals. In this case, teachers will use tools to improve the learner's academic performance in schools. It needs collaboration of stakeholders and using rules to reach the goal, which is improving learners' performance.

2.3 INTERVENTION STRATEGIES TOWARDS IMPROVING ACADEMIC PERFORMANCE IN SECONDARY SCHOOLS

2.3.1 Strategy of learning resources effect on learners' academic performance

A study done in the United States by Earthman (2002) defined that good school facilities support the educational initiative. In such a school, learning resources, like physical facilities which include classrooms in a comfortable state, and well-equipped libraries, computer rooms and laboratories, are available and adequate. These facilities attract many learners, and because of them learners' academic performance can be improved. However, research done by Crosnoe, Monica and Glen (2004) indicates that the school which has smaller classes performs better academically, and more access to teaching resources such as computers has been shown to have good results. If the physical structures are attractive, they can motivate learners academically.

Similarly, availability of teaching and learning resources enhances the effectiveness of learning processes in a school setting. According to Earthman (2002), learning resources have a direct influence on learning and teaching in secondary schools. Reche, Bundi, Riungu and Mbungua (2012) observe that learning and teaching support materials help the learners to follow the teacher's presentation and understand the lesson clearly. Therefore, libraries need to be equipped with sufficient books, and laboratories need to be installed and equipped with required apparatus and chemicals. Availability of laboratories at schools has an effect on science subjects. The researcher agrees that the lack of teaching resources at secondary schools debilitates their academic performance.

The learning and teaching resources in small schools are limited, and this affects learners' performance. This is contrary to Hanushek (2002), who indicates that the total level of school teaching and learning resources is not closely related to learners' academic performance, but Krueger (2003) challenges this argument by stressing the advantages of small class sizes. Kellaghan, Greaney and Murray (2009) argue that the use of school buildings, curricula and educational materials is very important in enhancing learners' performance. Adeogun (2008) states that lacks of teaching

resources hinder academic performance. The argument is supported by Van der Berg (2010) when he states that the absence of basic teaching and learning materials and severe overcrowding in many schools in developing countries may initially play a role in underperforming schools. The researcher concurs with this argument, because if there are enough teaching resources, such facilities will change the attitude of the learners academically.

A study conducted in Nigeria by Yara (2010) states that teaching and learning resources are fundamental for academic performance, especially in mathematics. Similarly, research done by UNESCO (2008) suggests that teaching and learning materials such as teaching aids, textbooks and school laboratories do have an impact on learners' academic performance. The findings are similar to Mutai's (2006), who asserted that teaching is strengthened when there are enough reference materials such as textbooks, exercise books, teaching aids and classrooms. Jimenez-Castellano Oscar (2008) states that, educational resources have an impact on learner's achievement. It is true that if the school lacks teaching and learning resources, learners' performance will be of low quality. Schools need to be well resourced by the Department of Basic Education for the learners to produce good results.

When learners are provided with necessary tools and equipment, they may be able to acquire an enhanced understanding of academic conceptions, and how to perform experiments. Some learners belonging to socio-economically deprived, marginalised sections of society cannot afford the books and materials required for learning, so they are dependent upon libraries and fellow learners to obtain them (Maina, 2010). Similarly, research conducted in Kenya by Wamulla (2013) argues that availability of physical and teaching facilities has a positive influence on a learner's academic performance. Learning resources that are clean and in a good state of repair have also been confirmed to have a progressive impact on academic performance. Another study done with primary schools in Kenya by Reche et al. (2012) indicates that school resources have a positive impact on learning and teaching.

According to Equal Education (2010), in their assessment studies conducted between 2000 and 2001 in Massachusetts and Texas, it was found that the highest

achieving learners were those who attended schools with good libraries. The mean pass rate for schools without a library was 47% compared to 66% for those with a library. The use of school libraries enhances learners' performance, as learners use information for their assignments and investigative projects, and this helps them to perform well. Deeper understanding of various concepts from library resources provides learners with a chance to be knowledgeable. Kgosana (2006) believes that if all schools had good libraries and computer laboratories, it would assist learners with their assignments and other projects.

2.3.2 Teacher-related factors on learners' academic performance

According to a study conducted by Creamer (1994) in the USA, teacher-related factors are those within the teachers that could hinder or promote the academic performance of learners in their schools. If teachers are absent themselves from school, and learners are not attending their lessons, learners will perform poorly. Absenteeism by both learners and teachers tends to reduce the amount of teaching time, and as a result, the syllabus will not be completed. Teacher satisfaction is generally related to learner attainment.

Teachers are irreplaceable, and they are the most important resource, as they are the backbone of teaching and learning in schools, according to the United Nations Development Program (2003). The quality of teachers in any school will determine the quality of the learners' results. It is indeed important for schools to train teachers, because well-trained teachers are committed to enhance learners' performance.

Teachers need to be nurtured in various ways by the school principal, so that they become motivated and committed to the learning and teaching in their schools. Demotivated and ineffective teachers weaken learners' performance. Teachers agree that praise and recognition from their principals, learners' parents, and even learners themselves have a positive impact on their motivation, and high quality results can be achieved. Recognition from the principal encourages teachers to excel in learning and teaching. Absence of praise, blame and destructive criticism for small mistakes are detrimental, and teachers become frustrated and demotivated about teaching and learning. The findings from a study by Schmidt (2005) indicate

that an atmosphere of praise and appreciation are of paramount importance for teacher motivation.

Both national and international evidence indicates that absenteeism, lack of teacher training, non-recognition of teachers' exceptional performance, and criticism for making small mistakes reduces the quality of learning and teaching at secondary schools. Excellent performance by learners and teachers are reinforced by extrinsic motivation.

2.3.3 Intervention strategies of socio-economic background on learners' academic performance

A study done in Australia by Ainley, Brian, Long and Batten (2005) asserted that the socio-economic status of a child is most commonly determined by combining parents' educational levels, occupational status and their income. Other researchers also found that socio-economic status does affect learners' academic performance, and those of low status are likely to drop school (Hochschild, 2003). Notably, literate parents are highly involved in academic activities, both in school and at home. Learners of illiterate families lack motivation and encouragement from their parents to perform well. Most illiterate parents refuse to provide their children with textbooks. Wamulla (2013) agrees that the home environment plays a critical role in the academic performance of every learner. It may stimulate positive self-esteem in the children, and that can improve their academic performance. Morakinyo (2003), like Wamulla (2013), recognises that there is a good relationship between learners' academic performance and their socio-economic status.

2.3.4 Teacher- learner rapport

Learners who have caring parents, who will look after them in relation to teaching and learning, do succeed in their performance (DeSocio, VanCura, Nelson, Hewitt, Kitzman & Cole, 2007). These mentors help learners improve their study habits, which allow them to be more successful in school. If teachers create a conducive learning environment for their learners, it motivates the learners to work very hard.

Moreover, the learners will feel embarrassed if their academic performance is not good enough, though the mentor is supporting them wholeheartedly.

Meyers (2009) agrees that teacher-learner rapport has an impact on learners' attitudes: their behaviour and learning will change. When there is a positive learner-teacher relationship, the learners enjoy the teaching and learning, and their attendance can improve. The Washington High School study demonstrates that having a caring mentor-teacher is a key intervention in helping at-risk learners (Knesting, 2008). The researcher concurs with the scholars who say that forming positive relationships with learners can prevent their dropping out of school. The key intervention is to care for your learners and their wellbeing. Knesting (2008) agrees that if teachers provide extra time for their learners, and give them more care; this will enable them to be more successful. The researcher cannot overestimate the importance of learner-teacher rapport as it relates to learner achievement. By receiving this support, learners can be motivated and obtain quality results.

2.3.5 Learner engagement strategies

Effective teachers use learner-engagement strategies in their classrooms by implementing the hands-on strategies for learning and teaching. According to Honigsfeld and Dunn (2009), learners easily forget about 70% of something that they hear or read in their classes, but when teachers group them in small groups and they are provided the opportunity to actively participate, they do well. Similarly, research done by Johannes (2004) states that struggling learners gain a deeper understanding of the concepts and subjects being taught when teachers 1) focus on difficult topics; 2) do remedial work with learners; 3) encourage deeper thinking; 4) encourage learners to learning skills; 5) matters related to teaching and learning; 6) teach learners how to ask questions. Teachers use different techniques and strategies in the learning environment to improve learners' academic performance, and all learners must be actively engaged to maximise their potential. International and national research (Darling-Hammond, 2006; Smylie, Allens, Greenberg, Harris, & Luppscu, 2001) indicates that learner interaction assists learners to improve their listening skills, and encourages them to actively participate in their learning. Researchers concur that if learners are grouped into small discussion groups, and

engage in finding solutions to the given problems, this may assist struggling learners to improve their performance. However, it is critical that teachers must capacitate learners with regard to questioning and listening skills.

2.3.6 Parental support of their children's learning

A study done in Kenya by Diaz (2003) states that learners' achievement can be influenced by the support they receive from their parents. For example, involvement of parents in the educational process of their learners was found to have a significant effect in improving their academic performance. Diaz (2003) believes that a mother's good academic preparation for her children and a positive cultural environment are the most effective influences on learners' academic achievement. Parental expectations were also an obvious inspiration for their children's performance. According to Caplan (2002), family cohesion and family relations strongly influence a learner's performance. Conversely, it was found that low achievement among children is significantly linked with lack of parental support (Boon, 2007).

Additionally, parenting style was found to be associated with children's level of academic achievement. Parents' authoritative style of parenting was associated with learners with high academic achievement, and a childrearing style that was characterised by neglect was associated with low-achieving learners. If parents are involved, learners will refrain from unacceptable conduct, and this will indirectly have positive effects on their achievement. Finally, research indicates (Boon, 2007) that parental involvement, parental expectations and parenting style are found to be associated with learners' high academic performance, and even the learner's behaviour can change. Parental involvement in their children's teaching and learning can help them to be well disciplined and cooperative in school. Learners whose parents are not actively involved in their teaching and learning are troublesome, and tend to work badly.

2.4 INTERVENTION STRATEGIES WITHIN THE SOUTH AFRICAN EDUCATIONAL CONTEXT – TOWARDS IMPROVING THE ACADEMIC PERFORMANCE OF GRADE 12 LEARNERS

2.4.1 Learner Attainment Improvement Strategy (LAIS)

The Learner Attainment Improvement Strategy (LAIS) is a document adopted from the National Strategy on Learner Attainment (NSLA) that guides all the districts on how they should ensure that learner performance is improving (Department of Basic Education, 2015). The Department of Basic Education in Vhembe District uses the educational framework from the national Department of Basic Education to develop its own intervention strategies to enhance learners' performance in schools within the district. The Vhembe District in Limpopo developed its own specific intervention strategy programmes based on national and provincial documents. The strategies are reviewed annually to accommodate varying trends and experiences from secondary schools. It accommodates schools that underperformed.

According to the Vhembe District Strategy on Learner Attainment (DSLAA) (Department of Basic Education, 2018), the acceptable quality of passes is 65% and more. Schools are categorised as dysfunctional if they do not perform above 65%, and achieve 40% of bachelor passes. Table 2 depicts schools from the Vhembe District Department of Basic Education that had underperformed for the past five years (2014-2018). These are the schools that the study will look at for implementing intervention strategies that will improve learner performance.

Table 2: Pass rate (%) in underperforming schools from 2014-2018 in Vhembe District

List of schools	PASS RATE				
	2014	2015	2016	2017	2018
School A	44.3	54.7	56.0	64.3	62.5
School B	32.0	63.7	31.0	62.5	30.0
School C	56.4	40.4	30.0	33.3	64.9
School D	26.9	63.7	36.1	34.4	52.6
School E	64.0	49.3	51.9	53.0	36.9
School F	36.1	34.4	52.8	32.2	51.5
School G	32.0	62.5	30.0	63.3	59.0
School H	52.9	64.4	44.4	57.6	43.8
School I	44.0	57.1	37.6	45.0	53.9
School J	61.0	37.7	49.0	63.7	46.5

(Department of Basic Education, 2018)

The school management and governance officials at circuit level ensure that the strategies are fully implemented in the schools. Circuit managers communicate these strategies as a directive to the school management teams and teachers. Effective monitoring is done by the circuit managers who are supervising the schools. This means that thorough follow-ups must be done. The district and circuit officials take different approaches to ensure that these intervention strategies are implemented in schools and that there is an improvement in learners' performance. Monitoring and controlling in schools must be checked on a regular basis.

In addition, it is the role and responsibility of SMTs to ensure that teachers are setting weekly and monthly targets for the purpose of content coverage. Generally, an assessment of learners' performance is completed during March, June, September and December each year. If the setting standards are not met, this means that extra lessons must be provided, especially during spring and winter, to improve learners' performance. National and international researchers indicate that protecting teaching and learning time, good staffing and basic resources are the factors that can enable the learners to improve their academic performance. SMTs are responsible for managing curriculum delivery.

2.4.2 Developing academic performance improvement plans (APIPs) for underperforming schools

All principals from the schools that had underperformed, as identified at the beginning of each year by the provincial heads of the Department of Basic Education, have an obligation mandated in terms of section 58(b) of the South African Schools Act of 1996 (as amended), namely, the responsibility to design an academic performance improvement plan (APIP) and submit it to the provincial head of the Department by mid-February, after the meeting of the SGB, parents, the SMT and teachers in the school. This is an official document that comprises performance targets set by the SMT and subject teachers.

The subject teachers and principals are the officials who will be responsible for the intervention strategies. Circuit managers, who are the district officials, monitor the effectiveness of the implementation, and report frequently to the district director. The curriculum advisers are also responsible for ensuring that the improvement plans are implemented in schools, especially for the subjects in which the learners did not perform well (Leepo, 2015). The subject content challenges which have been picked through the process of item and error analysis – i.e. those which resulted in poor learner performance – are to be analysed. The consistent errors committed by learners when they were writing their examination are to be analysed by teachers and SMTs (DBE, 2014). After identifying the items, and the errors committed, the teachers are then required to develop possible intervention strategies that will assist learners to understand difficult topics (Leepo, 2015). Teachers track learners' performance according to this plan, and get an opportunity to strategise on topics that are difficult for learners. The plan also assists in identifying learners who have serious challenges, and through this plan they can be properly assisted. Leithwood and Jantzi (2010) assert that underperforming schools must consolidate academic performance improvement plans, and subject advisers and circuit managers must monitor the plans for struggling schools in order for them to enhance their learners' academic performance. It means that, if circuit managers and subject advisers strictly monitor the plans for underperforming schools, learners' performance can be improved.

2.4.3 Content gap resulting in poor performance

According to Taylor and Moyana (2005), many teachers lack subject content knowledge, which results in poor performance in many schools. Whelan (2008) concurs that there are schools that do not have qualified, talented and effective teachers who can perform for better results. According to Mitchell, Robinson, Plake and Knowles (2001) teachers must have the knowledge and ability to produce good results. According to Clark and Walsh (2002), there are teachers who are underqualified in the subjects they are teaching, and spend less hours in class. Learners who attend such dysfunctional schools score lower on standardised achievement tests, and are more likely to drop out (Mbulaheni, 2015).

Pretorius (2012) indicates that active teachers have an in-depth knowledge of the curriculum, the outcomes and assessment required, and the particular contents to be taught in the relevant phase of learning. Leithwood and Jantzi (2010) indicate that the quality of instruction, which is dependent on the teacher's knowledge of the content and how to teach it, exerts a powerful influence on the learners' performance. It means that teachers need to accumulate more knowledge, so that learners' performance may improve. Teachers who have gaps in their knowledge of the subjects they teach are unable to produce high quality results.

2.4.4 Time management in terms of solving the identified challenges

Academic improvement requires a special focus of HoDs on time management. If time is not effectively managed, teaching and learning suffer. According to the HSRC Report (2005), schools which use teaching and learning time profitably may improve learners' performance. The report presents the following for consideration: lessons must start and end on time; there must be strict monitoring; rules must be consistent; all learners must know what is expected of them; curriculum must be tested, and the subject content covered. According to Leepo (2015), there are four important classroom management processes which are used to promote the use of effective time in teaching and learning. **(1) Transitions:** this is a practice which assists learners to go to the next learning activity. **(2) Arrangement of classrooms:**

classrooms that are well arranged promote simple movement of learners and teachers. **(3) Effective rules and procedures:** these help the teachers to spend time correctly when they are teaching. **(4) Preparation and pacing:** this is in connection with preparing teaching and learning activities. Leepo (2015) indicates that if time is used effectively and productively, teaching and learning is not disrupted, and teachers work consistently in planning; such an activity will achieve good results for learners. The Department of Basic Education (2012) stresses the use of effective time management in tasks. Teachers are supposed to be in class on time, and teaching. However, they waste time discussing issues which are not related to teaching and learning, and this may hamper the learners' performance.

2.5 STRENGTHENING LEADERSHIP AND MANAGEMENT CAPACITY (INTERNAL AND EXTERNAL)

2.5.1 Implementation, monitoring, evaluation and support activities

The principal has the obligation and responsibility to ensure that learners' education is promoted and protected. The principal and the SMT are required to supervise the teaching and learning at schools. SMTs regularly meet with relevant stakeholders in order to enhance teaching and learning. HoDs are required to monitor and supervise the work of teachers. According to the Employment of Educators Act, No. 76 of 1998, school principals, deputy principals and HoDs are required to manage teaching and learning effectively for better learner performance.

Monitoring teachers' and learners' work is a function where intervention by the principal and HoDs can be used to enhance classroom activity, improve literacy levels and indirectly contribute towards the alleviation of poverty (Bush, Kiggundu, & Mooros, 2010). SMTs must make teaching and learning the school's priority. Du Plessis (2013) indicates that monitoring the school's curriculum implementation can help the principal and the SMT to determine the needs of learners and their challenges in learning. She states that monitoring is about providing support and feedback to learners, and this leads to enhancement of learners' performance. It is through effective monitoring that learners who are struggling can be identified and assisted.

Evaluation and review are conducted in order to retain or improve relationships among stakeholders in school (Mngomezulu, 2015). Positive assessment feedback provided to the learner means expressing approval for quality results, and specifying what must be done to enhance their performance (Rhodes & Brundrett, 2011). The school must develop programmes that aim to improve teaching, learning and monitoring. The National Education Policy Act (NEPA), No. 27 of 1996 (RSA, 1996b), stresses that measurement and composite scheduling constitute school assessment programmes (DBE, 2011). Hoadley (2012) stresses that assessment; teaching and learning are inextricably linked. Effective teaching and learning can be monitored through assessment and an effective evaluation process. Teachers must provide ongoing productive feedback to the learners to improve their performance.

According to Raymond (2006), a balanced assessment system is a set of interacting assessments focused on serving the needs of different learners. Assessment is aimed at meeting the learners' needs. It is a process of finding evidence through the specific questioning of assignments, tests, projects and surveys. The evidence obtained assists a learner at a specific point in time to proceed to the next grade. Each teacher is accountable for the learners' performance. Effective assessment enhances the quality performance of learners.

Archer and Brown (2013) confirm that in these ways, learners' performance will be improved. International and national research has found that monitoring, evaluation and support activities will improve learning and teaching, because deputy principals and HoDs will be at the centre, managing curriculum effectively.

2.5.2 Subject adviser deployment to learning sites

Subject advisers are expected to be knowledgeable and effectively trained. They are expected to conduct research on new and current approaches in teaching methodologies and learning styles. It is very common practice in Vhembe District for the subject advisers to offer lessons, especially in dysfunctional schools where their subjects are underperformed. The subject advisers from the circuit and district level convene various workshops and seminars with subject teachers, and conduct support visits. The deployment of subject advisers aims at monitoring curriculum

coverage and ensuring that teachers are teaching according to pace setters provided by the Vhembe District Department of Basic Education. However, the monitoring must be of a high standard. The subject advisers assist subject teachers in how to teach certain topics and concepts which are difficult for them. Through this strategy, subject teachers are assisted because they form part of the intervention programme. Learners are taught by subject advisers in the presence of their teachers.

Teacher and subject adviser share skills and knowledge. Subject advisers' deployment to schools plays a vital role in learners' performance, because they transfer skills to teachers in regard to teaching methodology, and even assist teachers where there is a content gap.

2.5.3 Effective curriculum management

According to Subramoney (2016), curriculum management involves managing what is taught, how it will be taught and assessed, and the resources needed for teaching and learning. SMTs are tasked with the role of managing all these processes to ensure quality teaching and learning. The SMTs in South African schools engage in numerous activities related to the curriculum, like managing and planning it, classroom practicals and curriculum development (Department of Education, 2008). SMTs as curriculum supervisors engage in planning daily activities based on the prescribed curriculum.

SMTs are responsible for developing and implementing various intervention strategies which must produce a positive impact on learner achievement. Ntshoe and Selesho (2014) indicate that the school principal is at the centre of accountability for learners' academic performance in secondary schools. SMTs are responsible for monitoring teaching, assessing and teaching resources, and if curriculum is managed well, the learners' performance will be of high quality.

2.6 IMPROVING SUPPORT FOR QUALITY TEACHING AND LEARNING

2.6.1 Twinning of schools towards achieving optional performance

Twinning is a process whereby under resourced schools are accommodated by well-performing schools. This is done to capacitate schools with a low learner enrolment and deficient teaching resources with new approaches in teaching methodologies. The process of incubation takes place when well-performing schools are often made to accommodate learners from underperforming schools (Leepo, 2015). This helps the learners to achieve better results. In certain instances, learners from underperforming schools are taught by teachers from well-performing schools. The twinning of these schools involves making some teaching aids and resources available to the underperforming schools.

There are enormous benefits in twinning schools (Belgrade, 2006): it helps in building capacity; sharing vital information; transferring skills; identifying best practices, new ideas, new approaches and new methods of teaching; improving the quality of learning, organisational effectiveness, and the networking and mobility of learners and teachers. If twinning schools is correctly carried out and managed, learners in the underperforming school benefit, and their pass rate is increased. These advantages involve one or more staff from one school visiting or linking up with the partner school for a time to learn or impart information and skills. The study visits are when a group of staff from one school visits a potential or existing partner school for the purpose of understanding certain aspects of how the school works: its conditions, services, and collaboration with social partners. The transferring of skills and knowledge is more practical. Research indicates that twinning of schools is of considerable help to under resourced schools, because the two schools share knowledge, teaching resources, experiences and solving problems.

2.6.2 Strategies for assisting progressed learners

Progressed learners are those who have failed Grade 11 twice, and then are progressed through to Grade 12. According to the Department of Basic Education (2017), progressed learners would probably have dropped out of school without sitting for the National Senior Certificate examination after repeating Grade 11 numerous times. In Vhembe District the Department of Basic Education is trying to assist these learners specifically with autumn, winter and spring enrichment classes. Progressed learners from various schools within the circuit come together for classes

in which expert subject teachers and subject specialists from the circuit teach them difficult topics. The lessons are for morning and afternoon, and are monitored by curriculum advisers and officials from the province. Teachers teach these learners mathematics, mathematical literacy, life sciences, geography, physical science, agricultural science, history and accounting. At the end of each lesson, assessment tasks are administered and corrections are done. This helps the learners to grasp areas which have more marks in the assessment guidelines and have a better understanding of areas which tend to be challenging (Department of Basic Education, 2017).

Parents of the progressed learners are often called to the progress meeting at schools in the afternoon, where the learners' performance is reported and discussed. Constructive debate about the learners' performance is held in the learners' presence, and the learners are also expected to state their shortcomings and the obstacles to their performance. This helps the parents to know about their progress, and intervene to assist such learners to pass well at the end-of-year examination.

Progressed learners are engaged with additional enrichment activities, and are provided with much support. This helps them to become familiar with the questioning styles of the final examination papers. They are given previous question papers from other provinces, so that they can become familiar with their questioning approaches, and these question papers are used as a benchmark. More activities like case studies and essay-type questions are given to these learners. It is assumed that when they work hard on these case studies, they acquire more knowledge. The district invites motivational speakers to coach the progressed learners. Motivation has a direct influence on how an individual learns. The special effects of motivation are normally extensive because they raise an individual's energy level, and encourage the determination to reach a specific objective (DBE, 2014). The Department of Basic Education indicates that all progressed learners should be motivated so that they can succeed in their academic performance. On a quarterly basis, these learners are grouped together and are given the pass requirements, and motivated.

2.6.3 Error and item analysis

According to Chapman and King (2008), this strategy helps teachers to detect errors and describe how to correct a mistake or the inappropriate action, and move swiftly to the crafting of the improvement plan. This informs the teachers about learners' mistakes, and which areas they are struggling in. According to the Department of Basic Education (2013), teachers then look for the most suitable and easy ways of ensuring that the learners master the concepts, and are able to solve similar or related problems. The error and item analysis procedure works as follows: teachers in Grade 12 sample 10% of the learners' marked scripts of tests or assignments. This helps the teachers to improve teaching techniques, and employ various teaching approaches.

The analysis of error and item helps the teachers to understand the learners' thinking processes, and concepts which learners did not understand when the teacher was teaching them. Researchers indicate that for progressed learners to succeed in their final examination, it is vitally important for teachers to do error and item analysis in order to correct learners' mistakes before their final examination. Teachers should teach these learners basic techniques to master concepts, and this will also help teachers to improve their teaching techniques. In addition, if learners do not understand and lack interpretation skills, teachers should use their available time to expose these learners to various comprehension skills. Teachers should further motivate and encourage them to use dictionaries, in order to understand difficult concepts. Learners should be familiar with questioning skills and responding to questions that need more complex responses, in order to enhance their performance.

2.6.4 Benchmarking of schools

According to Stroud (2014), benchmarking is discerning the best performance being achieved and using this information to identify the gaps in an organisation's processes in order to achieve a competitive advantage. The Department of Basic Education's Action Plan in 2014 provided different benchmarks for different grades in the system (DBE, 2009). In Limpopo province the Department of Basic Education requires all Grade 12 secondary schools to achieve 65% and above to be classified

as performing schools on their final results. In Vhembe District, the average per subject is 60%, and it aims to improve levels of performance in the district. The aim of this target is to inspire enhanced levels of performance across the district. In many cases the performance targets are not based on research, but on facts. Benchmarking is done in an instinctive and unusual way which is not informed by what has been attained in the system, according to Leepo (2015). For example, a school which achieved a 45% pass rate in 2018 would be given a performance target of 90% in 2019, which is fairly unrealistic. Schools should target high percentages in learners' performance, because according to researchers, if they aim high, and succeed, it boosts learners' and teachers' morale.

2.6.5 Marking and moderation

The chief markers and moderators are regarded as the subject experts who are directly involved in assessment and evaluation at provincial and national level (Leepo, 2015). They are responsible for internal and external examinations issues, by moderating and marking learners' scripts. It is of paramount importance that teachers should work together with these specialists for more skills and understanding of the subject content. Moderation is a process in which teachers share their expectations of the performance of learners and their understanding of standards with each other in order to improve the consistency of their assessment decisions. It involves teachers' ensuring that the assessments are fair, valid and reliable. Feedback must be given to the teachers after moderation has been completed by senior teachers and HoDs. It should be used as a platform to discuss expectations and interpretations in order to ensure that assessments are fair, valid and reliable. Moderation of a sample of high, middle and low learners' performance must be done correctly in order to provide effective and meaningful feedback. Post-moderation must be done to ensure that corrective feedback is provided, and marks are correctly transferred from the learner evidence onto working mark sheets.

There is a district moderation plan to which all schools should adhere, and make all evidence of learners' school-based assessments available when requested. District moderation of assessment tasks are conducted by district subject advisers during school visits. The moderation is done in three phases during the course of the year,

and is managed by district officials. This moderation enhances the quality of marking at school level, and then high quality learners' academic performance is achieved. Leepo (2015) recommends that pre- and post-moderation is vitally important, because it validates the credibility of the assessment tasks, and feedback should always be done by teachers.

2.6.6 Dinaledi schools project

The Department of Education initiated this project in 2001 so that secondary schools with very high enrolments could be helped to improve the quality of teaching and learning in both mathematics and physical science, and increase the number and quality of learner passes in those subjects in Grade 12. The project has the following strategic objectives: ensuring that school performance targets are set; having qualified and competent teachers in schools; improving the medium of instruction, and introducing information and communication technology (ICT) to schools (Leepo, 2015). Through this project, schools were provided with textbooks, mobile science laboratories, mathematics kits, ICT laboratories, computer laboratories and a diagnostic tool to assess, measure and address the teaching and learning deficiencies in mathematics and physical sciences (Leepo, 2015). Teachers were trained, especially in mathematics and science, in content and teaching approaches as a form of additional support provided to these schools, and this will improve learners' academic performance.

In 2016 there were 10 schools involved in this project, and 3 353 learners were recorded in Grade 12 in Dinaledi schools in Vhembe District. 1 781 passed in the 2017 National Senior Certificate examination, and this amounted to a 53, 1% pass overall (Department of Basic Education, 2017). However, the Department of Basic Education should reinforce the Dinaledi schools, because the project aimed at increasing the number of learners who pass mathematics and physical science.

2.6.7 Enhancing learner performance through extra tuition

The Vhembe District Department of Basic Education came up with the following intervention strategies for improving learners' performance in schools: **School**

holiday classes: these generally occur for two weeks during Easter and in the winter break during July, and for a week during the September holidays. They are set up especially for schools that are struggling to produce quality results in Grade 12. Quarterly tests are regarded as a benchmark. **Incubation:** this is the process whereby learners in low enrolment schools that are not performing well in Grade 12 are assisted by schools that are producing quality results. These learners remain there until the final examination is written. With regard to **matric camps**, learners are taken from their schools to a specific centre for two to three weeks for revision. Subject specialists are responsible for teaching these learners.

Well-performing schools engage the accessible teaching and learning time maximally for quality results. With the maximum involvement of teachers from both underperforming and well-performing schools, these activities assist or help to develop teachers in those schools. Research confirms that extra tuition should be implemented, because teachers from well-performing schools are able to assist learners from struggling schools. Teaching during holidays, in autumn, winter, spring classes and matric camps is of paramount importance because struggling learners during these programmes are assisted in their problematic subjects. Teachers from well-performing schools and subject advisers assist these learners to pass their final examinations. Extra lessons are very important to learners who are slow to capture concepts at a normal teaching pace. They can be taught separately, so that they can understand better in a simple, modified way. The extra time and support tends to improve their performance.

2.6.8 Resource provisioning

2.6.8.1 Highly qualified teachers

Dedicated and devoted teachers who display confidence and passion for the profession are bound to influence learners because of their attitude. Teachers' poor content knowledge and pedagogical skills account for a greater part of the poor results coming out of schools (Van der Berg, 2011). The National Framework for Teacher Education in South Africa (2005) clearly states that well-qualified, committed and professional teachers are vital agents in the quality of schooling. Teachers who are highly qualified will teach according to the expertise they gathered

during training. These are the knowledgeable people who can teach with confidence and passion, and they can produce quality results. High qualification goes hand in hand with good performance in schools. Those teachers who have low qualifications in the subjects they teach tend to produce poor results, because they do not have a deep knowledge and understanding of the content. Highly qualified teachers not only know a lot about their subject, they are able to use different teaching methodologies for the enhancement of good results.

2.6.8.2 The role of school libraries in teaching and learning

A library is a place where books and other resources which should meet their needs are organised for use by learners and teachers (The American Association of School Librarians, 2012). These are books, periodicals, magazines and newspapers, films and filmstrips, slides, video tapes, audio recordings of all kinds, maps and charts, computers and other information-bearing resources. School libraries are essential in the educational process since they provide the needed materials to support the school's curriculum. Gretes (2013) stresses that, the real role of the school library is to make available and accessible good reading materials to learners to enhance their performance. These relevant reading materials assist learners in gaining skills for reading. When learners read magazines, newspapers and books their vocabulary increases.

Todd (2006) posits that the school library should provide information and information technology structures together with a collection of teaching facilities that support teaching and learning, and create a conducive atmosphere that encourages and boosts learners' learning outcomes. Hay and Todd (2010) state that the school library offers the academic environment for acquiring knowledge, and that school libraries develop advanced thinking skills that learners require for deep knowledge and deep understanding. Thus, well-resourced libraries contribute to excellent academic performance in schools. Burgin and Bracy (2003) indicate that in the USA a good school library programme enhances learners' performance. Hoskins (2006) points out that most of the research conducted on the usefulness of a school library for learners' achievements has established a distinctly positive advantage for teaching and learning with the support of the school media, and countless studies

indicate that well-resourced libraries contribute to excellent academic performance (Lacey, 2002). Most teachers make use of the resources from the library in their planning and preparation during teaching, by using them for research to support their teaching notes; this results in better performance by learners.

Lacey (2002) gives a useful overview of the evidence that links school libraries and learners' achievement, and his findings indicate the following: (i) In schools with good libraries and the services of a school librarian, learners perform significantly better on tests for basic research skills; (ii) learners perform significantly better in reading comprehension and in their ability to express effectively ideas in relation to their reading; (iii) learners' achievement in reading, study skills and use of newspapers is significantly greater.

2.6.8.3 Computer technology in teaching and learning

Fuchs and Woessmann (2004) express that there is positive interaction between the use of computers and learners' performance in schools. These results reinforce the argument that instructional activities that involve the use of technology, which affords a different way of expressing knowledge, capture the interest of learners, and have a helpful influence on performance. Mokgehle (2012) indicates that ICT is the best thing to have happened to teaching; it has revolutionised the profession and brought energy and innovation. The researcher concurs with this argument in the sense that technology makes work easier for learners, because they can easily access information. If schools are using ICT in teaching and learning it will make work easier, because learners will be able to explore the internet for themselves. In schools that use ICT, learners are more advanced. They are able to network with other learners with ease, and can help one another with difficult topics.

2.6.8.4 The school laboratory and science teaching

Hofstein and Lunetta (2003) refer to the science laboratory as a unique teaching environment, and a setting in which learners can work cooperatively in small groups

to investigate scientific phenomena. This argument is supported by Hofstein, Kipnis and Kind (2008), who indicate that a laboratory has a distinctive role for science learners and teachers, because it engages them in scientific activities. The researcher concurs with the argument because of his own laboratory experience. Teaching and learning become learner-centred, and learners learn how to make a scientific argument. Science facilities are used in science labs and in classrooms to demonstrate scientific phenomena to learners, and explain scientific concepts so that learners' understanding will be improved, and their performance be of high quality.

2.7 COMPREHENSIVE CONTINUING PROFESSIONAL TEACHER DEVELOPMENT

According to Dembele (2009), educationists have come to realise that teachers are made and not born. Teachers' education, both pre-service and in-service, is thus intended to improve the quality of education. Teachers are made through the educational preparation they undergo. Schools with a resilient culture provide their teachers with various and invaluable professional development opportunities. According to Pine (2009), professional development takes place in the school that aims to improve learners' performance, and it should be a school priority (Neil & Morgan, 2003). The learners' performance should be used to inform the professional development needs of the teachers (Marishane & Botha, 2011).

To promote a sustainable teaching and learning environment in a dysfunctional secondary school, some of the improvement initiatives taken so far have focused on the teacher as a key to improving learners' performance (Desimone, Smith, & Ueno, 2006). To bridge the content gap created by changes in curriculum, local training on subject content is always done. The subject advisers arrange training sessions at the beginning of each year to deal with challenging topics in their respective subjects and learners' expectations, and engage in learning to improve themselves.

Mundry (2005) discusses three shifts in beliefs about professional development: firstly, the critical value of teachers' experience and knowledge with regard to students' learning is being increasingly acknowledged. Secondly, even experienced teachers must continuously update their knowledge and skills, and must involve

themselves in lifelong learning. Thirdly, professional development must be focused on the learning area or subject content, and how it is taught. Professional development aims to improve the learning of challenging content by all learners.

The SMTs of schools which did not perform well in their results are made to attend the workshops during school holidays on various curriculum management topics. Marishane and Botha (2011) indicate that capacity building helps teachers to create chances to be actively engaged in programmes. This should lead to quality teaching, assessment and evaluation, and improvement in learners' performance.

Teacher training is intended to provide the teachers with the skills and knowledge necessary for educating learners. A study by Gamoran (2006) at the University of Wisconsin indicates that teacher training improves teaching and learning. Learners who are assigned to a succession of untrained and ineffectual teachers achieve significantly less; but learners who are assigned to several highly trained and effective teachers produce quality results.

Research indicates (Monk & King, 1994) that the more teachers are trained in skills and knowledge, the more learners will achieve quality results, and the less training they have, the worse the results. Numerous studies done in the USA (Darling-Hammond, 2006; Smylie et al., 2001) show those teachers have a tangible and visible influence on learners' performance. Thus, if teachers are well trained, they can approach new instructional ideas, and give effective feedback.

2.8 USE OF INFORMATION, COMMUNICATION AND TECHNOLOGY (ICT) TOWARDS IMPROVING TEACHING AND LEARNING

Mdlongwa (2012) indicates that teachers must incorporate ICT into the curriculum to assist learners' knowledge and understanding. The Department of Basic Education in Limpopo (2013) has put out a directive indicating that the following subjects must use ICT to enhance learner performance: mathematics, physical science, accounting, economics, geography and life sciences. This will allow learners to develop skills that will give an edge in an ever-increasing technology-saturated work environment. In addition, learners become creators in conducting research for school

projects on the internet. Those who use ICT in doing their assignments begin to cultivate the value of personal information management, working without supervision, and research skills. These ICT devices are intended to strengthen learning and teaching difficult subjects and challenging topics.

According to Livingstone (2012), ICT has a positive impact in significantly improving learners' academic performance, especially with knowledge, comprehension, practical skills and presentations skill in subjects such as mathematics, physical science and social sciences. Through the use of ICT, images can be used in teaching and in improving the retentive memory of learners, and teachers can easily explain complex instructions, and thus ensure learners' comprehension. Lessons tend to be more enjoyable, and generally improve learner attendance and concentration. Researchers indicate the positive impact of ICT on learners' performance, knowledge, skills and the downloading of useful information from the internet. With ICT, it is thus easy for learners to access information that could help their learning.

2.9 CHAPTER SUMMARY

Activity theory has been adopted as the theoretical framework which supports this particular study. The theory has established tools that can be implemented so that teaching and learning can be improved. Teacher development provides teachers with expertise and relevant information which can then be applied in teaching and learning, resulting in an improvement in learner performance. International and national researchers indicate that learner engagement and parental support enhances results. Setting targets, time management, strengthening leadership and management capacity, building and improving support for quality teaching and learning – all these educational goals promote the culture of performance, and enhance learner attainment.

Furthermore, there is a need for a school to manage resources in such a way that quality teaching and learning is guaranteed, and that the curriculum is uninterrupted. Comprehensive and continual professional teacher development is needed to promote sustainable teaching and learning in dysfunctional secondary schools. It

also bridges the content gap; local training on subject content must be an ongoing process. Relevant literature reveals that the provision and development of pre-primary education, improving the quality of education through curriculum content, and development of school improvement plans promote a sustainable teaching environment by making dysfunctional secondary schools identify their teaching and learning gaps.

The following chapter presents the research paradigm, research design, and target population, sampling and sampling procedures, research instruments, data analysis and ethical considerations in this study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The chapter presents the detailed methodological components used for this research. It outlines the research design, research paradigm, target population and sampling procedures, research instruments, data analysis and ethical considerations presented in the study. The main objective of this study is to address the following research questions:

- How do intervention strategies affect the academic performance of Grade 12 learners?
- What are educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners?
- What models of intervention could be used to improve the academic performance of Grade 12 learners?

3.2 RESEARCH DESIGN

According to Creswell (2003), mixed methods research is both a method and methodology for conducting research that involves collecting, analysing and integrating quantitative and qualitative research in a single study or a longitudinal programme of inquiry. The researcher chose this design on the basis that quantitative and qualitative method combined of the research problem and questions, rather than using only one of these methods (Creswell & Clark, 2017). Simply, this design involves the concurrent but separate collection and analysis of quantitative and qualitative data in order to compare and contrast findings (De Vos et al., 2011) that will enable the investigator to advance understanding of the effectiveness of intervention strategies on the academic performance of Grade 12 learners, thereby producing more complete and valid conclusions.

According to Denzin and Lincoln (2011), this means that qualitative research studies relevant aspects in their natural setting to make sense of or interpret phenomena in terms of the meanings people bring to them. For the purpose of this research, it is very important to recognise that in qualitative research, it is understanding that is central rather than statistics. Bassey (2001) indicates that qualitative research mainly

focuses on difficulties of the various aspects of the school and schooling, and takes into consideration the diverse objective capabilities and subjective perspectives which appeal to this study.

Lacey and Luff (2009) define a mixed-method design as a one-phase design using both quantitative and qualitative methods within the same time frame and with equal weight to understand the research problem. This design is concurrent, but entails separate collection and analysis of both quantitative and qualitative data to get findings (De Vos, Strydom, Fouché, & Delport, 2011). In this study triangulation refers to the grouping of qualitative and quantitative research methods in relation to the evaluation of intervention strategies which improved learners' academic performance in Grade 12. Both qualitative and quantitative research methods can be used for better understanding. Mixed methods can assist in terms of answering research questions clearly, and this integrated approach offers the researcher the use of mixed methods research as a process for collecting, and analysing both quantitative and qualitative data at some stage of the research process within a single study to comprehend an entire research problem. Simply, within this study the researcher has chosen to collect both numerical and textual information from the open- and closed-ended questionnaires and semi-structured focus group interviews to answer the research questions.

3.3 RESEARCH PARADIGM

The study is underpinned by the pragmatic paradigm. Teddlie and Tashakkori (2009) express that this is the most suitable paradigm. Indeed, a pragmatic approach encourages researchers who are using diverse methods in different paradigms to pursue joint action and place importance on sharing meanings. The researcher adopted this paradigm in his study in order to explore the effectiveness of the intervention strategies on the academic performance of Grade 12 learners. The quantitative approach is important when dealing with educators in determining such effectiveness, whereas the qualitative approach is intended to establish educators' concerns about the evaluation of intervention strategies on the academic performance of Grade 12 learners

3.4 POPULATION AND SAMPLING PROCEDURES

McMillan and Schumacher (2006) define population as a group of elements or cases, be it individuals, objects or events that conform to specific criteria, and are intended to provide a suitable base for research. The targeted population included HoDs and teachers who taught Grade 12 in selected secondary schools in the Vhembe District of Limpopo province, as they were most suitable for the study. They were the sources of information that needed to be collected, and of some of the research problems in the study.

Purposive sampling was used to select a sample of 20 HoDs and 40 teachers teaching Grade 12 from 20 selected schools in Vhembe District. In this view, the researcher established the correctness of generalisation from the sample to the population (Bless, 2013). The sample comprised two teachers per school teaching Grade 12, therefore 40 Grade 12 teachers from the 20 sampled schools for the quantitative data. Twenty teachers, one from each school, took part in four semi-structured focus group interviews, and 20 HoDs were also intended to participate in four semi-structured focus group interviews (a clustering of five participants per focus group) for the qualitative data; thus there were eight semi-structured focus group interviews altogether. However, on the scheduled date of the semi-structured interviews, only 16 Grade 12 teachers and 15 HoDs were available; thus six semi-structured interviews from 20 secondary schools were conducted with 31 participants forming part of the sample. From the 20 schools, 20 HoDs and 20 teachers selected by means of the purposive sampling method were interviewed. Forty-two Grade 12 teachers from the 20 sampled schools completed the questionnaires. The aim was to establish their views on the intervention strategies they were using to improve learners' academic performance, because they were teaching Grade 12 learners. Furthermore, these teachers were included in the implementation of the strategies as teachers in their respective schools. Participants were selected based on the assumption that they were likely to create valuable data for research.

3.5 DATA COLLECTION PROCEDURES

The questionnaires and semi-structured focus group interviews were the instruments that were used for data collection in this study. The first and third objectives were addressed through semi-structured focus group interviews whereby the participants (teachers teaching Grade 12 and HoDs) were provided an opportunity to express themselves freely, thus providing a greater variety of in-depth information. The semi-structured focus group interviews were elicited to find out how intervention strategies affected the academic performance of Grade 12 learners in secondary schools, and attempted to establish the intervention strategies that were used to improve learners' academic performance.

Closed-ended questions were used when designing the questionnaires which addressed the second research objective, which was to ascertain educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners. These participants were then interviewed in a focus group of five teachers and five HoDs from 20 sampled schools.

3.5.1 Questionnaires

The closed-ended questions were useful for eliciting factual information. The researcher delivered the questionnaires to the sampled schools. All participants were requested to append their signatures to the consent form before completing the questionnaires.

The questionnaire comprised two sections. Section A consisted of four items requesting demographic information from the respondents. The first part of the questionnaire sought information about the teachers, their qualifications, experience in teaching the subject, and grades taught. Information collected from this section was helpful in determining patterns, trends and consistency among the respondents, and in providing greater insight into their biographical context.

Section B consisted of 15 closed-ended questions related to issues of intervention strategies that could improve learners' academic performance in Grade 12. The respondents chose what applied to them by making a cross (x) in an appropriate space on intervention strategies that they thought contributed to the improvement of learners' academic performance. The questions required respondents to select the choices from a Likert-type 4 scale, ranging from strongly agree to strongly disagree

on strategies that affect learners' academic performance. The researcher used a questionnaire that comprised 15 questions (see Appendix E), as it allowed for a large population of respondents who provided a high proportion of usable answers (Denscombe, 2007). The researcher delivered questionnaires to the sample secondary schools in Vhembe District, Limpopo, and gave the participants a detailed explanation on how to complete the questionnaires.

Nardi (2006) indicates that questionnaires are efficient tools for surveying large samples of respondents in a shorter period than interviews or other research methods, with less expense. The questionnaires were distributed between August and September 2019, and were administered to Grade 12 teachers. All questionnaires were collected after 15 days from the respondents themselves, and were received on agreed dates. The researcher took time to go through all the questionnaires to check if they had been fully and correctly completed. Of the 42 copies of questionnaires that were delivered to schools, 42 were returned fully completed. However, owing to the questionnaire's disadvantages, which neither included the inability to probe, the respondents could not ask questions, nor be asked further questions where necessary.

3.5.2 Semi-structured focus group interviews

The researcher consulted with the sampled school principals for authorisation to engage Grade 12 teachers and the HoDs. Interviews were scheduled according to the availability of the participants. This was to adhere strictly to the agreement not to disrupt school activities.

Four semi-structured focus group interviews comprising five Grade 12 teachers and four semi-structured focus group interviews for HoDs from the 20 sampled secondary schools were conducted. Before semi-structured focus group interviews were conducted; all participants were requested to sign the consent forms. The study focused on strategies to improve learner performance, and teachers and HoDs were deemed fit for semi-structured focus group interviews. The researcher visited the participants in their schools, and suitable appointments were scheduled with them.

Focus group interviews were conducted in the chosen locations among the 20 secondary schools. The participants agreed to convene in convenient, conducive and comfortable schools in each of the circuits, and agreed on a convenient time as well. The participants were given interview guides (Appendices F and G) before the scheduled dates for their interviews, in order for them to prepare and make themselves comfortable in their responses during the interview sessions. They were given the opportunity to express themselves freely, thus providing a greater variety and depth of information. Interviewing could thus be regarded as the universal mode of systemic enquiry. The researcher recommends the use of semi-structured interviews in qualitative research as they provide the researcher with flexibility to probe for details during interviews. The researcher probed more deeply into the research problem while using them to substantiate group findings on intervention strategies for the academic performance of Grade 12 learners. The interviews were orderly and allowed the participants to listen to each other's views as corroboration or acceptance of common views on the challenges highlighted. Data from the interviews were captured accurately by recording the whole interview process.

3.6 PRE-TESTING

Gorman and Clayton (2005) indicate that pretesting is a draft of the research plan, and it is a neutral process which will not be used in the fieldwork. The pre-test identifies several variables and mistakes before preparing the final research project. Gorman and Clayton point out that a pre-test assists to check out the content of the questions, and language usage. For the pre-test during the study the researcher used five teachers and five HoDs. The pre-test questionnaires were administered to increase validity. Five teachers and five HoDs per school, a total of 10 teachers teaching Grade 12, were pre-tested from two other schools, which were not amongst the sampled secondary schools, to identify ambiguities and flaws. The questionnaire was found to be clear to the respondents, and was therefore left unchanged. It was tested on five teachers and five HoDs to provide information, and two focus group interviews for teachers and HoDs consisting of five members each were interviewed in the pre-test. This pre-test assisted the researcher to interview people, control semi-structured focus group dynamics, and generate factual data from

questionnaires. It also helped the researcher to make revisions for better quality in the study.

3.6 DATA ANALYSIS AND PRESENTATION

Data generated from participants must be ordered to make sense. The researcher used thematic analysis for qualitative data. Data in this study were coded manually. The transcripts were analysed using necessary coding. Data retrieved through the questionnaires were quantitatively analysed using inferential statistics of frequency counts, simple percentages, tables and statistical representations with inferential statistics explaining the results of the study. Analysis of statistics was done using the Statistical Package for Social Sciences (SPSS) software. The demographic data of respondents were therefore analysed using frequency counts and simple percentages.

With regard to the qualitative data analysis the researcher made use of thematic analysis. Thematic analysis is the interpretation of qualitative data in easily interpretable and concise descriptions of emerging patterns and themes in the data set (Braun & Clarke, 2006). Data from the semi-structured focus groups were transcribed, as thematic analyses involved verbatim transcripts of focus group interviews. According to Braun and Clarke (2006), six simple steps are used to evaluate the data in relation to the research questions: (i) data familiarisation; (ii) initial code generating; (iii) theme searching; (iv) review of generated themes; (v) naming and defining themes; and (vi) report production. Thus, these steps were carefully considered and undertaken during the analysis of data in the study. The researcher coded the two sets of focus group interview data from the 20 teachers and 20 HoDs, providing understanding and indicating conceptual relationships between the data collected. Coding also assisted in the counting of keywords. Each theme generated a conclusion that was found in the results from this study (Maree & Pietersen, 2010).

3.7 ETHICAL AND SAFETY CONSIDERATIONS

This study is centred on the evaluation of intervention strategies for the academic performance of Grade 12 learners. The researcher protected the welfare and rights of each of the participants in the study (McMillan & Schumacher, 2011). Approval for ethical clearance was granted to the researcher before the data were collected. The Department of Basic Education in Vhembe District granted permission to the researcher (Appendix C). A letter was written to circuit managers of selected circuits, who granted official permission for conducting the research in their circuits (Appendix B). The researcher wrote a letter to principals of the sampled secondary schools, who also granted permission for the participants to be involved (Appendix B). Participants were briefed and signed consent forms, and their permission was obtained to tape-record the interviews (Appendix D) for teachers and for HoDs (Berg, 2007). All interviews were tape-recorded, then transcribed and finally coded. Following the advice of McMillan and Schumacher (2011), 31 participants were referred to anonymously in print.

The researcher complied with all ethical principles such as accountability, honesty, confidentiality and privacy. All participants were informed that it was voluntary to participate, and that they had the right to call off their participation. Their rights included those of privacy, confidentiality and anonymity. Before data were collected, informed consent forms were signed between the researcher and participants (Appendix D for teachers and for HoDs). No participant was promised money or any form of reward for his or her participation, nor was there any deception by error or commission. The researcher assured all participants that the process would be trustworthy, and that they would not be subjected to any acts of betrayal.

3.8 VALIDITY AND RELIABILITY

The extent to which outcomes of a research study are consistently accurate using precise representations of the total population for the study constitutes its reliability (Joppe, 2000). If the results can be sustained several times by using the same

methodology and instruments, they can be measured reliable. Reliability is concerned with the reliable measurement in the study. The researcher confirmed that instruments were reliably valid through internal checks on data quality and interpretation, as well as accurate administration, timely retrieval of questionnaires from the respondents, and properly recorded interviews (Ritchie & Lewis, 2003).

The validity of the instruments is the significant strength of triangulation research for determining the accuracy of findings of a research study by the participants, the researcher, and the readers of the study (Miller, 2000; Jupp, 2006).

Credibility is the extent to which the key findings of the study represent the participants' actual meaning in their responses (Lietz & Zayas, 2010). In order to make the study credible, all participants were revisited, member checking was conducted, and participants reviewed their transcripts to make sure that there was accuracy and consistency in the researcher's interpretation.

Transferability concerns the way in which the results of the study can contribute to other situations (Shenton, 2004). In order to achieve transferability, purposive sampling must be done and descriptions must be communicated to allow the continuation and understanding that can arise in other research areas and populations (Shenton, 2004). The researcher duly noted this.

Dependability relates to the consistency of the findings of the research (McMillan & Schumacher, 2010). The overlapping method was used to ensure that dependability in corroborating findings through the reviewed documents (Shenton, 2004).

According to Shenton (2004), **confirmability** is the qualitative investigator's concern comparable to objectivity. This is an indication that experiences of the participants and research findings must be viewed. An audio-recorder was used to ensure the confirmability of the study. Notes were taken during interview for the sake of authenticity of the data.

3.9 CHAPTER SUMMARY

In this chapter the researcher has outlined the methodology and research design that were used for the evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo

province. The study was underpinned by using a pragmatic research paradigm to answer the research questions that have guided the research. Sampling procedures are discussed as the rationale for the sampling strategy that was used. Instruments used to collect data, and the necessary procedures followed are explained. The reliability and validity of data collection are also discussed, and ethical issues considered.

The next chapter presents an analysis of data collected through interviews and questionnaires.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION

4.1 INTRODUCTION

Chapter Three presented the research design and methodology of the study. This chapter presents a systematic analysis and interpretation of data obtained from the questionnaires with teachers, and from semi-structured focus group interviews with teachers and HoDs from 20 selected secondary schools in Vhembe District, Limpopo. Analysis of data serves to generate meanings, which are the results of a systematic arrangement and presentation of the information; the information is organised to show the comparisons, contrasts and insights that can be established (Creswell, 2014). In order to establish teachers' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners, the researcher administered questionnaires to 42 teachers, while 16 teachers and 15 HoDs from 20 secondary schools were engaged in six semi-structured interviews. Data analysis and findings of this study are triangulated, as they are based on the mixed-methods approach for the following research objectives of the study:

- To determine how intervention strategies affect the academic performance of Grade 12 learners.
- To establish teachers' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners.
- To establish models of intervention that could be used to improve the academic performance of Grade 12 learners.

4.2 SECTION A – TEACHERS' CONCERNS ABOUT THE EFFECT OF INTERVENTION STRATEGIES ON THE ACADEMIC PERFORMANCE OF GRADE 12 LEARNERS

This section presents findings from the questionnaires which specifically addressed objective 2 regarding teachers' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners in Vhembe District, Limpopo. The researcher presents the data in tables, followed by overall discussions of findings.

4.2.1 Teachers' demographic Information

Personal information of the respondents was necessary to ascertain the characteristics of the respondents in the study. The information included types of teaching qualification, years of teaching Grade 12, years of teaching experience and the subject/s taught in Grade 12.

Table 4.1: Types of teaching qualification

QUALIFICATION	FREQUENCY	PERCENTAGE
Certificate	2	4.8
Diploma	14	33.3
Bachelor's degree	13	31.0
Postgraduate (MED, PGCE)	13	31.0
Total	42	100.0

The profile of teaching qualifications shows that teachers who were offering Grade 12 were highly qualified, with 95.3% of the respondents being beyond the minimum requirement of matric plus four years. About 4.8% of the respondents were underqualified, with Grade 12 plus a one-year education qualification. About a third of respondents held either a diploma, bachelor's degree or postgraduate qualification. Slightly below 5% of them had a teaching certificate. It may be said that teachers need to acquire higher qualifications as a means to broaden their knowledge and skills in their profession (Fareo, 2013). The findings significantly show that teachers fulfilled the stipulated minimum qualifications as requirements for the teaching profession (SACE, 2008). Chisholm (2012) indicates that despite various intervention strategies, and improvement in the teachers' formal qualifications, the ongoing evidence of poor reading, writing and mathematical capabilities of many learners raised many questions about the teachers' subject content knowledge.

Table 4.2: Years of teaching experience

YEARS OF TEACHING EXPERIENCE	FREQUENCY	PERCENTAGE
VALID	1-5 years	2 4.8
	6-10 years	2 4.8

	11-15 years	12	28.6
	16-20 years	10	23.8
	21-25 years	6	14.3
	26 years and above	9	21.4
	Total	41	97.6
Missing		1	2.4
Total		42	100.0

Table 4.2 shows the years of teaching experience of the respondents. About 87.9% of the respondents had more than 10 years of teaching experience, and only 9.6% had less than 10. Louws, Meirink, Van Veen and Van Driel (2017) state that experience increases through professional development and knowledge of subject content. Louws et al. (2017) assert that the greater the teaching experience of teachers, the more they need professional teacher development to keep up-to-date with the trends in their specialisation.

Table 4.3: Years of teaching Grade 12

YEARS OF TEACHING GRADE 12		FREQUENCY	PERCENTAGE
VALID	1-5 years	7	16.7
	6-10 years	10	23.8
	11-15 years	6	14.3
	16-20 years	9	21.4
	21-25 years	8	19.0
	26 years and above	1	2.4
	Total	41	97.6
Missing		1	2.4
Total		42	100.0

Results in Table 4.3 present the number of years respondents had been teaching Grade 12, which ranged from 1-5 years to 26 years and above. Notably, 57.1% of the respondents had more than 10 years of teaching Grade 12, 16.7% had 1-5 years, and 23.8% 6-10 years. When teachers have more experience in teaching, they become better at it, and have a positive impact on learners' academic performance. Experience is the best teacher. Guerriero (2017) indicates that when teachers are gathering highly specialised knowledge from practice and research, or it

is shared in professional communities, they gain more valuable experience in teaching.

Table 4.4: Subject/s taught in Grade 12

SUBJECTS TAUGHT IN GRADE 12	FREQUENCY	PERCENTAGE
Languages	10	23.8
Sciences	17	40.5
Humanities and social sciences	6	14.3
Commercial subjects	3	7.1
Multiple subjects	6	14.3
Total	42	100.0

In terms of the subjects taught in Grade 12, about 40.5% of the teachers came from the sciences, and 23.8% from languages. The humanities, social sciences and commercial subjects accounted for about 21.4% of the respondents. 14.3% of them taught multiple subjects in Grade 12. The majority of the respondents teach sciences (40.5%), followed by languages (23,8%). Only 7.1% of the respondents taught commercial subjects.

Table 4.5: Timeous planning of intervention strategies

SCALE	FREQUENCY	PERCENTAGE
Disagree	2	4.8
Agree	21	50.0
Strongly agree	19	45.2
Total	42	100.0

Table 4.5 shows that there was overwhelming consensus (95%) that intervention strategies are timeously planned for Grade 12 learners. Leepo (2015) affirms that teachers are expected to develop possible answers after they have identified the errors committed by learners. It is the role of the curriculum adviser to ensure that the improvement plan is implemented to enhance learners' academic performance (Leepo, 2015).

Table 4.6: Achievable performance targets

	FREQUENCY	PERCENTAGE
Disagree	5	11.9
Agree	13	31.0
Strongly agree	24	57.1
Total	42	100.0

88.1% of the respondents strongly agreed that achievable performance targets for Grade 12 learners with low academic performance have been set before implementation of the strategies. However, a minority (11.9%) disagreed that their schools set achievable performance targets for Grade 12 learners. It is critical for the school, when setting targets, to consider the trends in performance over the previous years; the prior attainment of each year group; the school's environment and how it compares with other schools in similar circumstances; and the targets set by that school to improve learners' performance (Leepo, 2015). This clearly indicates that many schools set achievable targets for Grade 12 subjects with low academic performance before implementing the intervention strategies. However, whether the above range of factors is taken into account is debatable.

Table 4.7: Establishment of subject committees

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	1	2.4
Disagree	10	23.8
Agree	19	45.2
Strongly agree	12	28.6
Total	42	100.0

Subject committees had been established to assist in the implementation of the intervention strategies, as shown by about 74% of respondents in Table 4.7 who were in agreement. However, 26.2% of the respondents disagreed and strongly disagreed that their schools had established subject committees to assist in the implementation of the intervention strategies, which may have resulted in poor performance by learners. However, the establishment of subject committees in the school enhances good academic performance by learners, because teachers will be helping one another in terms of the subject content gap.

Table 4.8: Well-structured intervention strategies

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	1	2.4
Disagree	6	14.3
Agree	21	50.0
Strongly agree	14	33.3
Total	42	100.0

Table 4.8 indicates that about 83.3% of the respondents stated that the intervention strategies are well structured. On the other hand, only 16.7% disagreed and strongly disagreed that intervention strategies are well structured. This means that the majority of the schools are structuring their intervention strategies in order to enhance learners' academic performance. But a minority of schools are still not structuring their intervention strategies, which may hamper learners' performance.

Table 4.9: Well-paced curriculum coverage for the different subjects

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	2	4.8
Disagree	4	9.5
Agree	13	31.0
Strongly agree	23	54.8
Total	42	100.0

Table 4.9 indicates that curriculum coverage of different subjects is well paced and adequately covered in most secondary schools. About 85.8% of the respondents agreed and strongly agreed that the curriculum coverage for the various subjects is well paced and adequately covered. In contrast, only 14.3% of the respondents strongly disagreed and disagreed.

Table 4.10: Teachers' subject content knowledge

SCALE	FREQUENCY	PERCENTAGE
Disagree	3	7.1
Agree	11	26.2
Strongly agree	28	66.7
Total respondents	42	100.0

Teacher's content knowledge enables them to teach and implement the intervention strategies effectively. In Table 4.10 92.9% of the respondents agreed and strongly agreed that teachers have the necessary subject content knowledge, while only 7.1 % disagreed. According to Van der Berg (2011), if teachers have poor subject content knowledge and pedagogical skills, they will contribute to poor performance in those schools.

Table 4.11: Continuous professional development training in practical skills

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	1	2.4
Disagree	11	26.2
Agree	21	50.0
Strongly agree	9	21.4
Total respondents	42	100.0

71.4% of the respondents agreed/strongly agreed that there is continuous professional development training given to Grade 12 teachers in relation to the practical skills indicated in Table 4.11. However, 28.6% of the respondents strongly disagreed and disagreed. Pine (2009) states that professional development takes place in the school that aims to help to improve learners' academic performance, and it must be a school target. It is clear that professional teacher development is also informed by learners' academic performance (Marishane & Botha, 2011).

Table 4.12: Professional development training on subject content

SCALE	FREQUENCY	PERCENTAGE
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Disagree	9	21.4
Agree	19	45.2
Strongly agree	14	33.3
Total respondents	42	100.0

In the table above, 21.4% of the respondents disagreed that professional development training is provided to Grade 12 teachers on subject content. However, the vast majority of the respondents, 78.5%, agreed and strongly agreed that it is provided. According to Gamoran (2006), teaching skills and knowledge are improved during ongoing professional teacher training and workshops, and thus reduce the subject content gap.

Table 4.13: Professional development training on teaching methodologies

SCALE	FREQUENCY	PERCENTAGE
Disagree	15	35.7
Agree	16	38.1
Strongly agree	11	26.2
Total respondents	42	100.0

Table 4.13 indicates that 35.7% of the respondents disagreed that professional development training is provided for Grade 12 teachers specifically on teaching methodologies. On the other hand, the table shows that 64.3% of the respondents agreed and strongly agreed that such professional development training is provided. Osuji (2009) supports the continuous building of teachers' capacity as this prepares them with the required skills to impart knowledge and have self-confidence in their profession. Omole (2014) indicates that teachers' professional development training should expose them to various teaching methodologies that can be used to teach different subjects or topics to learners in different learning situations.

Table 4.14: Ongoing support from the school management team

SCALE	FREQUENCY	PERCENTAGE
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Disagree	6	14.3
Agree	21	50.0
Strongly agree	15	35.7
Total	42	100.0

It is clear from Table 4.14 that the SMTs are perceived to be providing adequate support as 85.7% of the respondents agreed and strongly agreed. However, 14% of the respondents disagreed. Omole (2014) affirms that SMTs play a prominent part in the quality of learning and teaching in schools, and schools which enjoy maximum support from their SMTs function effectively. SMTs should provide the necessary support to their teachers for improving learners' academic performance.

Table 4.15: Monitoring of intervention strategies by the SMT

SCALE	FREQUENCY	PERCENTAGE
Disagree	2	4.8
Agree	28	66.7
Strongly agree	12	28.6
Total	42	100.0

The principal and HoDs should monitor teachers' work on a regular basis, so that the help that can be implemented should improve classroom activities and indirectly improve literacy (Bush et al., 2011). Data in Table 4.15 show that an overwhelming 95.3% of the respondents agree and strongly agree that the SMTs monitor implementation of intervention strategies that are planned to enhance learners' performance in Grade 12. However, a minority of only 5% of the respondents disagreed that SMTs are monitoring implementation of these intervention strategies, which may result in these strategies being ineffective.

Table 4.16: Evaluation by SMTs to implement intervention strategies on academic performance

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	1	2.4

Disagree	9	21.4
Agree	20	47.6
Strongly agree	12	28.6
Total	42	100.0

Table 4.16 shows that 23.8% of the respondents were strongly disagreed and disagreed that the SMTs evaluate intervention strategies that focus on academic performance. The failure to evaluate such strategies may lead to dysfunctional programmes. However, the table shows that 76.2% of the respondents strongly agreed and agreed that such evaluation is evident.

Table 4.17: Adequate support material provided by SMT

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	1	2.4
Disagree	6	14.3
Agree	22	52.4
Strongly agree	13	31.0
Total	42	100.0

Table 4.17 shows that 83.4% feels that adequate support material is provided to implement the intervention strategies provided by the SMT, thus positively supporting and encouraging learners' good performance. This is contrary to the 16.7% of the teachers who strongly disagreed and disagreed, and this may hinder learners' academic performance. Adequate support materials must be provided by the school principal and circuit managers (Leornard, Petta & Porter, 2012). Teacher development must be given by school leadership on a daily basis (Nicolaidou, 2010).

Table 4.18: Intervention strategies catering for teachers' needs in a specified subject

SCALE	FREQUENCY	PERCENTAGE
Strongly disagree	1	2.4
Disagree	11	26.2

Agree	16	38.1
Strongly agree	13	31.0
Total	41	97.6
Missing system	1	2.4
Total	42	100.0

Data from Table 4.18 reflect that 69.1% of the respondents either agreed or strongly agreed that the intervention strategies cater for teachers' needs; but 28.6% strongly disagreed and disagreed.

Table 4.19: Intervention strategies catering for learners' needs in a specified subject

SCALE	FREQUENCY	PERCENTAGE
Disagree	10	23.8
Agree	18	42.9
Strongly agree	14	33.3
Total	42	100.0

In Table 4.19, 23.8% of the respondents disagreed that the intervention strategies cater for learners' needs in a specified subject, while 76.2% agreed and strongly agreed, i.e. the vast majority of the respondents; this may promote positive performance by the learners.

Findings from the quantitative data revealed that the majority of the respondents had a positive attitude, as shown by the percentages of respondents who agreed or strongly agreed that intervention strategies are timeously planned; achievable goals are set for poorly performing Grade 12 learners before strategies are implemented; subject committees have been implemented; intervention strategies are well structured and well organised; curriculum coverage is well paced; teachers have the necessary subject knowledge; and continuous professional development is provided by the SMTs.

The areas that could be considered for improvement are continual professional development for educators, especially in the area of teaching methodology and the

evaluation of the intervention strategies. The sentiments expressed show that the implementation of the interventions could be improved by placing more responsibility on the schools and through consultation between schools/educators and the Department of Basic Education so that the intervention strategies are focused on areas where educators have knowledge gaps.

4.3 SECTION B: THE QUALITATIVE DATA ANALYSIS

This section presents findings from the semi-structured focus group interviews for both HoDs and teachers. The HoDs and teachers were the sources of data for all three of the research objectives, namely: to determine how intervention strategies affect the academic performance of Grade 12 learners; to ascertain educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners; and to establish a model of intervention emanating from best practice that could be used to improve the academic performance of Grade 12 learners. The researcher administered two semi-structured focus group interviews, each comprising five teachers and five HoDs. The data from the participants were analysed and presented, and themes were identified in response to answering the research objectives. Data collected during semi-structured focus group interviews were analysed as described by Creswell (2014), and as outlined in the research methodology chapter. Cohen, Manion and Morrison (2011) state that thematic coding remains the common technique to analyse qualitative data. Verbatim transcriptions of recorded audio interviews were categorised into six themes. The researcher identified the following themes:

- Existing intervention strategies
- Rationale for intervention strategies
- Support experienced by teachers
- Monitoring and evaluation by SMTs
- Overall effects of intervention strategies
- Challenges experienced by teachers
- Suggestions for improvement of intervention strategies

4.4. DISCUSSION OF THE THEMATIC FINDINGS

Discussion of each of the above themes from the semi-structured interviews is presented below. Themes are firstly introduced, and findings are thereafter presented and interpreted. Verbatim quotations from the participants are presented, and relevant literature to support the findings is then described. Extracts from verbatim quotations from participants were indicated as: Teachers 1-16 (T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13, T14, T15 and T16; and for HoDs 1-15 as H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14 and H15 so as to maintain the anonymity of all participants. .

4.4.1 Existing intervention strategies

This theme relates to the various intervention strategies that teachers have currently implemented in the subjects they are teaching in Grade 12. This revealed that teachers have added extra scheduled times for individual subjects geared towards improving performance. They mentioned various options for these added times for implementing the intervention strategies in their subjects. Participant T1:

“In my subject we are implementing Saturday classes. We also use mornings and afternoons as time for teaching these learners.”

Apart from the weekend classes on Saturdays and Sundays, morning and afternoon classes were supported by participant T10, who clearly stated that both extra morning and afternoon sessions enhance learner performance:

“Besides getting afternoon lessons, another intervention strategy we are giving is morning studies. It’s one of the strategies we are using to improve their performance.”

Morning, afternoon and weekend classes were anchored by the HoDs supporting the efforts of the participating teachers to enhance learners’ performance. Participants H1 and H8 affirmed:

“Effective Saturday classes – that is what we are implementing. And we also have morning studies where educators teach for 40 minutes, and do the same for afternoon studies” (H1).

“You realise we have created Saturday classes? We also have studies during the afternoon and in the morning. We think with this at least we can get something from the learners, because it gives them a chance to participate. During these extra studies they will be busy reading on their own, though some educators will be teaching. And on Saturday we will be giving them different classes to try and catch up on whatever challenges they have. So these are some of the things that one can mention, though there are lots of them. Maybe colleagues will come up with something else” (H8).

Apart from weekend and early morning classes before the beginning of school, other teachers stated that they also make use of winter and spring classes in order to enhance learners' academic performance.

“We also have classes during spring break, and when the school is closed we have winter classes” (T14).

The spring classes as an intervention strategy were also presented by participant T15.

The HoDs placed emphasis on structured intervention strategies and division of learners according to capabilities based on profiling to address individual problems. Participant H3 agreed that profiling of learners is vital for their performance in Grade 12.

“We are profiling so that we group together those who are performing well, and we group together those who are slow learners, to provide them with additional support” (H3).

Participating HoDs confirmed the depiction of the monitoring and assessment process, and that tests and examinations were also used to measure learners' performance. Participant H14 said that March and June examinations are used as an intervention strategy to improve the pass rate of Grade 12 learners.

“The second one, like the June and March exams, is after the reflection on the previous exam, when we tried to focus mainly on difficult topics. We are not only going to just teach, but we look at the most difficult topics that learners experienced during the past exams, trying to help them mainly in these areas” (H14).

Regarding intervention strategies, which include providing learners with more activities aimed at improving their performance, participant T6 said that weekly, monthly and daily tests are being administered for increasing learners’ performance in mathematics.

“Ok, I concur with her: I also teach mathematics and we give extra lessons, do profiling whenever we are given a task, and do item analysis in our school. We can analyse where learners are doing badly, and where they are doing well. We have weekly, monthly, even daily tests. And we also have morning studies. I come at 06:30 for morning studies” (T6).

Participant H1 said that another intervention strategy for improving academic performance amongst learners was motivation from stakeholders involved, specifically in relation to monitoring of work, assessment, tests and examinations.

“Apart from effective Saturday classes, that is what we are implementing. And we are also doing morning studies, where educators teach 40 minutes, and afternoon studies. We engage learners in more written work. We also invite motivational speakers, SGBs and professional motivators and so on, to motivate our learners” (H1).

Learners’ academic performance in every school is of paramount importance: it needs various intervention strategies by teachers, the SMT and stakeholders in the school so that performance will improve. Knesting (2008) agrees that if teachers provide extra time for their learners, and more care in school, this will enable them to be more successful. By being provided this support, learners can be motivated and obtain quality results. These findings demonstrate that all the participants from teachers to HoDs agreed that added extra lessons scheduled for individual subjects were geared towards stimulating learners’ performance in Grade 12. It is evident from the findings that teachers are using the structured intervention strategies, which include providing learners with more activities aimed at improving performance. This reflects the finding that dividing learners, based on profiling, according to their

capabilities will address individual problems. However, only if teachers frequently and consistently implement these intervention strategies across all the different subjects will learners' performance substantially improve.

4.4.2 Rationale for intervention strategies

Teachers' views on the rationale for introducing intervention strategies to improve learners' performance were sought through semi-structured focus group interviews with teachers who are currently teaching Grade 12. Findings revealed that the rationale for introducing intervention strategies included poor reading and comprehension skills, and learners' poor behaviour. However, Meyers (2009) states that when there is a positive learner-teacher relationship, the learners enjoy the teaching and learning process, and even their attendance can change. Teachers tend to track learners' performance with this plan, and are given an opportunity to strategize on topics that learners find difficult. Through their interviews, teachers, for instance T12, expressed their view that learners' poor performance is the main reason for introducing these intervention strategies. The HoD H13 took a similar view to T12's when he stated:

"We check low marks where learners performed badly, and we choose that subject as the one that must be treated separately. For instance, maths and physical sciences are the subjects where learners performed poorly, as they did in life science and geography. So these are the target subjects" (H13).

If teachers implement intervention strategies for the subjects that are poorly performed in by learners, then improvement in learners' performance can be achieved. *"What I can add here is that some learners in Grade 12 who find difficulty in their subjects didn't do well while they were still in Grade 11. So they go to Grade 12 with very low marks. That's why we target these subjects so that maybe they can improve"* (H14).

Another finding from the participating teachers revealed that teachers are implementing intervention strategies because of poor use of language, and poor reading and comprehension. This overall inadequacy is affecting learners' performance. Participant T2 highlighted this by stating:

“Sometimes you will find that when our learners are given work, some of them struggle with the language. We find that our learners struggle with reading and understanding, so we give them some more time and teach them how to improve these skills” (T2).

Knesting (2008) agrees that if teachers give extra time and care to their learners, this will enable their learners to be more successful. The researcher cannot overestimate the importance of learner-teacher rapport as it relates to learner achievement. Teachers are therefore encouraged to frequently implement various intervention strategies so that learners who are performing poorly in reading and comprehension, and even those who resent teaching and learning, may improve their academic performance.

4.4.3 Support experienced by teachers

This theme focuses on the necessary support received by the teachers, specifically from the SMT during the application of intervention strategies. The participating teachers explained that their SMT assists them with support material so that they may improve learners' performance. The participants agreed that the HoDs provided question papers, teaching materials, and various policy documents.

“My HoD supports me a lot because she provides me with question papers, and teaching documents from other schools, and whenever I need help, if I go to ask her, she is always there for me” (T8).

This was supported by T4, who said:

“I see that our HoD plays a most important role because sometimes you find that if we are not following the CAPS document, they want us to understand that when you are going to teach the learners you need to look whether you are working with the CAPS document, so that you know what is going to be set as the coming activity or assessment that you are going to give your learners” (T4).

Findings indicate that teachers are guided, advised and supported by HoDs through the evaluating and monitoring of tests which are administered to learners. The HoDs check the quality of the tests and encourage teachers to network with other teachers from surrounding schools. Participant T3 stressed that quality tests and networking with other teachers help in terms of learners' performance.

"As has been indicated before, the HoD plays an important part because he checks the quality of the tests that we give learners so that we give them quality-assured tests, so that even during the exam they can perform well. The HoD where I work helps in content gaps in my subjects, and he encourages me to network with others teaching the same subject" (T3).

Participant H8 supported the view that teachers are being helped by HoDs in the subject content gap:

"Yes, sometimes as HoDs we may even consider helping teachers with the learning of the subjects we control. If there are some topics that are challenging to the teachers I go and encourage learners in how to perform best in a particular subject, even though I might not be the teacher for that particular subject" (H8)..

If teachers are supported by the HoDs, learners' performance may improve. The support and motivation experienced by teachers in terms of teacher outsourcing or networking is pivotal to such improvement. If HoDs plan, monitor, organise and evaluate the progress of the application of intervention strategies during the four terms of the year, and closely and consistently monitor learners' performance, results may improve.

4.4.4 Monitoring and evaluation by SMT

Monitoring and evaluation by the SMT are key elements of their duties and responsibilities. The participants indicated that monitoring and evaluation play an important role in improving the quality of the results.

“HoDs are responsible for monitoring the programme, even planning and organising how it should be. Besides that, they have another duty of monitoring the work by interacting with teachers to find if they have difficulties with certain topics” (H15).

This view was supported by participant H3:

“As HoDs we try to monitor these intervention strategies by class visiting. We check the attendance of the learners and teachers in class. We even check the coverage of each subject teacher in this intervention” (H3).

Participant T10 indicated his view supporting the monitoring programme as follows:

“One of the roles that the HoDs play here is that sometimes when there is a need the HoD helps in monitoring. The role of the HoD is to monitor what teachers are doing; it will be beneficial to all the learners” (T10).

Participants H15, T10 and H3 considered that monitoring of intervention strategies by HoDs is most important, because it has an impact on learners' performance. All the participants indicated that if monitoring is not done properly, results in Grade 12 will not improve.

4.4.5 Overall effects of intervention strategies

Participants indicated that improvement in Grade 12 results has been noticeable owing to the implementation of intervention strategies. The findings revealed that quarterly assessments have been improved, and there is also an improvement in performance in difficult subjects.

“In my subjects I find that this plays a very important role as far as the learners' results are concerned. My learners are improving their performance, and we can see that when we engage them quarterly. We check the results quarterly, and we can see that from one quarter to another quarter the results are improving” (T1).

Improving learners' performance from quarter to quarter was supported by participant T3:

“I agree with the last speaker because in my subject we can see great improvement because of these intervention strategies. As he has indicated, from quarter to quarter

you will see an improvement, showing us that these intervention strategies are really working” (T3).

Participant T6 indicated that intervention strategies motivated learners to concentrate on their studies, both the well-performing and even the less well-performing learners.

“Take my subject: usually they regard it as very difficult, but when we introduced these strategies, they performed better than they were doing previously. They are definitely motivated” (T6).

Almost all the participating teachers indicated that monitoring and evaluation of all aspects of teaching, learning and assessment were based on the results. This means that the implemented intervention strategies are focusing on improving learners’ academic performance.

“One can say we are satisfied. We started trial exams, and in some subjects like technical maths and maths, they finish marking and when we just look at them, there is an improvement and a tremendous one” (H15).

This was supported by participant H4:

“Grade 12 learners are improving in large numbers. These strategies to improve learners’ performance are working. The results are improving, and we hope for a pass by the end of the year” (H4).

The researcher concluded that if intervention strategies for improving learner performance are effectively implemented, and if necessary support, monitoring and evaluation are provided by the SMTs, this may lead to better results. The school principal is responsible and accountable for learners’ academic performance. Maicibi (2003) indicates that without proper leadership, learners’ performance in secondary schools cannot be improved.

4.4.6 Challenges experienced by teachers

Teachers encountered challenges to the effectiveness of intervention strategies for improving learners’ performance, such as the antipathy learners displayed towards the offering of extra scheduled lessons, their absenteeism, unpunctuality and use of

drugs. This is a root cause of some secondary schools' struggle, because the teachers' mindset needs to be changed. Participants expressed the view that intervention strategies cannot be effectively implemented owing to these challenges.

Participant H10 stated:

“So there is a serious challenge, because we find that even if we say we are coming on Saturday, some of the learners won't even bother to come, especially those that we know are not performing well. So the challenge that we are facing is that of learners who do not want to come for extra classes. And it is very difficult to find somebody from a particular race to come to this school because finance is also a challenge. So these are some of the challenges that we encounter whenever we try to manage these extra classes and staff” (H10).

This declaration was supported by participant H14, who said:

“There are some few learners who are not coming, and they are the ones who are performing very badly. We make follow-ups to their parents, and then we find that no one is there” (H14).

If the learners who are struggling are not attending the extra lessons, their performance will not improve. Struggling learners feel too discouraged to attend classes, and some learners do not make an effort to improve their performance, despite the strategies put in place. Some of the participants responded that some of the girls are not coming to school, because they are pregnant.

“Another thing I can add is the problem of a high rate of pregnancy in schools. We find that learners who are pregnant are always absent from school. And then they go and give birth and spend the whole week without coming to school. So that is a big challenge” (H4).

Another finding is lack of support from parents, which is viewed as problematic for learner performance.

“When we have problems with learners, we find that their parents are not involved in that particular problem, they are not there to support their children in academic matters” (H3). This is a serious challenge which affects teaching and learning. Parental support is critical for assisting learners' performance.

Diaz (2003) supports the view that learners' achievement can be enhanced by support they receive from their parents. If learners absent themselves from intervention strategies planned by schools for improving results, then their performance will deteriorate. Thus parental involvement and ongoing support during the implementation of intervention strategies for improving learners' performance is of paramount importance. Researchers both local and international, such as De Planty (2010), Diaz (2003) and Boon (2007), indicate that parental involvement, parental expectations and parenting style are found to be associated with high levels of academic performance, and even the learners' behaviour can change. Thus through parental support, learners may perform well in their final results in Grade 12. However, it needs dedicated and devoted parents to support intervention strategies planned by the schools to improve learners' performance.

4.4.7 Suggestions for improving intervention strategies

Findings revealed that most participants mentioned similar intervention strategies for improving learners' performance: involving learners, teachers, parents and the Department of Basic Education in solving learner-related challenges; implementing consistent learners' results analysis; extra tuition or classes; collaborative teaching; peer or cooperative learning; ongoing formative and summative assessment; integrated support; and employing regular monitoring and evaluation strategies.

Participant T3 stated:

"I think one of the possible solutions to this is to involve both learners and their parents during the weekends when we come here. If we can talk to their parents and their helpers, I think we can get good results" (T3).

This was supported by participant T2.

"Their parents must be involved with this education so that maybe learners can see that it is very important to be educated because the parents are involved." (T6). It is of paramount importance for the parents to support intervention strategies aiming to improve their learners' performance. This is supported by Boon (2007), who stresses that low achievement among children is significantly linked with lack of parental support.

Other participants specified that the Department of Basic Education's involvement in implementing the intervention strategies is viewed as critical for improving learners' performance. *"Maybe the government itself can help our learners by motivating them. It can maybe make them improve"* (T2). T2 was supported by T3: *"I just agree with the previous speaker. Subject advisers from the Department need to assist these schools"* (T3).

The feeling was that subject advisers and experts from the Department of Basic Education must intervene to support the intervention strategies for enhancing learners' academic performance. In addition, the Department could provide bursaries and other incentives for those learners who perform well. Participant H13 stated: *"I think I will back the intervention strategies that are introduced by the Department of Basic Education. They used to give us topics to teach instead of giving chances to teachers to decide which topics must be taught"* (H13).

Another participant indicated that teaching, learning, assessment, monitoring and evaluation strategies should be monitored and evaluated by the Vhembe Department of Basic Education, specifically by the subject/specialist advisers and district managers in regard to improving learners' performance. Participant H4 asserted: *"Check learners' performance pre-tests and post-tests, and also the language of teaching. I think it must be English"* (H13). This statement was supported by participant T16, who said: *"In English we are given some tests like pre-tests and post-tests that the learners write. And it is through these tests that we can evaluate whether the learners did well in such work or in such; lessons or classes that we have"* (H13). A similar feeling was expressed by participant T15, who said: *"This is the same for all subjects in Grade 12 because this is what they do: they give us pre-tests and post-tests"* (T15). The administering of pre-tests and post-tests is very important for checking whether learners are performing or not. It is an intervention strategy which can be implemented for improving learners' performance. Both the SMTs and district administrators are responsible for monitoring teaching and learning, assessing and teaching resources at school level, and if curriculum is managed well, the learners' results will be of high quality.

4.5 CHAPTER SUMMARY

This chapter has presented and analysed collected data for this study. The researcher summarises the findings of this study on teachers' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners. Data were collected from 42 Grade 12 teachers through questionnaires, and from 16 Grade 12 teachers and 15 HoDs through the semi-structured interviews from 20 secondary schools. The responses from questionnaires are presented and analysed through statistical data, and the qualitative themes analysed.

Findings revealed that it is essential to implement intervention strategies in order to improve learner's academic performance. They also revealed that the involvement of learners, parents, teachers and the Department of Basic Education can help to improve learners' performance at secondary schools, and that through motivation learners can be inspired to concentrate on their studies, and more quality results can be produced. The chapter reveals that consistent analysis of learners' results can improve their performance. Furthermore, structured intervention strategies that include learner profiling; regular content and error analysis; extra tuition or classes; collaborative teaching; peer or cooperative learning; ongoing formative and summative assessment; integrated support; regular monitoring and evaluation strategies; and the provision, accessibility and availability of necessary learner-teacher support material may also make a positive difference. The following chapter provides the summary, findings and recommendations of this study.

CHAPTER 5

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 INTRODUCTION

The previous chapter was mainly focused on data presentation, then analysis, and lastly interpretation. The present chapter mainly focuses on the summary of the study's findings, then the conclusion, and lastly recommendations, specifically for evaluating intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo. The principal aim of the study was to evaluate the effect of intervention strategies on the academic performance of those Grade 12 learners.

This study adopted a pragmatic paradigm. The researcher specifically selected the triangulated mixed-method design. Instruments that were used for the data collection in the study were questionnaires and semi-structured focus group interviews with Grade 12 secondary school teachers. Purposive sampling was then used to select a sample of 42 Grade 12 teachers for questionnaires, and 16 Grade 12 teachers and 15 HoDs for semi-structured focus group interviews from 20 secondary schools, as was outlined in Chapter Three ("Research methodology") of this study. This chapter highlights key findings of this study, which will be supported by relevant literature, and suitable recommendations.

5.2 SUMMARY OF FINDINGS

The chapter also revolves around the summary of major findings that have emerged from Chapter Four: extra lessons on Saturdays and in school vacations, and coaching. The following themes are summarised based on teachers' and HoDs' evaluation of intervention strategies for the academic performance of Grade 12 learners: *existing intervention strategies; the rationale for introducing intervention strategies; support experienced by teachers; monitoring and evaluation by SMTs; overall effects of intervention strategies; challenges experienced by teachers; and suggestions for improving intervention strategies*

The main findings of this study are discussed in this section.

5.2.1 Themes with regard to existing intervention strategies

Quantitative findings revealed that the majority of the Grade 12 teachers agreed that intervention strategies in Grade 12 were timeously planned. Similarly, qualitative findings revealed that teachers' plans with regard to extra lessons and intervention strategies are timely. With regard to existing intervention strategies, the study revealed that teachers have included extra scheduled time for individual subjects geared towards performance improvement. Teachers explained that they used Saturday, mornings, afternoons, and sessions during the school breaks for this purpose. Quantitative findings confirmed that the majority of the schools are structuring their intervention strategies by using extra scheduled time in order to improve learners' performance.

HoDs placed emphasis on structured intervention strategies and division of learners according to their capabilities. The latter is carried out by grouping and profiling learners to address challenges. According to qualitative and quantitative findings, the establishment of subject committees enhances learners' academic performance, as teachers will be helping one another to deal with the subject content gap.

Teachers revealed that March and June examinations are also used as intervention strategies for increasing the pass rate in Grade 12. Knesting (2008) supports the idea that if teachers provide extra time for their learners, and more care in school, this will enable them to be more successful. These findings demonstrate that all the participants, both teachers and HoDs, agreed that extra lessons scheduled for individual subjects are geared towards stimulating learners' performance in Grade 12.

Teachers revealed that providing learners with more practical activities aimed at improving performance is effective. If teachers and HoDs frequently and consistently implement these intervention strategies across all subjects, learners' performance may improve.

5.2.2 Rationale for intervention strategies

With regard to teachers' views on the rationale for introducing intervention strategies, findings revealed that intervention strategies were specifically introduced because of learners' poor performance. Meyers (2009) points out that when there is a positive learner-teacher relationship, the learners enjoy the teaching and learning process and even their attendance can change. The teachers revealed that they implement intervention strategies because of poor language usage, reading and comprehension. The lack of these basic skills hampers learners' academic performance. The researcher concurs with these findings, because the learner-teacher relationship has a strong influence on a learner's progress. The findings revealed that teachers should be encouraged to continue with the implementation of various intervention strategies to deal with poor language usage, reading and comprehension. Even learners who resist teaching and learning may change their attitude and improve their performance.

5.2.3 Support experienced by teachers

The findings from the semi-structured focus group interviews with teachers discovered that SMTs assisted them with learner-teacher support material in order to enhance learners' performance. Teachers agreed that question papers, teaching materials and various policy documents were available. The findings revealed that HoDs also provided the necessary learner-teacher support material for improving learners' performance.

Findings revealed that HoDs guided, advised and supported teachers through evaluating and monitoring tests, and they encouraged teachers to network with other teachers from neighbouring schools. Teachers mentioned that HoDs guided them on how to perform best in a particular subject: *"Sometimes as HODs we may even consider helping teachers with the learning of the subject I control. If there are some challenging topics for the teachers concerned I go and encourage learners by guiding them on how to perform best in a particular subject, even though I might not be the subject teacher"* (H8).

The aim of this support by HoDs is mainly to help teachers with regard to the content gap in the subject they teach, so that results may be improved. Teachers who

experienced content gap must continually update their knowledge and skills, and must engage themselves in lifelong learning and teaching for professional development focused on their subject, and how it is taught.

5.2.4 Monitoring and evaluation by SMT

Teachers indicated that monitoring and evaluation plays a significant role in improving results. Findings revealed that, monitoring of teaching and learning is regarded as an important way for leaders to locate faults in the process in order to improve instruction and learners' performance. The participants considered that monitoring of intervention strategies by HoDs is of great importance, because it has an impact on learners' academic performance. The participants stated that if monitoring was not done properly, there would be no improvement of results in Grade 12.

Archer and Brown (2013) confirm that ongoing monitoring and evaluation improves learners' performance. HoDs should monitor and evaluate learner assessments on a daily basis for that purpose. There is a need for teachers to be supported by SMTs. Teachers said that SMTs should always motivate discouraged and ill-disciplined learners. Quantitative and qualitative findings were corroborated in regard to the provision of learning and teaching materials, with all the teachers agreeing that the HoDs were able to provide learning and teaching resources to enhance learners' academic performance. Findings revealed that teachers are guided, advised and supported by HoDs in evaluating and monitoring tests administered to learners. Quantitative findings revealed that continual professional development training is given to Grade 12 teachers to enhance their practical skills.

5.2.5 Overall effects of intervention strategies

Teachers' found a noticeable improvement in Grade 12 results owing to the implementation of intervention strategies. The findings revealed that quarterly assessments have been improved, as has performance in difficult subjects.

“In my subjects I find that this plays a very important role as far as the learners’ results are concerned. My learners are improving their performance, and we can see that when we engage them quarterly. We check the results quarterly, and we can see that from one quarter to another the results are improving” (T1).

By consistently implementing these intervention strategies, learners’ academic performance may improve. All the teachers indicated that monitoring and evaluation of all aspects of teaching and learning were based on the learners’ performance. The researcher concluded that if intervention strategies for improving learners’ performance are effectively implemented, and if the SMT provides the necessary support, monitoring and evaluation, this may lead to better results.

5.2.6 Challenges experienced by teachers

Teachers encountered challenges to the effectiveness of intervention strategies for improving learner’s performance. Findings did not reveal that learners inhibited the offering of extra scheduled lessons by being absent or arriving late or using drugs. Teachers expressed their views as follows:

“There are some few learners who are not coming, and they are the ones who are performing very badly. When we follow up with their parents, we find that no one is there” (H14). If learners do not attend the extra lessons, their performance will not improve. Findings revealed that struggling learners were too discouraged to attend classes. Teachers involved in the intervention strategies for improving learners’ performance discovered that there was a lack of support from parents.

“We have problems with learners: their parents are not involved in those particular problems, and they are not there to support their learners on academic matters” (H3). If parents do not support their children in matters related to their learning and teaching, their performance may not improve. Diaz (2003) states that learners’ achievement is influenced by support they receive from their parents.

Much research evidence (Diaz, 2003; Boom, 2007; De Planty, 2010) indicates that parental involvement, expectations and style are found to be associated with a high

level of learners' academic performance, and even the behaviour of learners can change drastically. Thus, through parental support of teaching and learning their children may perform well.

5.2.7 Suggestions for improvement of intervention strategies

With regard to suggestions for improving intervention strategies, findings revealed that most participating teachers mentioned that learners, teachers and parents should all be involved in meeting learners' academic challenges. For the sake of learners' good performance there should be consistent analysis of their results, extra tuition, collaborative teaching, peer or cooperative learning, ongoing formative and summative assessment, cohesive support, and regular implementation of monitoring and evaluation strategies. The collaboration of various stakeholders for enhancing learner performance in Grade 12 can be linked to Leont'ev's (1978) principles in activity theory, the theoretical framework that underpins the current study. Thus in the current study collective activity may be regarded as the school and all the stakeholders that provide the necessary collective support for improving learners' academic performance. The following is a model which is based on the collective activity mediated by artefacts, rules, the community and division of labour.

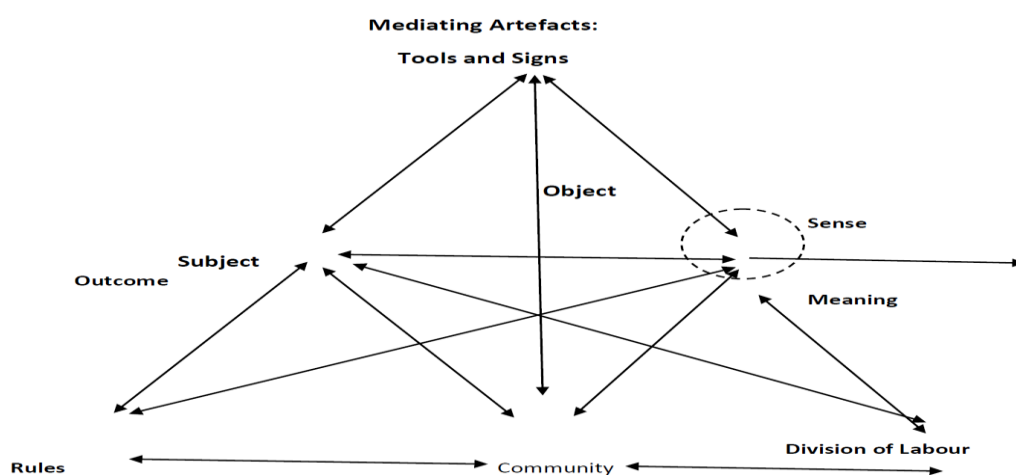


Figure 2: Model of a collective activity system (Engeström, 1987:78)

The school alone cannot improve learners' performance; it needs other stakeholders to participate for better outcomes. Learners' and learning is at the centre, while other stakeholders support these learners based on the rules given. The school cannot do it alone. Various intervention strategies should be implemented with the collaboration of parents. Quality results can be achieved. Human learning occurs through collective activity, and learning involves not only learning within the activity system, but also learning about the activity system. Similarly, the Grade 12 academic performance and the evaluation of interventions strategies would need to be viewed from this perspective.

Participating teachers revealed that teaching; learning, assessment; evaluation and monitoring should be monitored and evaluated by the Department of Basic Education through subject advisers and district managers in order to improve learners' performance. Subramoney (2016) indicates that curriculum management is a process whereby SMTs are involved in managing what has to be taught, how the teacher should teach, how learners should be assessed, and the resources needed for such teaching.

5.3 DISCUSSION OF RESULTS IN RELATION TO THE RESEARCH TOPIC

The main purpose of the study was to evaluate intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo. The teachers' participation during existing intervention strategies used to improve Grade 12 performance was identified in the problem statement as a significant element that can be used to improve results. Various intervention strategies must be implemented on a consistent basis to enhance learners' performance. The selected literature in Chapter Two provided the theoretical framework for the data collection as reported in Chapter Three. Chapter Three sketched the research paradigm, research design, target population, sampling and sampling procedures, research instruments, data collection procedures, data analysis, and the ethical considerations for the study. Chapter Four provided solutions to the research questions through data analysis and interpretation. This chapter presents the summary of the findings for the researcher to conclude on the evaluation of intervention strategies for the academic performance of the Grade 12.

To simply reiterate, teachers are using various intervention strategies to advance learners' performance. These are the mistakes which are generally identified during marking. The overall findings from the study specified that teachers who participated in implementing various intervention strategies for improving the performance of Grade 12 learners were provided with support from HoDs.in regard to the provision of question papers, teaching materials, provision of various resources, dealing with learners' challenges, and motivating the learners.

Findings revealed that there is a need for implementing intervention strategies in order to advance learners' performance. They also revealed that learners, teachers and parents should be involved in the teaching and learning process so that learners' performance at secondary schools can be improved. Furthermore, structured intervention strategies, which include learner profiling, collaborative teaching and peer or cooperative learning, should be implemented for this purpose.

5.4 CONCLUSION

The key findings from the study revealed that teachers have provided extra scheduled time for individual subjects geared towards performance improvement. The findings also discovered that HoDs play a vital role in guiding, assisting, monitoring and supporting teachers, which in turn assists them in improving learners' performance. As Diaz (2003) recognised, parental support is needed when learners are facing challenges in matters related to their learning, so that high quality results may be achieved.

Thus learners' performance may be improved if the following intervention strategies are effectively implemented: (i) struggling learners should be given extra lessons; (ii) HoDs must continually support teachers with teaching materials; (iii) the SMT must monitor and evaluate teaching and learning; (iv) teaching should be continually monitored through the use of assessment tools; (v) learners, teachers, parents and other stakeholders should be involved in teaching and learning so that high

performance by learners can be achieved through analysis of learner results, collaborative teaching, peer or cooperative learning, and ongoing formative and summative assessment..

5.5 RECOMMENDATIONS

As has been emphasised above, various intervention strategies for improving learners' performance must be continually carried out to ensure sustainable high quality work in secondary schools, specifically in Grade 12. The Vhembe Department of Basic Education needs to set panels consisting of circuit managers, curriculum advisers, subject specialists and education officials that will look into the strategic plans submitted by schools. The Department of Basic Education at district level needs to develop monitoring tools which will be used by teachers at their schools. The researcher critically analysed findings revealed by teachers for this study based on: existing intervention strategies; rationale for the introduction of intervention strategies; support experienced by teachers; monitoring and evaluation by SMTs; the overall effects of intervention strategies; challenges experienced by teachers; and suggestions for improvement of intervention strategies. This chapter attempts to make the following recommendations that may assist secondary schools to improve Grade 12 learners' academic performance, specifically in relation to the implementation of intervention strategies.

- It is essential for teachers, parents and the Department of Basic Education to be involved in the teaching and learning process of every Grade 12 learner. It is necessary for parents to support their children in order for them to achieve quality results.
- There is a need for extra scheduled time for individual subjects geared towards performance improvement. Morning, afternoon, weekend and school vacation classes should be implemented.
- SMTs should monitor and evaluate teaching and learning, and learner assessment.
- There is a need for dividing learners according to their capabilities based on profiling to address individual challenges.

- The HoDs should assist teachers with learner-teacher support materials.
- There is a need for quarterly assessment, which will focus on improving learners' academic performance. This recommendation has been supported by the then Department of Education (2008), which specified that SMTs in South African schools need to participate in various activities related to the curriculum, like curriculum management, monitoring learner assessment and developing curriculum.
- There is a need for collaboration in teaching and cooperative learning. Cooperative or peer learning requires working in teams to accomplish a common goal. Learners should interact with each other, by discussing topics together. Teachers should monitor these groups at close range.
- Teachers, SMTs and Department of Basic Education officials should motivate and inspire learners, so that effective teaching and learning can take place. Motivational speakers should frequently inspire these learners to work very hard in order to attain high quality results.

Furthermore, in regard to the above findings, to promote the improvement of Grade 12 learners' academic performance, the researcher put forward the Integrated Learner Attainment Model, which was originally developed by Van Tien, Mosely and Desinger (2004), and was designed to focus on improving learners' performance. This model was supported by Boon (2007), who stressed, concerning the relationship between the children's academic level and the support offered to them by their parents, that low achievement among children is significantly linked with lack of parental support.

The rationale for adopting this model is that in order to produce high learner performance in secondary schools, all the necessary stakeholders should effectively communicate and assist learners in their academic activities. The Integrated Learner Attainment Model reflects the tenets of selection, analysis, design, development, implementation and evaluation of the programme (Van Tien et al., 2004). The researcher strongly feels that a "good" learner requires a strong supportive background in order to achieve high academic performance. The model promotes teaching strategies in collaboration with other stakeholders to sustain active learner

involvement in the teaching and learning process. This collaboration may lead to improved performance. In addition, the Integrated Learner Attainment Model is premised on the five operational stages of performance analysis, cause analysis, selection of intervention strategies, the implementation stage and the evaluation stage (Leepo, 2015). This model is demonstrated in the diagram below

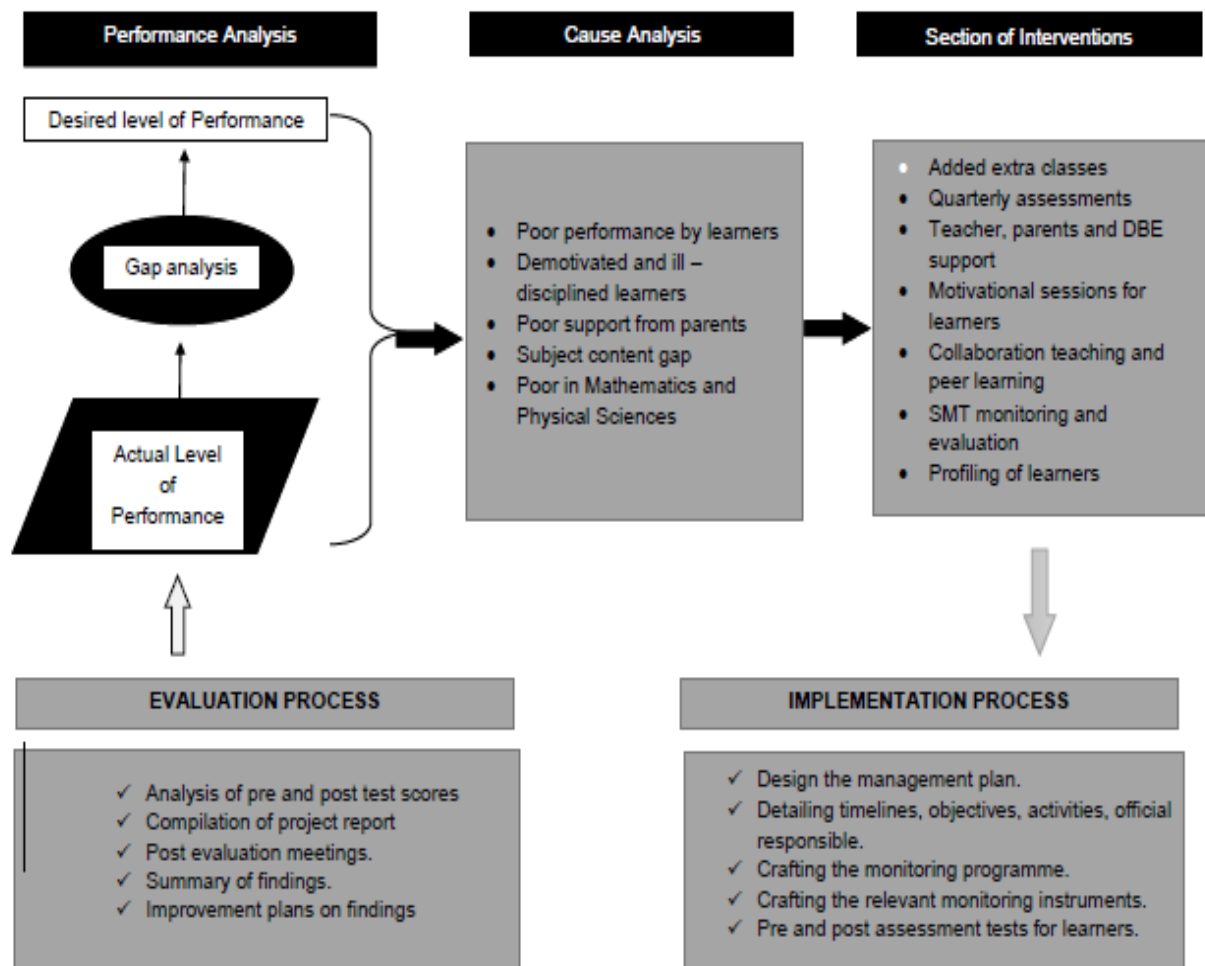


Figure 3: The integrated Learner Attainment Model (adapted from Van Tiem, Mosely and Desinger (2004))

The success of implementing intervention strategies can be measured significantly by effective teaching and learning. The model illustrates the following stages:

Performance analysis

This model looks at the current situation: overall pass rate, the quality of passes, attitudes towards teaching and learning, and discipline of learners. The anticipated

performance by learners is well-defined by performance targets set by secondary schools.

Cause analysis

This focuses on the cause of underperformance in the subject, which is below the targeted minimum performance standards, and includes the effect of teaching and learning resource materials. Demotivated and ill-disciplined learners, poor parental support, subject content gaps and poor results in mathematics and physical sciences must be analysed to enhance learners' performance.

Selection of the intervention strategies

This includes the designing and the developing of intervention strategies that are intended to address the causes of deficit, and it also considers the feasibility of resources. Extra classes, quarterly assessment, motivational sessions for learners, collaboration in team teaching and profiling of learners must be looked at for improving learners' performance.

Implementing process

This stage focuses on the way in which announcements are made, how to give feedback to learners and assessment instruments. It focuses on designing a management plan, monitoring programmes, relevant monitoring tools and pre- and post-assessment moderation of tasks which are critical for improvement.

Evaluation process

The operation of the Integrated Learner Attainment Model culminates in the evaluation process. This stage determines the effectiveness of the intervention strategies through the inputs made in the model cycle of strategy. This will improve learners' performance.

5.6 IMPLICATIONS FOR FURTHER RESEARCH

The study was limited to the evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo. Effective ways for improving learners' academic performance should be adopted by all schools, and not only in Grade 12, for quality performance. Therefore it is suggested that related research be carried out with rural secondary schools across the curricula, especially in underprivileged secondary schools. In the literature reviewed, intervention strategies are seen as a vitally important tool for improving learners' academic performance in secondary schools, specifically in Grade 12. In relation to the way forward for the DBE's curriculum designers and planners, it is recommended that teachers be trained to use various intervention strategies for improving quality performance and maintaining sustainable improvement.

5.7 LIMITATIONS OF THE RESEARCH

The objectives of this study were achieved. It was limited to intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo. The researcher experienced challenges regarding the participants' attending workshops. He found that teachers who had already signed consent forms were absent during the collection of questionnaires and during the interviews. This forced him to reschedule the dates for collections and interviews, which delayed the data collection process. He made the necessary arrangements to ensure the capturing of data required for the success of the research.

Time constraints were another factor which hampered the process of data collection. The researcher wrote letters seeking permission to collect data, but some school principals delayed their response. The sampling method was purposive. It consisted of 42 teachers for questionnaires, and 16 teachers and 15 HoDs for semi-structured focus group interviews. The findings of the study cannot be generalised to include the entire of the district. Despite these limitations, the study was able to collect adequate and valid data using questionnaires and semi-structured focus group interviews.

5.8 CHAPTER SUMMARY

The chapter has summarised and established the research findings, and presented the recommendations for the evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo. The objectives of the study were to determine how intervention strategies affect the academic performance of Grade 12 learners; to establish teachers' concerns about the effect of intervention strategies on learners' academic performance; and to establish a model of intervention that could be used to improve their performance. The key findings revealed that teachers need to be reinforced with learning and teaching resources, so that learners' performance can be improved. They also revealed that adding extra scheduled time for individual subjects geared towards performance improvement should be an on-going process, and that learners need to be motivated and supported by both parents and the Department of Basic Education.

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7. LIST OF APPENDICES

7.1 APPENDIX A: ETHICAL CLEARANCE CERTIFICATE



ETHICAL CLEARANCE CERTIFICATE

Certificate Number	UZREC 171110-030 PGD 2018/273					
Project Title	EVALUATION OF INTERVENTION STRATEGIES ON ACADEMIC PERFORMANCE OF GRADE 12 LEARNERS IN SECONDARY SCHOOLS IN VHEMBE DISTRICT, LIMPOMPO					
Principal Researcher/ Investigator	AM Muthala					
Supervisor and Co-supervisor	Dr S Govender			Prof AP Kutame		
Department	Curriculum and Instructional Studies					
Faculty	Education					
Type of Risk	Med Risk-Data collection from people					
Nature of Project	Honours/4 th Year		Master's		Doctoral	x Departmental

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project. The Researcher may therefore commence with data collection as from the date of this Certificate, using the certificate number indicated above.

- Special conditions:**
- (1) This certificate is valid for 1 year from the date of issue.
 - (2) Principal researcher must provide an annual report to the UZREC in the prescribed format [due date-31 January 2020]
 - (3) Principal researcher must submit a report at the end of project in respect of ethical compliance.
 - (4) The UZREC must be informed immediately of any material change in the conditions or undertakings mentioned in the documents that were presented to the meeting.

The UZREC wishes the researcher well in conducting research.


Professor Gideon De Wet
Chairperson: University Research Ethics Committee
Deputy Vice-Chancellor: Research & Innovation
01 February 2019



7.2 APPENDIX B: REQUEST FOR PERMISSION TO CONDUCT RESEARCH

University of Zululand
Faculty of Education

Private Bag X1001
KwaDlangezwa
3886
22 July 2019

The District Director
Vhembe Department of Basic Education
Limpopo

Dear Sir/Madam

**REF: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN SCHOOLS IN
VHEMBE DEPARTMENT OF BASIC EDUCATION: VHEMBE DISTRICT**

I am employed by the Department of Basic Education and currently teaching at a secondary school. I am currently registered for a Doctor of Education degree (D.Ed.) at the University of Zululand in the Department of Curriculum and Instructional Studies. The topic of my research project is: ***The evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo.***

I wish to seek permission to conduct research in schools in the Vhembe Department of Basic Education in the Tshinane Circuit. The Head of Department and Grade 12 educators who are currently involved in the intervention strategies will be used as participants to collect data for the study. The researcher will interview the Head of **Department and the educators will complete questionnaires in the sampled schools in Tshinane Circuit** in the Vhembe District. The researcher will seek permission from the Circuit Manager and principals, then schedule an appointment with the Head of Department to conduct the interviews during their lunch breaks and/or even after school, to minimise disturbance of the school routine. With the permission of the schools questionnaires will be delivered to and collected from the teachers and learners at their convenience.

I hope the findings of this study will assist the Department of Basic Education and educators teaching in secondary schools.

Yours faithfully



Mr Alugumi Meshack Muthala
072 255 5071 or email: muthalameshack@gmail.com
Dr S. Govender (Supervisor) Professor A.P. Kutame (Co-supervisor)

University of Zululand
Faculty of Education
Private Bag X1001

KwaDlangezwa
3886
2 June 2019

The Circuit Manager
Tshinane Circuit Office
Department of Basic Education
Vhembe District
Limpopo

Dear Sir/Madam

REF: REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN SCHOOLS

I am employed by the Department of Basic Education and currently teaching at a secondary school. I am currently registered for a Doctor of Education degree (D.Ed.) at the University of Zululand in the department of Curriculum and Instructional Studies. The topic of my research project is: ***The evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo.***

I wish to seek permission to conduct research in schools in Vhembe District in the Tshinane Circuit. The Head of Department and educators who teach Grade 12 who are currently involved in the intervention strategies will be used as participants to collect data for the study. The researcher will interview the Head of Department, and the educators will complete questionnaires in the sampled schools in Tshinane Circuit in Vhembe District. The researcher will seek permission from the principals, then schedule an appointment with the Head of Department to conduct the interviews during their lunch breaks and/or even after school, to minimise disturbance of the school routine. With the permission of the schools questionnaires will be delivered to and collected from the teachers at their convenience.

I hope the findings of this study will assist the Department of Basic Education and educators teaching in secondary schools.

Yours faithfully



Mr Alugumi Meshack Muthala
072 255 5071 or email: muthalameshack@gmail.com
Dr S. Govender (Supervisor) Professor A.P. Kutame (Co-supervisor)

University of Zululand
Faculty of Education
Private Bag X1001

KwaDlangezwa
3886
22 July 2019

The Principal
St Augustine High School

Dear Sir/Madam

**REQUEST FOR PERMISSION TO CONDUCT RESEARCH INTO GRADE 12
EDUCATORS**

I am employed by the Department of Basic Education and currently teaching at a secondary school. I am currently registered for a Doctor of Education degree (D.Ed.) at the University of Zululand in the Department of Curriculum and Instructional Studies. The topic of my research project is: ***The evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo.***

I cordially request permission to conduct research in your school. The educators that teach Grade 12 and are involved in the intervention strategies will be used as participants to collect data for the study. The researcher requests permission to distribute questionnaires to and collect them from these educators. The Heads of Department responsible for implementation of these intervention strategies will also be interviewed.

The researcher will schedule an appointment with the educators at times convenient to them so as to distribute and collect the questionnaires. With regard to Heads of Department, I shall consult with them and make the necessary arrangement which will be most convenient for those involved so as not to disrupt their lessons.

I hope the findings of this study will assist the Department of Basic Education and educators teaching in Grade 12.

Yours faithfully



Mr Alugumi Meshack Muthala
072 255 5071 or email: muthalameshack@gmail.com

Dr S. Govender (Supervisor) Professor A.P. Kutame (Co-Supervisor)

7.3 APPENDIX C: PERMISSION GRANTED TO CONDUCT RESEARCH



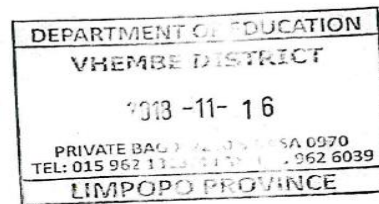
LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
EDUCATION
VHEMBE DISTRICT

REF : 12/1/10/8 ENQ : MATIBE M.S CONTACT NO : 082 3004 774

MR MUTHALA A.M
UNIVERSITY OF ZULULAND
FACULTY OF EDUCATION
PRIVATE BAG X 1001
KWADLANGEZWA
3886



**REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN SCHOOLS IN THE
VHEMBE DISTRICT**

1. This serves to inform you that your request to conduct research in the district on the topic "*The effect of intervention strategies on academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo*" has been approved.
2. You are expected to ensure that your interactions with educators will not disrupt teaching and learning activities.
3. We appreciate your commitment to seek permission from circuit manager and principals prior to commencing your data collection.
4. Wishing you the best in your academic endeavours.



DISTRICT DIRECTOR

16/11/2018

DATE

Thohoyandou Government Building, Old Parliament, Block D, Private Bag X2250, SIBASA, 0970
Tel. (015) 962 1313 or (015) 962 1331, Fax. (015) 962 6039 or (015) 962 2288

The heartland of southern Africa - development is about people!

7.4 APPENDIX D: INFORMED CONSENT DECLARATION

PARTICIPANT INFORMED CONSENT DECLARATION

INFORMED CONSENT DECLARATION (Participants- Teachers and Heads of Department)

Project Title: *The evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo.*

The researcher is registered for the Doctor of Education (D.Ed.) degree at the University of Zululand, Department of Curriculum and Instructional Studies.

The nature and the purpose of the research project and of this informed consent declaration have been explained to me in a language that I understand.

I am aware that:

1. The purpose of the research project is to understand the evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo.

2. The University of Zululand has given ethical clearance to this research project, and I have seen/may ask to see the clearance certificate.

3. By participating in this research project I shall be contributing towards the improvement of the intervention strategies offered for the different subjects in Grade 12.

4. I shall participate in the project by participating in semi-structured focus group interviews on how intervention strategies affect the academic performance of Grade 12 learners in secondary schools.

5. My participation is entirely voluntary, and should I at any stage wish to withdraw from participating further, I may do so without any negative consequences.

6. I shall not be compensated for participating in the research, but my out-of-pocket expenses will be reimbursed.

7. There may be risks associated with my participation in the project. I am aware that (a) the following risks are associated with my participation: information disclosure and identification of the participants; and (b) the following step has been taken to prevent the risks: consideration of ethical issues. There is no chance of the risk materialising.

8. The researcher intends publishing the research results in the form of journal articles and forwarding them to the Department of Basic Education. However, confidentiality and anonymity of records will be maintained, and my name and

identity will not be revealed to anyone who has not been involved in the conduct of the research.

9. I shall receive feedback in the form of empirical findings, and access to the copy of this report on the results obtained during the study.

10. Any further questions that I might have concerning the research or my participation will be answered by Mr Alugumi Meshack Muthala on the following mobile number and email: 072 255 5071, muthalameshack@gmail.com

11. By signing this informed consent declaration I am not waiving any legal claims, rights or remedies.

12. A copy of this informed consent declaration will be given to me, and the original will be kept on record.

I,have read the above information/ confirm that the above information has been explained to me in a language that I understand, and I am aware of this document's contents. I have asked all questions that I wished to ask, and these have been answered to my satisfaction. I fully understand what is expected of me during the research.

I have not been pressurised in any way, and I voluntarily agree to participate in the above-mentioned project.

Participant's signature

Date

7.5 APPENDIX E: QUESTIONNAIRE

TO BE ANSWERED BY GRADE 12 TEACHERS IMPLEMENTING INTERVENTION STRATEGIES

This study seeks to address the following objectives:

- To determine how intervention strategies affect the academic performance of Grade 12 learners in secondary schools.
- To ascertain educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners in secondary schools.
- To establish a model of intervention that could be used to improve the academic performance of Grade 12 learners in secondary schools.

Mr. A.M. Muthala (D.Ed Student)
Faculty of Education
Department of Curriculum and Instructional Studies
University of Zululand
Private Bag X1001
KwaDlangezwa
3886

SECTION A BIOGRAPHICAL INFORMATION

FILL IN THE NECESSARY INFORMATION IN THE SPACE PROVIDED

Type of teaching qualification(s):	
Years of teaching experience:	
Years of teaching Grade 12 :	
Subject taught in Grade 12:	

SECTION B

Educators' concerns about the effect of intervention strategies on academic performance of Grade 12 learners	STRONGLY AGREE 3	AGREE 2	DISAGREE 1	STRONGLY DISAGREE 0
1. The intervention strategies are timeously planned for Grade 12 learners. (time management)	3	2	1	0
2. My school has set achievable performance targets for the Grade 12 subjects with low academic performance before implementing the intervention strategies. (objectives: SMART)	3	2	1	0
3. My school has established subject committees to assist in the implementation of these intervention strategies. (teachers: inclusion)	3	2	1	0
4. The intervention strategies are well structured and organised. (structure and organisation)	3	2	1	0
5. The curriculum coverage for the different subjects are well paced and adequately covered. (pacing and curriculum coverage)	3	2	1	0
6. Teachers have the necessary subject content knowledge to enable them to teach and implement the intervention strategies. (subject content knowledge)	3	2	1	0
7. Continual professional development training is provided to Grade 12 teachers in practical skills	3	2	1	0

that can be integrated into our classroom practice. (professional development)				
8. Continual professional development training is provided to Grade 12 teachers on subject content. (professional development)	3	2	1	0
9. Continual professional development training is provided to Grade 12 teachers on teaching methodologies. (professional development)	3	2	1	0
10. The school management team provides ongoing support to teachers implementing these intervention strategies. (SMT: support)	3	2	1	0
11. The school management team monitors the implementation of these intervention strategies. (SMT: monitoring)	3	2	1	0
12. Evaluation systems are in place for the SMT to evaluate the implementation of the effectiveness of the intervention strategies on academic performance. (SMT: evaluation)	3	2	1	0
13. We are provided with adequate support material so as to implement these intervention strategies. (resources)	3	2	1	0
14. The intervention strategies cater for teacher needs in a specified subject. (needs: context)	3	2	1	0
15. The intervention strategies cater for learner needs in a specified subject. (needs: context)	3	2	1	0
ADDITIONAL COMMENTS				

7.6 APPENDIX F: SEMI-STRUCTURED FOCUS GROUP INTERVIEW SCHEDULE – EDUCATORS

This study attempts to answer the following research questions:

- How do interventions strategies affect the academic performance of Grade 12 learners in secondary schools?
 - What are educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners in secondary schools?
 - What models of intervention could be used to improve the academic performance of Grade 12 learners in secondary schools?
1. List the various intervention strategies that are currently implemented in the subject you teach for Grade 12 learners. **(current state)**
 2. Provide reasons as to why these intervention strategies were introduced in your subject for Grade 12 learners.
 3. Explain how these intervention strategies in the subject you teach are structured. **(organization and structure: framework)**
 4. Do you think adequate time is provided for you to implement these intervention strategies? **(time management)** Explain.
 5. What role does your HoD play in your school with regard to the implementation of these intervention strategies? **(monitoring)** Explain.
 6. Comment on the support provided by your HoD towards improving learner attainment. **(support)**
 7. What has been the overall effect of the intervention strategies on the performance of your Grade 12 learners in the subject you teach?
 8. Discuss some of the challenges experienced during the implementation of the intervention strategies for the academic performance of the Grade 12 learners.
 9. Suggest possible intervention strategies that may be considered most effective in supporting you to improve academic learner performance in Grade 12.
 10. What measures are in place to evaluate the effect of the intervention strategies on academic learner performance in Grade 12 in the subject you teach? **(achievable targets)**

7.7 APPENDIX G: SEMI-STRUCTURED FOCUS GROUP INTERVIEW SCHEDULE – HoDS

This study attempts to answer the following research questions:

- How do intervention strategies affect the academic performance of Grade 12 learners in secondary schools?
 - What are educators' concerns about the effect of intervention strategies on the academic performance of Grade 12 learners in secondary schools?
 - What models of intervention could be used to improve the academic performance of Grade 12 learners in secondary schools?
1. List the different intervention strategies that are currently implemented in your school for Grade 12 learners for the various subjects. **(current state)**
 2. Provide reasons as to why these intervention strategies for Grade 12 learners were introduced in these subjects.
 3. Explain how these intervention strategies are structured in these subjects. **(Organization and structure: framework)**
 4. Do you think adequate time is provided to implement these intervention strategies? **(Time management)** Explain.
 5. Comment on the subjects that are included in these intervention strategies and whether the curriculum for each subject is adequately covered. **(Curriculum coverage)**
 6. What role do the HoDs play in your school with regard to the implementation of these intervention strategies? **(Monitoring)** Explain.
 7. Comment on the support provided by the HoDs to both teachers and learners for improving learner attainment. **(Support)**
 8. What has been the overall effect of the intervention strategies on the performance of your Grade 12 learners in these specific subjects?
 9. Discuss some of the challenges experienced during the implementation of the intervention strategies for the academic performance of the Grade 12 learners in these subjects.
 11. Suggest possible intervention strategies that may be considered most effective in supporting schools to improve academic learner performance in Grade 12
 12. What measures are in place to evaluate the effect of the intervention strategies on academic learner performance in Grade 12 in these subjects? **(achievable targets)**

7.8 APPENDIX H: COPY OF PLAGIARISM

Evaluation of intervention strategies for the academic performance of Grade 12 learners in secondary schools in Vhembe District, Limpopo

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7.9 APPENDIX I: LETTER FROM EDITOR

CERTIFICATE

This is to certify that I edited Mr Alugumi Meshack Muthala's doctoral thesis for the Department of Curriculum and Instructional Studies at the University of Zululand, entitled Evaluation of Intervention Strategies for the Academic Performance of Grade 12 Learners in Secondary Schools in Vhembe District, Limpopo.

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