INVESTIGATING THE ROLE OF FORMATIVE ASSESSMENT AMONG GRADE 10 GEOGRAPHY LEARNERS IN THE OHANGWENA EDUCATIONAL REGION OF NAMIBIA

A THESIS SUBMITTED IN PARTIAL FULFILMENT OFTHE REQUIREMENTS FOR THE DEGREE OF MASTER OF EDUCATION (CURRICULUM, INSTRUCTION AND ASSESSMENT STUDIES)

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ABSTRACT

The continuous failure of Namibian students in the subject of Geography has been a concern for several stakeholders in the education sector. One of the problems identified for such a failure rate is poor assessment approach employed by Geography teachers in junior and senior secondary schools. The purpose of this study is to investigate the role of Formative Assessment in Grade 10 learners' final grades for the subject of Geography in Ohangwena Educational Region of Namibia. Therefore, to collect relevant information for the study, the study addresses three research questions. (a) What are the teachers' perceptions about formative assessment in Grade 10 Geography Continuous Assessment (CA) in the Ohangwena Educational Region? (b) What are the guidelines that could be provided in the syllabus for Grade 10 Geography to guide teachers on the assessment of learners to work formatively? (c) What are some of the strategies that can be implemented to improve the effectiveness of formative assessment in Grade 10 Geography in Ohangwena Educational Region? Furthermore, the study utilized a mixed method approach rooted in phenomenology. In collection of information, systematic and convenience sampling was used to select participants for the study. The results indicate that formative assessment was an everyday process within the schools. Formative assessment was used frequently to evaluate the learners' progress in schools. The continuous assessment marks are more important than exam marks to learner's progress because they provide opportunities for learners to improve because of the immediacy of the feedback that teachers give to leaners. Finally, the study recommends that the Geography teachers need to dedicate themselves and increase efforts towards continuous formative assessment as it monitors and improves learning. Teachers also need to be motivated and attend workshops, seminars, training or conferences to build their capacities and acquire adequate and contemporary skills to practice formative assessment.

Keywords: Achievement, Formative Assessment, Grade 10, Geography, Secondary School, MoEAC, Ohangwena, Namibia

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I am very much indebted to all those who facilitated my access to data and information. Despite such contributions from different people, I am personally liable for the study contents and facts.

DEDICATION

I dedicate this project to God Almighty my creator, my strong pillar, my source of inspiration, wisdom, knowledge and understanding. He has been the source of my strength throughout this programme and on His wings only have I soared. I also dedicate this work to my parents who taught me that even the largest task can be accomplished if it is done one step at a time. To my child Penexupifo, thank you for allowing mummy to study, this is for you. And finally, I dedicate this project to my colleagues who offered unwavering encouragement and support.

DECLARATION

I, Ester Egumbo, hereby declare that this study is my own work and is a true reflection of my research, and that

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ACRONYMS

CERI	Centre for Educational Research and Innovation
DNEA	Directorate of National Examination and Assessment
JSC	Junior Secondary Certificate Examination
MEAC	Ministry of Education, Arts and Cultures
MED	Ministry of Education - MED
NIED	National Institute for Educational Development
OECD	Organisation for Economic Co-operation Development
PCEE	Polytechnic and Colleges Entrance Examination
WASC	West African School Certificate

CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

The chapter presents the orientation of the study by defining the key concepts attached and constituted on the role of formative assessment among the grade 10 Geography learners in Ohangwena region. The Chapter also presents the problem statement which encouraged the researcher to scrutinize and study the topic investigated. It also constitutes, the research questions which guide this study. Furthermore, the chapter explains the study's significance, limitations and delimitations. Lastly, the chapter outlined fragmentation of the chapters and ends with a summary.

1.2 ORIENTATION OF THE STUDY

'Student assessment' refers to processes through which evidence of learning is collected in a planned and systematic way in order to make a judgement about student learning (OECD, 2013). It encompasses summative and formative purposes, and may be designed and implemented internally within the school or externally through standardised assessments. Johnson (2019) views assessment as the use of a variety of procedures to collect information about learning and instruction. OCED (2013) and Johnson (2019) identify two types of assessments and these are; *summative* and *formative.* 'Formative assessment' is commonly referred to as the assessment for learning in which the focus is on monitoring learner responses and progress with instruction. Willison (2017) explicates that formative assessment can provide teachers and learners with immediate feedback in the learning process, while summative assessment evaluates the learning status of learners in the teaching unit through comparison with specific standards.

Several countries promote formative assessment as a fundamental approach to educational reform. For example, the OECD examined the use of formative assessment in eight educational systems: Australia (Queensland), Canada, Denmark, England, Finland, Italy, New Zealand and Scotland. OCED (2015) observes that tests and examinations are a classic way of measuring student progress and are integral to the accountability of schools and the education system. These highly visible forms of tracking progress, known as "summative assessment" are also used by parents and employers. However, to be truly effective, assessment should also be "formative" – in other words, identifying and responding to the students' learning needs. In classrooms featuring formative assessment, teachers make frequent, interactive assessments of student understanding. This enables them to adjust their teaching to meet individual student needs, and to better help all students to attain higher standards of learning and comprehension. Teachers also actively involve students in the process, helping them to develop skills that enable them to learn better (Moyosore, 2015).

In Namibia, the Ministry of Education, Arts and Cultures (MoEAC) encourages the formative assessment of leaners. It is often used in face to face teaching in a classroom setting to help foster learning. With the use of formative assessment, feedback and self-assessment are executed (NIED, 2016). At Grade 10 level of education in Namibia, 35 subjects and 126 components (examination papers) are covered including Geography which learners are expected to write at the level of Junior Secondary Certificate examination (JSC) (MEAC, 2018). The JSC at the Junior Secondary Education (JSE) is a combination of the learners' final marks of 65% and the Continuous Assessment marks of 35% that has to be sent to the Directorate of National Examination and Assessment (DNEA), which then constitutes the learners' final grade (MoEAC & NIED, 2015).

According to the Namibian Ministry of Education, Arts and Culture (2015) and NIED (2015), secondary schools provide effective and efficient management of the human and material resources available for the achievement of the school academic goals. The classroom teacher is charged with a lot of functions to perform in the teaching and learning process. One of the most challenging functions of the classroom teacher is the assessment of students. The teacher's effectiveness is assessed by the overall learners' results at Grade 10, Junior Secondary Certificate examination (JSC). In the 2018 JSC national results, there was a total of 44,863 full-time Grade 10 candidates in 732 secondary schools who sat for the final JSC examination compared to 40,599 in 2017. However, 23,911 candidates, representing 53.3%, qualified for admission to Grade 11 for 2019 compared to 22,363 or 55.3% in 2017, indicating a drop of 2% in the performance of the candidates between 2018 and 2017 (MoEAC, 2017). In Ohangwena Educational Region, only 44%passed Geography in 2018 (MoEAC, 2018). Evidence from the mentioned data evinces that learners' grades in Geography were average, which may be common also in other subjects. This idea is that formative assessment allows for a diagnosis of the learning difficulties among learners. However, the effectiveness or usefulness of the strategies used may vary, and it is agreed that certain strategies may not be applicable to certain challenges encountered in mastering learning. The present study therefore aimed at investigating the role of formative assessment in the Grade 10 learners' final grade for Geography in Ohangwena Educational Region, Namibia.

1.3 PROBLEM STATEMENT

The continuous failure of Namibian students in the subject of Geography has been a concern for several stakeholders in the education sector. One of the problems identified is the poor assessment approach employed by Geography teachers in junior and senior

secondary schools. For example, in many cases, the continuous assessment marks that teachers give are much higher than the examination mark. It appears that learners do not pass geography at the end of Grade 10, despite having obtained good CA marks during the year. This shows a discrepancy between the role of formative assessment marks and examination mark in Grade 10 Geography in schools in Ohangwena Educational Region of Northern Namibia. Thus, awarding high marks to the learners and classroom assessment may make leaners lazy to concentrate or take it for granted that they may also be given high marks at JSC which could be a reason for the reduced performance at National Junior Secondary Certificate. The researcher is not aware on any study regarding the role that formative assessment plays in the Grade 10 learners' Geography final grades in Namibia. This study aimed at investigating the role that formative assessment plays in the Grade 10 learners' Geography final grade in Ohangwena Educational Region, Namibia.

1.4 RESEARCH QUESTIONS

- What are the teachers' perceptions about formative assessment in Grade 10 Geography CA and exam results in Ohangwena Educational Region?
- What are the guidelines that could be provided in the Grade 10 Geography Syllabus to guide teachers on the assessment of learners to work formatively?
- What are some of the strategies that can be implemented to improve the effectiveness of formative assessment in grade 10 Geography in Ohangwena Educational Region?

1.5 THE SIGNIFICANCE OF THE STUDY

It is envisaged that the information obtained by this study and subsequent recommendations may help in the improvement of instructional practices and may also influence an improvement in learners' performance (Cauley & McMillan, 2010). The study may also provide the Ministry of Education, Arts and Culture (MoEAC) with ways that can ensure effective evaluation for the CA marks in Grade 10 Geography. Besides that, the study may help the teachers to enrich existing knowledge and also to gain an insight into what learners understand, motivate them to learn and take responsibility for their learning. Finally, this study may contribute to the body of knowledge that currently exists within the UNAM repository/resources on formative assessment. This study also identified other research issues and gaps that future studies can be anchored on hence it has the potential for advancing knowledge on the study phenomenon.

1.6 LIMITATIONS OF THE STUDY

Given that this study bears qualitative results on the role of formative assessment, its findings can only be generalised to the studied public secondary schools in the Ohangwena Educational Region. The results cannot be generalised to all other secondary schools in the circuits, in Ohangwena Educational Region and in Namibia as a whole. Another limitation is that of the paucity of literature in Namibia that relates to the role of formative assessment in secondary schools in Namibian schools. To the best of the researcher's knowledge there is little, if any study, which has been conducted on formative assessment in secondary schools in Namibia. Therefore, the researcher couched the results of the current study within result of researches that were conducted outside Namibia – control literature. Particular participants felt threatened by the presence of the researcher at their schools. Perhaps participants did not feel comfortable to provide all required documents

with learners' records [assessed activities and marks] needed for analysis and the respondents did not answer questions in the questionnaires truthfully.

1.7 DELIMITATIONS OF THE STUDY

The study was specifically confined to investigating the role that formative assessment plays in the Grade 10 learners' final grades in the subject of Geography in Ohangwena Region, Namibia. It was restricted to three (3) schools in Ohangwena Region, found in the northern part of Namibia and therefore the results cannot be generalised to all other schools countrywide.

1.8 CHAPTER DIVISIONS

The remainder of this thesis is structured as follows: **Chapter 2** presents the literature review which was not limited to the introduction of the chapter. **Chapter 3** presents the research methods for the study. The chapter also presents the population, instruments and sampling and includes data analysis as well as ethical considerations. **Chapter 4** presents the results and interprets the results of the study. **Chapter 5** discusses the findings presented in Chapter 4 and relates them to the literature. **Chapter 6** presents the conclusions and recommendations of the study based on the results and suggestions for further/future research.

1.9 CHAPTER SUMMARY

The chapter contained the introduction of the study through orientation and also explained the key concepts of the topic investigated. The chapter also presented the statement of the problem which is grounded on the continuous failure and poor assessment approach used on Geography subject by the teachers. The chapter also contained of the research questions which guide study. Furthermore, the chapter explained significance of the study rationalised followed by discussions of the limitations and delimitations of the study.

CHAPTER 2

CONTEXT OF THE STUDY: THEORIES, CONCEPTS AND ROLES OF FORMATIVE ASSESSMENT IN EDUCATION

2.1 INTRODUCTION

The purpose of this chapter is to provide a literature review and scholarly analysis on the concepts, theories, and functions of formative assessment in secondary school education. The researcher firstly discusses the conceptual framework followed by the theoretical framework. There follows after that, a discussion of the barriers to wider use of formative assessment and the role of formative assessment in teaching and assessment. The final section presents a review of related case studies – control literature - that guide the current study exploring the role of formative assessment in Grade 10 learner's final grades for the subject of Geography in the Ohangwena Educational Region of Namibia.

2.2 CONCEPTUAL FRAMEWORK

The effective assessment of learners is critical in determining whether students are adequately learning in secondary schools. The assessment of learners' not only helps in measuring learners' progress but also identifying and meeting learning needs. Thus, the assessment of learners is useful in the evaluation of individual learner's performance, planning for future steps for improvements in teaching and learning and in the sharing of information with several stakeholders (Moyosore, 2015). According to Ghaicha (2006), a teacher needs to be vigilant and accountable for their learners' performance in schools. The authors further explain that teachers should "assess their learners" regularly and also consider assessment as a powerful tool which can either boost or undermine the learners' learning.

Many teachers incorporate aspects of formative assessment into their teaching, but it is less common to find the formative assessment systematically practiced (Pallios, 2011). If formative assessment is to be used as a framework for teaching, teachers should change the way they interact with learners, how they set up learning situations and guide learners toward learning goals, even how they define learner success (Tsilo, 2016). This reproduces an ideology that teachers need to change their teaching and interaction behaviors with learners for the effective use of formative assessment.

The National Institute for Educational Development (NIED) (2015) explains that formative continuous assessment is made during the school year in order to improve learning and to help shape and direct the teaching-learning process, NIED further explains that formative assessments is used to promote healthy habits of study. Assessment tasks help learners to solve problems intelligently by using what they have learnt and the teachers can also use the information to improve their teaching methods and learning materials. This is supported by Boston (2002) who submits that formative assessment promotes learners' learning. Nikol (2007) views formative assessment as part of the instructional process, because it is incorporated into classroom practices and to adjust teaching and learning.

The conceptual framework that guided the study investigating the role of formative assessment in Grade 10 learners' final grades in Geography in the Ohangwena Educational Region of Namibia is further elucidated in Figure 1 below:

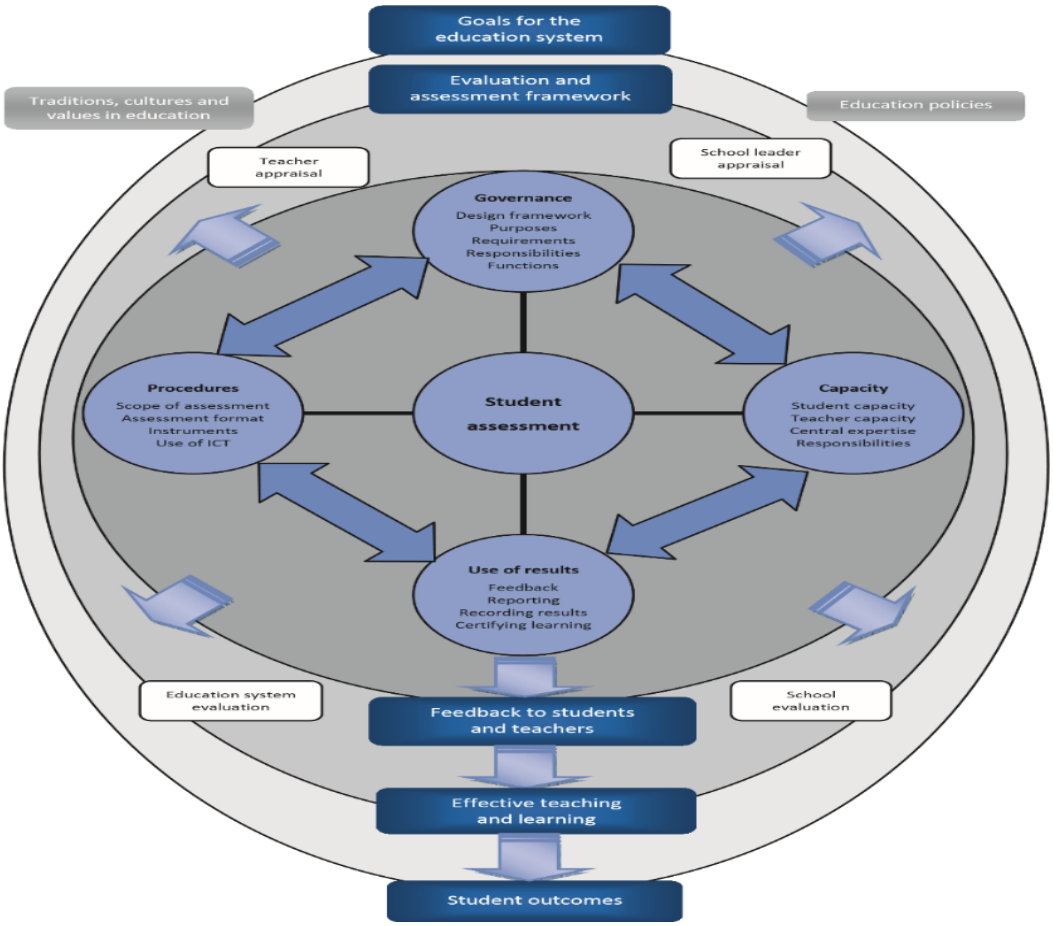

Figure 1: ***Conceptual frameworks for student formative assessment (Source: OECD, 2013)***

Within the context of this study, the innermost circle is more important in guiding the role of formative assessment in Grade 10 learners' final grades in the subject of Geography in the Ohangwena Educational Region of Namibia. There are *four* main interrelated themes that are important therein. The first theme is **governance**. This theme describes the different purposes and objectives of student assessment systems and the legal frameworks that should be in place to ensure that student assessment results are used and that objectives are reached. The theme explores how responsibilities for assessment are distributed in different areas and how different levels of governance interact to form a coherent assessment system. The second theme is **procedures**, which is about *the* methodologies used for student assessment in the education system. Included in this

theme are areas of learning, the assessment as well as the key procedural features of student assessment. It also reviews the ways in which the design of assessments can enhance or threaten fairness and equity in education. P**rocedures** is about the methodologies used for student assessment and include the scope of assessment, and the mix of instruments used in specific student assessment systems. The theme also includes the format of assessments; and the use of ICT in assessment. The next theme is **capacity,** which discusses the competencies and the support necessary to assess students, to benefit from assessment, and to use the results of student assessment. Other issues included therein are the capacities students need to engage in and learn from their assessment; the assessment competencies that teachers acquire in initial teacher education, professional development and moderation arrangements; and the expertise of the agencies involved in student assessment. The final theme pertains to the **use of results**. This is concerned with how assessment results are reported and used for both summative and formative purposes. It describes the standards of quality and reporting formats used in different contexts and reviews the legal frameworks that regulate reporting of results. The importance of recording information, providing feedback to students and making decisions is also highlighted.

The current investigation of the role of formative assessment in the Grade 10 learners' final grades in the subject of Geography in Ohangwena Educational Region of Namibia was guided by the conceptual framework discussed above.

2.3 THEORETICAL FRAMEWORK

This study is guided by Vygotsky's (1980) Constructivism Theory. The theory postulates that knowledge is co-constructed and that individuals learn from one another (Vygotsky, 1980). Vygotsky opines that the learner must be engaged in the learning process.

A reaction to didactic approaches such as behaviorism and programmed instruction, constructivism states that learning is an active, contextualised process of constructing knowledge rather than acquiring it. Knowledge is constructed based on personal experiences and hypotheses of the environment (Piaget, 2013). According to David (2015), constructivism incorporates a learning process where the learners develop their own conclusions through the creative aid of the teachers as a facilitator. Overall, the setting should include classroom applications of constructivism within a few key concepts.

The Constructivist Theory embraced in this study argues that learners must be advised to actively personally participate in the learning process. The teachers are the most convenient counselors whose role is to guide, mediate, prompt and help learners to develop, evaluate their understanding and grasp of concepts. Vygotsky (1978) explains that constructivism identifies learning as the process of making information and experience meaningful. The author believes that for constructive learning to occur, there must be an environment in which learners can study collegially in real activities and situations. All in all, learning in a social environment is most productive. Mcleod (2019) citing Arends (1998) submits that constructivism is a process where learners personally construct meaning through experience while the learners' developed consciousness is affected by prior knowledge interactions and new events.

Mcleod (2019) identifies five principles of constructivism. The *first principle* is that knowledge is constructed, rather than innate or passively observed. According to Philipps (1995), the central idea of constructivism is the construction of knowledge during the human learning process. This allows learners to build new knowledge on the basis of previous studies. Accordingly, this principle maintains that previously developed knowledge has an influence on new knowledge. This entails that the learner will draw hypotheses from the new learning experience. The *second principle* of constructivism is

that learning is an active process; Knowledge is an active rather than a passive process. Mcleod (2019) explains that the passive process views learners as empty vessels which need to be filled with knowledge. In this way, the information is passively received, but not understood, because it must come from establishing a meaningful connection between prior knowledge, new knowledge and the learning process involved. The view within constructivism is that learners construct meaning only through active involvement. The *third principle* is that knowledge is socially constructed. This is done through interaction with each other rather than through an abstract memory or concept. The *fourth principle* is that knowledge is personal. Vygotsky (1978) argues that each learner's idiosyncratic viewpoint is built on the prevailing knowledge and values. This means that the learner may end the same lesson, teaching or activity with a different study. The interactive theme is different. Even so, this principle contradicts the view that knowledge is constructed socially. The *fifth principle* is that learning exists in the mind. According to Driscoll cited in Mcleod (2000, 2019), knowledge is found in the human brain and does not need to be matched with any real world. This fact implies that the learners will instantaneously develop their own mental model of the real world from their perceptions of that world. When learners gain new experiences, they will repeatedly update their thinking patterns to reproduce new information, thereby establishing their own understanding of reality.

The relevance of this theory to this study is how it is able to guide the discussion on formative assessment. Through constructivism the learners and teachers must bring past experiences to the current learning situation - which contributes to their final academic performance. David (2015) imagines that Vygotsky's theory can be very beneficial in helping teachers to plan their instructional processes and methods. Moreover, constructivism helps teachers to think through the knowledge and skills that their learners

are expected to master and determine the order in which to teach such knowledge and skills.

2.4 BARRIERS TO THE WIDER USE OF FORMATIVE ASSESSMENT IN SECONDARY SCHOOL EDUCATION

Although formative approaches to teaching and assessment often resonate with practitioners and policy makers, there are barriers to its wider practice. Subsections 2.4.1 to 2.4.4 discuss some of these barriers:

2.4.1 Perceived tensions between formative assessments and highly visible summative tests to hold schools accountable for learner achievement

OCED (2008) reports that in formative assessment, teachers often teach and then use summative tests and examinations to assess how learners performed. A summative assessment test that is highly visible has the power to hold the school accountable for the learner's performance and this drives what takes place in the classroom. However, many people feel that formative assessment helps in the planning process. Vázquez-García (2018) is of the views that the assessment supports teaching while considering the learner's needs thus creating supramental continuous steamrolling than putting emphasis on the end of year test which is often inaccurate. This idea is frivolous in the minds of many teachers. They accept this idea in principle, and then realise that the document that is planned to be printed is a fixed document. Oxenford-O'Brian and Uchiyama (2018) for example, observe that almost all teachers are obsessed with the formative assessment process because they tend to get lost in the development process of evaluation and eventually ignore long-term goals.

The formative assessment tension can be addressed. OCED (2008) submits that in any setting where there is an increased visibility of summative tests, teachers are often compelled to teach to test as learners are stimulated to realise set performance goals (to do

well in tests), at the expense of learning goals (that is, to understand and master new knowledge). Many, if not most, teachers perceive these external assessments as being in conflict with or even inimical to the practice of formative assessment. Poorly designed external tests, media league tables which use a narrow set of data to compare performance across schools, and a lack of connection between tests and curriculum can also inhibit innovation.

2.4.2 Lack of coherence between assessments and evaluations at the policy, school and classroom levels

The links between systematic school, classroom assessment and assessment methods are inefficient, which poses a challenges to effective formative assessment in schools. The OECD (2013) notes that in most cases, information to be used in the learners' assessment, collected through the national or regional monitoring system in the evaluations of schools, is taken to be extraneous or obstructive to the practice of teaching. Similarly, the information collected in the classroom is considered immaterial to decision-making.

2.4.3 Fears that formative assessment is too resource-intensive and time-consuming to be practical

Formative assessment takes time. Moyosore (2015) postulates that teachers need a lot of time to conduct formative assessments. According to Herman, Osmundson, Yunyun, Ringstaff, and Timms (2015), spending enough time on formative assessment helps teachers ensure that all methods are applied consistently. Teachers' failure to have enough time to carry out formative assessment may result in a few learners being retaught to demonstrate mastery of knowledge (Herman et al., 2015). Kingston and Nash (2011) submit that many teachers admit that formative assessment methods (such as tracking tools, personal conversations with learners, etc.) take a lot of time. Formative assessment has a lot of paperwork, which is a time-consuming task that the teacher must complete,

and the strategies adopted represent an extra burden and a waste of time. The OECD (2015) proposed the need to use ICT-based learning programs that can provide effective feedback, thus reducing paperwork. OECD further proposed the effective deployment of volunteer teachers, peer learning and other related approaches that can mitigate this burden. According to OECD (2015), the curricula need to support the importance of helping learners by focusing on developing a few core skills, and for developing skills for self-assessment and learning-to-learn. Herman *et al*. (2015) also believe that the progress of learners can make them take more responsibility for their own learning and self-evaluation.

2.4.4 Disconnecting the mind-set that there is synonymy in teaching and learning.

Frunza (2014) believes that understanding how to use formative assessment is a key challenge. Frunza, (2014) observes that the biggest formative assessment is rooted in the classroom and is carried out moment by moment. Therefore, performance barriers are formative assessment developmental behaviors among teachers and learners, rather than carefully designed paper systems or pencil tests related to a set of standards (this seems to be a recent trend). Nonetheless, Frunza (2014) further notes that no matter how many forms of assessment are performed, they can help learners, but they can also help teachers by allowing teachers to follow feedback and be able to effectively orient themselves and choose the most precise teaching/pedagogic strategies. Despite the fact that much of the work devoted to formative assessment contains important information about its characteristics, in reality, the situation is hardly different. So, in the work of pedagogy, when carrying out dimensional analysis and formative evaluation, teachers should also refer to the manner in which they put this form of assessment into practice. Pedagogically speaking, formative evaluation can be achieved sequentially, which means that putting this

method in practice implies crossing various stages that are formed on a hierarchical system, in a succession system that has to be strictly respected.

OECD (2015) believes that teachers and school leaders need to create a culture of evaluation or assessment. In this culture, teachers and school administrators have to gather learner's information and use it to create new knowledge on what exactly works and why as well as practice knowledge sharing and build the ability to solve several needs of learning. Ideally, information gathered through assessment and evaluation processes is used to shape strategies for improvement at each level of the education system. In classrooms, teachers gather information on learner understanding and adjust teaching to meet identified learning needs. School leaders use the information to identify areas of strength and weakness and to develop strategies for improvement. At the policy level, the OECD (2015) explicates that officials use the information gathered through national or regional tests, or through the monitoring of school performances to guide investments in training and support for schools, or to set broad priorities for education. This can be illustrated schematically as in Figure 2 below.

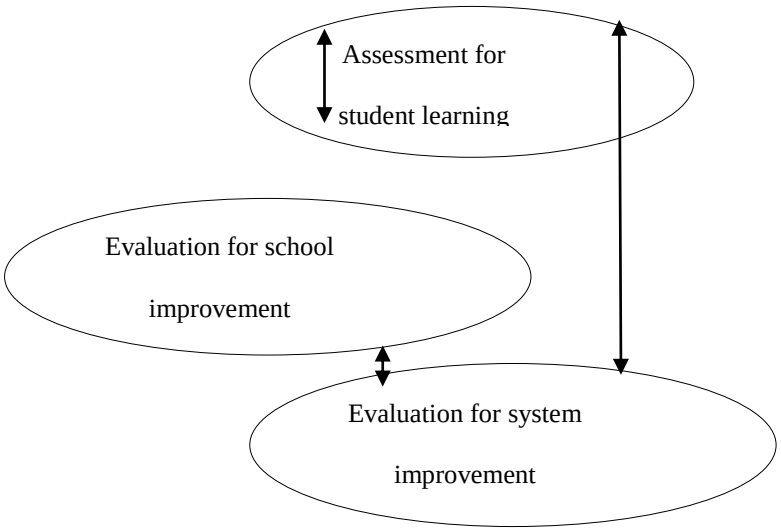

Figure 2: ***Coordinating assessment and evaluation. (Source: OECD, 2015)***

The OECD (2015) argues that the basic requirements of the curriculum should be to improve the use of formative assessment. Teachers in secondary schools are faced with extensive curriculum and reporting requirements. In several of the case study schools, teachers prioritise what they will cover in the curriculum. Deciding which concepts are most important and ensuring that learners have a good understanding before moving on could prove difficult to reconcile. Some curriculum items are missed, but teachers are more confident that learners retain information and learn subjects in greater depth. Teachers should also enlist students in tracking their own performance. For example, teachers sometimes ask students to record the teacher or peer-feedback in individual portfolios. Students are able to refer to their portfolios and teachers do not need to invest inordinate amounts of time in detailed record-keeping. Students may also use tools such as rubrics as part of self-assessment. A checklist that details the criteria for a quality piece of work is required to improve their work independently.

OECD (2015) also proposes that teachers and schools must use self-evaluation as a way of shaping future planning and to also use knowledge management techniques. They should share what they have learnt, work together to create new ideas, and systematise and transmit this knowledge to others. By doing this, they become better able to push innovations further and to sustain them longer.

2.5 THE ROLE OF FORMATIVE ASSESSMENT IN SECONDARY EDUCATION

The role of formative assessments has been outlined in a number of studies. For example, Black and William (2018) observe that formative assessment builds students' learning to learn skills by emphasising the process of teaching and learning, and involving students as partners in that process. It also builds students' skills at peer-assessment and self-assessment, and helps them develop a range of effective learning strategies. Moyosore (2015) indicates that students who are actively building their understanding of new

concepts (rather than merely absorbing information) and who are learning to judge the quality of their own and their peers' work against well-defined criteria are developing invaluable skills for lifelong learning.

Ajogbeje, (2013) cites Gronlund and Linn (1990), who submit that formative evaluation serves three specific uses namely: (i) to plan corrective action for overcoming learning deficiencies; (ii) to aid in motivating learners and (iii) to increase retention and transfer of learning. According to them, students' response to a formative test could be analysed to reveal group and individual errors needing correction. Tahir, Tariq, Mubashira and Rabbia (2012) observe that formative assessment provides feedback to teachers and students over the course of instruction, it stands in contrast to summative assessment, which generally takes place at final end of an instruction.

Marsh (2007) cited in Moyosore (2015) postulates that formative testing is a strategy designed to identify learners' learning difficulties with a view to providing remediation measures to enhance the performance of the majority of learners. Jung (2012) submits that the result of investigation into the extent to which cognitive entry characteristics and formative assessment measured students' academic performance among university undergraduates demonstrate that teacher formative assessment has the highest predictive strength on academic achievement out of all variables, that is, certificate worth and the National Junior Secondary Certificate results considered. In a similar study carried out among Polytechnic students, Ajogbeje, (2008) suggests that the cognitive entry characteristic of West African School Certificate (WASC) and Polytechnic and Colleges Entrance Examination (PCEE) are not significantly related to the academic achievement of polytechnic students in Geography and that most of the students with good grades oftentimes rely too much on these results, which in turn, affects their academic

performance. However, the study observes that semester results (i.e. continuous assessment scores) are the best predictors of academic achievement in Geography.

A study by Ughamadu, (2009), titled *'The interactive effect of formative testing and cognitive style on students' learning outcomes in secondary school geography'* observes that analytical students exposed to formative testing with remediation performed significantly higher in composite concept attainment at classification and formal level than global students. Also, Oluwatayo, (2017) reports positively about formative assessment when he notes, in a study carried out on continuous assessment as predictors of students' grades, that formative assessment improves students' academic achievements in the subject of Chemistry.

Classroom assessors sometimes seems to confuse assessment methods to evaluate learners' performance in schools. Therefore, assessment is closely linked to concepts of evaluation, measurement and testing. These are used as ways of collecting valid data on learners' performance in schools. While some might think these concepts have the same meaning with assessment, there is a very big difference. For example, Ghaicha (2016) emphasises the fact that measurements and testing are terms used to describe the outcomes of the educational process while assessment is the term currently used to describe all aspects of evaluation and testing.

OECD (2015) believes that school leaders in establishments using formative assessment foster school-wide cultures of evaluation, using objective data on the impact of teaching methods on student performance. These data give energy and purpose to developing school and classroom strategies for improvement. In schools with strong evaluation cultures, teachers' pay more attention to which strategies work well, for which students, and under what circumstances. They also develop a stronger interest in understanding

learning theories and refer more often to evidence-based research. Within subject departments, teachers may identify common student misconceptions, and develop strategies suitable to teaching their particular disciplines.

2.6 REVIEW OF RELATED STUDIES ON THE ROLE OF FORMATIVE ASSESSMENT IN EDUCATION

The purpose of this section is to present two case studies that could inform the current study on the role of formative assessment in Grade 10 learners' final grades in the subject of Geography in Ohangwena Educational Region of Namibia.

In South Africa, Der Nest, Caroline Long and Engelbrecht (2018) investigated the impact of formative assessment activities on the development of teacher agency in mathematics. This study highlights the constraining factors inhibiting the attainment of quality mathematics grades and also describes the educational environment that impacted the quality delivery of mathematics teaching. The study also proposes a solution to the problem by drawing on the assessment model developed by Bennette (2010) and Bennet and Gitomer (2009). The study combined the designs sets of the assessment tasks with professional development where teachers' agency was grounded. This was aimed at examining how the author(s) could strategically design assessment tasks that could support teacher agency and professional development. An interpretivist qualitative research methodology was used. The population of the study were Grade 9 (Nine) mathematics teachers in the Tshwane District of South Africa. Purposive sampling was used to select Grade 9 teachers from 10 selected schools in the Tshwane District. Data was collected by means of observations, an open ended questionnaire, standardised semi structured interviews, written documents and field notes. There was also the recording of participants to ensure the trustworthiness of collected data. The collected data was thematically analysed following Creswell's (2007) steps of qualitative data analysis. The results

demonstrated that a narrowing of curriculum and a reliance on one source of external monitoring were the main challenges of using formative assessment in South Africa. Other challenges were the learners' socio-economic backgrounds, large classes, learner preparedness, language issues, anxiety related to assessment and teachers' beliefs in formative assessment. The study recommends the development of mathematics proficiency, which is of intrinsic value to learners and the subject that is naturally applied by a learner within their environment.

Another study conducted in Nigeria by Moyosore (2015) investigates the effects of formative assessment on learners' achievements in mathematics at secondary level. The study was guided by three research question: To what extent would the use of formative-assessment affect the achievement scores of students in Mathematics in senior secondary schools? Will there be any significant difference between students exposed to formative assessment? And will there be any significant gender difference in the achievements of Mathematics students who are exposed to the formative assessment method of evaluation? Experimental research was used. The population comprised 120 mathematics learners in Secondary II Art classes in two public schools in the Iseyin Local Government of Oyo State, Nigeria, selected through purposive sampling technique. Formative Tests I, II and III and a Mathematics attainment test were the sources of data the collection. Paired sample t-test and independent sample t-test were used in data analysis. The results demonstrate that formative assessment plays a vital role in assessing learners. Also, formative assessment had a strong significant difference in the mean achievement score of mathematic learners ($t = 36.54$, $p = 000$). The study recommends that school administrators need to continuously encourage the use of formative assessment by all teachers. They should allow, encourage and provide incentives for them to attend seminars, workshops,

conferences and in-service training to enhance their performance and to acquire necessary skills for constructing formative tests.

However, these studies were not investigating the role of formative assessment in the subject of Geography, but rather on the constraining factors of formative assessment in Mathematics and on the effects of formative assessment on learners' achievements in Mathematics respectively. They however respond dialogically to some of the objectives of the present study - which are, to investigate challenges faced in formative assessment and the use of formative assessment in affecting learners' achievements in the subject of Geography. The studies also reproduce an ideology that formative assessment is used in evaluating learners' progress which speaks to the main objective of the current study.

The researcher can benefit from the above case studies. The first lesson is that formative assessment improves the achievement scores of learners in secondary education. The second lesson is that formative assessment is characterised by a host of challenges, especially in its implementation. Chief among such challenges are the narrowing of the curriculum, learner preparedness, anxiety related to assessment and teachers' beliefs on formative assessment. A third lesson that can be drawn from these studies is that formative assessment requires the development of the subject proficiency that offers intrinsic value to learners and the subject that is naturally applied by a learner within their environment. Subsequently, this also entails allowing teachers to implement it, encourage and provide incentives for them to attend seminars, workshops, conference and in-service trainings to enhance their performance and to acquire necessary skills for constructing formative tests.

2.7 SUMMARY

This chapter has presented a review of literature related to the concepts, theories and roles of formative assessment in education. The researcher has discussed the conceptual framework as well as the theoretical framework in which the current research is couched. The conceptual framework has outlined four themes namely: ***governance*** - which describes the different purposes and objectives of student assessment systems; ***capacity*** - which discusses the competencies and the support necessary to assess students; ***procedures*** - that is about procedures and methodologies used for student assessment in the education system and finally the use of ***results***. The review observes that the selected theoretical framework has five principles of constructivism; the first principle is that knowledge is constructed, rather than innate or passively observed, the second principle of the constructivism theory is that learning is an active process; Knowledge is an active rather than a passive process. Thirdly, knowledge is socially constructed. Fourth, knowledge is personal and fifth, learning exists in the mind. Also discussed in the chapter are the barriers to the wider use of formative assessment and the role of formative assessment in teaching and assessment. The barriers are perceived tensions between formative assessments and highly visible summative tests to hold schools accountable for learner achievement; the lack of coherence between assessments and evaluations at the policy, school and classroom levels; fears that formative assessment is too resource-intensive and time-consuming to be practical and disconnecting the mindset that there is synonymy in teaching and learning, while the role is to monitor learners' learning to provide ongoing feedback that can be used by teachers to improve their teaching and by learners to improve their learning thus building the learners' learning to learn skills. The final section presented a review of related of two related case studies on the role of formative assessment among learners. It was learned from the case studies that formative

assessment improves the achievement scores of learners in secondary education. However, it is riddled with challenges in its implementation, exemplified by the narrowing of the curriculum, learner preparedness, anxiety related to assessment and teachers' beliefs in formative assessment. The next chapter presents the research methods and design used to investigate the role of formative assessment in Grade 10 learners' final grades in the subject of Geography in the Ohangwena Educational Region of Namibia.

CHAPTER 3

RESEARCH METHODS

3.1 INTRODUCTION

This chapter presents the research design and methods of the study. This is followed by discussions of the population, sampling procedures and the sample size of the study. The chapter also deliberates on the research instruments as well as data collection procedures. The last two sections of the chapter explain the data analysis processes and ethical considerations made for the current study.

3.2 RESEARCH DESIGN

Research design refers to the techniques employed during data collection and analysis in determining the variables defined in the research's statement of the problem (Creswell, 2014). Creswell further explains that the research design defines the type of study, data collection methods and gives the statistical plan for data analysis (Creswell, 2014). Borg and Gall (2013) indicate that the study design gives a researcher a plan that guides the study process. Durrheim (2006) defined research design as a strategic framework for actions that serves as the bridge between the research questions and execution or implementation of research.

The study adopted the Mixed Method (MM) approach. The Mixed Method approach is characterised by the combination of at least one qualitative and one quantitative research components (Creswell & Clark, 2011). Schoonenboom and Johnson (2017) stated that in a mixed method research a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e. g., the use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration. It is commended that

using of Mixed Method approach provides the best opportunity to address the research questions (Mali et al, 2011).

Mixed Method was adopted in order to expand and strengthen the conclusion and recommendations of the current enquiry on the role formative assessment plays in Grade 10 learners' final grades in the subject of Geography in the Ohangwena Educational Region of Namibia and therefore it contributes to the corpus of literature on the subject.

The use of the qualitative research approach involves discovery (Maxwell, 2013). It also enables and in-depth understanding of the role formative assessment plays in Grade 10 learners' final grades in the subject of Geography in the Ohangwena Educational Region of Namibia. Creswell (2014) defines the qualitative research design as an unfolding model that occurs in the natural environment, which is essential to develop a level of detail from a high degree of participation in practical experience. This method helped the researcher to conduct in-depth interviews to gain an in-depth understanding of the phenomenon under study. This ability of the design is explained by Saunders, Lewis and Thornhill (2012) who explicate that the qualitative design develops in-depth knowledge.

The quantitative research approach, on the other hand, uses numbers as its basis for generalising a phenomenon (Babbie, 2010). Babbie (2010) and Muijs (2010) argue that quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques. Quantitative research focuses on gathering numerical data and generalising it across groups of people or to explain a particular phenomenon. The numbers are derived from objective scales of analytical units, the so-called variables (Regoniel, 2015). According to Creswell (2014), quantitative research is used to quantify the problem by way of generating numerical data

or data that can be transformed into useful statistics. Apuke(2017) indicates that quantitative method is imperative as it explains issues or phenomenon through gathering of the numerical data.

Norman and Yvonna (2015) argue that the data obtained using quantitative methods are organised using tables, graphs, or figures that consolidate large amounts of data to show trends, relationships, or differences between variables. This promotes understanding for the readers or clients of the research. Researchers can repeat the quantitative method to verify or confirm the findings in another setting. This reinforces the validity of ground-breaking discoveries or findings, thus eliminating the possibility of spurious or erroneous conclusions (Norman & Yvonna, 2015).

The qualitative approach embraces phenomenology. Phenomenology is the study of human life-world which focuses on human experiences in each individual (Van Manen, 1990 as cited in Hooker C. 2015). The goal of a phenomenological method is to uncover the meaning of lived experiences through analysis, intuition, and describing a phenomenon from individual reports in the way they appear and without any preconceived notions (Parse, Coyne & Smith, 2015). The researcher found the phenomenological approach sustainable because the study mainly aimed at understanding the processes and steps in formative assessment, practices, perception and the meanings teachers and learners of Geography as a subject assign it within the education context as well as the on-ground academic process.

The quantitative approach embraces the descriptive research design. The descriptive research design is a research method used to describe the characteristics of the population or problem under study (Shields & Rangarajan, 2013). The researcher found the descriptive research design because descriptive statistics state the *'what?'* of research,

while inferential statistics try to determine the cause and effect – the *'why?'*. A descriptive research design was used since it resulted in extensive data being collected in large quantities (Bernard & Bernard, 2012) and provided a way of organising educational data and view the object under study as a whole. The descriptive research design determined and described the way things were.

3.3 POPULATION

The population of the study consisted of all the Grade 10 Geography teachers, Head of Departments for Social Sciences and learners in schools within the Ohangwena Educational Region. There are 137 schools and an estimated 155 Geography teachers that teach about 3200 Grade 10 Geography learners in the Ohangwena region. Thus, all these, comprise the total population of the study.

3.4 SAMPLE AND SAMPLING TECHNIQUES

The sample for this study comprised of Grade 10 Geography teachers, Head of Departments for Social Sciences and learners at three sampled schools in the Ohangwena Educational Region. These are drawn from within the total population of the study as expressed above in 3.3. The sampling size is shown in Table 3.1 and is explained immediately after the table.

Table 3.1 Sample size

Category	**Number of schools**	**No. of respondents per school**	**Total**	**Sampling method used**
Teachers	3	2	6	Purposive
Department heads	3	1	3	Automatic/total

Learners	3	39	132	Simple random
Total	**3**	**23**	**141**	

A systematic sampling method was used to select the schools to participate in the study. The researcher obtained a list of schools from Ohangwena Directorate of Education, Arts and Culture (Ohangwena) at the regional office. The researcher obtained a list of the schools who have Geography as a subject at Grade 10 in the 2018 National Junior Certificate of Education and arranged the names of the schools in ascending order based on performance. For example, the best school in Geography performance was numbered as (1) and the middle school was numbered (64) while the last school was numbered (137). Three schools were selected based on their performances in Geography results taking into account the best, middle (moderate) school and the last school based on the 2018 JCE results.

The non-probability sampling technique, specifically purposive sampling, was used to select Geography teachers in the selected schools. There were two Grade 10 Geography teachers and one Head of Department for Social Sciences at each of the sampled schools. The researcher purposively sampled two Grade 10 Geography teachers and the Head of Social Sciences Department to participate in the study. Thus, in total, six (6) Geography teachers and three (3) Heads for Social Sciences Departments were sampled to participate in the study.

Simple random sampling was used to select the learners. This approach was used to select learners in each selected secondary school in the Ohangwena Educational Region. Geography learners were given an equal chance to participate in the study (Omari, 2011).

This helped the researcher in getting the respondents (learners) to participate in the study. To obtain the sample data from learners in the selected three schools in their respective schools, a list of learners was prepared in each school. From the list, the required number of respondents was selected. The researcher put equal numbers of pieces of paper with "YES" and "NO" in a box and allowed the learners from the selected schools and to draw. For each "YES" drawn, the potential learners were included in the sample data and each "NO" drawn excluded the learner from the sample data. The exercise was done on learners from each of the selected schools. This implies that only 39 respondents (learners) who drew "YES" were selected to participate in the study.

3.5 RESEARCH INSTRUMENTS

The research instruments that were used to collect data were the questionnaires, interviews, and observational checklist.

3.5.1 Questionnaire

One set of questionnaires was administered to the selected learners. The researcher asked for a private classroom at every secondary school selected where learner filled in their questionnaires from. Filling of the questionnaires took between 20-30 minutes and data collection took only one week.

The importance of questionnaires in the study was to facilitate the collection of large amounts of data that were more dependable and reliable as they have the potential to provide information or answers to the research questions. The researcher individually distributed structured questionnaires to the selected respondents. A structured questionnaire was prepared using mostly close ended questions. The questionnaires were designed in line with the reviewed literature. The questionnaire was divided into two

sections: Section A (which solicits respondents' personal information) and Section B (which collects data responding to the study problem and questions).

3.5.2 Interviews

An interview guide was used to collect data from the Heads of Departments for Social Sciences and Geography teachers in the selected junior secondary schools. Face to face in-depth interview were conducted with the learner participants. The semi structured interview was used in order to yield high quality responses as it takes advantage of interviewer's presence as well as because of its capacity for multi-method data collection (Creswell & Creswell, 2017).

3.5 DATA COLLECTION PROCEDURES

The researcher collected data by setting up appointments with the research participants. The respective research participants' consent was also obtained during the meetings with Heads of Social Sciences Departments. The researcher ensured that they established a congenial interviewing atmosphere in all secondary schools. The data collection process lasted for 30-40 minutes per participant. Some participants were voice recorded during the interviews and a manual recording system (using a notebook and pen) was done for those who felt uncomfortable with being voice recorded.

A closed ended questionnaires was distributed by the researcher to the respondents (teachers and learners). The researcher distributed the questionnaires to individual learners and these were filled in a private room at each sampled school. Interviews for Geography teachers and Heads of Departments were conducted in one day at their respective schools.

3.5.1 Pilot Study

A pilot study is conducted in order to test the data collection methods, time, cost and size of the research group. Marchant (2018) defines a pilot study as a mini-version of a full-scale study or a trial run and which is done in preparation for the real study. It is indicated that pilot study is crucial for a good research design and it provides the like hood of success in the study (Teijlingen et al 2001). In this study, the researcher piloted the instrument with one (1) Head of Department for Social Sciences, one (1) Geography Grade 10 teacher and one (1) of the learners chosen from each of the five (5) Grade 10 classes at the school where the researcher is employed. Thus, only five (5) Geography Grade 10 learners, one (1) Geography Grade 10 teacher and one (1) Head of Department for Social Sciences (a total of seven (7) participants) participated in the pilot study.

The pilot study enabled the researcher to check whether the questions were clear and easy to understand so that the results obtained would be useful in determining the validity of the instrument in the actual research. The respondents that participated in the pilot study did not take part in the final survey. There was no change made in the instruments after the pilot study.

3.6 DATA ANALYSIS

Glesne and Peskin (2012) explains that data analysis involves organising what we have observed, heard and read, to make sense of acquired knowledge. They maintain that for one to do so he/she categories, synthesises, searches for patterns and interprets the data collected. It is also concerned with synthesising data, searching for patterns, discovering what is important, what is to be learned and deciding what to tell others. Bogdan and Biklen (2012) quoted by Rwejuna (2013) define data analysis as systematic process involving working with data, organizing and breaking them into manageable units. It is a

process also concerned with synthesising data, searching for patterns, discovering what is important, what needs to be learned and deciding what to tell other.

The qualitative data were recorded using the audio-recorder (and notebook and pen in some cases) and the analysis was done by incorporating participants' descriptions and quotations into the discussions under established themes. The results of the study are presented based on the objectives of the study. The discussions of findings are based on the empirical reviews presented in chapter two of this study and the theoretical framework that were adopted for the study. The findings are also presented in narrative form. The analysis of quantitative data was done using Microsoft Excel spreadsheets 2016. The analysis included the tallying of frequencies and calculation of percentages. The results are presented in tables and figures for ease of understanding and interpretation.

3.6.1 Elimination of bias

The nature of a qualitative study makes it challenging. It is not possible for a person analysing data to separate him/herself from the data. In this study, bias was eliminated in order to maintain objectivity of the study by using two people in the coding of data – a process which evinced homogeneity between the results of the researcher and others. Triangulation was also used for the purposes collecting other forms of data that support the study's major interpretation. There was also constant comparison for any alterations in order to make interpretations stronger, thus eliminating bias in the study.

3.7 ETHICAL CONSIDERATIONS

Prior to the actual data collection process, ethical clearance was obtained from the University of Namibia's Research Ethics Committee (UREC). The researcher sought approval and permission for the study from the Director of Postgraduate Studies Committee (PGSC) of the University of Namibia, the Permanent Secretary of the Ministry of Education, Arts and Culture, the Director of Education in Ohangwena Educational Region and Principal(s) of the selected schools in Ohangwena region to carry out the research. The following ethics were taken into account:

- **Informed consent.** The researcher explained the aims and objectives of the study to all participants and they were given an opportunity to ask for any clarification. Written informed consent was obtained from Heads of Department for Social Sciences, Geography Grade 10 teachers and from parents of minor students that participated in the research study. The respondents were not pressured to take part in the study. They were informed that they could withdraw from the study at any time without any penalty.
- **Principle of fair treatment/justice**. Selection of respondents was fair and was carried out according to the eligibility criteria explained in the research design section. There were no financial rewards for taking part in this research, and no penalty or fine was charged for declining to participate. Moreover, the participants had the legal right to decide and control their own destiny.
- **Anonymity and autonomy**. The anonymity and aautonomy of the participants was ensured. No names of respondents were used at the completion of the research study. Participants that took part in this research project were protected and their real names were not revealed.

- **Confidentiality and privacy**. The research participants are known only to the researcher. The researcher ensured that no private information was shared without the participant's knowledge or against their will. Data collected was used to write a report book which will be stored in the university library. Recordings were protected from unauthorised access, use, disclosure, modification, loss or theft by keeping them in the locked filing cabinet. The computer containing research data was kept away from the public areas and locked with a strong password known only to the researcher. Additionally, there were technical safeguards on the computer that included the use of the computer password to log on which was not revealed to anyone. This was done to ensure a trustworthy relationship between the researcher and the participants.
- **Beneficence and non-maleficence.** The researcher assured the participants that no physical, psychological, financial and/or emotional benefits or abuse would accrue on the participants.

3.8 SUMMARY

This chapter presented the research design and methods utilised in the investigation of the role of formative assessment in the Grade 10 learners' final grades in the subject of Geography in Ohangwena Educational Region of Namibia**.** The chapter explained that the research adopted a mixed methods research approach rooted in the phenomenology and descriptive research designs. The chapter also explained the sampling strategy, data collection instruments and procedures. Furthermore, the chapter discussed issues regards the data analysis, elimination of bias, pilot study and the ethical issues considered during the data collection process. The next chapter presents and interprets the data.

CHAPTER 4
PRESENTATION AND INTERPRETATION OF DATA

4.1 INTRODUCTION

The purpose of this chapter is to present and interpret the data collected in the study which is investigating the role of formative assessment in the Grade 10 learners' final grades for the subject of Geography in Ohangwena Educational Region of Namibia. The presentation and interpretation of data follows the following pattern:

- Biographical data for teachers and learners
- Perceptions of the teachers about formative assessment in Grade 10 Geography CA and examination results in Ohangwena Educational Region
- The guidelines that could be provided for the Grade 10 Geography Syllabus to guide teachers in assessing the learners' work formatively in Ohangwena Educational Region
- The strategies that can be implemented to improve the effectiveness of formative assessment in Grade 10 Geography in Ohangwena Educational Region of Namibia

4.2 THE BIOGRAPHICAL DATA FOR LEARNERS AND TEACHERS

The biographical data addresses the gender of learners, teachers' highest educational qualifications and teacher experience in the teaching of Geography. These are now presented.

4.2.1 Gender of respondents

The gender of respondents in the study carried out in the Ohangwena Educational Region is presented in Table 4.1 below.

Table 4.1: ***Respondents' gender in Ohangwena Educational Region of Namibia***

Variables	**Learners**	
	Frequency	**Percentage**
Male	71	55.5%
Females	57	44.5%
Total	**128**	**100**

Table 4.1 reveals that 55.5% of learners who participated in the study were males while 44.5% of them were females. In general, the result shows that males were the dominant among participants in the study.

4.2.2 Teachers' highest educational qualification and experience of teaching geography in the Ohangwena Educational Region.

The teachers' highest educational qualification and experience of teaching Geography in Ohangwena Educational Region is presented in table 4.2 below.

Table 4.2: ***Teachers' highest education qualification and experience in Ohangwena Educational Region***

Variables	**Qualification**	**Experience in years**
Certificate	0	0
Basic Education Teacher Diploma (BETD)	1	4 - 7 years
Bachelor of Education Degree (BED) Honours	4	7 - 10 years+

Total	**5**	

Table 4.2 demonstrates that none of the teachers who participated in the study have a low qualification level of a Certificate. There was only 1 teacher with the Basic Education Teacher Diploma [3 years] qualification and experience ranging from 4-7 years. Four (4) teachers have the Bachelor of Education Degree Honours [a 4-year qualification] with more than 10 years working experiences of teaching Geography at Grade 10 level. In general, the table shows that all teachers who participated in the study possess a good understanding of, and expertise in the subject as they have the required qualifications and they have taught Geography for more than 7 years at Grade 10 level. This educational level and experience could serve a crucial role in understanding the subject as well as on the role of Formative Assessment [FA] in the Grade 10 learners' final grades in the subject of Geography in the selected schools in the Ohangwena Educational Region of Namibia.

4.3 THE ROLE OF FORMATIVE ASSESSMENT AND EXAM MARKS IN GRADE 10

The researcher sought to ask learners to establish the role of formative assessment and exam marks in Grade 10. The purpose of this question was to examine the extent of understanding that learners have towards the role of formative assessment marks to the exam marks that they score in their final exams which they usually write at Grade 10 level in the Ohangwena Educational Region of Namibia.

The learners used the following key to respond to the questions:

SA= Strongly Agree, AG= Agree, D= Disagree and SD= Strongly Disagree. This information is presented in table 4.3 below.

4.3.1 Learners' views on the role of formative assessment and exam marks in Grade 10

Table 4.3: ***The role of formative assessment and exam marks according to Grade 10 learners in the Ohangwena Educational Region of Namibia.***

Learners' views on the role of CA and Exam Marks in grade 10	**A**	**SA**	**D**	**SD**	**Total**
Continuous assessment in Geography grade 10 is an everyday occurrence and improves learners' learning	72 (57.1%)	21 (16.7%)	24 (19.0%)	9 (7.1%)	126 (100%)
To give clear guidance to learners before assessing them	31 (24.6%)	88 (69.8%)	4 (3.2%)	3 (2.4%)	126 (100%)
To use methods to assess learners' progress	42 (33.3%)	53 (57.9%)	9 (7.1%)	2 (1.6%)	126 (100%)

Table 4.3 illustrates the learners' views on the roles of formative assessment and exam marks in the subject of Geography at Grade 10 in the Ohangwena Educational Region of Namibia. These views are based on their experience with the occurrence of formative assessment in their classrooms, the guidance which teachers provide to the learners before assessing their work formatively, as well as the methods used to assess their work. The table shows that 83.8% of the learners opined that continuous assessment in Geography at Grade 10 level is an everyday occurrence and improves the learners' learning (57.1% agreed and 16.7% strongly agreed) whilst the remaining 26.1% disagreed that continuous assessment in Geography at Grade 10 is an everyday occurrence (19.0% disagreed and

7.1% strongly disagreed). Similarly, the majority of the learners agreed (94.4%) that teachers give clear guidance to learners before assessing them while 5.6% disagreed. 91.2% of learners agreed that teachers use clear methods to assess the learners' progress whilst 8.7% of learners disagreed that teachers use clear methods to assess the learners' progress. The results show that learners knew the role that formative assessment plays in their educational goals and final grades.

4.3.2 Teachers' views on the role (use) of formative assessment to assess learners' progress in schools.

The teachers were asked about the roles of formative assessment in assessing learners' progress in schools and the following responses emerged from the corpus of their narrative interviews:

TEACHER 1

"The use of formative assessment in schools by teachers is important as it assess learners' progress, such as by giving them mastery tests which is helpful as it allows slow learners to improve and participate freely."

TEACHER 2

"The use of formative assessment is to assess learners work in schools and ensures that there is always progress in terms of learning by following the guidance provided in the syllabus to monitor their abilities."

TEACHER 3

"It is useful to use formative assessment in schools to assess learners' progress as it helps to prepare them for both mid-year and final examinations. It also provides clear evidence to the parents about the progress made and challenges faced by the learners in schools, as regular feedback would convince parents to be serious with their children's education".

TEACHER 4

"Formative assessment is very crucial in schools to assess learners' progress as learners would be provided with remedial lessons after school or during weekends this might help them to improve as the extra lessons will boost up the confidence of both the slow and gifted learners".

TEACHER 5

"If teachers could always conduct formative assessment in schools to assess learners' progress, it is very crucial to enlighten teachers to know the type of learners they have in class, and to give proper feedback whilst learners would be aware of what is expected of them to know".

The above excerpts indicate that the teachers strongly support the use of formative assessment in school and that they were also using it in assessing Geography learners at Grade 10. It was apparent that Geography teachers gave learners mastery tests that permitted slow learners to improve. The use of formative assessment helped teachers to monitor the performance of learners by providing ongoing feedback, improving their (teachers) teaching and to also improve learning on the side of the leaners. The results demonstrate that Formative Assessment is important in evaluating learners' academic progress and identifying their learning needs.

4.3.3 How effective is the use of formative assessment on Grade 10 Geography learners?

The teachers were asked about how effective they believed the utilisation of formative assessments was on Grade 10 Geography learners, and the following responses emerged from the corpus of their combined narrative interviews.

TEACHER 1

"Yes, it is not effective because the explanation and guidance is limited. It is only in the syllabus and teachers often follow it by making sure that at the end of each term, the CA forms are submitted to Heads of Department (HODs) for Social Sciences and are checked. Sometimes, it is useful to assess learners work formatively because it helps teachers to get the pre-knowledge of the learners".

TEACHER 2

"We have a policy guide at school which guides teachers to give many activities to our learners like topic tests, practical work or projects which is submitted to the Subject Head at school to make sure that learners work is assessed regularly".

TEACHER 3

"Yes, we give learners mastery tests and the HODs at school ensures that teachers submit marks of learners' assessed work regularly by checking learners' work books and support teachers with necessary coaching as HODs are expert in all subjects offered at their headed department. Other tasks given involve learners themselves to do them and to research more on the tasks that are not taught, but could help them to be on the right track".

TEACHER 4

"Yes, we have a policy guide at school which helps teachers to record the CA marks generated from all activities given to the learners such as class work, group assignments and homework which are given regularly with remedial lessons after school or during weekends, as it helps them to improve and also boosts up the confidence of both slow and gifted learners".

TEACHER 5

"Yes, we have a policy at school which enlighten us to know the type of learners that you have in class that needs to be assessed regularly and forms are submitted to Heads of Department for Social Sciences Department (HODs) to be monitored."

The above excerpts indicate that all participants (teachers) were aware of the subject policy and syllabus which guides teachers on how to assess learners' progress in schools. From the teachers' narratives, it is clear that formative assessment is done regularly. It is done very often and in line with the policies and guidelines within the schools. These findings indicate that teachers were following the Geography assessment policy and guidelines provided to them by assessing learners regularly.

4.3.4 Learners' opinions regarding continuous assessment and examination marks.

The researcher sought to find out learners' opinions regarding continuous assessment marks and examination marks, and the results are presented in Figure 3 below.

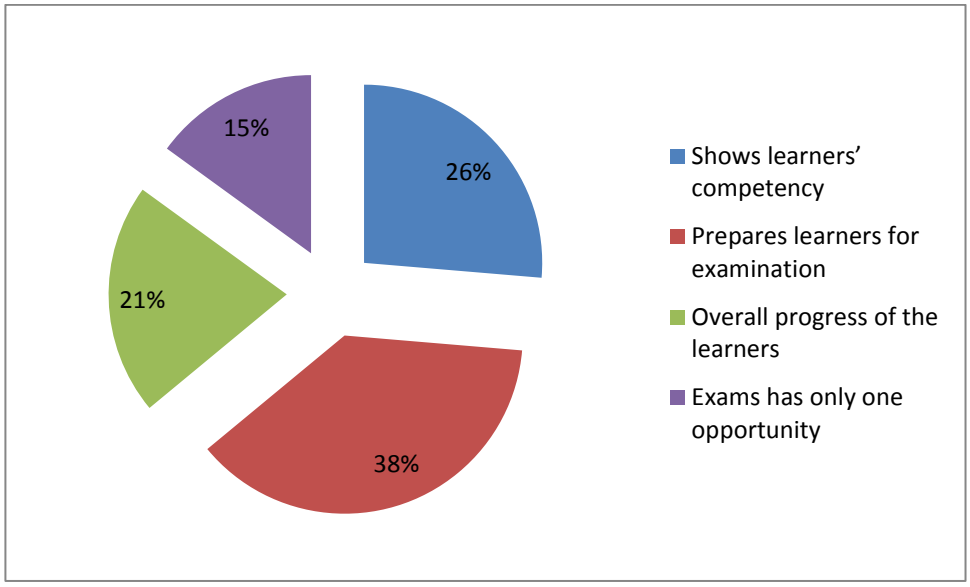

Figure 3: ***Learners' opinion regarding continuous assessment and examination marks***

Figure 3 above shows that 38% of respondents expressed confidence that CA prepares learners to be ready for the examination while 26% of them submits that CA helps learners to be competent. 21% of respondents believed that CA helps with the overall progress of the learners. Fifteen percent (15%) of learners explained that examinations offer learners only one opportunity. These results support the view that continuous assessment marks and examination marks are equally important in learner's performance.

4.7.3 Comparisons of CA and Exam marks in Grade 10 Geography

The study also sought to compare school examination and CA marks in Grade 10 Geography within the three schools that participated in the study named A= better performing school, B= moderate and C least performing school for the last academic 2015 to 2018. This is presented in Table 4.4 below.

Table 4.4: CA Average and Exam Average for the three schools (A, B and C)

Year	**Schools**					
	CA marks			**Exam marks**		
	A	**B**	**C**	**A**	**B**	**C**
2018	52	39	37	79	47	36
2017	46	35	40	78	49	52
2016	45	41	34	84	75	52
2015	48	38	40	80	58	50

Table 4.4 shows the comparisons of CA and Examination marks between the three (3) participating schools (A, B & C) in the Ohangwena Educational Region in the years 2015 to 2018. It indicates clearly that schools A, B and C have achieved different percentages of CA marks and Examination marks during the four-year period used for the comparison (2015-2018). For instance, school A which is a high performing school has achieved the class averages of forty-five to fifty-two (45-52) percent from 2015 to 2018, while the examination averages have been high from seventy eighty to eighty-four (78-84) percent. However, school B which is moderate performing school has scored a class average of

thirty-five to forty-one (35-41) percent, while the examination marks range from forty-seven to seventy-five percent (47-75) percent. Finally, school C which is a low performing school has also achieved a class average of thirty-four to forty (34-40) percent; while the examination marks range between thirty-six to fifty-two (36-52) percent respectively. This has an implication that different schools had varying class average and examination averages.

4.3. METHODS USED BY TEACHERS TO ASSESS LEARNERS HELP IN BETTER LEARNING OF THE SUBJECT OF GEOGRAPHY.

The teachers were asked about the methods used to help in improving the learning of Geography and the following responses emerged from the collective corpus of their narrative interview.

4.3.1 Perspectives of the teachers on the methods

The teachers were asked about the methods used to help in the better learning of geography and the following responses emerged:

TEACHER 1

"Teachers have a huge responsibility to play in schools apart from teaching. We use different methods like practical exercises, topic tests, project work, homework and end of term test to assess learners' progress in the better learning of geography".

TEACHER 2

"Time on task is very important. Tasks given always involve learners themselves to do them in order to learn more. We use various methods at our school such as practical exercise, group work, class activities, topic test, and presentation with drama, project work, homework and end of term test to assess learners' progress in school throughout the year before they sit for the end of year examination".

TEACHER 3

"We continuously assess learners in geography through different types of activities mainly, class activities, topic test, homework and end of term test. All these methods allow teachers to assess the ability of different learners at our school".

TEACHER 4

"Teachers are entrusted with the responsibility of mentoring the future leaders of any nation. Learners are made aware of their progress in schools by receiving feedback regularly from their teachers through a variety of assessed work such as practical exercise, class activities and topic test".

TEACHER 5

"Teachers would only know about the strengths and weakness of their learners in schools by evaluating their progress by giving practical exercise, class activities, topic test, and presentation with drama, project work, homework and end of term test".

The above excerpts indicate the teachers' viewpoints on the usage of class activities, project work, practical work, topic tests and homework as common methods of assessing learners' progress in Geography. Other methods such as presentation with drama, end of

term test were only used infrequently in helping learners to master the content of Grade 10 Geography in Ohangwena Educational Region. In addition, one participant teacher also revealed that other methods such as mastery tests, end of lesson questions, peer assessments and speed tests are also used to ensure that learners are well equipped with adequate skills to master Geography content at Grade 10 in schools in the Ohangwena Educational Region. The results indicate that teachers use several teaching methods to assess learners to help them in better learning of Geography as a subject.

4.3.2 Perspectives of the learners on the methods

The learners were asked about the methods used to help them in learning Geography and the responses in Table 4.5 emerged.

Table 4. 5: ***Learners' response on the methods used by teachers to assess learners' work***

Methods	**Frequency**	**Percentage (%)**
Class activities	219	20.4
Practical work	96	8.9
Project	26	2.4
Group work	67	6.2
Presentation /Dramas	38	3.5
Homework	201	18.7
Short test	152	14.2
Assignment	14	1.3

Topic test	160	14.9
End of term test	102	9.5
Total	**1075**	**100**

Results as presented in table 5 above shows (20.4%) of the learners' acknowledged class activities as the main method used by teachers to assess learners in the learning of Grade 10 Geography. This was followed by homework (18.7%), topic test (14.9%), and short tests (14.2%) while the least mentioned was presentation/dramas (3.5%) and assignment (1.3%). In general, the results show that teachers use a variety of methods.

4.5 THE GUIDELINES THAT COULD BE USED BY GEOGRAPHY TEACHERS IN ASSESSING LEARNERS' WORK (from the Ministry of Basic Education, Arts and Culture)

The Heads of Departments for Social Sciences (HODs) were asked about the guidelines that could be used by Geography teachers in assessing learners' work and the following responses emerged from the corpus of their collective narrative interviews:

HOD 1

"*Because this is the policy, it refers to a wide variety of methods that teachers use to conduct in the process of evaluation of learners, comprehension, learning needs and academic progress during a lesson*"

MALE HOD 2

"*The use of policy guidelines is effective, as it includes diagnostic testing of learners, it has a range of formal and informal assessment procedures conducted by teachers*

in assessing of learners during the learning process in order to modify teaching and learning activities to improve learner's attainment."

SUBJECT HEAD

"Teachers in most cases encourage learners and assess them after the lesson" Male Subject Head.

MALE HOD 1

"...to monitor learners while learning in order to provide on-going feedback that can be used by the instructors in improving their teaching and by learners to improve their learning" Male HOD.

The above excerpts indicate that teachers in schools were aware of the guidelines used grading, assessment and the award of marks for all learners' assessed work. The HODs submitted that teachers are utilising a diversity of learning activities in Geography based on the guidelines provided in the Syllabus and the Subject Policy for Social Sciences which is followed in assessing Geography at Grade 10. The results show that teachers follow prescribed guidelines and the Geography subject policy scope in assessing learners' performance.

4.6 THE STRATEGIES THAT CAN BE IMPLEMENTED TO IMPROVE THE EFFECTIVENESS OF THE FORMATIVE ASSESSMENT

4.6.1 Strategies for assessment used to assess Grade 10 Geography learners by teachers

The teachers were asked about the strategies that can be implemented to improve the effectiveness of the formative assessments and the following responses emerged from the collective corpus of their narrative interviews:

TEACHER 1

"Yes, assistance from advisory service is needed by conducting workshops. We follow a subject policy and subject syllabus so that a common mastery test should be set up, apart from a common regional exam which is usually given to allows learners be assessed in a uniformity way in all schools found within Ohangwena Educational Region".

TEACHER 2

"Proper teaching and learning aid should be designed by geography teachers to use available natural materials to design learning materials which is cheap and accessible to learners in schools of Ohangwena region. Teachers should also sacrifice their time to offer remedial teaching to the slow learners, and sometimes invite parents to come and give motivational speeches to the learners".

TEACHER 3

"Teachers should set up their own learning targets together with all learners on what they want to achieve each term in geography. All HODs for Social Sciences at schools should invite advisory service to come and support teachers when necessary.

Parents should also be invited each term to come and check the progress of their children in schools".

TEACHER 4

"School managers or HODs should always guide meeting at schools each term at school to help teachers not to go out of the way, and also ensures that all learning materials required in each department at schools is made available for teachers to facilitate learning and assessment more effectively. People involved in policy planning should do regular research in schools every year, and involved teachers to continuously revise the assessment policy regularly".

TEACHER 5

"Yes, each school should set up its own internal policy based on the CA manual to help teachers understand the awarding of CA marks. Assess learners regularly after class, and also give extra lessons when opportunities arise, as it always benefits learners to improve. Teachers should also use examiner reports when revising to review learners' strengths and weaknesses in order to avoid repetition of mistakes by current learners when assessing different topics in geography".

The above excerpts from the interviews express the need for all stakeholder in the education fraternity to collaborate together in order to achieve success. The participants centred on advisory assistances, Geography teachers' designation of proper teaching aids and offering remedial teaching, termly meetings to guide teachers on assessment and setting up of individual school formative assessment policies for guiding teachers in understanding the awarding of CA marks. The results indicate that such strategies, if implemented, can improve the effectiveness of the formative assessment of Grade 10 Geography learners in Ohangwena Educational Region of Namibia.

4.6.2 Strategies from the Ministry of Basic Education, Arts and Culture (MoEAC) used by HODs

The HOD were asked about the strategies that the Ministry of Basic Education, Arts and Culture (MoEAC) uses and the following responses emerged from the corpus of their narrative interviews:

MALE HOD 1

> *"Assessment should be done in line with the syllabus requirements as set out in the national subject policy. The requirements of CA are spelled out in the policy document "Towards improving CA in school: A policy and information guide". Through workshops conducted by advisory service, teachers and educational staff have become aware of the new strategies that help them and the learners" Male HOD.*

MALE HOD 2

> *"The policy guide for teachers guides them on how to assess learners and recording of CA. The CA marks for grade 10 use to be checked by HODs or Subject Heads before they are entered on CA forms / sheets by geography teachers. Examiners report is also sent regularly to schools through the regional directorates in order to use them during revision before learners sit for the end of year examination" Male HOD.*

MALE HOD 3

> *"Policy guide is used by geography teachers to evaluate learners' performance to find both their strengths and weaknesses in the subject.*

HODs or Subject Head also monitored learners and subject teacher's performance at the end of every term to see if learners have mastered the subject content" Male HOD.

The above excerpts indicate that the MoEAC has strategies in place which need to be followed by teachers in schools. These guides for the Geography syllabus, examiners' report and CA manuals are provided to teachers for guiding and assessing learners' progress. The strategies include workshops conducted by advisory services and a policy guide from the MoEAC. The HODs revealed that to avoid common mistakes by learners, teachers use examiners reports during revisions with learners before they sit for the end of year examination. The evidence from the HODs indicates that the schools get support from the MoEAC.

4.8 SUMMARY

In this chapter, the researcher presented the summarised results of the study pertaining to the role of formative assessment in the Grade 10 learners' final grade in Geography in Ohangwena Educational Region of Namibia. The first section presented the biographical data for teachers and learners. The second part presented the role of formative assessment and exam marks in Grade 10. The third part presented the methods used by teachers to assess learners to help in bettering the learning atmosphere for Geography. The fourth part deliberated on the guidelines from the MoEAC that could be used by Geography teachers in assessing learners' work. The fifth part unpacked the strategies that can be implemented to improve the effectiveness of the formative assessments in Grade 10. The next chapter will present a discussion of these results.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

The chief purpose of this study was to investigate the role of formative assessment in Grade 10 learners' final grades in Geography in the Ohangwena Educational Region of Namibia. This chapter discusses that results of the study presented and interpreted in Chapter 4. The discussion of the data follows the following sequence:

- The teachers' perceptions regarding formative assessment of Geography Grade 10 CA and exam results in Ohangwena Educational Region.
- The guidelines that could be provided for Geography Grade 10 Syllabus to guide teachers in assessing the learners' work formatively in Ohangwena Educational Region
- The strategies that can be implemented to improve the effectiveness of formative assessment in Grade 10 Geography in Ohangwena Educational Region of Namibia

Accordingly, the main research questions of this study were formulated in response to the research objectives, which this present study sought answers to.

5.2 Discussion of results on the role of formative assessment of CAs and exam marks for Grade 10 Geography

5.2.1 The teachers' perceptions regarding formative assessment in Geography Grade 10 CA and exam results in Ohangwena Educational Region

The data from the findings suggest that formative assessment in Grade 10 Geography is an everyday occurrence and improves learners' learning, provides clear guidance to learners before assessing them and is used to assess learners' progress. Having known the role of formative assessment, Grade 10 Geography teachers in Ohangwena Educational Region of

Namibia strongly support the use of formative assessment in schools and in assessing Geography learners. The use of formative assessment by giving learner's mastery tests allow slow learners to improve. Further, the findings indicate that the use of formative assessment helped teachers to monitor the performance of learners by providing ongoing feedback while improving on their (teachers) teaching and also the learning (on the side of the learners). Formative assessment raises the learners' academic performance level, improves the learners' equity results and accelerates the ability of the learners to learn.

Teachers provide clear guidance to learners before assessing them which makes them understand how assessment is conducted. For example, by conducting routine tests and examinations which constitute typical ways of measuring learners' progress. These are integral to schools' accountability as well as the education system. Equally, a report by OECD (2005) supports the present study's findings. The report indicates that educators need to use clear methods of assessing learners' progress – an observation that 92.3% of learners agreed to. This seems to indicate that formative assessment is conducted using clear methods to assess learners' progress. This helps in identifying and responding to the needs of the learners. Geography teachers in Ohangwena Educational Region, Namibia are able to actively involve learners in the formative assessment process which helps them to develop skills and consequently empower them to learn better while quite cognizant of the role that formative assessment for Grade 10 Geography plays in the determination of the final grades.

The findings of the study indicate that teachers possess adequate knowledge about the Geography subject policy and syllabus which guides them on how to assess learners' progress in schools. The subject assessment policy and guidelines direct them in the assessment of learners on a regular basis. These results are similar to those established by Tsilo (2006) who observes that teachers need to conduct regular assessments of leaners

and give clear guidance regarding to their assessment, especially in terms of what is considered important. Campbell and Evans (2012) note that daily assessment records of leaners' performances in secondary schools showed how they performed in various subjects. Campbell and Evans (2012) further observe that regular assessments give a picture of how learners are given different tasks to do. The assessment of the students' progress achievement in class need to be carried out in the manner that it does not cause anxiety in the students (Shaaban, 2001). The researcher observes that regular assessments in in the subject of Geography in the Ohangwena Educational Region of Namibia is important in the monitoring and evaluation of Geography learners' academic progress at Grade 10. However, while regular assessment is crucial, teachers are sometimes found wanting with regards to assessing learners regularly (Tsilo, 2006).

The learner participants in this study opined that continuous assessment marks and examination marks are equally important. Learners indicated that the CA results prepare them to be ready for the examination, help them to be competent and in general, help with the overall progress of the learners since examinations only provide one opportunity. The CA marks enable teachers to recognise learners' weaknesses, thus forming a basis for guiding them and helping them improve. CA is an influential analytical tool that permits learners to understand where they are challenged in learning and put more effort in such areas. The use of CA marks enables teachers to change their teaching strategies, to embrace remediation activities that help slow learners and generate enrichment activities for learners working beyond their expected level. These findings confirm the observations made by Ali, Sultana and Marwat (2010). The observation that the CAs help in preparing of learners to be ready for the final examinations is also congruent with the report by OECD (2015) which notes that the results of the continuous assessment of learners helps in ensuring that they get prepared for the final examination.

Learners who participated in this study noted that CA results help with their overall progress since exams accord them only one opportunity. This demonstrates that CA marks give learners more opportunities to improve, give teachers feedback and opportunities based on the learners' scores. This provides evidence that Formative Assessment plays a significant role in the academic performance of learners. This finding is in agreement with previous studies such as Ajogbeje (2013) who observes that the actual use of formative assessments prepares leaners for tests which empower them to be more involved and active in the teaching-learning process - thus potentially increasing academic performance in the subject. In the same vein, Ojugo (2013) demonstrates that formative assessment is meritorious to both leaners and educators. It is important in stimulating learners' challenges and in the preparation of different remedial measures aiming at uplifting the learners' academic performance in the concerned subject. With regards to educators, it acts as a way of discovering the challenges faced by learners in the subject content - in this case, Geography at Grade 10 - and predicts effective teaching approaches to aid learners understand the challenging content of the subject, with the aim of improving the learners' academic performance.

5.2.2 Methods used by teachers to assess learners and help them in the better learning of Geography as a subject.

The findings from this study reveal that teachers utilise several teaching methods. The study participants (teachers) use class activities, project work, practical work, topic tests and homework as common methods of assessing learners' progress in Geography at Grade 10 in Ohangwena Educational Region. These activities are in line with the previous studies' findings that observe that regular formative assessments are critical in assessing learning in schools. These teaching methods have also been suggested by other researchers (Bennet, 2011; Moyosore, 2015; Pollas, 2011 and Tsilo, 2016). Besides, these forms of

assessment used by Geography teachers in the Ohangwena Educational Region of Namibia help learners in the form of practices and even to assess them on what they had already been taught. Putting emphasis on how Geography at Grade 10 has been assessed, one can conclude that Geography was assessed through teachers giving class activities, homework, topic tests, short tests and end of term tests. Based on the above, theories or models of understanding are constructed by internal systems of the mind, they can never be directly observed, and thus tests or examination are the only means of assessing the meaning of understanding.

The teachers in this study admitted that there are other teaching and assessment methods, even though they were not commonly used. These methods include presentation with drama, end of term test (used sometimes in helping learners to master the content of Geography at Grade 10 in Ohangwena Educational Region). These findings are in support of observations made by Tsilo (2016) on the forms of assessment of learners.

All the aforementioned teaching methods are supported by the learners' responses in this study. The learners acknowledged that teachers use class activities, homework, topic tests, short tests, presentation/dramas and assignments in attempting to better the learning of Geography in Ohangwena Education Region. This further confirms the observation that teachers use a variety of teaching methods in assessing learners. This accords several opportunities to the learners to be assessed. For instance, class activities are assessments that Geography teachers used the most because of their potential to help the learners understand what had been taught, as well as give learners remedy instantly - for those who appeared to have difficulties in grasping the concepts. The use of homework enables learners to conduct research on the subject matter to improve their understanding. Literature has shown that the use of class activities and homework or assignments allow learners to work freely and thus, responses provided are well thought of. These findings

resonate with Khan (2010) who observes that the use of the constructivist assessment approaches by teachers increased the learners' academic performances. Moyosore (2015) submits that similar activities mostly used to assess learners like practical exercises, group work, class activities, topic tests, presentations and field work are effective in the learning process of the learners.

5.2.3 The guidelines that could be provided to the Geography Grade 10 Syllabus to guide teachers in assessing the learners' work formatively in Ohangwena Educational Region

The findings of this study obtained from the Heads of Departments for Social Sciences reveal that the schools acknowledge the existence of guidelines used in determining the award of marks/grades for all learners' assessed works. These guidelines direct teachers to give learners a diverse number of learning activities in Geography, within the confines of the defined syllabus and the subject policy for Social Sciences. This indicates that policy guidelines chaperon teachers on how to assess learners' work and in the recording of learners' CAs.

The Policy Guide is effective because it does not only require teachers to submit learners' assessed work to their heads of departments, but it also includes the diagnostic testing of learners by following formal and informal assessment procedures during the learning process. This often naturally suits or modifies the learning atmosphere to accommodate learners with different learning capabilities by monitoring them while learning - as continuous feedback would help learners to improve and upgrade their knowledge in Geography at their respective schools within the Ohangwena Educational Region.

Policy guidelines also allow teachers be aware of the learners' weaknesses in the subject of Geography and it also help learners to evaluate their own performances. This is

explained in an observation by one Head of Department for Social Sciences who noted that,

> "*The use of policy guideline is effective, as it includes diagnostic testing of learners, it has a range of formal and informal assessment procedures conducted by teachers in assessing of learners during the learning process in order to modify teaching and learning activities to improve learner's attainment."*

The provision of the guidelines may be explained as the most important role of the syllabus and the subject policy scope. This is congruent with the observations made by OECD (2015). OECD observes that officials use information gathered through national or regional tests, or through monitoring of school performances to guide investments in training and support for schools, or to set broad priorities for education. OECD (2015) proposes different ways through which school leaders and teachers can be able to address school level barriers related to the use and effectiveness of formative assessment**.**

5.2.4 Strategies that can be implemented to improve the effectiveness of formative assessment in Grade 10 Geography in the Ohangwena Educational Region of Namibia

Teachers who participated in this study proposed strategies to improve the effectiveness of formative assessment for Grade 10 Geography in Ohangwena Educational Region of Namibia. The proposed strategies included; the need for all stakeholder in the education sector to collaborate together in order to achieve success, advisory assistance, designation of proper teaching aids and offering remedial teaching, termly meetings to guide teachers on assessment and setting up of individual school formative assessment policies to guide the teaching and learning processes in schools through the active participation of all stakeholders.

The teachers also noted that the advisory services need to provide the necessary support to all teachers in schools in order for them to be adequately equipped with the necessary skills and knowledge. This would help them prepare learners to be assessed in a uniform manner by facilitating mastery tests in all schools within the region. Again, Geography teachers are also encouraged to consider the utilisation of available natural resources when suggesting and assigning project works to their learners in schools. Although it require a lot of sacrifice from teachers and learners, it is also suggested that, if they want to improve learner perfomance through remedial sessions, both groups need to be willing to make these commitments and sacrifices. Teachers also acknowledged that the setting up of learning targets for Geography would be helpful as it directs and motivates both teachers and learners to work hard, and requires parents to also step in and motivate the learners in schools. School managers need to also give their full support to all teaching staff by ensuring that all teaching and learning materials are made available to eliminate all drawbacks traced from examiners' reports. This would benefit learners immensely as it helps in avoiding the repetition of mistakes that were made by previous learners while studying for and attempting questions on different topics in the Geography Grade 10 for both CA and examination. These finding comply with OECD's (2015) observations that countries need to build, develop and provide assessment patterns to back formative assessment in order to better provide teachers with the knowledge on the application of formative assessment when assessing learners. However, this may require deeper investments, most importantly in areas of novice teacher training and professional development in a sense of making change.

The Heads of Departments for Social Sciences explained the strategies that the Ministry of Basic Education, Arts and Culture (MoEAC) uses. A number of strategies were employed which included adhering to the Geography syllabus, evaluation of examiners' reports and

the CA manual provided to teachers for guiding and assessing learners' progress. The use of teachers' guides, Geography syllabus, examiners' reports and the CA manual provided to teachers in school help them guide and assess learners' progress regularly. Furthermore, results from the HODs indicate that workshops conducted by advisory services are helpful to both Geography teachers and other members of the teaching staff, because these platforms provide them with opportunities to know each member of the team, as well as to learn new strategies to be implemented within schools by giving feedback to others once they return to their respective schools. It can be noted that a policy guide from the Ministry of Education, Arts and Culture regarding assessment reminds teachers to submit allocated marks and learners' assessed work to the HODs for Social Sciences for moderation before marks are entered into the CA forms/sheets. Responses from the HODs indicate that the schools receive material support from the Ministry of Education, Arts and Culture. The policy guide also helps in avoiding common mistakes by learners as teachers use examiners' reports during revisions with learners before they sit for the end of year examination. The use of the Geography syllabus is important because it ensures that teachers use assessment objectives as explicated in the syllabus and to achieve the learning goals set up in the syllabus.

The strategies employed by the Ministry of Education, Arts and Culture include advisory services and a policy guide. This finding is dialogic to the previous finding in which the teachers explained the strategies they proposed to implement in order to improve the effectiveness of formative assessment for Grade 10 Geography learners in the Ohangwena Educational Region of Namibia.

5.3 SUMMARY

This chapter presented a discussion of the research findings. The findings in Chapter 4 were presented in relation to the control literature, as well as the background and problem statement of the present study as established in Chapters 1 and 2. Through the discussion of the findings, it can be observed that formative assessment helps learners develop confidence in the classroom and in learning in general. Teachers use assessment marks to evaluate learners' progress and offer remedial teaching to slow learners. They also generate enrichment activities for learners working beyond their expected level. This is all aimed at improving the learners' academic performance. Several teaching methods that were used by the teachers were also discussed. Furthermore, the chapter engages the guidelines used by teachers in assessing learners, as well as strategies that need to be implemented to improve the effectiveness of formative assessment. The next chapter will present the conclusion and recommendation of the study.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This purpose of this chapter is to provide the summary, conclusion and recommendations of the study. The first section of the chapter presents a summary of the research findings as well as conclusions drawn from the discussion of the findings. This is followed by a presentation of the recommendations emanating from the observations made for/within the research environment throughout the research process. The last section provides a discussion of suggestions for further/future studies.

6.2 Summary of findings and conclusions

The study's findings reveal that formative assessment is largely based on school policies and guidelines, and is regularly implemented. Teachers follow the Geography assessment policies and guidelines when assessing students. This is done in order to improve the learners' learning capabilities, to provide clear guidance for learners as well as to assess the learners' progress.

The role of formative assessments is to assist learners in mastering the learning content and to help the slow learners to catch up and improve their performance. Formative assessment helps the teachers to monitor the performance of learners through on-going feedback and also raises the learners' performance levels, improves the learner's equity results and accelerates the ability of the learners to learn. The learner participants in this study believe that formative assessment marks and summative evaluation marks are equally important because they both prepare learners for examinations and learners' competence. Formative assessment is also an influential analytical tool and enables learners to understand and comprehend the challenges they face with regards to learning the subject content, so that they can understand the direction in which they need to increase concentration.

The teachers, the research also indicated, have profound knowledge of Geography as a subject and also understand the Geography subject policy (which explains the number of activities for assessment, gives clear guidelines on how to award marks for each activity, give examples of good, average and poor formative assessment examples, and allows teachers to select the best assessed activities for CA marks). In this way, the formative assessment policy enables teachers to change their teaching strategies and employ tutoring activities to help slow learners. It also provides learners with a large number of activities that enable them to work towards and realise their highest potential.

Teachers use a variety of teaching methods in the teaching of the Grade 10 Geography curriculum in the Ohangwena Education District of Namibia. These include classroom activities, project work, hands-on work, topic tests and homework, classroom activities, short-term tests, lectures/drama and examination tests in order to improve their learners' learning of Geography as a subject and also to measure the learners' progress.

There are also guidelines that could be provided to Grade 10 Geography teachers to guide them in the assessment of learners' work formatively in the Ohangwena Educational Region of Namibia. These guidelines provide teachers with numerous examples of forms of formative assessment activities. Therefore, the guidelines provided by the Ministry of Basic Education, Arts and Culture can be implemented to help and guide Geography teachers carry out formative assessment tasks.

In this study, the teachers proposed strategies to improve the effectiveness of the Grade 10 Geography formative assessments in the Ohangwena Educational Region in Namibia. They proposed that all stakeholders in the education sector needs to cooperate in order to succeed, provide advice and help, designate appropriate teaching aids and provide teachers with remedial teaching aids. Teachers also recommend the setting up of learning goals, using available natural resources when carrying out project work, providing adequate teaching support and meeting often during the semester to guide teachers. They wished for the development of a formative assessment policy for individual schools to guide the schools' teaching processes through the active participation of all stakeholders. Furthermore, the advisory services need to provide all teachers in the schools with the necessary support to ensure that all teachers have the necessary skills and knowledge. They also need to educate teachers on how to develop a unified evaluation standard for all schools in the Ohangwena Educational Region of Namibia.

The researcher concludes that Geography teachers who participated in the study use the teaching guides and the Ministry of Education, Arts and Culture examination reports from previous years to prepare learners for examinations. The Ministry of Education, Arts and Culture makes use of seminars to provide teachers with insights regarding assessments for the Grade 10 Geography final exams. The Ministry of Education, Arts and Culture provides

assessment policy guidelines and outlines to schools, which define in detail the requirements for the continuous assessment of learners.

6.3 Recommendations

This section provides recommendations culmination from observations made during the research process and as evinced within the research environment.

6.3.1 Recommendations for action to the policy makers

Based on the results reported and discussed in the study, the following recommendations - aligned to constructivism - are made:

The policymakers in Ohangwena Educational Region of Namibia, including the school administrators, need to place more emphasis on formative assessment as the teaching and learning of Geography has to be done on a daily basis. This enables them identify the weaknesses in learners and work towards eliminating them. The administrators must encourage Geography teachers to use a variety of teaching methods to make the learners better understand the subject. This can help in ironing out the difficulties learners face as learners often tend to respond to different instructional methods, in the process improving their learning potential and academic performance in Geography at Grade 10. As a principle of constructivist theory, the establishment of a useful knowledge structure requires painstaking and purposeful activities and all stakeholders must be willing to put in the effort.

6.3.2 Recommendations to the teachers

- Teachers need to invest more energy in Grade 10 final examinations. They should conduct regular formative assessments for Geography as it helps to monitor and improve the teaching-learning process. This can be achieved by having on the job

training and workshops on how to use the formative assessment methods and having a continual acknowledgement of the importance of formative assessment in evaluating learners' progress.

- Geography teachers need to be motivated through active participation in workshops, seminars, trainings or conferences in order to improve their performance levels and acquire sufficient skills to help them understand the unified formative assessment as well as the relevant assessment procedures.
- The schools' Geography teachers should formulate an internal evaluation policy in accordance with the policy guidelines from the Ministry of Education, Arts and Culture. This will help teachers and schools to have a better understanding of the guidelines on how internal assessment can be used to improve learners' academic performance at classroom level.
- From the research, it is also observed that Geography teachers understand the importance of the difference between CA and test scores, and they also have different understandings and implementations of CA tasks. Teachers regularly conduct formative assessments. The researcher prays that the Ministry of Education, Arts and Culture and school administrators designate the responsibilities for the CA concept to implementers and also regulate the number of times it must be done.

6.4 Directions for further/future research

The following are possible directions for further research:

Because, this study is aimed at investigating the role that formative assessment plays in the Grade 10 learners' Geography final grades in Ohangwena Educational Region, a need exists to examine the effectiveness of formative assessment in Geography on Grade 10

learners' grades in the Ohangwena Educational Region. Another potential future/further study that may be conducted is on teachers' Formative Assessment practices in Geography at Grade 10 within the Ohangwena Educational Region. A broader and more longitudinal study that comparatively studies several regions, or even national level, is also an important study that needs to be conducted, not only for Geography but other subjects as well.

6.5 Summary

This chapter provided a summary of the research and made recommendations based on the findings of the study. The summary is important because it explains the key issues emanating from the research's attempts to answer the research questions. The second section provides recommendations culminating from the analysis of data undertaken in the study. The recommendations are directed towards the policy makers and Geography teachers and are geared towards understanding and appreciating the need and the role of formative assessment within schools by both groups. The last section provides direction for further/future studies in line with observation of the shortcomings that the scope and results of the current research evince. The direction for further studies calls on the need to examine effectiveness of formative assessment and how teachers practice formative assessments as well as expanding the scope of future studies.

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APPENDECES

Appendex A: Informed consents

Permission Letter to the Permanent Secretary of the Ministry of Education, Arts and Culture

Ester Egumbo
P. O. Box 2449
Ondangwa
Cell: 0813121439
Email: eegumbo25@yahoo.com

July, 05 2018

The Permanent Secretary
Ministry of Education, Arts and Culture
Private bag 13236
Windhoek
Namibia

Dear Mrs. Steenkampt

PERMISSION REQUEST TO CONDUCT RESEARCH AT SOME SCHOOLS IN OHANGWENA

I am a Master of Education student at the University of Namibia and as part of my degree requirements; I am expected to do research.

I am therefore requesting your permission to allow me conduct my research at some schools in Ohangwena Region. My research topic is INVESTIGATING THE ROLE FORMATIVE ASSESSMENT [CA] PLAYS IN THE GEOGRAPHY GRADE 10 LEARNERS' FINAL GRADE IN OHANGWENA EDUCATIONAL REGION, NAMIBIA.

(See the attached Clearance letter from the University of Namibia).

Kindly fax your response to +264 65 – 263027 or email: eegumbo25@yahoo.com

Thank you and I look forward to your positive response.

Kind regards

Ester Egumbo

Permission letter to Ohangwena Educational Director

Ester Egumbo
P. O. Box 2449
Ondangwa
Cell: 0813121439
Email: eegumbo25@yahoo.com

July, 05 2018

The Director of Education
Mr Isak Hamatwi
Eenhana

Ohangwena Region

Dear Mr Hamatwi

REQUEST TO CONDUCT RESEARCH AT SOME SCHOOLS IN OHANGWENA REGION.

I am a Master of Education student at the University of Namibia and as part of degree requirements; I am expected to do research.

I am therefore requesting your permission to allow me to conduct my research at three schools in Ohangwena Region, two in Eenhana circuit and the third one in Ondobe circuit. My research topic is INVESTIGATING THE ROLE FORMATIVE ASSESSMENT (CA) PLAYS IN THE GEOGRAPHY GRADE 10 LEARNERS' FINAL GRADE IN OHANGWENA EDUCATIONAL REGION, NAMIBIA.

(See the attached Ethical Clearance from the University of Namibia).

Kindly fax your response to +264 – 65 – 263027 or email: eegumbo25@yahoo.com

Thank you and I look forward to your positive response.

Kind regards

Ester Egumbo

Permission letter to School Principal (s) of selected schools

Ester Egumbo
P. O. Box 2449
Ondangwa
Cell: 0813121439

Email:eegumbo25@yahoo.com

August, 06 2018

School Principal

…….

Ohangwena Region

Dear Sir/Madam

REQUEST TO CONDUCT RESEARCH AT YOUR SCHOOL (s)

I am a Master of Education student at the University of Namibia and as part of my degree requirements; I am expected to do research.

I am therefore requesting your permission to allow me to conduct my research at your school(s). My research topic is INVESTIGATING THE ROLE FORMATIVE ASSESSMENT [CA] PLAYS IN THE GEOGRAPHY GRADE 10 LEARNERS' FINAL GRADE IN OHANGWENA EDUCATIONAL REGION, NAMIBIA.

The information obtained by this study will help teachers with improvement in practices of giving the CA marks to the learners and also ensure effective judgment for the CA marks in Geography grade 10. Besides that, the study will not reveal out any school name or participants' name and all information obtained will be treated as confidential.

Thank you and I look forward to your positive response.

Kind regards

Ester Egumbo

Permission letter to Head of Department for Social Sciences department at selected schools

Ester Egumbo
P. O. Box 2449
Ondangwa
Cell: 0813121439

Email: eegumbo25@yahoo.com

July, 05 2018

HODs for Social Science

…….

Ohangwena Region

Dear Sir/Madam

CONSENT LETTER

I am a Master of Education student at the University of Namibia and as part of my degree requirements; I am expected to do research. I am therefore requesting your permission to be a participant to take part in my research.

My research topic is INVESTIGATING THE ROLE FORMATIVE ASSESSMENT [CA] PLAYS IN THE GEOGRAPHY GRADE 10 LEARNERS' FINAL GRADE IN OHANGWENA EDUCATIONAL REGION, NAMIBIA.

The information to be obtained by this study will help Geography teachers' to improve their practices in awarding CA marks to their learners, the Ministry of Education, Arts and Culture may also be provided with better ways that can ensure effective judgment for the CA marks in Geography at Grade 10.Therefore, all information obtained by this study concerning the school(s) will be treated with confidentiality and all school names or participants' identities will not be revealed, as both will be given fake names to protect their identities. As a researcher, I respect your rights of being a participant in this study and feel free to withdraw from the study any time without the fear of being intimidated.

Thank you. I look forward to work with you.

Kind regards

Ester Egumbo

Please sign the consent letter to indicate that you agreed to take part in the research study.

You do not need to give your correct name.

HODs CONSENT LETTER

I…….....hereby agreeing to take part in the research study to be conducted at our school.

Student Signature: …….. Date: ……

HOD Signature: …….. Date: ……

Permission letter to Geography grade 10 teacher (s) at selected schools

Ester Egumbo
P. O. Box 2449
Ondangwa
Cell: 0813121439

Email: eegumbo25@yahoo.com

July, 05 2018

Geography Grade 10 teachers'

…….

Ohangwena Region

CONSENT LETTER

Dear Sir/Madam

I am a Master of Education student at the University of Namibia and as part of my degree requirements; I am expected to do research. I am therefore requesting your permission to be a participant to take part in my research.

My research topic is INVESTIGATING THE ROLE FORMATIVE ASSESSMENT [CA] PLAYS IN THE GEOGRAPHY GRADE 10 LEARNERS' FINAL GRADE IN OHANGWENA EDUCATIONAL REGION, NAMIBIA.

The information to be obtained by this study will help Geography teachers' to improve their practices in awarding CA marks to their learners, the Ministry of Education, Arts and Culture may also be provided with better ways that can ensure effective judgment for the CA marks in Geography at Grade 10.

Therefore, all information obtained by this study concerning the school(s) will be treated with confidentiality and all school names or participants' identities will not be revealed, as both will be given fake names to protect their identities. As a researcher, I respect your rights of being a participant in this study and feel free to withdraw from the study any time without the fear of being intimidated.

Thank you. I look forward to work with you.

Kind regards

Ester Egumbo

_____

Please sign the consent letter to indicate that you agreed to take part in the research study. **You do not need to provide your correct name.**

GEOGRAPHY GRADE 10 TEACHERS' CONSENT LETTER

I…….....

hereby agreeing to take part in the research study to be conducted at our school.

Student Signature: …… Date: ……

Teacher Signature: ……. Date: ……..

Permission letter to Parents' of minor learner (s) at selected schools

Ester Egumbo

P. O. Box 2449

Ondangwa

Cell: 0813121439

Email: eegumbo25@yahoo.com

August, 06 2018

Parents' of the minor learner(s)

……

Ohangwena Region

REQUEST TO ALLOW YOUR CHILD TO TAKE PART IN MY RESEARCH STUDY

Dear Parent / Guardian

I am a Master of Education student at the University of Namibia and as part of my degree requirements I am expected to do research. I am therefore requesting your permission to allow your child to be a participant to take part in my research study.

My research topic is INVESTIGATING THE ROLE FORMATIVE ASSESSMENT [CA] PLAYS IN THE GEOGRAPHY GRADE 10 LEARNERS' FINAL GRADE IN OHANGWENA EDUCATIONAL REGION, NAMIBIA.

The information to be obtained by this study will help learners' to improve their learning in Geography Grade 10 so that they can perform better in the subject at the end of the year.

Therefore, all information obtained by this study concerning the school(s) and the learners' will be treated with confidentiality and all school names or learners' identities will not be revealed, as both will be given fake names to protect their identities. Feel free to request your child to withdraw out from the study at any time without any fear.

Thank you. I look forward to work with you.

Kind regards

Ester Egumbo

Please sign the assent letter to indicate that you agreed to take part in the research study. **You do not need to provide your correct name.**

ASSENT LETTER

I…….....

hereby agreeing to allow my child to take part in the research study to be conducted at their school.

Parent / Guardian Signature: …….. Date: ……

Student Signature: …….. Date: ……

Appendex B: Questionnaire for Geography teachers

Teachers' questionnaires on the role of formative assessment and examination marks on learners' final grade in Geography grade 10 classrooms.

Instructions

This questionnaire is intended to explore the role of formative assessment and exam marks on learners' final grade in Geography Grade 10 classrooms. The information that will be collected from this questionnaire will only be used for the purpose of this study and your identity will not be revealed in this study. **You are requested to feel free to answer questions truthfully based on your understanding and experience to ensure accurate findings of this study.**

Section A

Biographical information

Please make a tick in the box corresponding to the appropriate answer ( )

1. What is your sex?

Female	
Male	

2. In which age group do you fall?

-21 years	
22 - 45 years	
46 - 55 years	
56 - 60 years	

3. Which grade level are you currently teaching?

Grade 8	
Grade 9	
Grade 10	

4. What is your position at this school?

Principal	
HOD	
Teacher	

5. What is your qualification in the subject that you are teaching?

Certificate	
BETD	
BED	
Others, specify	

6. How long have you been teaching Geography at this school?

1 – 3 years	
4 – 7 years	
10 years + more	

Section B. Questionnaire

Please answer by indicating a tick in the correct box. [You may choose more than one option].

7. Is there a difference between the averages of the CA marks you award your Geography learners and the examination mark? Yes / NO

(a) The averages of the CA marks are always high than the examination marks.

(b) The averages of the CA marks are similar to the examination marks.

(c) The averages of the CA marks are equal to the examination marks.

(d) The averages of the CA marks are low than the examination marks.

8. Formative assessment is useful to assess learners' progress in schools? The following abbreviations are used: AG – Agree, SA - Strongly Agree, D – Disagree and SD – Strongly Disagree.

Statement	AG	SA	D	SD
Regularly				
Sometimes				
Very often				
Often				

9. What in your opinion is the reason for the difference in the CA and exam mark? [**You can choose more than one option]**

(a) The CA marks is more important than exam marks to learner's progress because it has more opportunities to improve.

(b) The CA marks is equally important as the exam marks in assessing learner's progress because it give teachers feedback and opportunities.

(c) The CA marks are given throughout the year to practice situations to assess the competency of the learner / Teachers are more lenient with CA marks.

(d) The exam marks gives an overall picture of the learner's knowledge and skills in the subject at the end of the term or year/ Exam mark has only one opportunity.

(e) The CA marks and examination marks are only useful if they are used as a learning experience in preparing the learners how to answer examination-type questions.

10. Which activities do you use most to assess your learners in Geography? **[You can tick more than one answer]**

Practical exercise		Field work	
Group work		Project work	
Class activities		Home work	
Topic test		End of term test	
Presentation		End of year examination	

11. Provide examples of any other activities in use to assess learners' progress in your school.

(a) ……

(b) ……

(c) ……

12. Are there guidelines in place from the Ministry of Education and Culture to help you carry out formative assessment task in grade 10 Geography? Yes / No **[You can choose more than one answer]**

(a) The grade 10 Geography syllabus gives ample examples of formative assessment activities.

☐

(b) The syllabus explains how many activities for assessment per term.

☐

(c) The syllabus gives clear guidelines on how to award marks for each activity.

☐

(d) The syllabus gives examples of good, average, poor formative assessed examples.

(e) The syllabus allows teachers to select the best assessed activities for CA marks.

☐

13. Compare your school's exams and CA marks in grade 10 Geography with other schools' in the region for the last three years.

Year	CA mark	Exam mark	Total average
2018			
2017			
2016			

Thank you for your time

Appendex C : Questionnaire for Geography Learners

Learners' questionnaire on the discrepancy between CA and examination marks in Geography grade 10 classrooms.

Formative assessment refers to the regular and continuous monitoring of learners' progress by teachers (NIED, 2010). All activities that are given by teachers in classroom throughout the year play a role in preparing learners for the final examination. These activities are Homework, Topic test, projects work, Class works in the form of practical exercise either individual or in groups and End of term test.

This questionnaire is designed to find out your truthful views about role of formative assessment during the Geography l0 lessons. **Your responses will be kept strictly confidential, and will only be used for the purpose of this study**. Please respond to all the questions below in the spaces provided by making a tick in the appropriate box

Biographical information

1. What is your gender?

Male	Female

Learners' views about roles of formative assessment and exam marks in Geography grade 10

2. Please read each statement very carefully and **tick** the answer which best describe you degree of agreement or disagreement.

The following abbreviations are used: **AG – Agree, SA – Strongly Agree, D – Disagree, and SD – Strongly Disagree.**

Statement	AG	SA	D	SD
Continuous assessment in Geography grade 10 class is an everyday occurrence				
Teachers give clear guidelines to learners before assessing them				
Teachers use clear methods to assess learners in lessons.				

3. Which of the following assessment methods used by teachers to assess learners help you learn Geography better? **[You can tick more than one answer]**

Class activities		Home work	
Practical work		Short test	
Project work		Assignment	
Group work		Topic test	
Presentation / Dramas		End of term test	

Strategies of assessment used in Geography grade 10 lessons

4. How often do you think teachers' should use formative assessment in Geography classrooms?

Everyday	
Sometimes	
Most of the time	

5. Do you think continuous assessment marks and examination marks are equally important? Yes / No **[You can tick more than one option]**

(a) CA marks shows learners' competency.

(b) CA marks prepares learners' to improve and be ready for the examination.

(c) Exam marks gives an overall progress of the learner.

(d) Exam marks has only one opportunity.

Thank you for your time

Appendex D: Interview guide for Heads of Social Sciences departments

Interview questions for HODs in the Social Sciences Department on the Role of formative assessment marks and examination marks on learners' final grade in the Ohangwena Educational Region, Namibia.

Date

…….

School (A, B or C) …….

Interview guide

Instructions:

The questions that will be asked have no right or wrong answer. You are requested to feel free to answer questions based on your understanding and experience. **All the responses will be treated with confidentiality and no name will be revealed in the findings of this study.**

Interview: HODs

Do you have a policy regarding formative assessment and exam marks at your school? If yes, how effective is it?	
What strategies do the Ministry of Education, Arts and Culture use help your school to effectively implement the policy on roles of formative assessment and exam marks in Geography grade 10?	
Do the teacher's guide the learners' during the lesson according to the syllabus?	
Does the school get any assistance from the Ministry of Education, Arts and Culture in terms of policy implementation of formative assessment and learners' final grade in Geography grade 10? If yes, what assistance does your school receive?	

What guidelines and standards do teachers use in implementing formative assessment and exams marks in Geography grade 10?	
How does your school overcome challenge faced in implementing the policy on roles of formative assessment and exam marks?	
In your opinion, do teachers at your school give clear guidelines to learners before they assess them?	
Do teachers use some of the following activities to assess learners' regularly? [Class work, Group work, Presentation, Field work, Project work or Homework,	
Are there any criteria put in place on how to assess teachers' CA mark forms/ sheets for grade 10 Geography at your school? Yes / No. What are those criteria?	
How often do you think teachers should use formative assessment in Geography lessons? [Everyday, Sometimes or Most of the time] Give a reason for your answer.	

Appendex E: Ethical Clearance from the University of Namibia PGSC

UNAM
UNIVERSITY OF NAMIBIA

ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: FOE/312/2017 **Date: 10 October, 2017**

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project: Investigating The Role Formative Assessment Plays In The Geography Grade 10 Learners' Final Grade In Ohangwena Educational Region, Namibia

Student Name: Ester Egumbo

Student Number: 201501320

Faculty: Faculty of Education

Supervisor(s): Dr Dolores Wolfaardt (Main) Dr Alex Kanyimba (Co)

Take note of the following:

(a) Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the UREC. An application to make amendments may be necessary.

(b) Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the UREC.

(c) The Principal Researcher must report issues of ethical compliance to the UREC (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by UREC.

(d) The UREC retains the right to:

(i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,

(ii) Request for an ethical compliance report at any point during the course of the research.

UREC wishes you the best in your research.

Prof. P. Odonkor: UREC Chairperson

Ms. P. Claassen: UREC Secretary

Appendex F: Consent letter from the Permanent Secretary of the Ministry of Education, Arts Culture

REPUBLIC OF NAMIBIA

MINISTRY OF EDUCATION, ARTS AND CULTURE

Tel: +264 61 -2933200
Fax: +264 61- 2933922
Enquiries: C. Muchila/ G. Munene
Email: Cavin.Muchila@moe.gov.na/gm12munene@yahoo.co.uk

Luther Street, Govt. Office Park
Private Bag 13186
Windhoek
Namibia

File no: 11/1/1

Ms. Ester Egumbo
P. O. Box 2449
Ondangwa
Cell: 081 312 1439

Dear Ms E. Egumbo

SUBJECT: PERMISSION TO CONDUCT RESEARCH IN OHANGWENA REGION

Kindly be informed that permission to conduct an academic research for your Masters of Education Degree on *"Investigating the Role Formative Assessment (CA) Plays in the Geography Grade 10 Learners' Final Grade in Ohangwena Educational Region,"* Namibia, is here with granted. You are further requested to present the letter of approval to the Regional Director to ensure that research ethics are adhered to and disruption of curriculum delivery is avoided.

Furthermore, we humbly request you to share your research findings with the Ministry. You may contact Mr. C. Muchila/ Mr. G. Munene at the Directorate: Programmes and Quality Assurance (PQA) for provision of summary of your research findings.

I wish you the best in conducting your research and I look forward to hearing from you upon completion of your study.

Ministry of Education, Arts and Culture
Office of the Permanent Secretary
2018 -07- 18
Private Bag 13186
Windhoek, Namibia

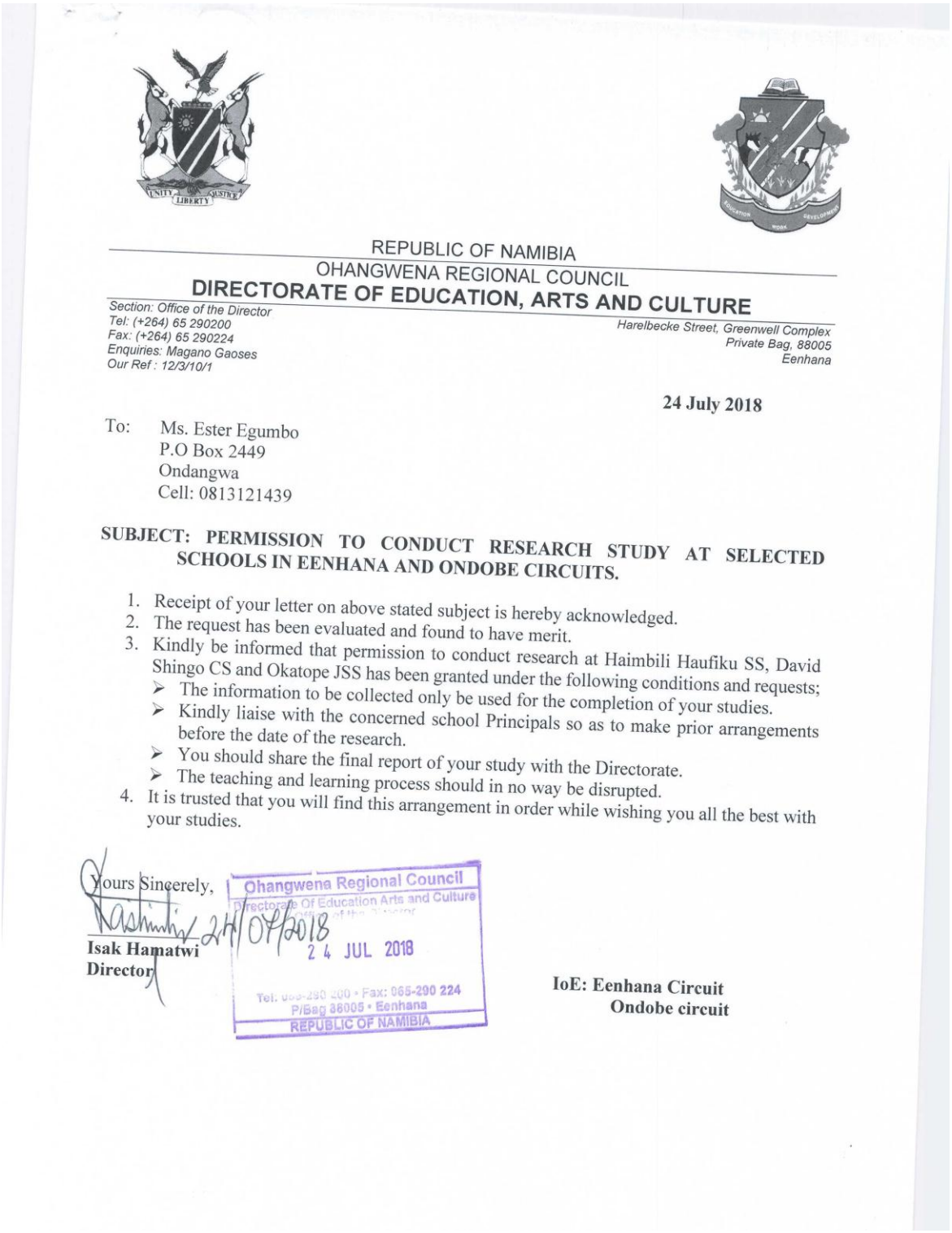
Sincerely yours

SANET L. STEENKAMP
PERMANENT SECRETARY

18-7-2018
Date

All official correspondences must be addressed to the Permanent Secretary

Appendix G: Consent letter from the Ohangwena Educational Region



REPUBLIC OF NAMIBIA
OHANGWENA REGIONAL COUNCIL
DIRECTORATE OF EDUCATION, ARTS AND CULTURE

Section: Office of the Director
Tel: (+264) 65 290200
Fax: (+264) 65 290224
Enquiries: Magano Gaoses
Our Ref : 12/3/10/1

Harelbecke Street, Greenwell Complex
Private Bag, 88005
Eenhana

24 July 2018

To: Ms. Ester Egumbo
P.O Box 2449
Ondangwa
Cell: 0813121439

SUBJECT: PERMISSION TO CONDUCT RESEARCH STUDY AT SELECTED SCHOOLS IN EENHANA AND ONDOBE CIRCUITS.

1. Receipt of your letter on above stated subject is hereby acknowledged.
2. The request has been evaluated and found to have merit.
3. Kindly be informed that permission to conduct research at Haimbili Haufiku SS, David Shingo CS and Okatope JSS has been granted under the following conditions and requests;
   - The information to be collected only be used for the completion of your studies.
   - Kindly liaise with the concerned school Principals so as to make prior arrangements before the date of the research.
   - You should share the final report of your study with the Directorate.
   - The teaching and learning process should in no way be disrupted.
4. It is trusted that you will find this arrangement in order while wishing you all the best with your studies.

Yours Sincerely,

Isak Hamatwi
Director

Ohangwena Regional Council
Directorate Of Education Arts and Culture
24 JUL 2018
Tel: 065-290 200 • Fax: 065-290 224
P/Bag 88005 • Eenhana
REPUBLIC OF NAMIBIA

IoE: Eenhana Circuit
Ondobe circuit